# 16th Conference on Postal and Delivery Economics

# May 28–31, 2008 Albufeira, Algarve, Portugal

# Presented by

# CENTER FOR RESEARCH IN REGULATED INDUSTRIES

Rutgers Business School – Newark and New Brunswick

CENTER FOR RESEARCH IN REGULATED INDUSTRIES



## **Sponsored By**

- Royal Mail
- Deutsche Post World Net
- United States Postal Service
- Bank of America
- Canada Post Corporation
- La Poste
- La Poste / De Post
- Österreichische Post AG
- R.R. Donnelley & Sons Company
- UPS
- Swiss Post
- CTT Correios de Portugal S.A.
- Pitney Bowes
- Postcomm Postal Services Commission
- Siemens AG
- United States Postal Regulatory Commission
- Posten AB
- International Post Corporation
- Itella Corporation
- Anacom
- An Post
- **■** ARCEP
- Communication Workers Union
- **LECG**
- NERA Economic Consulting

- Poste Italiane
- Posten Norge AS
- Postwatch
- Sidley Austin LLP
- TNT Post
- Canadian Union of Postal Workers
- IBM Global Business Services
- Oxera
- Haldi Associates
- Aspen Institute
- Bird & Bird
- Brown Rudnick, LLP
- Comreg
- FratiniVergano European Lawyers
- Frontier Economics
- New Zealand Post
- Association for Postal Commerce
- d'Alcantara Economic Consulting
- **■** Envelope Manufacturers Association
- Kirkpatrick & Lockhart Preston Gates Ellis LLP
- London Economics
- National Association of Letter Carriers
- Parcel Shippers Association
- SLS Consulting, Inc.
- Venable LLP

## Wednesday, May 28, 2008

5:30 - 7:00 Registration Registration

7:00 Reception Reception

8:00 Welcome and Introduction to Conference: Michael A. Crew, Paul R. Kleindorfer, & Carlos Dias Alves

Dinner & Speech: Eduardo Cardadeiro, Board Member, Anacom

## Thursday, May 29, 2008

7:30 Breakfast

9:00 - 10:40 Concurrent Sessions

**STRATEGY I** 

Chair: Robert Curry

Discussants: Mohammad Adra & Alberto Pimenta

Laurent Deduytsche and Nathaniel Medina:

Strategies and Business Models of European Postal

Competitive Operators

Peter Koppe, Christian Bosch, S. Hömstreit, &

 $\boldsymbol{S.}$   $\boldsymbol{Pohl}:$  The IPO as a Driving Force in the Change

**Process** 

Robert Reisner, Maynard Benjamin and Derek

**Osborn**: Innovation in Postal Products and Pricing –

Opportunities and Obstacles in the Reform Era

USO

Chair: John D. Waller

Discussants: Stephen Gibson, Derek Holt

& Joost Vantomme

Jeffrey Colvin, Michael D. Bradley & Mary K.

Perkins: The Universal Service Obligation with

Asymmetric Market Power

Helmuth Cremer, François Boldron, Philippe

**De Donder, Denis Joram & Bernard Roy:** Network Externalities and the Universal Service

Obligation – A Two Sided Market Approach

Pekka Leskinen, Peter Karlsson, Heikki Nikali &

Päivi Rokkanen: What Will Happen to Competition

When USO Substitution Grows?

10:40 - 11:00 Coffee Break

11:00 - 12:40 Concurrent Sessions

STRATEGY II

Chair: Charles E. Fattore

Discussants: Farah Abdallah & Norma Nieto

Jody Berenblatt, Lawrence Buc, & Peter Soyka:

Bank of America, Mail, and the Environment

Stefano Gori, Beat Friedli, Leon Pintsov, Mark van

der Horst & Howard Wright: Mail on Mars –

A New Awakening: from Universal Service to Needs

**Based Services** 

Luis Jimenez, Judy Auslander & Denice Koljonen:

The Environmental Impact of Mail – A Baseline

**COSTING USO** 

Chair: David Sibbick

Discussants: Felipe Flórez Duncan & Paul Smith

François Boldron, Claire Borsenberger, Denis Joram, Sebastien Lecou & Bernard Roy: A

Dynamic Approach for Financing USO

Richard Bradley, Philip Burns & George Houpis:

Costing Individual USO Elements

Urs Trinkner & Martin Koller: Calculating the

Burden of the Universal Service - The Need of a

Global Approach

12:40 - 2:00 Lunch Lunch

# Thursday, May 29, 2008 (CONTINUED)

2:00 - 3:30 **Concurrent Sessions** 

**COST STUDIES** 

Chair: Gene Columbo

Discussants: Adam Houck, Joakim Levin

& Jacques Ruth

**A. Thomas Bozzo:** Using Operating Data to Measure Labor Input Variability and Density Economies in U.S.

Postal Service Mail Processing Operations

Louis O'Brien, Leon Pintsov & Andrei Obrea: Cost Analysis and Pricing of Innovative Postal Products

Richard Robinson & Jane McMurdie: Postal Costing beyond ABC – Estimating the Economic Cost of Mails

Services

3:30 **Break** 

7:00 Reception Reception

8:00 -Dinner & Speech: John L. Campo, Vice President, U.S. Postal Relations, Pitney Bowes, Inc.

# Friday, May 30, 2008

7:30 **Breakfast** Breakfast

9:00 - 10:40 **Concurrent Sessions** 

**REGULATION I** 

Chair: Daniel Krähenbühl

Discussants: Michael MacClancy, Mark van der Horst,

& Sture Wallander

Trond Helge Bårdsen: Designing a Price Cap Regulation for a Partially Deregulated Mail Market –

The Norwegian Experience

John Hearn, Greg Harman & Sangeet Dhanani: Price

Control Systems Appropriate to Newly Liberalized Postal Markets in Europe

R. Hern, S. Holder, S. Maunder, P. Lowe & H. Webb:

Ensuring the Free Market Opening in the Postal Sector Delivers Competition and Benefits to Postal Users

Coffee Break 10:40 - 11:00

11:00 - 12:40 **Concurrent Sessions** 

**REGULATION II** 

Chair: Michael Scanlon

Discussants: Joan Calzada & Robert Cohen

Catherine Gallet-Rybak, Cécile Moreno & Daniel

Nadal: The French Postal Market – The Situation Three

Years after the Vote of the Postal Law

Shoji Maruyama & Shinichi Sano: Developments in Privatization and Liberalization in the Asian Postal

Market

E. Pearsall, L. Fenster, D. Monaco, Waller, G.

Willette & S. Xenakis: A Complete Test of U.S. Postal

Rates for Cross-Subsidies

LABOR

**ACCESS** 

Chair: John L. Campo

the United Kingdom

Discussants: Robert Bernau, Philip Burns

& David Stubbs

Antonio Amaral & Sónia Pinto: Strategic

Christian Jaag: Market Opening, Downstream Access, and Competition in the Market for Mail

with Different Regulatory Scenarios

Stephen Agar & Paul Dudley: Downstream Access in

Equilibrium under FMO for Providers and Costumers

Chair: Deborah Bourque

Discussants: Robert Campbell & Paul Schoorl

John Baldwin & Daniel Doonan: The Merits and Drawbacks of Post Offices Moving from Defined Benefit to Defined Contribution Pension Plans

Geoff Bickerton, James Sauber, Daniel Doonan &

Katherine Steinhoff: Is North America Preparing to

**Embrace Postal Deregulation?** 

Billy Hayes & Stephen Bell: Monopoly to

Competition in UK Mail Market - Conflicting

Approaches

**SERVICE QUALITY** 

Chair: Ingo Willems

Discussants: Ian Leigh, David Levy

& Stephen Littlechild

João Castro & Agostinho Franco: Binomial Price

and Quality of Service Regulation in Portugal, and Its

Impact on the Market

Michael A. Crew & Paul R. Kleindorfer: Service

Quality, Price Caps and the USO

Greg Swinand: Empirical Evidence on Price, Margins,

and Quality of Service in Post

## Friday, May 30, 2008 (CONTINUED)

12:40 - 2:00 Lunch Lunch

2:00 - 3:30 Concurrent Session

**DEMAND** 

Chair: Bernard Damiens

Discussants: George Houpis & Menahem Spiegel

**Xavier Ambrosini, Olaf Klargaard, Sebastien Breville, & Joel Cornee:** Direct Mailers Demand – A

Theoretical Approach

Frédérique Feve, Jean-Pierre Florens, Frank

Rodriguez & Soterios Soteri: The Diffusion of Internet

Advertising and Demand for Postal Services

Vincenzo Visco-Comandini, Stefano Gori & Michael

**Lintell:** Postal Price Elasticities and Intermedia Competition – A Multisided Market Approach **ENTRY** 

Chair: Joy Leong

Discussants: Jan Bart Henry & Wolfgang Pickavé

**Alex Dieke & Ralf Wojtek:** Competition, Wages and Politics in the Delivery Sector – The Case of Postal

Minimum Wages in Germany

Helmut Dietl, Markus Lang & Stephan Wagner:

Market Entry and Competitive Strategies in the

German B2B Parcel Market

Axel Gautier & Gonzales d'Alcantara: USO

Financing in a Free Postal Market – Three Possible Solutions with Empirical Implementation in Six

Countries

3:30 Break

7:00 Reception Reception

8:00 – Dinner & Speech: Luís Nazaré, Chairman and CEO of CTT Correios de Portugal

# Saturday, May 31, 2008

7:00 Breakfast Breakfast Breakfast

9:00 - 10:35 **EFFECTING COMPETITION** 

Chair: James Pierce Myers

Discussants: Cátia Felisberto, Marjolein Geus & Leonardo Mautino

Patrick de Bas, Nick van der Lijn, Bjorn Volkerink & Arno Meijer: The Impact of Competition and Regulation

on Development of Productivity

Philippe De Donder, Helmuth Cremer, Frank Rodriguez & Paul Dudley: Some Welfare and Pricing

Implications of Alternative Regimes for Value Added Taxation of Postal Services

John Panzar: The Interaction between Regulatory and Antitrust Policy in the Postal Sector

10:35 - 11:05 Coffee Break

11:05 - 12:55 **COMPETITION LAW** 

Chair: Nancy S. Sparks

Discussants: Tarjei Weseth & Ralf Wojtek

James I. Campbell: Liberalization – Lessons from the Airline Industry

**Richard Eccles:** EU Law Principles to be Followed by National Regulators

Alessandra Fratini & Fabio Filpo: The EU Postal Services and Public Procurement Law – New Legal and

Regulatory Issues for the Postal Sector

12:55 - 1:00 Concluding Remarks – Michael A. Crew

1:00 Lunch (Conference Ends) Lunch

## POSTAL AND DELIVERY ECONOMICS PUBLICATIONS

The following edited books resulted from Previous CRRI Postal Events:

- Competition and Regulation in the Postal and Delivery Sector, edited by M.A. Crew and P.R. Kleindorfer, Edward Elgar, 2008
- Liberalization of the Postal and Delivery Sector, edited by M.A. Crew and P.R. Kleindorfer, Edward Elgar, 2007
- Progress toward Liberalization of the Postal and Delivery Sector, edited by M.A. Crew and P.R. Kleindorfer, Springer, 2006
- Regulatory and Economics Challenges in the Postal and Delivery Sector, edited by M.A. Crew and P.R. Kleindorfer, Kluwer Academic Publishers, 2005
- Competitive Transformation of the Postal and Delivery Sector; edited by M.A. Crew and P.R. Kleindorfer, Kluwer Academic Publishers, 2004
- Postal and Delivery Services: Delivering on Competition, edited by M.A. Crew and P.R. Kleindorfer, Kluwer Academic Publishers, 2003
- Postal and Delivery Services: Pricing, Productivity, Regulation and Strategy, edited by M.A. Crew and P.R. Kleindorfer, Kluwer Academic Publishers, 2001
- Future Directions in Postal Reform, edited by M.A. Crew and P.R. Kleindorfer, Kluwer Academic Publishers, 2001
- Current Directions in Postal Reform, edited by M.A. Crew and P.R. Kleindorfer, Kluwer Academic Publishers, 2000
- Emerging Competition in the Postal and Delivery Services, edited by M.A. Crew and P.R. Kleindorfer, Kluwer Academic Publishers, 1999
- Managing Change in the Postal and Delivery Services, edited by M.A. Crew and P.R. Kleindorfer, Kluwer Academic Publishers, 1997
- Commercialization of Postal and Delivery Services: National and International Perspectives, edited by M.A. Crew and P.R. Kleindorfer, Kluwer Academic Publishers, 1994
- Regulation and the Nature of Postal and Delivery Services, edited by M.A. Crew and P.R. Kleindorfer, Kluwer Academic Publishers, 1992
- Competition and Innovation in Postal Services, edited by M.A. Crew and P.R. Kleindorfer, Kluwer Academic Publishers, 1991

The following are texts on postal economics:

- Postal Reform; edited by J.I. Campbell, M.A. Crew and P.R. Kleindorfer, Edward Elgar, forthcoming 2008.
- The Economics of Postal Service, by M.A. Crew and P.R. Kleindorfer, Kluwer Academic Publishers, 1992

These books are published by Springer and Edward Elgar. For information on ordering the books is available at either <a href="http://www.e-elgar.co.uk/">www.springeronline.com</a> or <a href="http://www.e-elgar.co.uk/">http://www.e-elgar.co.uk/</a>.

## **CONFERENCE STAFF**

Professor Michael A. Crew, Director—CRRI

Conference Chair

Jeremy T. Guenter, Assistant Director—CRRI,

Conference Administrator

Center for Research in Regulated Industries
Rutgers Business School, Rutgers University

180 University Avenue, Newark, NJ 07102-1897, USA

Telephone: 973-353-5049 (Office); 973-353-1348 (fax)

Michael A. Crew: 908-221-0524 (Home)

Email: <a href="mailto:mcrew@rbs.rutgers.edu">mcrew@rbs.rutgers.edu</a> (Michael Crew)

<a href="mailto:crri@rbs.rutgers.edu">crri@rbs.rutgers.edu</a> (Jeremy T. Guenter)

Professor Paul R. Kleindorfer, *Conference Co-Chair*Anheuser Busch Professor of Management Science, Emeritus, The Wharton School of the University of Pennsylvania, and Distinguished Research Professor, INSEAD

Email: Kleindorfer@wharton.upenn.edu

## **CRRI**

The Center for Research in Regulated Industries (CRRI), located at Rutgers University, aims to further study of regulation by research in economics, finance, and institutions. Its publications, seminars, workshops, and courses make available the latest advances to academics, managers, consultants, and regulatory commission staff. The Center has over thirty years of experience providing research, instruction, conferences, courses, seminars, and workshops in economics of network industries. The Center's *Journal of Regulatory Economics* is an international scholarly bi-monthly publication intended to provide a forum for the highest quality research in regulatory economics. CRRI was the recipient of The Hermes Award, 1992, awarded by the European Express Association.

## SPEAKERS, DISCUSSANTS & CHAIRS

Farah Abdallah, Research Associate, Ecole Polytechnique Fédérale de Lausanne

Mohammad Adra, Economist, United States Postal Service – O.I.G. Stephen Agar, Director Strategy & Regulatory Affairs, Royal Mail Carlos Dias Alves, COO of the Board, CTT Correios de Portugal Antonio Amaral, CTT Correios de Portugal S.A.

Xavier Ambrosini, Competition & Strategic Diagnostic Expert, La Poste

John Baldwin, Head of International Affairs, CWU

**Trond Helge Bårdsen**, Senior Adviser, Norwegian Post and Telecommunications Authority

Jody Berenblatt, Senior Vice President, Bank of America

Robert Bernau, Competition and Regulatory Manager, New Zealand Post

**Geoff A. Bickerton**, Research Director, Canadian Union of Postal Workers

Deborah Bourque, President, Canadian Union of Postal Workers

A. Thomas Bozzo, Vice President, Christensen Associates

Lawrence G. Buc, President, SLS Consulting

Philip Burns, Director, Frontier Economics

Joan Calzada, Professor, University of Barcelona

James I. Campbell, Jr., Counsel, Brown Rudnick

Robert Campbell, President and Vice-Chancellor, Mount Allison University

John L. Campo, Vice President, U.S. Postal Relations, Pitney Bowes,

Eduardo Cardadeiro, Board Member, Anacom

João Castro, Director - Market Regulation Direction, Anacom

Robert Cohen, Independent Consultant

Gene Columbo, The Aspen Institute

Jeffrey Colvin, Manager of Product Cost Analysis, USPS

Helmuth Cremer, Professor, IDEI – Universite des Sciences Sociales Michael A. Crew, CRRI Scholar and Director–CRRI, Rutgers University

**Robert Curry**, Vice President Business Development & Sales, Siemens Energy & Automation, Inc.

**Gonzales d'Alcantara**, Senior Lecture at the University of Antwerp, d'Alcantara Economic Consulting

**Bernard Damiens**, Chairman of the board, PostEurop aisbl & Director, Strategic and Regulatory Affairs, La Poste/De Post

Patrick de Bas, ECORYS NEI

**Philippe De Donder**, Professor, Toulouse School of Economics **Laurent Deduytsche**, Director – Strategy Projects, Pitney Bowes

Alex Dieke, Head of Department – Postal Services and Logistics, WIK

- Wissenschaftliches Institut fur Kommunikations

Helmut M. Dietl, Professor, Universität Zürich

Paul Dudley, Head of Regulatory Economic Analysis, Royal Mail Richard Eccles. Partner, Bird & Bird

Charles E. Fattore, President, R.R. Donnelley Logistics

Cátia Felisberto, Research Associate, Ecole Polytechnique Fédérale de Lausanne

Frédérique Feve, Researcher, IDEI – Universite des Sciences Sociales Felipe Flórez Duncan, Senior Consultant, Oxera

**Agostinho Franco**, Expert – Market Regulation Direction, Anacom **Alessandra Fratini**, Partner, FratiniVergano – European Lawyers

**Catherine Gallet-Rybak**, Head of Unit Authorizations and Universal Service, ARCEP

Marjolein Geus, Partner, Bird & Bird

**Stefano Gori**, Pitney Bowes & University of the West of England **Billy Hayes**, General Secretary, Communication Workers Union **John Hearn**, Project Manager – Postal Regulation, Commission for

John Hearn, Project Manager – Postal Regulation, Commission for Communications Regulation

Jan Bart Henry, Public Affairs, TNT Post

Richard Hern, Associate Director, NERA Economic Consulting Adam Houck, Managing Consultant, IBM Global Business Services George Houpis, Director, Frontier Economics

Derek Holt, Director, Oxera

Christian Jaag, Economist, Swiss Post and University of St. Gallen Luis Jimenez, Senior Vice President and Chief Industry Policy Officer, Pitney Bowes, Inc.

Denis Joram, La Poste

**Paul R. Kleindorfer**, Professor Emeritus, University of Pennsylvania and Distinguished Research Professor, INSEAD

Peter Koppe, Head of Corporate Intelligence, Österreichische Post AG

Daniel Krähenbühl, Corporate Development, Swiss Post

Ian Leigh, Managing Director, Postwatch

Pekka Leskinen, General Counsel, Legal Affairs, Itella Corporation

Joakim Levin, Analyst, Swedish Post and Telecom Agency

David M. Levy, Partner, Sidley Austin LLP

Joy M. Leong, Partner, Brown Rudnick, LLP

Michael MacClancy, Head of Regulation, The DX Group

Shoji Maruyama, Senior Manager, Japan Post Service Co., Ltd.

Leonardo Mautino, Managing Consultant, Oxera

Luís Nazaré, Chairman and CEO of CTT Correios de Portugal

Norma B. Nieto, Managing Consultant, IBM Business Consulting Services

**Heikki Nikali**, Research Director, Corporate Development, Itella Corporation

Louis F. O'Brien, Senior Vice President – Parcels, Canada Post Corporation

John C. Panzar, Louis W. Menk Professor of Economics, Northwestern University

Edward S. Pearsall, Consultant

Wolfgang Pickavé, Director, Regulation Strategy, Deutsche Post World Net

James Pierce Myers, Attorney at Law, Parcel Shippers Association Alberto Pimenta, Director-Strategic Development, CTT Correios de Portugal S.A.

**Leon Pintsov**, Pitney Bowes Fellow and Vice President, Pitney Bowes,

Sonia Pinto, CTT Correios de Portugal S.A.

Robert A. F. Reisner, President & CEO, Transformation Strategy Richard Robinson, Senior Regulatory Business Modeller, Royal Mail Bernard Roy, Head - Department of Regulatory Economics, La Poste Jacques Ruth, Senior Profitability Manager, La Poste / De Post Belgium

**Paul Schoorl**, Project Manager Regulatory Think Tank & Research, International Post Corporation

David Sibbick, Director of Regulatory Affairs, DX

Paul Smith, Managing Consultant, Cambridge Economic Policy Associates

Nancy S. Sparks, Managing Director - Regulatory Affairs, FedEx Menahem Spiegel, Associate Professor, Rutgers University

David Stubbs, Managing Consultant, Europe Economics

Greg Swinand, Divisional Director, London Economics

Urs Trinkner, Head of Regulatory Strategy, Swiss Post

Mark van der Horst, Manager - Corporate Public Affairs, United Parcel Service

**Joost Vantomme**, Executive Director Strategic & Regulatory Affairs, La Poste / De Post Belgium

Vincenzo Visco-Comandini, Professor in Industrial Economics, University of Rome Tor Vergata

**Sture Wallander**, Vice President, International Relations Secretariat, Posten AB

**John D. Waller**, Director of the Office of Accountability and Compliance, U.S. Postal Regulatory Commission

Tarjei Weseth, Senior Adviser, Posten Norge AS

Ingo Willems, Vice President, A.T. Kearney GmbH

Ralf Wojtek, Partner, Heuking Kühn Lüer Wojtek

## SPEAKERS, DISCUSSANTS & CHAIRS (CONTINUED)

### **ORGANIZING COMMITTEE**

Nabil Allaf, Canada Post Corporation

José Amado da Silva, Chairman, Anacom

John Baldwin, Head of International Affairs, Communication Workers
Union

Maynard Benjamin, President, Envelope Manufacturers Association Jody Berenblatt, Senior Vice President, Bank of America

Kristin Bergum, Director – Regulatory Affairs, Posten Norge AS Robert Bernau, Competition and Regulatory Manager, New Zealand Post

**Geoff A. Bickerton**, Research Director, Canadian Union of Postal Workers

Lawrence G. Buc, President, SLS Consulting

Philip Burns, Director, Frontier Economics

James I. Campbell, Partner, Brown Rudnick, LLP

Ralph Carter, Managing Director – Legal and Regulatory Affairs, FedEx

Joao Castro, Director of Studies and Forecast, Anacom

Gene Columbo, Senior Advisor, The Aspen Institute

Jeffrey Colvin, Manager of Product Cost Analysis, USPS

Julien Coulier, Universal Service Expert, ARCEP

Michael A. Crew, Professor of Economics, Rutgers University

**Gonzales d'Alcantara**, Senior Lecture at the University of Antwerp, d'Alcantara Economic Consulting

**Bernard Damiens**, Chairman of the board, PostEurop aisbl & Director, Strategic and Regulatory Affairs, La Poste/De Post

Gene Del Polito, President, Association for Postal Commerce

Paul Dudley, Head of Regulatory Economic Analysis, Royal Mail

**Jane Dyer**, Director of Markets and Communication, International Post Corporation

Richard Eccles, Partner, Bird & Bird

Jutta Fabjan, EU and Regulatory Affairs, Österreichische Post AG

Charles E. Fattore, President, R.R. Donnelley Logistics

Stephen Ferguson, Assistant Secretary, An Post

Charles Firestone, Executive Director, The Aspen Institute

Alessandra Fratini, Partner, FratiniVergano – European Lawyers

**Catherine Gallet-Rybak**, Head of Unit Authorizations and Universal Service, ARCEP

**Stephen Gibson**, Director - Economic Development, Postal Services Commission

**Stefano Gori**, Poste Italiane SpA & University of the West of England **John Haldi**, President, Haldi Associates, Inc.

Greg Harman, Director, LECG

**John Hearn**, Project Manager – Postal Regulation, Commission for Communications Regulation

Jan Bart Henry, Public Affairs, TNT Post

George Houpis, Director, Frontier Economics

Christian Jaag, Economist, Swiss Post and University of St. Gallen

Helen Jenkins, Managing Director, Oxera

**Luis Jimenez**, Senior Vice President and Chief Industry Policy Officer, Pitney Bowes, Inc.

Denis Joram. La Poste

**Paul R. Kleindorfer**, Anheuser Busch Professor of Management Science, Emeritus, The Wharton School of the University of Pennsylvania, and Distinguished Research Professor, INSEAD

Peter Koppe, Head of Corporate Intelligence, Österreichische Post AG

Daniel Krähenbühl, Corporate Development, Swiss Post

Ian C. Leigh, Managing Director, Postwatch

David M. Levy, Partner, Sidley Austin LLP

Lisa Martin, General Counsel, USPS OIG

Walter Maschke, Managing Director Corporate Regulation Management, Deutsche Post World Net

Simon Maunder, Consultant, NERA Economic Consulting

Leonardo Mautino, Managing Consultant, Oxera

**Heikki Nikali**, Research Director, Corporate Development, Itella Corporation

Louis F. O'Brien, Senior Vice President – Parcels, Canada Post Corporation

Chris Osborne, Director, LECG

Wolfgang Pickavé, Director, Regulation Strategy, Deutsche Post World Net

James Pierce Myers, Attorney at Law, Parcel Shippers Association Alberto Pimenta, Director-Strategic Development, CTT Correios de Portugal S.A.

Bernard Roy, Head - Department of Regulatory Economics, La Poste James Sauber, Research Director, National Association of Letter Carriers

Michael F. Scanlon, Kirkpatrick & Lockhart Preston Gates Ellis LLP Gennaro Scarfiglieri, Head of Core Business Strategic Marketing -Strategic Planning, Poste Italiane SpA

Paul Schoorl, Project Manager Regulatory Think Tank & Research, International Post Corporation

Michael Shinay, Associate Partner, IBM Global Business Services

Nancy S. Sparks, Managing Director - Regulatory Affairs, FedEx Gregory Swinand, Senior Consultant - Regulatory Division, London

Joëlle Toledano, Commissioner, ARCEP

Economics

Mark van der Horst, Manager - Corporate Public Affairs, United Parcel Service

Anton van der Lande, Vice President-Public Affairs International, UPS

Ian D. Volner, Partner, Venable LLP

Sture Wallander, Vice President, International Relations Secretariat, Posten AB

John D. Waller, Director – Rates Analysis & Planning, U.S. Postal Regulatory Commission

Matthew Ward, Deputy Director, Access, Postal Services Commission David Williams, Inspector General, USPS

## **HOTEL INFORMATION**

reservas.alg@hoteisreal.com

communication. Please make your reservations only through the hotel and not through reservation services/travel agencies.

The conference will be held in Albufeira, Algarve, Portugal. The conference site is:

The Grande Real Santa Eulália Phone: + 351

Praia de Santa Eulália

8200-916 Albufeira – Portugal

Phone: + 351 289 598 012; Fax: + 351 289 598 002

If you are staying at either the Grand Real Santa Eulália or the Bellavista it is necessary to make your hotel reservations directly with hotel via the email address above, telephone, or by faxing the reservation form. Reference the CRRI – Rutgers Conference in your

The hotel reservation forms can be obtained at our web site (<a href="http://crri.rutgers.edu/post/">http://crri.rutgers.edu/post/</a>). The reservation forms must be sent to the Grand Real Santa Eulália. The Conference rates run from 216.50 €single to 320 €for double including meals, for the Real Bellavista Hotel & Spa the rates run from 138.50 €single to 208 €for double including meals. The rates for two days before and two days after the conference at the Grand Real are from 157 €per night for single to 201 €for a double; at the Real Bellavista are 79 €per night for single and 89 € for a double. Please note on reservation form that you are attending the 16th CPDE (Rutgers University). The deadline for reservations is May 1st. However as hotel space is limited it may fill earlier than May 1st.

## **FEES AND EXPENSES**

- A registration fee of \$1,400 is payable to Rutgers University.
- Food and lodging at the Conference are not included in the registration fee. Breakfast, lunch and dinner are included in the rates for lodging. All persons that do not stay at the either the hotel will be required to pay for meals separately.
- The conference fee is waived for a limited number of employees of sponsoring organizations.
- Registered participants will be provided with
  - o Online access to the conference proceedings
  - o A CD-ROM with complete proceedings (papers and presentations) after the conference.
  - o A copy of the edited volume resulting from the conference (approximately 6 months after the conference).

Please forward the Registration Form to Jeremy T. Guenter at:

Center for Research in Regulated Industries, Rutgers University 180 University Avenue, Newark, NJ 07102-1897, USA Fax: 973-353-1348 Email: <a href="mailto:crri@rbs.rutgers.edu">crri@rbs.rutgers.edu</a>

Signature of Participant: \_\_\_\_\_

**><** 

made at any time.

REGISTRATION FORM: 16th Conferen	ice on Postal and Delivery Economics
Name:	Title:
Organization:	
Complete Address:	
Telephone:	Fax:
Email:	
Billing Information:  Employee of sponsoring organization*—fee may be w Payment of \$1,400 enclosed in U.S. Dollars payable to Credit Card: VISA MC Exp/ Ca Send invoice to	o Rutgers University
<b>CANCELLATION POLICY:</b> Until April 16, 2008 cancellatin full. After this date, the indicated fee is due in full whether	* •

# Abstract for the 16<sup>th</sup> Conference on Postal and Delivery Economics

## "Strategies and Business Models of European Postal Competitive Operators"

## Laurent Deduytsche and Nathaniel Medina, Pitney Bowes

Over the past decade, many competitive postal operators have emerged in the letter mail market with new strategies and business models as European postal markets liberalize. Country specificities such as the regulatory environment and strategies of the incumbent have heavily influenced the current degree of competition in each market as well as the type of new entrants that have emerged.

Past economic literature and commissioned studies primarily provide a high level perspective on the development of competition in Europe and of new entrant models. The objective of our paper is to cast a more granular light on existing new entrants in order to better understand their actual strategies, business models, performance, viability, and to put them in perspective of the countries in which they operate.

This exercise has been difficult due to the lack of information of mostly small size and often privately held new entrants. But new entrants have gained enough visibility to be analyzed in greater detail. "Downstream access" players in the U.K. are now claiming close to 20% market share in the letter mail market while end-to-end competitive operators in Germany, the Netherlands, Spain and Sweden are close to or have surpassed 10% market share. In addition, many new entrants are now part of listed groups or owned by listed foreign operators.

In this paper, we first assess the degree of competition in six key countries (France, Germany, Netherlands, Spain, Sweden, U.K.) in terms of mail volumes and existing new entrants. We then review the business models, strategies, and financial performance of the main ones.

With regard to business models of new entrants, we analyze in detail who their customers are, what their products are, and how their services are delivered. We clarify what role national postal operators play in foreign markets, whether new entrants leverage pre-existing networks such as parcel, to what extent their infrastructure and workforce is flexible, whether they have expanded across the value chain, and how competitive new entrants' prices are over incumbent posts.

We analyze and categorize their competitive positioning and strategy for growth, and map the vehicles they have used to expand. We also match these business models with models identified in previous papers (e.g., Dietl and Waller 2002) to assess which ones have actually emerged.

We also assess the financial performance of these new entrants, information availability permitting. We analyze the new entrants' profitability and shareholder structure,

clarifying the role of private equity firms, and the type of valuations that some new entrants enjoy.

We conclude this thorough analysis of new entrants by identifying patterns, both commonalities and differences, in their approach to the market, and by synthesizing their actual strengths – or competitive advantages – and weaknesses, drawing conclusions as to their likely viability.

In the last section, we describe country specificities, analyze the implications for new entrants' strategies and business models, and relate this analysis to case studies of actual new entrants. Country specificities are described on the basis of the major barriers to entry faced by new entrants in liberalizing European postal markets, including: the country regulatory and social environments, the strategy of incumbent posts, and existing infrastructures and economies of scale. We also attempt to analyze why specific pre-existing networks are leveraged by new entrants in certain countries and not others.

This paper builds on a comprehensive secondary research not only of the existing academic literature, commissioned studies or country regulatory reports, but also of business information such as annual reports, analyst reports, and financial databases when available. In addition, we interview industry stakeholders such as business executives with incumbents and new entrants, regulators, associations, and consultants.

#### References

Andersson, P., 1999. Entry on deregulated postal markets: Lessons from Sweden, Sintra, June 1999.

Burke, N. (2004), Deregulation in the UK postal sector, Cork, June 2004.

Cohen, R., P. Jonsson, M. Robinson, S. Selander, J. Waller, S. Xenakis (2006), The impact of competitive entry into the Swedish postal market, Bern, June 2006.

De Bijl, P., E. van Damme, P. Larouche (2005), Regulating access to stimulate competition?, Antwerp, May 2005.

Dietl, H. M., and P. Waller (2002), Competing with Mr. Postman: Business Strategies, Industry Structure, and Competitive Prices in Liberalized Letter Markets. Schmalenbach Business Review, Vol. 54, April 2002.

Dietl, H. M., and P. Waller (2002), Competitive Strategies of Former Monopolists in Liberalized Letter Markets, Potsdam, June 2002.

De Bas P., and N. van der Lijn (2007), Development of competition in EU postal markets: influence of the regulatory framework on the pattern of competition.

Ecorys Research and Consulting (2005a), Development of competition in the European postal sector, Rotterdam, July 2005.

Ecorys Research and Consulting (2005b), Barriers to competition in the German and UK postal market, Does de jure liberalization lead to de facto liberalization?, Rotterdam, December 2005.

Escribano, A., P. González, J. Laceras (2003), Evolution and Analysis of the Market Structure of Postal Service in Spain, Toledo, June 2003.

Harford, G. (2004), The liberalization of postal services in New Zealand, Cork, June 2004.

Jonsson, P., and S. Selander (2005), The "real" graveyard spiral – Experiences from the liberalized Swedish postal market, Antwerp, June 2005.

NERA Economic Consulting (2004), Economics of postal services, London, July 2004.

NERA Economic Consulting (2005), Postal business strategies in Europe, Antwerp, June 2005.

PricewaterhouseCoopers (2006), The impact on Universal service of the full market accomplishment of the postal internal market in 2009, Brussels, May 2006.

Schwarz-Schilling, C. (2002), Market results of postal reform in Germany: Current trends, Potsdam, June 2002.

WIK Consult GmbH (2004), Main developments in the postal sector, Bad-Honnef, July 2004.

WIK Consult GmbH (2005), The evolution of the regulatory model for European postal services, Bad-Honnef, July 2005.

WIK Consult GmbH (2006), Main developments in the postal sector (2004-2006), Bad-Honnef, May 2006.

WIK Consult GmbH (2007), Arbeitsbedingungen im briefmarkt, Bad Honnef, May 2007.

## Abstract for the 15<sup>th</sup> Conference on Postal and Delivery Economics

#### "The IPO as a Driving Force in the Change Process"

P. Koppe, C. Bosch, S. Hömstreit, S. Pohl Austrian Post / marketmind

Today, postal operators are facing three main influences affecting their businesses, namely privatization, liberalization and substitution. To be successful within this changing environment, higher cost efficiency, increasing flexibility and stronger customer orientation are the challenges to meet.

Coming from a public authority with bureaucratic environment, the Austrian Post, like other postal operators in Europe, successfully made the step towards process-orientation by implementing cost accounting, ratio systems, streamlining the distribution channel and understanding the relevant streams. Now, the Austrian postal operator is facing the next challenging step, which is customer orientation. The perception of the company by different stakeholders – shareholders, customers and employees – is a key success factor for this change process.

Change management is a main topic for most companies. In postal organisations the major changes are needed. Theoretically and in most cases applied in practice, the change process is started with different Kick-Off-Events to enlarge the involvement of the employees. Sometimes an exogenous occasion can stimulate the change process like an additional propellant. In the case of the Austrian Post its IPO as third European postal organisation listed on the stock market prompted this role as impetus of the change process.

The paper aims to show through the example of the Austrian Post, how an IPO can boost the positive perception of postal operators' employees towards their employer and thereby positively affect the process of change. A periodical "image evaluation" study is conducted every two years in cooperation with the market research institute called "marketmind" to observe the perception of the Austrian Post among its stakeholders. Three different groups were considered in the study: business customers, private customers and employees. In 2006 around 6 months after the IPO the latest study so far took place.

With a Structural Equation Model the main drivers for the improvements in certain image dimensions are determined. These can be attitudes, knowledge about the IPO or loyalty, for example, and will differ between the different stakeholder groups. The main goal was to identify these causes and their impact for each stakeholder group. It will be shown that the drivers differ considerably between the three groups. The largest impact is perceived within the employees. The paper aims to answer a number of important questions, for example, whether the IPO really advanced the change process and what the Austrian Post can do to continue this process.

#### References

Doppler, K. , Lauterburg, C. , Change-Management; den Unternehmenswandel gestalten. Frankfurt/Main: Campus-Verlag; 2002

Koppe et al 1 / 2

Esch, F.-R., Tomczak, T., Kernstock, J. and Langner, T., *Corporate Brand Management*, Gabler, Wiesbaden, 2006

Hayes, J., The theory and practice of change management; Palgrave Macmillan, 2007

Koppe, P. and Bosch, C., "Microanalysis of Mail Demand Drivers for Large Business Customers", in Michael A. Crew and Paul Kleindorfer (eds), *Liberalization of the Postal and Delivery Sector*, Edwar Elgar, Cheltenham, 2006

Koppe et al 2 / 2

# **Innovation in Postal Products and Pricing: Opportunities and Obstacles in the Reform Era**

#### Robert A. F. Reisner, Maynard Benjamin and Derek Osborn

The age of postal reform has brought the topic of product and pricing innovation to the fore. As posts have been privatized and have had reform realign their objectives to focus on achieving profitable performance to generate retained earnings, the imperative of topline revenue growth has become clear.

In the private sector the pressure to improve profitability and revenue growth in an increasingly competitive marketplace has made the subject of innovation one of the most rapidly growing fields of management study. This paper will (1) summarize highlights of the abundant management innovation literature and (2) use the results of a survey of postal industry leaders to develop hypotheses about opportunities and obstacles facing future postal leaders. These insights will then (3) be applied to a case study of current practice as the announcement and initial presentation of the Intelligent Mail Barcode by the USPS offers lessons about the opportunities for postal-mailer collaboration.

## **Objectives**

The objective of this paper is to provide insight into one of the fastest growing areas of postal management concern. In the past, investing in network efficiency, cost reduction and productivity improvement has offered the posts a high probability pathway to achieving returns on investment. Investing in new products and innovative pricing has faced regulatory resistance and cultural barriers among other obstacles. But today posts throughout the world have made the development of innovation into a high priority. The insights and conclusions in this paper will seek to provide guidance to future postal managers and mailing industry executives as they develop innovation initiatives and to suggest new directions for future research.

#### Approach

Three research steps will be used to support this paper: literature review, survey and case study. The management literature is filled with discussions of questions that are important to the field of innovation. Can innovation be accelerated with the development of global networks for information sharing<sup>1</sup>? Should third party participation be encouraged to reduce risk and uncertainty<sup>2</sup>? Can innovation become a systematic

<sup>1 &</sup>quot;The Innovation Value Chain,", Morten Hansen & Julian Birkinshaw focused on finding the key links in an individual company's value chain to adapt innovation to each case. HBR, June 2007.

"A Buyer's guide to the Innovation Bazaar," Satish Nambisan and Mohanbir Sawhney, HBRJuly, 2007 introduces the concept of

the difference between shopping for raw ideas and market

management practice<sup>3</sup>? The first part of the paper will summarize the issues that this literature raises for postal managers who are now being pushed to develop new programs of innovation to create new postal products and to encourage postal pricing innovation.

In the fall of 2007, both the McKinsey Quarterly and Harvard Business School have published the results of global studies of management practices in innovation. These private sector perspectives have been used to develop a survey that will be conducted with current and former postal managers. Testing the survey informally had demonstrated that this tool could be useful in generating hypotheses for future testing. In the future, this survey may be administered globally. In the postal industry studies by Derek Osborn offer a starting point for adapting these discussions of private sector issues to the mailing industry's context.

Finally, the hypotheses generated in the survey will be used to examine a case study of the initial introduction of the Intelligent Mail Barcode (IMB). The implementation of the IMB will have great significance for the US mailing industry, individualizing mail tracking and will offer the basis for service performance measurement. Perhaps its significance will also be felt in the global postal technology market as well.

Intelligent mail offers the prototypical example of a technology that can yield customer side learning<sup>4</sup>. The applications of intelligent mail will allow mailers to measure performance not only of processing and delivery but also of the effectiveness of using the mail channel – real time. Will mailers perceive the IMB as an opportunity for learning and innovation or as a regulatory requirement, a necessity to receive full discounts? The answer will be clear by February 2008 as the first phase of IMB implementation – presentation of a value proposition to the customers – is completed. This case study may offer an opportunity for mid-course correction if that is appropriate and will suggest models that might be employed by the global mailing industry.

ready products and offers concepts for the intermediaries that can help accelerate the search.

<sup>&</sup>lt;sup>3</sup> "Match Your Innovation Strategy to Your Innovation Ecosystem," Ron Adner, HBR, April 2007

Offers the questions that leaders should address to ensure that innovation "fits" in a larger context. These articles and others have followed the work of Clayton M. Christensen and Michael Raynor and more recently, Gary Hamel. They illustrate the abundant interest that the private sector has shown in this topic in recent years.

Writers such as Henry Chesbrough (Open Business Models, How to Thrive in the New Innovation Landscape, HBS Press 2006) would say that the IMB offers an opportunity to achieve network effects through collaborative. The question is whether such a pathway is open to the mailing industry.

## The Universal Service Obligation with Asymmetric Market Power

Michael D. Bradley
Department of Economics
George Washington University
Washington, D.C.

Jeff Colvin United States Postal Service Washington, D.C.

Mary K. Perkins
Department of Economics
Howard University
Washington, D.C.

The ongoing liberalization of the postal sector has increased in the importance of understanding the role of the universal service obligation. In a series of important papers, Crew and Kleindorfer (2000, 2005, and 2006) have highlighted the fact that cream skimming by entrants could lead to financial instability for an incumbent operator which is subject to a uniform price USO. The possibility of potentially large negative outcomes under liberalization is strong motivation for theoretical work on the impact of a universal service obligation in advance of liberalization.

Recently, in a series of papers, Billette De Villemeur, Cremer, Roy, Toledano (2003) and DeDonder, Cremer, and Rodriguez (2005) have increased our understanding of the economics of postal markets and the role played by the USO in a liberalized environment. The rich models developed in this line of papers include the major characteristics the postal environment: high and low cost delivery areas, price caps, work shared and end to end products, uniform pricing, and imperfect substitution among postal products. In this paper we build upon this previous work to construct a model of postal competition and regulation similar to what is outlined by the recent postal reform in the United States. We then build a structure for measuring the cost of universal service in that model.

We also extend the competitive environment so that is more closely resembles the nature of competition in the United States. Most previous work on postal markets

## **Preliminary Draft**

assumes that entry will take the form of a competitive fringe. While there are some exceptions (Billette De Villemeur, Cremer, Roy, Toledano (2003 and 2007)), these papers continue to assume that the incumbent postal operator is the dominant firm and the entrants are the followers. While this is a reasonable assumption for the monopoly product in the United States, it is not appropriate for the competitive product. There, the private sector firms are dominant. In the markets for competitive products, the Postal Service is a relatively small player. Our model is designed to capture this aspect of postal markets in the U.S.

After some preliminary models created for benchmarking purposes, we construct a model based upon the post-reform structure, in which rate of return regulation is replaced by price cap regulation. The postal operator now faces both a ubiquity constraint (it must serve both areas) and a uniform pricing constraint (the same price must be charged for delivery to both areas). Because the market is liberalized, the entrant can now operate in the formerly protected market, using its competitive product network in the low cost area and either establishing its own network or using the incumbent's network in the high cost area. The profit earned by the postal operator in this scenario is the baseline for calculating the cost of universal service.

Finally, we modify the previous scenario by dropping the uniform pricing constraint and allow the incumbent to price differentially across the high and low cost areas. Note that the price cap is still in place, so the average price across areas is still constrained. The difference in profit earned in this scenario and the previous one is the cost of universal service in the liberalized environment.

## Network externalities and the universal service obligation: a two sided market approach

by
François Boldron
(DREN, Goupe La Poste)
Helmuth Cremer, Philippe De Donder,
(IDEI, University of Toulouse)
Denis Joram and Bernard Roy
(DREN, Goupe La Poste)

Externalities and particularly network externalities are amongst the most prominent arguments used to justify a universal service obligation (USO) in the postal sector. This is an important issue for the future of the postal sector. The very idea of universal service has remained relatively uncontested during the early stages of the liberalization process. More recently, however, the USO in itself has increasingly been questioned. The question is whether the social benefits associated with the USO are significant enough to justify its cost and in particular the impediment to competition it often implies. In a recent paper, Cremer et al. (2007) have provided an overview of the benefits and costs of the USO in the postal sector. They have presented and assessed alternative economic justifications of the USO. In particular they have mentioned the issue of network externalities but have limited themselves to a sketch of the main ideas. The current paper takes up this issue and provides a more formal and thorough analysis which is inspired by recent developments in the industrial economics literature.

Network externalities are a classical justification of USO in telecommunications. They arise when the benefits from using a network depend on the number of individuals who are connected to the network. This traditional view relies on a symmetric view of externalities where all subscribers are potential callers and receivers. This view is probably of limited relevance for the postal sector. A more modern approach to network externalities is provided by the "two-sided markets" framework. This view is much better suited for the postal sector. In this setting, a market is viewed as a platform (intermediary) for exchanges between agents on its two sides. The membership and/or usage on one side of the market affects the utility or profit opportunities on the other side. This gives rise to membership and/or usage externalities that are no longer symmetric.

We provide a simple two-sided market model of the postal network and examine if and to what extent this view can provide a rationale for USO. The main features of our model are as follows.

There is one representative sender who sends mail to a large number of individuals. These addressees are ranked according to their "delivery cost", starting with the lowest delivery cost. We assume, as is the case in most countries, that low cost addressees receive more mail. In a first step we assume that there is a single operator who serves a fraction of addressees with a high quality of service (e.g., delivery six days per week), while the remaining fraction is served with a low quality (less frequently or no home delivery at all). The benefits of senders (per addressee) increase with the size of the high quality delivery network. This brings about the first type of externality (from addressees to senders). Furthermore receiving mail provides utility to addressees; this implies the second type of externality (from senders to addressees, the counterpart to the "call externality" in telecommunications). We show that (because of the interplay of the two externalities) unregulated equilibria tend to imply an insufficient (les then

socially optimal) coverage at high quality of service and we examine how this problem can be mitigated by a USO.	be

Leskinen Pekka, Karlsson Peter, Nikali Heikki and Rokkanen Päivi Itella Corporation, Finland

Rutgers Conference May 28-31, 2008, Albufeira, Algarve, Portugal

**ABSTRACT** 

#### What will happen to competition when USO substitution grows?

A new EU postal directive is in the process of implementation. The definition of Universal Service Obligation (USO) has remained unchanged but member states and national regulators are given more flexibility in implementing the directive in the light of national conditions. However, even under the current EU legislation there has been some national variation in the national interpretation of USO and it will undoubtedly increase. The reason for the lack of clarity in interpretation is based on a limited understanding of the philosophy of competition and varying national geographical circumstances.

If the interpretation of USO is very strict, how will it be possible for those postal services subjected to USO to compete with electronic means of communication? In Finland the market share of letters in written targeted communication (email, SMS, telefax, letters) has dropped from 60 per cent to 10 per cent in 10 years. That has happened despite the fact that the real price of letters has fallen by 2 per cent, because at the same time the prices of telecommunications in general have halved. In Finland consumers used approximately the same amount of money for postal and telecommunication services in the middle of the 1990s. However, today households spend 30 times more money on telecommunication than on postal services. If the postal market is attractive it will generate competitive offering and the interest of users is safeguarded by effective competition. Therefore the need for broad universal service obligations no longer exists. This has to a large extent already taken place in electronic communications where the needs of end-users have satisfactorily been met by the market.

On the other hand, if the demand for postal services diminishes considerably e.g. due to electronic substitution, the need to ensure the availability of these services by excessive regulation can be questioned. In that case can be asked how long this process will continue before USO becomes useless. These are processes that take place at different times in different countries even in the EU.

This report considers the definition of USO as described above and is based on structural comparisons between different countries in the EU and presents the following questions:

- National markets evolve at different times; therefore the principle of subsidiarity needs to be applied
- The different national characteristics should be taken into account in implementing the postal legislation
- Some member states may be protecting their postal markets when no competition in postal services nor electronic substitution has emerged

## BANK OF AMERICA, MAIL, AND THE ENVIRONMENT

by

Jody Berenblatt Bank of America

and

Lawrence G. Buc SLS Consulting, Inc.

The environment is becoming or already is an important world-wide issue. For example, the EU has put in effect a cap and trade system to control green house gas emissions and Al Gore recently won a Nobel Peace Prize for his work in pointing out the need for world-wide action on this issue. Green marketing claims are becoming increasingly-popular: the United States Postal Service has redesigned its Priority Mail packaging to make it more environmentally friendly. And several European Posts are offering carbon free shipping.

Direct mail in the United States is increasingly under attack for its alleged deleterious environmental aspects. Although no state or federal legislation has been enacted in the United States,15 states have introduced "Do-Not-Mail" legislation which in some way would allow mail recipients to restrict the ability of firms to send them marketing mail.

In spite of the flurry of emotion surrounding direct mail, there is little analytic work bearing on the issue of its environmental aspect and how these compare to other environmental aspects of firms. This paper presents just such an analysis.

The Bank of America has prepared a Life Cycle Inventory of its operations. In this paper we first present the results of that study, showing emissions of important pollutants caused by the Bank's operations. We then use these to illustrate the policy analysis which should be performed if society is to solve environmental problems in a rational, economically-based way. Finally, we conclude by discussing some of the actions the Bank has taken to ameliorate its footprint and others that it is planning.

# "Mail on Mars--a new awakening:

### From Universal Service to Needs Based Services"

Friedli B. (Swiss Post) - <a href="mailto:beat.friedli@post.ch">beat.friedli@post.ch</a>, Gori S. (UWE and Poste Italiane) - <a href="mailto:stefgori@yahoo.com">stefgori@yahoo.com</a>, Pintsov L. (Pitney Bowes) - <a href="mailto:Leon.Pintsov@pb.com">Leon.Pintsov@pb.com</a>, Vanderhost M. (UPS) - <a href="mailto:mvanderhorst@ups.com">mvanderhorst@ups.com</a>, Wright H. (i2f and Pitney Bowes) - <a href="mailto:howard@insight2foresight.co.uk">howard@insight2foresight.co.uk</a>

It is 2060 - 10 years since humans colonized Mars. Everything is running as it had on Earth until a magnetic storm hit, causing a catastrophic communications blackout, including the mail system run by *Mars-mail*. The governing body, the Martian Grand Council (MGC), set up a High Commissioner on Communication (HCC) to find solutions to the temporary blackout. All the Commission had to go on were a few pieces of information recovered from the archive brought from Earth. Due to the destruction of electronic archives all that was left were document on the postal system dated pre December 2007. Within a few weeks the Commission developed a reliable daily courier service to deliver official and personal mail, as well as "colourful magazines" to various commercial establishments, households and outposts on Mars. Once all electronic communications were restored many of the members of the MGC declared they didn't need mail anymore as: "We have electronic substitutes!". To make matters worse for the postal service, the entire workforce deserted their posts in a labour dispute. A set of robots designed by a company called 'Redwater' could be used to replace the employees, but they were expensive and after all, Mars might not need a mail service anymore now Electronic Substitution has returned.

The Grand Council asked the Commission to design, from scratch, the planet's communications sector so the HCC established a working group just arrived from Earth, Kleindorfer. The Working Group based its analytical framework on the material from the first report of the HCC and three books published around the years 2006-2007, one on regulated industries (Crew, Parker, 2006) one on innovation by the futurologist Wright (2007) and the other one called "Idealized Design" (Ackoff et al., 2006). Ackoff's book states that to find the ideal solution to a business challenge, envision the perfect solution, and then work backward to the possible. One of the key questions in this theory is whether a particular design would be sustainable within a given context if it were brought into existence.

The main topics that caught the attention of the working group were: from Crew, Kleindorfer (2007), Pintsov et.al. (2006), Gori et.al. (2003). These references defined the ideal users and products/services, including an ideal Universal Service Obligation (USO) to provide everyone on Mars with some basic services. The HCC asked: Should business and social mail be segregated? Should the postal operator offer one product for everyone regardless of the communication needs of the users, or should differentiated products be offered for different groups of users having different needs (Need Based Services)? In particular, should the 'U' in the USO should be eliminated, leaving the post office with service obligations (SOs)? What should the optimal postal network be (the network that delivers communication products to end users with precise quality of services, and with a minimal overall cost), process and equipment architecture that would support delivery of products? Further questions were raised after the HCC read Friedli et al. (2005). What are the benefit/risks of having such standards? Who would pay (sender, receiver, both parties, general taxation)? If paid by customers, how would it be paid? From Armstrong (2005), Rochet and Tirole (2005) Panzar (2006) Jaag and Trinker (2007), Visco Comandini (2007), the HCC also studied two-sided markets and why the postal sector should consider innovations arising from the consideration of two-sided markets.

This paper summarizes the second report the HCC presented to the MGC with its official proposals, The primary focus of this paper is to illustrate the process of idealized design or a greenfield approach for strategic assessment within an industry in strong transition.

#### Basic References for the HCC:

- 1- **Ackoff R. L., Magidson J., Addison H. J. (2006):** "Idealized Design: How to Dissolve Tomorrow's Crisis...Today ", Wharton School Publishing.
- 2- Armstrong, M. (2005): "Competition in two-Sided Markets", Department of Economics, University College, London.
- 3- **Crew M. and Kleindorfer P. (2007):** "Welfare Effects of Innovative Approaches to the USO under Entry" Edward Elgar Publishing, London.
- 4- Crew M., Parker D. (2006): "Internastional Handbook on Economic Regulation", Edward Elgar Publishing.
- 5- Friedli B., Finger M., Felisberto C., Krähenbühl D., Trinkner U. (2005): "Exploring the "last mile" in the postal sector" Rutgers Conference.
- 6- Gori S., Lettieri L., Marè M. and Visco Comandini V. (2003): "Reconsidering the Myths on Postal Service", Rutgers Conference.
- 7- **Pintsov L. A., Obrea A., Biasi T. (2006):** "Unbundling the Mailstream Analysis of an Innovative Approach to USO", Rutgers Conference.
- 8- Jaag, C., Trinkner, U. (2007): "Pricing in competitive two-sided mail markets", Rutgers Conference.
- 9- Panzar, J. (2006): "PO Box Access: Competition Issues in a Two-Sided Postal Market", Paper presented at the 4th IDEI/La Poste Conference on Regulation, Competition and Universal Service in the Postal Sector, Toulouse.
- 10- **Rochet, J.C., Tirole, J. (2005):** Two-sided Markets: A Progress Report. http://idei.fr/doc/wp/2005/2sided\_markets.pdf
- 11- Visco Comandini V. (2007): "Trade offs between competition and universal service in liberalized postal markets", presented at the Società Italiana di Diritto ed Economia III Annual Conference Bocconi University, Milan 9 November.
- 12- Wright H. (2007): "Ten Steps to Innovation Heaven" Cyan Communications, March.

## Abstract for the 16<sup>th</sup> Conference on Postal and Delivery Economics Algarve, Portugal, May 30 – June 3, 2008

## The Environmental Impact of Mail: A Baseline

Luis Jimenez, Judith Auslander, Denice Koljonen<sup>1</sup> Pitney Bowes, Inc. – 2007

A significant number of recent media events and legislative actions<sup>2</sup> have raised the consciousness of the need for the mailing and postal industry to have an accurate and fact-based understanding of the environmental impact of mail. Broad studies of CO2 emissions by source of fuel, human activity and country have been completed in various notable reports, such as Stern, Lehman Brothers, the United Nations and the IPCC. Unfortunately, a baseline of the specific impacts of mail does not currently exist and this paper aims to contribute much-needed original, baseline work to fill that void and stimulate future research. A basic step in controlling carbon emissions is measuring them. As the World Economic Forum has observed, such measurements do not exist. Bottom-up models of CO2 emissions produced within a post's internal value chain principally consider fuel consumption for transportation activities and resultant emissions by type of vehicle and fuel (e.g., such as the tables in Vattenfall), coupled with estimates of energy use in postal facilities. A number of posts and integrators have computed total CO2 emission estimates (e.g., DPWN, Post Danmark, Royal Mail, TNT, and UPS), and typically publish them in their Corporate Social Responsibility (CSR) reports. More comprehensive studies aim to use Life Cycle Analysis (LCA), notably the work in Denmark, which has been extended to model Europe-wide estimates that form the basis for PostEurop's Greenhouse Gas Emissions Reduction program. A difficulty with comparing LCA-based emission estimates is that there is currently no commonly agreed "boundary" for the life-cycle activities and processes to be included in estimating mail's CO2 emissions. More broadly still, other areas related to mail's environmental impact beyond CO2 emissions suffer from uneven documentation and a shortfall in the dissemination of valuable studies. Among these areas we include the actual rates of forest exploitation, the accumulation of mail in landfills, and the comparison of mail's impact in relation to other human activities and consumption of everyday commodities. This baseline paper will include five areas: (1) estimates of the rate of change in the forest stock resulting from paper and mail production; (2) assessment of mail's impact on the waste stream and landfills; (3) baseline conversions from units of energy and fuel use to CO2 emissions; (4) estimating CO2 emissions from a variety of human activities and consumption of everyday commodities; and (5) estimates of CO2 emissions from mail with clear definition of the areas of life cycle or value chain that each estimate encompasses.

<sup>&</sup>lt;sup>1</sup> Luis Jimenez is Senior Vice President and Chief Industry Policy Officer, Pitney Bowes. Dr. Judith Auslander is Senior Fellow at Pitney Bowes. Denice Koljonen is an independent consultant to Pitney Bowes and was formerly a member of the Global Postal Practice at Arthur D. Little, Inc. The authors wish to express their gratitude to Dariusz Dziedzic, Corporate Strategy Analyst, Pitney Bowes, for research support.

<sup>&</sup>lt;sup>2</sup> Do Not Mail legislation has been introduced in 15 states in the US.

#### **References:**

CST. <u>Vehicle Efficiency and CO2 missions: Troubling Trends</u>, by Dr. Lee Schipper, Ph.D., Director of Research, EMBARQ-WRI Center for Sustainable Transport.

Doherty, Sean. <u>World Economic Forum</u>. Presentation at PostExpo Business Forum. Barcelona, Spain, October 2, 2007.

Defra. Waste Strategy for England, Defra, 2007.

Defra. <u>The Open University Household Waste Study, Key Findings from 2006</u>, Defra, April 3, 2007.

Deutsche Post World Net. <u>Facing the challenges of global logistics</u>; <u>Corporate Social</u> Responsibility Report. DPWN, 2006.

EIA. Official Energy Statistics from the U.S. Government, Voluntary Reporting of Greenhouse Gases Program Fuel and Energy Source Codes and Emission Coefficients. Energy Information Administration

EMA. The Future of Recovered Paper, Envelope Manufacturers Assoc. Meeting, May 20, 2007.

EPA. <u>Energy STAR web site</u>, EPA. http://www.energystar.gov/

EPA. <u>Municipal Solid Waste in the United States</u>, 2005 Facts and Figures, EPA. http://www.epa.gov/msw/pubs/ex-sum05.pdf

FedEx. FedEx home page. FedEx environment responsibility: <a href="http://www.fedex.com/us/about/responsibility/environment.html">http://www.fedex.com/us/about/responsibility/environment.html</a>

Grossman, Elizabeth. <u>High Tech Trash: Digital Devices, Hidden Toxics, and Human Health.</u> Washington: IslandPress/Shearwater Books, 2006.

IAER. IAER Electronics Recycling Industry Report: (IAER), 2006.

IIEE. <u>Using Wood Products to Mitigate Climate Change: A Review of Evidence and Key Issues for Sustainable Development</u>, International Institute for Environment and Development (IIEE), January 2004.

The Green Guide, "A Calculated Loss: How to Reduce Your Global Warming Emissions", <u>National</u> Geographic, October 10, 2006.

Lehman Brothers, "The Business of Climate Change II", London September 20, 2007

"Look No Footprint", NewScientist, March 10, 2007.

Post Europe. <u>Greenhouse Gas Reduction Program a challenge for European Postal Operators.</u> Brussels: Post Europe, 2005.

Post Denmark. Environmental Report. Post Denmark, 2006.

Stern Review. The Economics of Climate Change. UK, 2006

Terrapass.com. TerraPass is the brainchild of Dr. Karl Ulrich at the University of Pennsylvania. Along with 41 of his students, Karl launched TerraPass in October, 2004.

The State of America's Forests. Society of American Foresters, May 2007.

TNT. <u>Social Responsibility Report</u>. TNT, 2006. <u>Transportation Energy Data Book</u>: Edition 22 – 2002

www.timeforchange.org. "What is a carbon footprint – definition. Data are for the U.K.

UPS. UPS home page. UPS Sustainability Statement: http://www.sustainability.ups.com/overview/statement.html

US Commerce Dept., Bureau of the Census. <u>Current Industrial Reports</u>. "<u>Glass Containers</u>", 2005.

USGS, 2005 Minerals Yearbook, Recycling – Metals, February 2007.

USGS, "Recycled Cell Phones – A Treasure Trove of Valuable Metals", Fact Sheet, June 2006.

USGS, "Obsolete Computers, 'Gold Mine,' or High-Tech Trash? Resource Recovery from Recycling", Fact Sheet, July 2001.

USPS. Environmental Impact of Advertising Mail, USPS, September 2005.

Vattenfall. Life Cycle Assessment Vattenfall's Electricity in Sweden. Vattenfall, 2005.

#### A DYNAMIC APPROACH FOR FINANCING USO

F. Boldron, C. Borsenberger, D. Joram, S. Lecou, B. Roy La Poste, 44 boulevard de Vaugirard, 75757 Paris Cedex 15, France

According to the political agreement on the proposal for a third postal Directive, remaining postal service monopolies in EU Member States should expire by 31 December 2010. The proposal's objectives are to achieve an efficient postal services internal market through the removal of exclusive and special rights in the postal sector and to safeguard a common level of universal services for all users in all EU countries.

In a fully liberalized market, the issue of costing and financing the universal service is likely to become important. Although the question of costing has been quite well addressed, the research of competitive neutrality as well as financial viability is still quite tricky concerning the financing question. The necessity for financing involves not only the value of the net cost itself but also many factors, such as market contestability and effectiveness of entry.

This paper intends to put forward a dynamic approach for studying financing needs and the most appropriate features of the mechanism to ensure both fair and effective competition as well as the provision of efficient USO. Most of works done until now use a static framework. However, a dynamic approach seems more appropriate in a context of liberalisation, with a gradual development of competition and consequently a growing share of entrants.

After a review of the various methodologies for calculating the net cost of USO in the economics literature and their practical implementation, we study the factors driving the dynamic game of liberalisation. In particular:

- The scope of the constraints compared to the specificities of the postal market on which they apply leading to a more or less profitable market situation;
- The contestability of the market (what impact would entry have on incumbent profitability considering constraints put on the operator with an initial dominant position?);
- The relative efficiency of operators (what is an "unfair" burden for the universal service provider?) and their ability to innovate

According to these factors, several dynamic scenarios are conceivable. For each one, we propose to examine the most appropriate funding mechanisms to ensure the viability and the efficiency of universal service and also competitive neutrality on the postal market.

Costing individual USO elements

16TH CRRI CONFERENCE ON POSTAL AND DELIVERY ECONOMICS

George Houpis, Richard Bradley; Philip Burns

Frontier Economics

In this paper, we describe our modelling approach to assessing how changes in the specification of the universal service obligation (USO) would affect universal

service providers' (USPs') costs, revenues and volumes. Our work is based on a

relatively standard net avoided cost (NAC) methodology but focuses on the

NAC associated with the provision of individual USO elements – whether

products or service standards - rather than the USO as a whole. The main

modelling development is the use of forward looking models – both financial and

operational - to understand the activities associated with providing different

aspects of the USO and the effects that modifying the USO could have on

market entry or demand for mail products. These models are combined in a

framework that generates a consistent set of volumes, costs and prices for a given

set of market conditions and USO specification. As a result our analysis can

provide greater insight into what drives USO costs. This modelling approach can

help regulators or operators evaluate "what if...?" scenarios; that is how the mail

market – and the USP's position within it – would change with tighter or looser

USO constraints.

Frontier Economics Limited in Europe is a member of the Frontier Economics network, which consists of separate companies based in Europe (Brussels, Cologne & London) and Australia (Melbourne & Sydney). The companies are independently owned, and legal commitments entered into by any one company do not impose any obligations on other companies in the network. All views expressed in this document are the views of Frontier Economics Limited.

# Calculating the Burden of the Universal Service: The Need of a Global Approach

Martin Koller, Swiss Post and Swiss Federal Institute of Technology, Zurich Urs Trinkner, Swiss Post and University of Zurich

#### **ABSTRACT**

Postal market liberalization is a current issue in Switzerland as well as in the European Union. The reserved area has been the traditional means to finance the provision of the Universal Service. In liberalized markets it has to be funded else wise to secure a level playing field. If one decides to delegate the so called universal service obligations (USO) to one or more postal operators, one should compensate those operators for the resulting burden in a fair way.

In our paper, we first summarize the discussion on calculating the "cost" or the "burden" of the USO. There are various approaches. We identify the proposals of Cremer et al. (2002) and Panzar (2000) as the only correct way to calculate the cost of the USO. Due to the authors, one has to estimate the universal service provider's (USP) profit situation for a fully liberalized market with and without governmental obligations. The resulting difference in USP profits is the burden of the USO. In contrast to this approach, the current draft directive of the European Union states that the "net costs" of the various USO elements should be computed individually.

Against this background we show by means of a stylized example that all parts of the USO have to be considered jointly to capture the various direct and indirect effects involved. We then illustrate this need for a global USO cost calculation by a real and controversially discussed Swiss example. In Switzerland, the obligation for providing a nationwide collection network - in itself not limiting Swiss Post's choices over the kind of collection points - yields a new restriction in combination with the obligation to provide financial transactions, as these limit Swiss Post's possibilities to replace post offices with agencies or other collection forms. Applying econometric methods to a cross-section dataset of Swiss Post' collection network involving both post offices and agencies we compute the direct effect of this new implicit constraint on Swiss Post's cost structure. In the same time, we identify those "forgone savings" as the direct effect on Swiss Post's burden of the USO. We further show by means of a stylized market entry model that complex indirect effects are present: The derived differences in the USP's operating costs affect equilibrium prices, market shares, profits, and hence again (and indirectly) the cost of the USO.

Abstract for the 16th Conference on Postal and Delivery Economics
"Using Operating Data to Measure Labor Input Variability and Density Economies in
U.S. Postal Service Mail Processing Operations"

#### A. Thomas Bozzo, Christensen Associates

Estimates of factor input "variabilities" (elasticities of factor demands with respect to outputs) are required to calculate marginal and incremental product costs by the U.S. Postal Service (USPS) using feasible methods such as those described in Bradley, Colvin, and Smith (1993). The factor demand elasticities are closely related to "economies of density," which describe the cost response of firms in network industries as non-network outputs—e.g., mail volumes—are varied holding the network fixed. The presence of density economies favors a variety of policies intended to increase or maintain density, including consolidation of operations and offering of volume discounts.

The USPS collects extensive data on pieces sorted and associated labor usage in the course of its operations, but a decade of litigation has failed to resolve basic questions of whether and how analyses using the data should be implemented. Nevertheless, some broad areas of agreement have arisen. In the 2006 U.S. postal rate case, all of the approaches involved estimation of factor demand functions, though the competing studies differed in the characterization of mail processing "outputs" and the degree of aggregation over operations. The econometric methods were more similar, involving a combination of screening data for gross anomalies and use of panel data instrumental variable (IV) estimation methods to produce elasticity estimates robust to latent costcausing effects, irreducible measurement error, and other sources of "endogeneity" in the output data (Bozzo 2006, Roberts 2006). In contrast, Fenster et al. (2007) estimated production functions using a switching regression model that effectively separates the sample between "good" and "bad" data without requiring data screening, though the method is not robust to the "classical" errors-in-variables problem. Moreover, Fenster et al. arrived at the highly unusual result that "scale" economies exceed "density" economies in USPS mail processing, which implies negative marginal labor usage as the delivery network expands (other things equal).

The competing models yield widely varying results, from modest density economies to strong diseconomies. Non-nested models and a lack of robustness testing

for the Fenster et al. approach complicate understanding differences among the models. The proposed paper seeks to contribute towards resolving these differences and narrowing the range of estimates of density economies in USPS mail processing.

First, it will describe the variety of data collection processes and resulting data quality problems, focusing on how these interact with the choice of the "primal" versus "dual" specification and the applicability of IV and switching estimators. Second, it will explore the possibility of identifying and estimating meta-specification(s) for labor demand from which previous labor demand models—plus the labor demand equations implied by the production functions estimated by Fenster et al.—can be obtained by parameter restrictions. It will consider the possibility of resolving differences over the specification of "outputs" by way of hedonic models of non-network outputs (see, e.g., Friedlaender and Spady 1981; Blitzan and Wilson 2007). Finally, it will estimate (or reestimate) a set of factor demand specifications using both IV methods and the Fenster et al. switching model. The estimation will employ an updated version of the mail processing data set analyzed by Pearsall et al., extended through USPS fiscal year 2006.

#### References

- Blitzan, John D. and Wesley W. Wilson, "A Hedonic Cost Function Approach to Esitmating Railroad Costs," *Resarch in Transportation Economics* 20 (2007), 69-96.
- Bozzo, A. Thomas, Direct Testimony on Behalf of the United States Postal Service (Docket No. R2006-1, USPS-T-12;
  - http://www.prc.gov/docs/48/48708/USPS.T.12.pdf).
- Bradley, Michael D., Jeffrey L. Colvin, and Marc A. Smith, "Measuring Product Costs for Ratemaking: The U.S. Postal Service," in Crew, M.A., Kleindorfer, P.R. (eds.), Regulation and the Evolving Nature of Postal and Delivery Services. Kluwer Academic Publishers, 1993.
- Friedlander, Ann F. and Richard H. Spady, *Freight Transportation Regulation: Equity, Efficiency, and Competition in the Rail and Trucking Industries*. Cambridge, MA: MIT Press, 1981.
- Fenster, Lawrence, Diane Monaco, Edward S. Pearsall, and Spyros Xenakis (2007), "Are There Economies of Scale in Mail Processing? Getting the Answers from a Largebut-Dirty Sample." Forthcoming in Crew, M.A., Kleindorfer, P.R. (eds.), Competition and Regulation in the Postal and Delivery Sector.
- Roberts, Mark J. (2006), "An Economic Framework for Modeling Mail Processing Costs" (at http://www.prc.gov/OCA/papers/framework/mailprocessfinal.pdf).

Abstract for 16th Conference on Postal and Delivery Economics, Albufeira, Algarve, Portugal 2008

"Cost analysis and pricing of innovative postal products"

Louis F. O'Brien (Canada Post Corporation), Leon A. Pintsov and Andrei Obrea (Pitney Bowes Inc)

Modernization of the postal sector raises a number of questions related to the nature and role of postal products (PPs) in the mail communication system. PPs serve as a main interface between users and postal operators as well as a target for regulatory process. In deregulated environment pressure to quickly introduce new products with differentiated features is high. Despite numerous attempts clear definition of PP that is useful for reliable cost analysis remains elusive. Meanwhile, significant progress was made in defining data structures suitable for representing information in business applications. We believe that representation of PPs as data structures has many momentous advantages. The paper exploits this approach for PP cost analysis (specifically for parcels). PPs can be described as a collection of attributes and their values. For example, each and every parcel is defined by its physical parameters (dimensions, volume, density), each of which is an attribute having a numerical value. Similarly geography of induction and delivery and HS codes for customs are attributes with alphanumeric values (e.g. postal codes or addresses). Timing and frequency of collection and delivery is described in consanguineous manner. Likewise various events that occurred during mail operations (e.g. scanning, re-direction, attempted delivery) could also be represented by codes. Objects linked to mail items and arbitrary complex rules that define mailer/recipient information requirements and exception processing are definable by other known attributes/values. The method of uniquely describing individual PPs sheds a new light on some of the longstanding issues. What are the attributes of the PPs that are cost causative and how they can be linked to activity-based costing method? How cost of new PPs could be quickly estimated, how such products could be priced and how this would affect inter-company cost analysis (interlining)? For Regulatory questions, a filter could be defined, using these parameters, to classify products into competitive vs. market dominant categories.

The paper explores cost analysis implications of a new approach to PPs design described in more detail in our other Abstract "Postal Innovation and New Opportunities for Postal Commerce" submitted by L.

employing a theoretical framework and a detailed analysis of PPs offered by Canada Post and other postal

A. Pintsov and A. Obrea. The paper opens up a number of new possibilities, which we investigate

operators/carriers.

This paper is an original contribution making reference to a previous paper by the authors (Pintsov and Obrea, 2008). The paper has significant implications for policy and costing of feature-rich products. The paper would be of interest to the conference participants who are concerned with new services, cost accounting, service pricing issues, incentive regulation, privatization and commercialization.

References

L. Pintsov and A. Obrea (2008), Data requirements for cost accounting in the mail communication system, in Competition and Regulation in the Postal and Delivery Sector, ADVANCES IN REGULATORY ECONOMICS, Michael A. Crew and Paul R. Kleindorfer, Editors, Edward Elgar Publishing, London, 2008

http://www.upu.int/document/2007/an/cep\_gn-2/d005.pdf

CEN/UPU Draft Standard P28: Extensible XML-Based Postal Product Markup Language 2008

2

# Abstract for the 16<sup>th</sup> Conference on Postal and Delivery Economics 28 – 31 May, 2008

## Postal Costing beyond ABC: Estimating the Economic Cost of Mails Services

### **Richard Robinson and Jane McMurdie**

Royal Mail Group

Royal Mail faces many challenges: a fully open and declining market, mandated access arrangements and bypass opportunities, pressure on delivering returns, and challenging regulatory requirements. In these circumstances it is important to ensure that prices are more cost-reflective (as required by the EU Directive) and reflect willingness to pay so that the competitive market can operate in a way which encourages efficient entry. This starts with a requirement to calculate robustly the costs of products. This paper will describe how Royal Mail is addressing this through developments beyond Activity Based Costing (ABC).

The first part of the paper outlines the theoretical approach along the lines of that presented at the 14<sup>th</sup> Conference (Robinson, 2005). It will briefly describe the drawbacks of the ABC approach - which have also been covered elsewhere – and will focus on the practical issues involved in developing and using a set of operational models to evaluate the economic costs of products. A key requirement of this work has been to link back to the actual cost information of Royal Mail so that an extension to the usual ABC approach can be proposed. There are a number of decision variables included in this approach covering, for example, whether an incremental or decremental approach is required, whether within the approach chosen the mail volume for the relevant increment transfers from/to another increment or is assumed to be created/destroyed. These decision variables will be described and their relevance to the case discussed. The models deploy some of the elements of engineering models as suggested by Soares et al, 2002

The second part will look into the complexity of applying the theory in practice. In essence the approach taken is to estimate incremental costs by examining in succession a series of scenarios including more, or fewer, products and services. The cost differences between each step indicate the incremental/decremental costs to which are then added a share of any remaining common costs. This, therefore, is a simplification of the LRIC (Long Run Incremental Cost) approach which can require a complex and almost uncountable set of combinatorial costing exercises to be carried out. It is also attempting to deal with the practical estimation issues raised by Crew and Kleindorfer, 2000.

The third part of the paper will focus on numerical illustrations of the practical approach that re-assess the relative costs of first, second and third class mail services. Examples will be shown as to how the costs have changed between the ABC approach and the incremental (or class-costing) approach. Clearly, some costs will increase and others decrease as the modelling is re-apportioning the same total cost. Royal Mail's price control features pricing constraints on 'baskets' of products and the change in cost allocation to these baskets will be shown.

The suite of operational models used for these estimations will be introduced and briefly described – some of these follow other models used in the literature of delivery economics and others relate to areas where there is no or limited reference in the literature.

#### **References**

- Awerbuch, Shimon and Alistair Preston, "Postal ABC: What are the Reasonable Expectations?", in Michael A. Crew and Paul Kleindorfer (eds), *Current Directions in Postal Reform*, Kluwer Academic Publishers, Boston, 2000
- Crew, Michael A;. and Paul R Kleindorfer, "Cost Estimation and Economically Efficient Prices" in Michael A. Crew and Paul Kleindorfer (eds), *Current Directions in Postal Reform*, Kluwer Academic Publishers, Boston, 2000
- European Communities (2002). Directive 2002/39/EC of the European Parliament and of the Council of 10 June 2002 amending Directive 97/67/EC with regard to the further opening to competition of Community Postal Services. OJEC L176/21.
- Robinson Richard, John Ward and Rupert Booth. "Cost Allocation to support the pricing of Mails Services". Paper presented at 14<sup>th</sup> Conference on Postal and Delivery Economics, Bern, 2006
- Soares Jose, Joao Confraria and Albereto Pimenta, "Postal Services Cost Modelling: An Engineering Process Approach Proposal" in Michael A. Crew and Paul Kleindorfer (eds), *Postal and Delivery Services: Pricing, Productivity, Regulation and Strategy,* Kluwer Academic Publishers, Boston, 2002

# Abstract for 16<sup>th</sup> Conference on Postal and Delivery Economics 28 – 31 May, 2008

## **Downstream Access in the United Kingdom**

**Stephen Agar<sup>1</sup> and Paul Dudley<sup>2</sup>**Royal Mail Wholesale<sup>1</sup> and Royal Mail Group<sup>2</sup>

By the time of the Rutgers' conference in May 2008, Royal Mail will have provided downstream access services in the United Kingdom for four years. During that time some large customers have developed their own upstream services and used Royal Mail's downstream access services to deliver mail to their customers. Other operators have also entered the postal market to offer customers an alternative to Royal Mail's end-to-end services, through the use of Royal Mail's downstream access services. Up to this point in time, other postal operators have not developed their own delivery networks for mail to offer services that bypass Royal Mail's network entirely - the postal market in the United Kingdom could be characterised by an incumbent national operator with competition through access only.

The paper sets out how the market for downstream access services has actually developed in practice in the United Kingdom. It explains how the governance or legal structure has influenced its development, and how that governance has itself changed over time. It also explains how the downstream access services and market have developed over time.

It reviews these developments alongside the economic literature relating to downstream access prices and their effects on the market, customers and operators. It also considers how the developments in the United Kingdom compare with those in Europe and the US.

In concluding it reflects on how the regulatory approach towards downstream access has influenced the development of competition in the United Kingdom.

# Strategic equilibrium under FMO for providers and costumers with different regulatory scenarios<sup>1</sup>

# António Amaral, CTT Correios Sónia Pinto, CTT Correios

In the advent of the 3<sup>rd</sup> European Directive for postal services with the Full Market Opening (FMO) expected by 2011, the issue of Access Pricing is proving to be one of the hot topics in agenda for the majority of the EU Member States. Indeed, in the future configuration of fully liberalized postal market, this is a subject that remains open for discussion, as the 3<sup>rd</sup> Directive refers to its definition as jurisdiction of national regulation authorities.

The fact that the responsibility for the definition of the framework for Access Pricing is made at a national level is, in our understanding justified by the importance of idiosyncrasy component of each Member State in its postal market. Thereby, it is advised a deeper study in order to establish the legal framework that best suits each Member State (although, in the European context, there are already some examples of the application of a legal framework concerning Access Pricing, namely the case of the United Kingdom).

In its particular case, the Portuguese postal market being a small, highly concentrated market, with highly heterogeneous geographic and socio-demographic conditions can determine an array of substantial consequences for the market players resulting from the determined Access Pricing framework. Therefore, this is a frontline subject of discussion within the Portuguese context.

From a microeconomic point of view, the ex ante determination of equilibrium Access prices and quantities is central to ensure that efficient levels of competitiveness necessary for the market, in a FMO context are achieved. The approach proposed here should be understood as a dynamic balance between a trinity of interests, which are conditioned by the various objective functions of each economic player that drive balance in the market. On one hand, we have the regulator that aims to a maximum social welfare and a "customer friendly" service, including the full compliance by the Universal Service Provider (USP) with its obligations. On the other hand, for the incumbent and the entrants the main purpose is to maximize the value created for the shareholders. In this paper, the incumbent will be the only USP and thus its motivations are somewhat different from those of the entrants. We will determine equilibrium Access prices, quantities and social welfare (as defined further on), conditioned by the different regulatory scenarios, using a single stage game with 3 players based on the output generated by a microeconomic model, that focuses on a duopolistic competition framework (in light of the paper "Peeking into the future: modelling Portuguese postal market in competition" presented in June 2007 in the 15th Conference on Postal and Delivery Economics").

\_

<sup>&</sup>lt;sup>1</sup> The views expressed in this paper are those of the authors and do not necessarily reflect the views of CTT Correios

#### References

Burns, Phil, Isabelle Carlslake and George Houpis, (2002), "Brand Loyalty and Limited Entry in Postal Markets", in Crew, Michael and Paul Kleindorfer (eds), Postal and Delivery Services – Delivering on Competition, Boston, Kluwer Academic Publishers.

Billette de Villemeur, Etienne, Helmuth Cremer, Bernard Roy and Joëlle Toledano, (2005), "Worksharing, Pricing and Competition in the Postal Sector", in Crew; Michael and Paul Kleindorfer (eds), Regulatory and Economic Challenges in the Postal and Delivery Sector, Boston, Kluwer Academic Publishers.

De Donder, Philippe, Helmuth Cremer, and Frank Rodriguez, (2005), "Access Pricing in the Postal Sector: Results from a Model with Bypass and Costumer Direct Access", in Crew; Michael and Paul Kleindorfer (eds), Regulatory and Economic Challenges in the Postal and Delivery Sector, Boston, Kluwer Academic Publishers.

Santos, Ricardo Goulão, Alberto Pimenta and Sofia B. Henriques, (2006), "Assessing the Cost of the Portuguese Postal Network", in Crew; Michael and Paul Kleindorfer (eds), Future Directions in Postal Reform, Springer, New York.

Cohen, Robert H., Matthew H. Robinson, John D. Waller and Spyros S. Xenakis, (2006), "Worksharing: How Much Productive Efficiency, at What Cost and at What Price", in Crew; Michael and Paul Kleindorfer (eds), Future Directions in Postal Reform, Springer, New York.

De Bijl, Paul W.J., Eric Van Damme and Pierre Larouche, (2006), "Regulating Access to Stimulate Competition in Postal Markets", in Crew; Michael and Paul Kleindorfer (eds), Future Directions in Postal Reform, Springer, New York.

Crew, Michael A. and Paul R. Kleindorfer, (2006), "Approaches to the USO under Entry", in Crew, Michael and Paul Kleindorfer (eds), Liberalization in the Postal and Delivery Sector, Springer, New York.

Rubinstein, Ariel, (2006) "Lecture Notes in Microeconomic Theory: The Economic Agent", Princeton University Press.

Caves, Richard and Michael Porter, (1987), "From Entry Barriers to Mobility Barriers", Quarterly Journal of Economics.

Nash, John, (1950), "Equilibrium points in n-person games", Proceedings of the National Academy of the USA 36(1):48-49.

# Market Opening, Downstream Access, and Competition in the Market for Mail

Christian Jaag, University of St.Gallen and Swiss Post. December 12, 2007

### **Abstract**

This paper discusses various scenarios with respect to the opening of the postal market and (regulated or negotiated) downstream network access. Increased use of network access by the entrant increases the incumbent's network usage and profitability due to economies of scale. However, it also extends the entrant's strategy space, leading to increased market penetration. These effects have a significant impact on the financial results of both the incumbent operator and the entrants as well as overall welfare.

From the perspective of network economics, mail conveyance can be segmented in the complementary components collection, sorting, and delivery. In none of these components there are irreversible cost which would constitute an essential facility. Hence, from a network economics point of view, there is no long-run obstacle to competition and hence no need for access regulation in fully liberalized mail markets. However, an incumbent operator possesses a considerable reputation advantage at least in the short-run. This results in an asymmetric market equilibrium. Hence, access regulation is employed in some countries, e.g. the United Kingdom and Germany, in order to accelerate the development of competition. The future of downstream access regulation is currently a hot topic in many European countries and its profound analysis is of equal interest to policy makers and PO management.

Compared to the previous literature, we explicitly model the extent of entry as a function of the access regime in place and the resulting asymmetric price competition. We are hence able to discuss and simulate the interaction between market opening, access, and competition and to determine the welfare implications of access vs. bypass. Our simulations focus on the effect of access price setting on the entrant's market penetration and profit and the incumbent's resulting ability to fulfill her universal service obligations.

The model is calibrated to the Swiss mail market. Our simulations show that regulated access might spur competition in the upstream market while reducing competitive pressure downstream. Positive welfare effects of downstream access can only be expected if the multiplication of cost due to entry is overcompensated by a better overall cost allocation among operators. However, in these situations, inefficient entry into the market by cherry picking is most likely. Granting the universal service provider flexibility in her pricing and product range decisions reduces this threat and improves welfare.

#### References

Armstrong, M. (2006): "Access Pricing, Bypass and Universal Service in Post," London: University College, mimeo.

Armstrong, M., C. Doyle, and J. Vickers (1996): "The Access Pricing Problem: A Synthesis," Journal of Industrial Economics, 44(2).

Baumol, W. J., and J. Sidak (1994): "The Pricing of Inputs Sold to Competitors," Yale Journal on Regulation, 11.

Billette de Villemeur, E., H. Cremer, B. Roy, and J. Toledano (2007): "Worksharing, Access and Bypass: The Structure of Prices in the Postal Sector," Journal of Regulatory Economics, 32(1).

Crew, M. A., and P. R. Kleindorfer (2001): "Whither the USO under Competitive Entry: A Microstructure Approach," in Future Directions in Postal Reform, ed. by M. A. Crew, and P. R. Kleindorfer, Boston. Kluwer.

de Donder, P. (2006): "Access Pricing in the Postal Sector: Theory and Simulations," Review of Industrial Organization, 28(3).

de Donder, P., H. Cremer, P. Dudley, and F. Rodriguez (2006): "A Welfare Analysis of Price Controls with End-to-End Mail and Access Services," in Liberalization of the Postal and Delivery Sector, ed. by M. A. Crew, and P. R. Kleindorfer, Northampton. Edward Elgar.

Dietl, H. M., U. Trinkner, and R. Bleisch (2005): "Liberalization and Regulation of the Swiss Letter Market," in Regulatory and Economic Challenges in the Postal and Delivery Sector, ed. by M. Crew, and P. Kleindorfer, Boston. Kluwer.

Felisberto, C., B. Friedli, M. Finger, D. Krähenbühl, and U. Trinkner (2006): "Pricing the last mile in the postal sector," in Progress Toward Liberalization of the Postal and Delivery Sector, ed. by M. Crew, and P. Kleindorfer, Berlin. Springer.

Gautier, A. (2006): "Dynamics of Downstream Entry in Postal Markets," in Liberalization of the Postal and Delivery Sector, ed. by M. A. Crew, and P. R. Kleindorfer, Northampton. Edward Elgar.

Hill, R., R. Robinson, and F. Rodriguez (2001): "The Financial Equilibrium of Universal Service Providers in a Liberalized Postal Market," in Regulatory and Economic Challenges in the Postal and Delivery Sector, ed. by M. A. Crew, and P. R. Kleindorfer, Boston. Kluwer.

Jaag, C. (2007a): "Liberalization of the Swiss Letter Market and the Viability of Universal Service Obligations," Swiss Journal of Economics and Statistics, 143(3).

Jaag, C., and U. Trinkner (2008): "Pricing in Competitive Two-sided Mail Markets," in Competition and Regulation in the Postal and Delivery Sector, ed. by M. A. Crew, and P. R. Kleindorfer, Northampton. Edward Elgar.

Knieps, G. (2006): "Does the System of Letter Conveyance Constitute a Bottleneck Resource?," in Contestability and Barriers to Entry in Postal Markets, ed. by G. Kulenkampff, and A. Niederpr"um, Bad Honnef. Wissenschaftliches Institut f"ur Infrastruktur und Kommunikationsdienste.

Laffont, J. J., and J. Tirole (1994): "Access Pricing and Competition," European Economic Review, 38(9).

# Designing a price cap regulation for a partially deregulated mail market

# - The Norwegian experience

Paper to be presented at the 16<sup>th</sup> Conference on Postal and Delivery Economics May 28-31, 2008

### **ABSTRACT**

Trond Helge Bårdsen - Norwegian Post and Telecommunications Authority

The paper gives an account of the issues examined and the important concerns for the Norwegian Post and Telecommunications Authority (NPT), when designing a new price cap regulation for universal services in Norway. From the regulator's perspective the paper deals with such topics as the scope of the price control, the level at which prices should be capped and the appropriate rate at which prices should be allowed to increase. The recent treatment by NPT of these topics will be relevant for NRAs and postal operators alike, concerned with the setting of regulated prices for universal services.

The development of a price cap regulation in Norway will be placed in the context of the most recent theoretical and applied work in the field, e.g. the recent summaries in Crew and Kleindorfer (2008) and WIK (2006).

NPT set as the goal to design a forward-looking price regulation that could fulfil the needs of three key stakeholders:

- 1) Private customers in need of affordable prices on single piece items and frequently used services such as redirection or mail-holding
- 2) The incumbent postal operator requiring a legitimate degree of pricing and financial flexibility to meet changes in demand and increasing competition in the segments open to competition
- 3) Potential new entrants in the market segments open to competition looking for a predictable and transparent setting of regulated prices for universal services

In addition, it was important that the price regulation mechanism should be simple to operate, thereby minimizing the administrative burden for the regulated company as well as for the regulator.

The paper outlines the price cap regulation now in place in Norway, and argues that it strikes an appropriate balance between pricing flexibility and consumer protection. In addition it aims to give the right incentives. Although NPT think that there will be a need for price regulation also after full market opening, new regulation should be developed with an eye on the future. The incentive effect which the regulation might have on potential new entrants, and how it may facilitate competition for the delivery of universal services, need to be considered.

### Price Control systems appropriate to newly liberalised postal markets in Europe

John Hearn, Greg Harman, Sangeet Dhanani

The opening of most postal markets within the European Communities to competition by the end of December 2010 raises a number of issues relating to price control systems for postal markets that have recently been opened to competition. The purpose of this paper is to develop a template to enable legislators and regulators identify the most appropriate price control system for their postal market.

The argument is often made that following FMO there will be no need for sector specific regulation and the competition law can deal with any deficiencies that may arise, see for example IPC(2007). The Third Postal Directive does however require Member States to ensure that prices for universal services are affordable, cost-oriented, transparent and non-discriminatory, while giving incentives for efficient universal service provision and complying with competition law. Studies by WiK demonstrate that the broadly similar requirement in the current European Postal Directive has been implemented in many different ways in the various Member States, in terms of scope (universal service or reserved area), form (Price Cap or Price Approval) and timing (ex-post or ex-ante).

The use of inappropriate price control systems following FMO runs the risk of distorting competition and undermining the ability of incumbents to continue provision of universal service, see for example De Donder et al (2005). This paper, therefore, examines the European Commission's reasons for continued price control, and looks at issues such as how consumers have benefited from price competition in other sectors following market opening and how postal operators have reacted when price controls have been removed or relaxed following earlier market openings.

Having examined the underlying rationale for continuing price controls the paper examines the various types of control and questions how appropriate each model is for markets that have recently been opened to competition. Also addressed are the practical issues of implementing and enforcing each type of price control.

The paper argues that price control systems used to regulate postal markets where the universal service provider had exclusive rights over a "reserved area" need to be reviewed to ensure that operators have sufficient flexibility to respond to competition while at the same time ensuring that the rights of consumers (commercial, administrative and individuals), and especially those who have to rely on the universal service provider, are respected.

The final section of the paper extends the work presented in LECG (2007) and considers the types of price regulation one can expect to see develop under FMO. It sets out a template to enable legislators and regulators identify the most appropriate price control system for their postal markets following FMO, taking into account, for example, whether postal operators have a legitimate expectation that price controls should be removed following market opening and whether ex-ante forms of control are preferable over ex-post forms of control.

### References:

IPC(2007) "How to regulate the postal industry - an economic approach", International Post Corporation in cooperation with DIW Berlin, Brussels

WiK-Consult (2006): "Main Developments in the Postal Sector (2004-2006)" Study for the European Commission, Brussels and Bad Honnef

De Donder et al (2005) "Pricing and Welfare Implications of Alternative Approaches to setting Price Controls in the Postal Sector", Philippe De Donder et al, presented at the 13th Conference on Postal and Delivery Economics, Antwerp, Belgium, (1-4 June 2005)

LECG (2007) "Ensuring that consumers benefit from the opening of postal markets to competition" Study for ComReg, ComReg document CP46e

# Ensuring that free market opening in the postal sector delivers competition and benefits to postal users: understanding the role for ex ante regulation of incumbents

By Dr. Richard Hern, Stuart Holder, Simon Maunder, Phillippa Lowe and Helen Webb, NERA Economic Consulting.

In October 2007 the Council of the European Union reached a political agreement on a third postal Directive related to the full accomplishment of the internal market of Community postal services. The agreement follows the European Commission's proposals submitted to the European Parliament and Council in October 2006. Although the text has not yet been finalised, the main provisions of the Directive appear to have now been agreed, including the deadlines for full market opening (FMO).

The Directive has a number of objectives concerning the achievement of FMO, including a substantial component on the establishment of common rules and processes related to the provision of the universal postal service in a liberalized market. The Directive, as agreed in October, is however more limited in its treatment of how incumbent postal operators should be regulated.

While there are some limited explicit provisions within the Directive related to ensuring that access arrangements are put in place where it is in the interests of users and/or to promote effective competition, requirements for Member States to regulate prices are more implicit. Decisions on how to ensure that prices are compliant with the Directive's tariff rules are left to the Member States and National Regulatory Authority's (NRAs) discretion.

This paper therefore reviews the case for implementing robust ex ante regulatory frameworks in European postal markets ahead of 2011 to ensure that the competition between operators enabled by the Directive materialises in a meaningful way and generates benefits for postal users.

The paper starts by providing an explanation of the relevant economic theory and evidence related to postal markets, including issues such as the presence of natural monopoly characteristics in the value chain and the existence of barriers to entry. Using this analysis we explain why the prospects for market entry are limited in the absence of ex ante regulation, even with strong competition policy rules, and further more, how incumbents could act to stifle the development of competition.

We then review the international experience from both liberalised postal markets (eg Sweden, Finland and the UK), and from other industries that have gone through similar liberalisation reforms (eg telecoms) to demonstrate the importance of ensuring that appropriate regulatory frameworks and powers are in place to foster the development of competition and counterbalance the power of dominant operators.

Finally we examine the regulatory tools available to NRAs (for example, price caps and access regimes) and critically assess the ability of these mechanisms to deliver the type of environment that will foster effective and efficient competition.

# **Abstract for the 16th Conference on Postal and Delivery Economics**

"The Merits and Drawbacks of Post Offices Moving from Defined Benefit to Defined Contribution Pension Plans"

John Baldwin, Communication Workers Union and Dan Doonan, National Association of Letter Carriers

In the United States, during the last few decades, employers have rapidly abandoned traditional defined benefit (DB) pensions in favor of defined contribution (DC) plans, especially in non-union workplaces. Now, that trend seems to be spreading around the world.

The results of this major shift to DC plans have yet to be experienced, as most workers who will rely upon DC plans have yet to retire. Therefore, the jury is out on whether or not these plans will prove sufficient in providing retirement benefits, all while public pensions are also under threat.

Employers prefer defined contribution plans for two main reasons: much of the cost is paid by employees, and employer costs are more predictable under DC plans. But what are the other costs and benefits of switching to DB plans?

Some of the many questions that we will explore in the paper are:

- Which type of plan is more efficient from a total cost perspective?
- Does the size of the employer matter?
- Is there a difference in asset returns when comparing DB and DC plans? If so, higher returns would clearly decrease the cost of providing the same value at retirement. What have existing studies shown?
- What would the additional cost be to provide the same pension, given lower returns?
- Are there any hidden effects, which are often overlooked?

To study these issues, the paper will be broken up into two major sections. First, we will look at the pension trends in post offices around the world. Are DC plans prevalent yet? Are they coming? And, should they be embraced? The second part of the paper will compare the economic efficiency of the two types of retirement plans, and look at hidden effects. Finally, we will discuss whether or not we are choosing a less efficient system to avoid discussing the cost sharing aspect inherent in moving to a defined contribution system.

In order to collect information for the paper, the authors will utilize existing research such as "Regret, Portfolio Choice, and Guarantees in Defined Contribution Schemes" where Olivia S. Mitchell, A. Muermann and J. Volkman look at decision making on an individual level in DC plans.

In addition, the authors will seek research for comparisons of investment returns and investment decisions in both survey work done by Human Resource Consulting Firms such as Wyatt Watson, as well as academic research such as "Investment Returns: Defined Benefit VS. 401(k) Plans" published by the Center for Retirement Research at Boston College.

# Abstract for the 16th Conference on Postal and Delivery Economics

# "Is North America preparing to embrace postal deregulation?"

JAMES SAUBER AND GEOFF BICKERTON
National Association of letter carriers and Canadian Union of Postal Workers

In North America, during the last decade, discussion of postal issues such as deregulation, privatization and the universal service obligation has only rarely hit the public policy radar screen. However postal stakeholders are carefully watching developments in Europe and elsewhere.

Significant changes in the structure and mandate of postal services can only occur in the context of a broad consensus. Does such a consensus exist? Are North American attitudes evolving as postal liberalization and privatization move from policy to practice in other countries?

This paper will identify the perspectives and policies of the major constituencies that are likely to play an active role in shaping public discourse on postal issues in the future.

The paper will examine the current and historic policies of the major postal stakeholders in Canada and the United States concerning deregulation, privatization and funding of the USO. Stakeholders include major mailers, competitors, unions, postal management, rural organizations, political parties, economic policy institutes, farmers, seniors and small businesses.

The paper will also examine the basis for differences that exist between organizations representing the various product lines within the mail stream such as direct marketers, publications, transaction mailers, small businesses and large volume commercial mailers.

The authors will conduct interviews with stakeholders and review current and historic policy documents.

# Abstract: 16<sup>th</sup> Conference on Postal and Delivery <u>Economics</u>

"Two policies contest the move from monopoly to competition in UK mail market"

William Hayes and Stephen Bell

# 1. Objective of the Paper

The aim of the paper is to demonstrate the contradiction in the attempts to introduce generalised competition in the UK mail market.

This process has involved a Government intervention into the longest standing mail monopoly in the world. The use of a regulator (Post Comm) to carry this through has created specific problems for Government, Management and Trade Unions.

It will be the aim of the paper to demonstrate that in general terms the policy of the regulator has been a notable failure. In comparison the policy of the Union has been relatively successful in highlighting the problems of the process.

The current position of the industry demonstrates, in a manner of more general interest, that Governments must proceed with caution when attempting to make the transition from a monopoly to competition in mail services.

## 2. The approach of the Paper

The approach of the paper will be to define concretely the position of Royal Mail before and after the introduction of competition. The proposed and actual effects of the regulators policy will be examined. The anticipated and actual outcome of Trade Union criticisms will be examined.

## 3. The original character of the Paper

Nothing has been published which centrally compares and contrasts the policy of a postal industry regulator with the policy of a Trade Union. The general significance of this will become clear due to the fact that a parliamentary review of liberalisation is to be announced in late December by the British Government following the Union's campaign.

## 4. The audience for the Paper

This will be an analysis of the experience of a failed market liberalisation in a country which has an international reputation for aggressively pursuing market reforms. The paper will have great interest for policy makers in the postal industry in other countries, particularly regulators, Governments and Trade Unions.

# 5. The Timeliness of the Paper

Inside Europe there have been a number of moves away from the introduction of generalised competition in the postal sector. This is highlighted by the postponement of the general market opening at the EU level. It is also highlighted by the recent related developments in Holland and Germany. In this context, the UK experience stands as a unique experiment.

# The French Postal Market: The Situation 3 years after the Vote of the Postal Law

Catherine Gallet-Rybak, Cécile Moreno, Daniel Nadal (all authors from ARCEP)

For the third consecutive year, ARCEP, the French Regulatory Authority for electronic communications and postal services, publishes the postal market figures. This survey covers activities of the authorized postal operators (delivery of addressed mail and outbound international mail) as well as other markets such as mailing houses, parcels, express and unaddressed mail.

From the results of the statistical observatory, the first part of this article gives a market overview.

Afterwards the paper focuses on both markets of authorized operators (for correspondence items delivery and outbound international mail) and mailing houses. The purpose is to put into perspective the activities of the alternative operators as well as upstream operators activities: how are they emerging, on which market segments are they expanding and how is their economic health.

The second part puts forward the regulation stakes. These are linked to the competition opening up as the Authority has faced them in concrete terms since its creation with the vote of the 2005 law.

Amongst hurdles that emerging operators are facing, two of them have created interesting and complex debates. The first one is the difficulty to access to private letter boxes installed in apartment buildings with controlled access. The second one results from the additionnal costs involved in the rectification of envelops or plastic films carrying a double mark (La Poste and another operator). The last problem concerns more specifically companies which delivers items prepared by mailing houses. In some cases, these intermediaries use envelopes or plastic films already preprinted with La Poste prepaid carriage.

On the contrary, other questions have not been brought up to this date: for instance the access to the facilities controlled by the universal service provider such as the postcode directory, information collected by La Poste on change of addresses, redirection service and delivery service for post-office boxes in post-offices. Consequently, agreements on access to these technical means have been reached between La Poste and alternative operators without any regulatory intervention.

In conclusion, first lessons are drawn on the forms that competition on these markets is taking.

## Developments in Privatization and Liberalization in the Asian Postal Market

- Impacts of Postal Reforms on the Universal Service Obligation (USO) in Asia -

Shoji Maruyama and Shinichi Sano Japan Post Service Co. Ltd.,

### Abstract:

In the European Community, which aims to form single integrated market, exclusive rights or reserved areas for national postal operators will not be granted from 2013 at the latest, according to the recent agreement among Member States. Meanwhile, the privatization of the public postal business has made some operators expand their business domestically and globally in response to the contraction of their traditional mail delivery volume. Postal reforms similar to those in the EC, i.e., liberalization of the postal market and privatization of the former state-owned postal operator, have also been implemented in Asia, where there is less political movement toward trans-national integration. Whatever the environmental changes surrounding the postal business are, however, the initial objective of maintaining the USO is expected to be imposed on the incumbent operators.

In Japan, as a result of postal privatization on October 1, 2007, Japan Post Service Co. has succeeded the equivalent of USO as the former public corporation. In China, where the former China Post Bureau was partly restructured into a public corporation (China Post Group), liberalization discussions concerning new entry are likely to be restricted to the express business. It is noteworthy that, while ASEAN countries such as Singapore, Thailand, and Malaysia have also implemented postal reforms, a country-specific approach to preserve the USO can be observed in each case.

In this paper, we will provide an overview of postal reforms in major Asian countries based on reports published in recent years and numerical information with reference to the cross section analysis methodology by Cohen, et al. (1997). We will also discuss the impact on future postal reform of the high economic growth in this region and some lessons learned from experience in the European Community with respect to protecting the USO. Postal reform in developing countries was covered by Anson, et al. (2007), who estimated postal demand in Latin America using some macroeconomic characteristics. With regard to the Asian market, however, there are few publications with

the exception of the work by Campbell and Porges (2007), which analyzed major policy issues concerning Japan's postal privatization. This paper will possibly be the first work that comprehensively covers major Asian postal markets and presents extensive information on postal reforms in this region of rapid economic growth.

### References:

- Anson, J., R. Cuadra, A. Linhares, G. Ronderos, J. Toledano (2006) "First Steps towards New Postal Economics Models for Developing Countries: Learning from the Latin American Experiences" in *Liberalization of the Postal and Delivery Sector*, edited by M. Crew and P. Kleindorfer, Edward Elgar.
- Campbell, J., A. Porges (2007) "How Much Postal Reform in Japanese Postal Privatization?" a paper presented at the 15<sup>th</sup> Conference on Postal and Delivery Economics in Semmering, Austria.
- Cohen, R., E. Chu (1997) "A Cross Sectional Comparison and Analysis of Productivity for 21
  National Postal Administrations" in *Managing Change in the Postal and Delivery Industries*, edited by M. Crew and P. Kleindorfer, Springer.

# A Complete Test of U. S. Postal Rates for Cross-Subsidies\*

Lawrence Fenster, Diane Monaco, Edward S. Pearsall, John Waller, Gail Willette & Spyros Xenakis U. S. Postal Regulatory Commission

#### Abstract

The recently enacted Postal Accountability and Enhancement Act (PAEA) explicitly prohibits "the subsidization of competitive products by market-dominant products". In this paper we describe and then apply an algorithm to estimate the incremental cost for many combinations of products in order to test for the existence of cross-subsidies. The incremental cost of a subset of products is the cost that an enterprise avoids if all of the products in the subset are eliminated from the enterprise's offerings. A complete test for the absence of cross-subsidies for a stipulated set of rates consists of a demonstration that incremental cost does not exceed foregone revenue for any subset of products (except, for the subset of all products). This is the incremental cost test proposed by Faulhaber (1975) and by Baumol, Panzar and Willig (1988). It is now accepted by most economists as the appropriate test for cross-subsidies among the product offerings of a multi-product enterprise.

In the past, the U.S Postal Service estimated incremental costs of single products and a few combinations of products, but did not estimate the incremental costs of all product combinations. This limitation of the test was made to avoid a serious combinatorial problem. Even a small number of rate categories yields a prohibitive number of combinations, all of which need to be evaluated for a complete test. We overcome this difficulty by exploiting the fact that postal cost functions are characteristically super-modular. They exhibit declining marginal costs for every category of mail, and, many postal services also have specific fixed costs. As a consequence, incremental costs are super-additive, meaning that the incremental cost for any subset of products taken together is always at least as large as the sum of the incremental costs of the products taken separately. This property makes it possible to apply the incremental cost test by using an efficient algorithm to identify the subset of rate categories that maximizes incremental cost minus foregone revenue - the subset with the largest crosssubsidy. We show that any subset that leads to a cross-subsidy must include at least one member of the maximizing subset; and, the cross subsidy for any subsidized subset increases if non-members of the maximizing subset are dropped. Therefore, the maximizing subset includes all of the products, and only those products, causing the cross-subsidies left by a set of rates.

Our complete incremental cost test is applied using the U.S. Postal Regulatory Commission's (PRC's) current cost model and postal volumes, rates and revenues for FY 2007 from the annual Cost and Revenue Analysis (CRA) report. We also explore several methods of applying the incremental cost test to identify cross-subsidies of competitive mail products.

<sup>\*</sup> The views expressed in this paper are our own and do not necessarily represent the opinions of the U. S. Postal Regulatory Commission.

# Binomial Price and Quality of Service regulation in Portugal, and its impact on the market.

# Agostinho Franco, ICP-ANACOM; João Castro, ICP-ANACOM

Price and Quality are intrinsic parameters of products or services and generally have been regulated in monopolistic environments, especially where Universal Service objectives are paramount.

Postal Services in Portugal have been gradually liberalized, in strict accordance with European Union directives. Pursuant to this process is the goal to complete the internal market for postal services and to ensure that efficient, reliable and good-quality postal services are available to all at affordable prices.

In Portugal ICP-ANACOM has established price-cap mechanisms since 1993, and has embedded into them Quality of Service targets since 1995. The non-compliance of Quality of Service targets thus may and will impact price reductions.

This paper focuses on the Portuguese Price and Quality of Service regulation. It describes the mechanism and discusses its merits, namely the enforcement, the monitoring and auditing processes by the National Regulatory Authority, and the impact on prices, on quality and on the market in general.

# Service Quality, Price Caps and the USO: Abstract M. A. Crew P. R. Kleindorfer December 11, 2007

There has been considerable interest in service quality in regulated industries, following the rise of price-cap regulation (PCR). Previously, under public enterprise in Europe and cost-of-service or rate-of-return regulation (ROR) in the United States, service quality was less an issue, since the costs of higher quality were passed through to the customer in the regulatory regime. Under PCR, it was clear at an early stage that, for a regulated monopolist, there were incentives to reduce quality as one means of increasing profitability while satisfying the price cap. Thus, a number of modifications to the initial PCR regimes emerged to provide incentives for the regulated firm to maintain service quality at a level determined by the regulator. The mix of competition and PCR brings additional levels of complexity to the quality of service issue, both for regulators as well as for regulated firms. This is particularly clear in the postal sector because of the high level of competition relative to fixed network industries. In the postal sector, there is the additional problem of determining the quality of service that should apply to USO products, and their interdependencies with competitive products.

Although there is an extensive literature on service quality and competition both in industrial organization and in the postal sector there are several unanswered questions.

- 1. How should service quality standards for USO products be determined?
- 2. How does competition and entry affect service quality standards, not only in competitive products but also for USO products?
- 3. How should service quality standards be monitored and reflected in the incentives provided under PCR?

This paper proceeds by first providing a survey extending e.g. Sappington (2005), to the postal economics literature. Second, it develops a model to examine the behavior and efficiency consequences of a PCR regulated PO facing a USO and competition. This would relate to our previous work on access. Different forms of incentives under PCR can then be analyzed, including: penalties, incentives, a mix or such and a menu-based approach. With a menu, for example, the PO would be able to choose different quality of service targets with higher such targets being rewarded with lower values of the X factor. Third, implications to the current debate in the postal sector would include: pricing flexibility, in this case extended to the service quality domain (the appropriate granularity of service quality regulation), and the question of the interaction of USO service quality standards with competitive products. This relates to network density, commingling of first and second class mail in distribution, and in other ways arising from the interaction between competitive and USO products in the use of the same network.

### References

Sappington, D. E. (2005). "Regulation Service Quality: A Survey." *Journal of Regulatory Economics* 27 (2): 123–154.

# Swinand, Lyons, O'Grady, and Murphy\* Abstract

## Empirical Evidence on Price, Margins, and Quality of Service in Post

This paper investigates the determinants of service quality in postal delivery by universal service providers (USPs). The paper considers the question of whether price-cost margins impact service quality.

Quality of service is an important and current issue in postal regulation and in the transition to postal liberalisation. Postal regulators and international agencies or agreements often impose quality of service standards on USPs. Postal regulators have been considering quality of service standards and postal companies have been considering their strategies as to whether to enhance quality in the face of possible entry (or a requirement to provide access.) Further, with the transition to competition often involving price caps and incentive regulation, the possibility that firms are incentivised o provide sub-optimal quality has become more pivotal. In general, however, it can be demonstrated<sup>1</sup> that an unregulated monopolist may provide quality that is either above or below the social optimum; the monopolist's incentives depend on whether quality is a compliment or a substitute with demand. When considering a regulated monopolist, with price regulation and an obligation to serve demand, the incentives become even more ambiguous. Swinand (2004) showed that quality may become the endogenous variable in production, with quality varying as labour and capital are used more intensely<sup>2</sup>. Swinand and Jones (2006) provided evidence that quality is a complement to demand in post. Swinand and Scully (2006)<sup>3</sup> showed that the incentive to provide quality depended on the ratio of the marginal cost and the marginal benefit of quality to the producer.

This paper builds on that previous work of Swinand (2004), Swinand and Jones (2006), and Swinand and Scully (2006) and seeks to extend it by empirically testing the theory that margins impact quality. More specifically, the paper seeks to answer the question of whether quality provisions are a function of pricing policy and marginal cost. We believe that this is quite original, as we are not aware of other work on the impact of price-based incentives on quality.

The approach of the paper is as follows. First, we derive a model of the determinants of service quality provision by the hypothetical USP. The model assumes firms maximize profits by choosing their level of service quality (price is fixed by the regulator, demand is a function of price, quality and other parameters). We assume that firms also minimize cost and that a cost function for posts exists<sup>4</sup> subject to fixed effects. We further assume that the cost function can be approximated with the translog form. Taking the first order conditions and with some manipulation, quality of service is then shown to be a function of: fixed effects, input prices, demand levels, and price cost margins. By taking logs and adding a random error term the equation is made into an econometric model.

<sup>\*</sup> The authors are, respectively, Divisional Director at London Economics, Research Economist, ESRI, Economist, London Economics, and Economist at An Post.

<sup>&</sup>lt;sup>1</sup> See for example, Spence, M. 1975. "Monopoly, Quality, and Regulation," Bell Journal of Economics, The RAND Corporation, vol. 6(2), pages 417-429, Autumn..

<sup>&</sup>lt;sup>2</sup> It should be noted that this was done for only one country, Ireland, so the generality of this is an issue.

<sup>&</sup>lt;sup>3</sup> See Swinand, G., and D. Scully (2006), "Incorporating Quality of Service Measures into Price-caps for Post," London Economics working paper, www.londecon.co.uk.

<sup>&</sup>lt;sup>4</sup> See Cohen and Chu (1998), Cohen et. al. (2002).

Data on quality comes from a panel of quality observations from UNEX. Data on demand comes from UPU. Margins are derived from marginal costs. We estimate margins using accounting measures of margin (revenue minus cost/revenue) and (price minus predicted marginal cost—assuming again that cost is approximated by the translog form). For price, we consider two measures: average revenue and headline stamp price and comes from IPC data. The data are available in a timely fashion<sup>5</sup>.

Current status of the work is we are still creating the price-cost margins. The expectation is that higher margins give firms more incentives to provide quality. Possible extensions are to create variable that measures the extent or intensity of the USO, and test whether that variable has a significant impact on service quality.

### **References**

- Cohen, Robert H. and Edward H. Chu. 1997. "A Measure of Scale Economies for Postal Systems." In Managing Change in the Postal and Delivery Industries, edited by Michael A. Crew and Paul R. Kleindorfer. Boston, MA: Kluwer Academic Publishers.
- Cohen, Robert H., Carla Pace, Matthew H. Robinson, Gennaro Scarfiglieri, Vincenzo Visco Comandini, John D. Waller and Spyros S. Xenakis. 2002. "A Comparison of the Burden of Universal Service in Italy and the United States." In Postal and Delivery Services: Pricing, Productivity, Regulation and Strategy, edited by Michael A. Crew and Paul R. Kleindorfer. Boston, MA: Kluwer Academic Publishers.
- Spence, M. 1975. "Monopoly, Quality, and Regulation," *Bell Journal of Economics*, The RAND Corporation, vol. 6(2), pages 417-429, Autumn.
- Swinand, G. and S. Jones. 2006. "Consumers' willingness-to-pay for Quality of Service in Post," in *Progress Towards Liberalization of the Postal and Delivery Sector*, eds. M. Crew and P. Kleindorfer; New York, NY: Springer.
- Swinand, G. 2004. "A Production Model of Service Quality at An Post," in *Competitive Transformation of the Postal and Delivery Sector*, eds M.A. Crew and P.R. Kleindorfer, Boston, MA: Kluwer Academic Publishers.
- Swinand, G., and D. Scully (2006), "Incorporating Quality of Service Measures into Price-caps for Post," London Economics working paper, www.londecon.co.uk.

<sup>&</sup>lt;sup>5</sup> All of the data, save the IPC data (which exists) have been collected. IPC restricts access to their data to members but we are working with David Murphy of An Post on this.

# Direct Mailers demand: a theoretical approach

Xavier Ambrosini Sébastien Bréville Joël Cornée

Olaf Klargaard La Poste, 44 Boulevard de Vaugirard 75757 Paris Cedex 15

Although direct mailers demand has raised a great field in empirical economic literature, the theoretical study of direct mailers demand has been neglected. This paper proposes a first step in theoretical analysis of direct mailers demand. It also provides elements for an appropriate response from postal operator.

Contrary to private customers and transaction mailers, direct mailers determine their postal demand in a similar way to any firm measuring the economic return of a project or an investment. The purchase of an additional mail unit depends on the direct mailer expectation for a positive return on investment (ROI) from the mail campaign. The revenue side of the ROI equation is the expected sale from a direct marketing campaign, i.e. the probability that direct mail triggers a purchase and the average amount of purchase. On the cost side of the ROI equation, the direct mailer supports on the one hand conception and printing costs of mails and, on the other hand, the cost of delivery (postal tariff). This last variable is a key driver of a direct mailer's decision to campaign.

The capacity to classify prospects in their database according to response rate is the other specificity of direct mailers demand. These latter determine their demand level according to expected revenue from the targeted groups. As long as a group has positive expected return, the direct mailer undertakes the campaign.

Following these demand characteristics, postal operators have two ways to stimulate ROI and consequently mail demand of direct mailers. Acting on the revenue side of the ROI equation, postal operators can improve direct mailers' knowledge about the probability of response of their prospects. By improving this knowledge, postal operators may, on the one hand, allow direct mailers to extract a profitable sub-group from an unprofitable group. On the other hand, it can allow direct mailers to separate an unprofitable sub-group from a profitable group, decreasing then the demand level. At this stage, acting on the cost side of the ROI equation, postal operators can use appropriate rebates to turn unprofitable groups into profitable groups, from the direct mailer point of view. A well-designed pricing policy – in line with competition rules and universal service obligations – could then better meet requirements of both direct mailers demand specificities and postal operators cost structure (increasing return of scale).

#### **DRAFT**

Abstract for the 16<sup>th</sup> Conference on Postal and Delivery Economics 28 – 31 May, 2008

# The Diffusion of Internet Advertising and Demand for Postal Services

**F.Fève<sup>1</sup>, J.P. Florens<sup>1</sup>, F. Rodriguez<sup>2</sup> and S. Soteri<sup>2</sup>** *Toulouse School of Economics (IDEI & GREMAQ)*<sup>1</sup>, and Royal Mail Group<sup>2</sup>

The econometric models used for forecasting in the mail demand should incorporate a substitution mechanism between used mail and electronic mail. In particular, the use of internet for advertising explains partially the recent evolution of traffic. This type of model is then required to forecast the future evolution of mail advertising. This requires an auxiliary model and the topic of this paper is to propose an economically based model for the evolution of internet advertising.

We study the economical determinants of the diffusion of internet advertising using a model of diffusion. Each firm having money to spend in advertising has the choice between internet advertising and other advertising. Firms which choose internet compare the cost of internet advertising and the value of internet advertising: it determines a threshold under which firms don't choose internet for advertising. Assuming that the proportion of money spent on internet is made of two things, a probability distribution and a threshold, we model the part of firms which choose internet for advertising. The threshold depends on the percentage of customers using internet as a network effect. We don't observe the market at the equilibrium but we propose a dynamic model describing the convergence to the equilibrium. The lag value is supposed to capture all the network effect and the model takes also into account a speed of diffusion (the speed of diffusion of the network effect). After estimation simulation of the model converges to an asymptote (maximum level reached by internet advertising) possibly depending on explanatory variables.

# Postal price elasticities and intermedia competition: A multisided market approach

Vincenzo Visco Comandini (University of Rome Tor Vergata) v.visco@unitus.it

Stefano Gori (University of West England, Bristol) stefgori@yahoo.com

Michael Lintell (Pitney Bowes) michael.lintell@pb.com

#### **Abstract for XVI CPDE**

The aim of the proposed paper is to discuss the rationale for applying multisided market theory (MSM) to postal services by reviewing its basic concepts as defined in the relevant literature (see for example Armstrong; 2005; Evans, 2003; Rochet-Tirole, 2004). A MSM structure arises when a platform enables interactions with two or more distinct customer groups, and the exchange between them creates a benefit. The platform's economic value is based on reducing transaction costs or information asymmetries between sellers and potential buyers, making it superior with respect to bilateral relations. In the case of the postal industry, the two main sides of the market are senders of a letter and their addressees. These two groups typically do not negotiate the price, as service pricing is agreed between mailers and the postal provider (the platform owner), not with receivers. This concept was first introduced to the postal industry by Panzar (2006) applying this theory to Post Office Box services. Visco Comandini (2007) has recently proposed an adaptation of MSM to postal services via the utility function of the different sides, as defined by Rochet-Tirole. Jaag-Trinkner (2008) discussed the potential for viable MSM structures as optimal pricing in liberalized markets.

There are three proposed rationales for applying the MSM approach to postal services. First, MSM exhibits a strong explanation for the paradox that the highest cost component of postal service is supplied free of charge since the 1837 Rowland Hill reform. This paradox has stimulated proposals aimed at introducing a delivery charge to the addressee (Owen-Willig; 1981; Schwarz-Schilling, 2001; Felisberto et al, 2005)<sup>1</sup>. Although theoretically interesting, these proposals are not only seemingly impossible to implement, but also inefficient if seen under the light of MSM theory. In fact, indirect network externalities arising from the ubiquitous, non excludable and universal delivery provided to every citizen with a known address are, for the current industry, a crucial positive component of the demand function of one side of the platform (senders). These benefits, generated by one side but enjoyed by the other, would be reduced or eliminated should a fee be charged to receivers. This result, therefore, is consistent with Jaag-Trinkner (2008) conclusions that in liberalized postal markets, addressees should be subsidized even more, not less.

The second rationale for MSM may solve the existing conflict between standard economic theory and empirical observations of price elasticity coefficients. Robinson (2006) provides a review of the estimates of main postal econometric studies. These results that includes both end-to-end and network access services, summarized and detailed by Robinson, are surprisingly similar for both US and European markets: letter price elasticities, already relatively low, are decreasing over time, despite market liberalization in Europe. The positive externality arising from free delivery and internalized in prices may provide an explanation. In MSM, the platform is able to efficiently redistribute prices charged to different sides. For each side, price equal marginal cost is not efficient anymore. The redistribution (or subsidy) is then an efficient tool for internalizing in the platform-senders transaction externalities due to universal free delivery. In a pure zero transaction cost world,

1

<sup>&</sup>lt;sup>1</sup> They credit the idea for charging delivery to Coase (1939). However, in his postal paper Coase criticized uniform tariff, not free delivery.

postal addressees were charged a fixed fee for the benefit of being connected to the delivery network. In this ideal world, prices charged to senders were lower (because part of the total cost were shifted to addressees), but addressees were free to not pay this charge (e.g. to disconnect themselves from the postal network), thus benefits for senders, despite price reduction, would immediately collapse. This is to say that observed prices are expected to include these externalities, making senders (paying the full price because receivers pay zero) less sensitive to prices with respect to products belonging to single-sided markets.

The third rationale for MSM exists in discussing the multi-homing situation (Armstrong, 2005). MSM provides a framework for analyzing the under-investigated inter-media competition (e.g., Gabszewicz-Laussel-Sonnac, 2004). As any media, Direct mail is a MSM. It exhibits higher price elasticities with respect to other postal products. This may be due to its direct (continuous, not discrete) competition with other media for allocation of a firm's advertising budget. The paper aims to provide empirical evidence of this competition by evaluating aggregate and vertical industry advertising expenditure data by media over time for the US and Western European markets. One goal of this evidence is to investigate whether different media and mail are complementary with or substitute each other.

#### References

Armstrong, M. (2005) *Competition in two-Sided Markets*, Department of Economics, University College, London

Bernstein, P. (2005) Direct Testimony of Peter Bernstein on Behalf of the United States Postal Service, docket R2005-1, *Postal Regulatory Commission*, Washington, DC

Coase, R. (1939), "Rowland Hill and the Penny Post", Economica, 6,1.

European Interactive Advertising Association, *Marketers' Internet Ad Barometer*, 2007, 2006 and 2005

Evans, D. (2003) Some Empirical Aspects of Multi-sided Platform Industries, *Review of Network Economics*, vol.2, issue 3, September

Felisberto, C., Finger, M., Friedli, B., Krähenbühl, D., Trinkner, U. (2005) "Pricing the last mile in the postal sector", in M. Crew, P. Kleindorfer (eds.) *Progress toward Liberalization of the Postal and Delivery Sector*, Springer Science + Business Media, New York

Gabszewicz, J. Laussel, D. Sonnac, N. (2004) "Programming and advertising competition in the broadcasting industry", *Journal of Economics & Management Strategy*, 13, 4, 657

Jaag, C., Trinkner, U. (2008) "Pricing in competitive two-sided mail markets", in M. Crew, P. Kleindorfer (eds.) Competition and Regulation in the Postal and Delivery Sector, Edward Elgar, (forthcoming)

Owen, B., Willig, D. (1983) "The economics and postal pricing", in J. Fleishman (eds) *The Future of the postal service*, Aspen, the Aspen Institute.

Panzar, J. (1991) "Is postal service a natural monopoly?" in M. Crew e P. Kleindorfer (a cura di), *Competition and innovation in postal services*, Kluwer Academic Publishers, Boston

Panzar, J. (2006) *PO Box Access: Competition Issues in a Two-Sided Postal Market*. Paper presented at the 4th IDEI/La Poste Conference on Regulation, Competition and Universal Service in the Postal Sector, Toulouse.

Robinson, A. (2006) Review of the Models on Price Elasticity of Postal Product, Pitney Bowes, Background Paper, September

Rochet, J. e Tirole J. (2004), Two-sided Markets: an Overview, mimeo, IDEI, Université de Toulouse

Schwarz-Schilling, C. (2001) *Pricing Schemes in liberalized postal markets*, paper presented to the "Second Conference on Competition and Universal Service in the Postal Sector", IDEI, Toulouse 6-7 December

Thress, T. (2006) Direct Testimony of Thomas Thress on Behalf of the United States Postal Service, docket R2006-1, *Postal Regulatory Commission*, Washington DC

Visco Comandini, V. (2007) *Trade offs between competition and universal service in liberalized postal markets*, paper presented at III Annual Conference of the Italian Association for Law and Economics, Bocconi University, Milan 9-10 November 2007



# Abstract for the 16th Conference on Postal and Delivery Economics in Albufeira; Portugal

"Competition, wages and politics in the delivery sector.

The case of postal minimum wages in Germany"

Alex Kalevi Dieke, WIK, Bad Honnef, Germany Dr. Ralf Wojtek, Heuking Kühn Lüer Wojtek, Hamburg, Germany

#### Submitted on 14 December 2007

Since the beginning of gradual liberalization in 1998, several operators have entered the German market for letter delivery to compete with the incumbent Deutsche Post AG. Most of these operators provide end-to-end delivery. In total, they delivered about nine percent of all German letter post in 2006; and more than ten percent in 2007. With the recent growth of competitive mail delivery, a controversial political debate about working conditions at the new entrants emerged in Germany since winter 2006/07. At the time of submission of this abstract, introduction of a sector-specific minimum wage for the postal sector appears very likely.<sup>1</sup>

The first objective of this paper is to discuss the development of wages levels for workers in the postal and delivery sector in Germany; by assembling empirical findings presented by various stakeholders.<sup>2</sup> In addition to traditional postal delivery, regional publishers in Germany operate networks for of newspaper delivery for many decades – and these can be seen as part of the delivery sector as well..

The second objective of the paper is to discuss the difference in wages paid by the incumbent (Deutsche Post) and the entrants. This also discussion compares differences between the postal incumbent and other, perhaps more competitive, industries.

Third, the paper reviews the political debate about minimum wages in Germany; and the market impact of such minimum wages. This debate kept politics busy for most of 2007; and is expected to result in a sector-specific minimum wage as of 1 January 2008. To understand the market impact, the paper investigates the effect of the new wage regulation on postal operators'

<sup>&</sup>lt;sup>1</sup> In November 2007, the German federal government (grand coalition) has agreed adopting a minimum wage for delivery of letters. A decision of Parliament is expected at the submission date of this abstract: 14 Dec 2007.

<sup>&</sup>lt;sup>2</sup> See Input Consulting, Liberalisierung und Prekarisierung. Beschäftigungsbedingungen bei den neuen Briefdienstleistern in Deutschland, December 2006, Stuttgart; and Dieke/Zauner, Arbeitsbedingungen im Briefmarkt, WIK discussion paper 295, May 2007, Bad Honnef. German regulator Bundesnetzagentur is currently conducting a (mandatory) survey of labour conditions at all licensed operators. Results of this survey are expected to become available for the proposed paper.



wages, price levels, employment, and on competition in the delivery market. In interpreting the findings, the paper takes account of the peculiar situation of the German labour market: the absence of a general minimum wage; and relatively high unemployment.

Finally, the paper draws conclusions with regard to licensing conditions in other EU countries. The draft for a Third Postal Directive, as agreed by the European Council in October 2007, allows that "the granting of authorisations may, where appropriate, be made subject to or impose an obligation to respect working conditions laid down by national legislation." (Common Position adopted by the Council on 8 November 2007, Council document 13593/6/07). These conclusions will be based on the experience with such obligations in Germany.

# Market Entry and Competitive Strategies in the German B2B Parcel Market

Helmut Dietl – University of Zurich

Markus Lang – University of Zurich, UC Berkeley

Stephan Wagner – Otto Beisheim School of Management

The objective of this paper is to analyze market entry and competitive strategies in the German Business-to-Business (B2B) parcel market. Currently, there a four big B2B service providers in the German parcel market: DHL with a market share of approximately 27%, DPD (27%), UPS (21%) and GLS (14%). Each of these four companies operates with a classical hub-and-spoke network. Red Parcel Post plans to enter the B2B market with a completely new transport and RFID- and GPS-based distribution system. This new transport and delivery strategy leads to lower fixed and possibly higher variable costs. By 2012, Red Parcel Post expects annual revenues of EUR 850 Mio, approximately 25% of DHL's current revenue in the German CEP market.

We describe Red Parcel Post's business strategy and develop a game-theoretic model to analyze the effect of Red Parcel Post's market entry on competition, market shares, prices, costs and profits. The model is a Cournot model with network effects and different cost functions. First, we solve the model analytically to derive qualitative results. In a second step, we simulate market entry and competition by calibrating the model with data from the German B2B market.

Our paper differs from previous conference presentations because it is based on a new transport and distribution strategy. In particular, this paper differs from De Donder et al. (2002) who model the letter and C2C parcel market using a Bertrand model with constant marginal costs. Their main objective is to identify optimal access charges to parcel operators who access the letter mail network in rural areas. Our paper also differs from Crew and Kleindorfer (2004) who analyze access policies and Ramsey-optimal access prices to the PO's network. In their model, the PO has a universal service obligation in letters and parcels and enjoys a reserved area in single-piece mail only. Entrants are modelled as a competitive fringe. Contrary to both models, our focus is not on welfare, but on business issues. In our model, the B2B market is not subject to USO or access regulations. Moreover, we explicitly

model different business strategies and try to highlight the effects of entry and competition on network effects, prices, profits and market shares. Our model is based on the German case. Nevertheless, most results can be generalized to other markets and even other industries with similar demand and cost structures.

The paper is of interest to managers in the parcel market in general and the B2B market in particular. It is also of interest to consultants, logistics operators, and customers because it analyzes new strategies and developments in B2B delivery.

The paper is timely, because red Parcel Post plans to enter the market in 2008.

#### References:

Crew, Michael A. and Paul R. Kleindorfer. 2004. "Access and the USO for Letters and Parcels." In Competitive Transformation of The Postal and Delivery Sector, edited by Michael A. Crew and Paul R. Kleindorfer. Boston,

MA: Kluwer Academic Publishers.

De Donder, Philippe, Helmuth Cremer, and Frank Rodriguez. 2002. "Access Pricing and Parcels Delivery." In Postal and Delivery Services: Delivering on Competition, edited by M.A. Crew and P.R. Kleindorfer. Boston, MA: Kluwer Academic Publishers.

# 16<sup>th</sup> conference on postal and delivery economics, May 28–31, 2008, Albufeira, Algarve, Portugal.

# USO financing in a free Postal Market: Three possible solutions with empirical implementation in six Countries

#### Gonzales D'ALCANTARA

University of Antwerpen and d'Alcantara Economic Consulting

#### Axel GAUTIER

HEC, Université de Liège and CORE, Université Catholique de Louvain, Belgium

In an earlier contribution we have shown that in a single product postal market the delivery cost curve is a key determinant of market coverage and has an important impact on the welfare and the internal postal capacity to finance the USO (d'Alcantara and Gautier, 2008). We started from a cost curve model is a postal market model where a strategic entrant competes with an incumbent operator who has Universal Service Obligations (USO). The entrant develops its own delivery network and the operators are engaged in a facility-based competition. The model estimates the optimal market coverage of the entrant, the optimal tariffs and the resulting market shares. The real focus however is on the associated consequences on welfare, the operator's profit and on possible means to finance the USO after FMO. We consider three potential safeguarding measures, which might be imposed to maintain the USO: Relaxing price regulation, a pay-or-play mechanism and public subsidies.

This proposed paper further develops an extension of our ealier theoretical model to include two products (single piece and bulk) with a uniform tariff imposed on single piece mail. The theoretical model is then numerically calibrated based on publicly available data for six counties (Belgium, Germany, France, Italy, Spain and UK). These countries are characterized by different delivery cost curves, mailing volume per inhabitant and composition of the mail streams, measured as the percentage of bulk mail in total mail. Our objective is to estimate the consequences of FMO in these six countries, taking into account their differences on the basis of a limited set of available data about the shape of their cost curves (Boldron et al., 2006).

The differing shapes of the cost curves in the various countries will, at the solution of the model, lead to different outcomes in terms of market shares obtained by the entrant, profits of the entrant and eventual losses of the USP. We will compute the ratio between the profits of the entrant and the loss of the USP. This ratio measures the capacity to finance the USO within the postal sector. For each country a graphical presentation of the country cost curve and the model results will then be presented and interpreted in terms of the underlying cost curves and other elements of the postal context of these countries.

The whole study should be of interest for national policy makers in Europe where the third European Directive (decided upon in October 2007) will have to be applied at the national level. Both the vulnerability of the Incumbent and the financing of the USO are sensitive issues and this paper intends to advance our knowledge of the impact of the underlying factors that affect these issues...

# Selected references

Boldron F., Joram D., Martin L. and Roy B., (2006). "From Size of the Box to the Costs of Universal Service Obligation: A Cross-Country Comparison", in M. A. Crew a P. R. Kleindorfer (eds), *Liberalization of the Postal and Delivery Sector*, Edward Elgar, Cheltenham.

d'Alcantara G. and B. Amerlynck (2006) - «Profitability of the Universal Postal Service Provider in a Free Market with Economies of Scale in Collect and Delivery», in M. A. Crew a P. R. Kleindorfer (eds), *Progress toward liberalization of the Postal and Delivery Sector*, Springer. Annex on ttp://www.alcantara.be/belgium/Antwerp.htm.

d'Alcantara, G. and A. Gautier (2008) National Postal Strategies after Full Postal Market Opening, in M. A. Crew, and P. K. Kleindorfer (eds.), *Competition and Regulation in the Postal and Delivery Sector*, Edward Elgar, Northampton, MA, USA and Cheltenham, UK, chapter 12, pp 167-186.



### The impact of competition and regulation on development of productivity

Authors: Patrick de Bas (ECORYS), Dr. Nick van der Lijn (ECORYS), Dr. Bjørn Volkerink (ECORYS), Arno Meijer (CPB Netherlands Bureau for Economic Policy Analysis).

In De Bas and Van der Lijn (2008), we investigated the influence of regulation on market developments and in particular on the types of business models of competitors in the postal sector. In the current paper, we broaden the analysis to the interaction between regulation, market developments and productivity developments. The objective of the paper is to analyse to what extent the regulatory framework and market developments influence the size of mail volumes and productivity of postal operators in the postal sector. The paper builds on and further elaborates on a study by ECORYS (2004).

In this paper, we explain the development in productivity with the help of an econometric panel estimation. As explanatory variables, we use and elaborate on the variables used in ECORYS (2004) to explain developments in productivity. The ECORYS (2004) study used, inter alia, the following variables: market structure, the regulatory environment, entry regulation and price regulation. To obtain the data for the analysis, we collected information on postal volumes, employment, some notion of capital intensity, and key characteristics of market structure and regulation for the postal sector for five EU-countries for the period 1990-2006, complemented by less detailed information for the other EU countries for 2002-2006.

Insight in the development of productivity is very relevant in the current debate on liberalization. The European postal sector has been partly liberalized in the recent years. The final step to full liberalization has been postponed to 2011. One of the reasons for postponement is the fear of various Member States that their national posts will be unable to compete in a fully liberalised market due to a lack of competitiveness. This lack of competitiveness is mostly related to poor productivity. With our paper, we aim to contribute to a better understanding of the impact of various factors (and incentives) on productivity developments.

#### References

Patrick de Bas and Nick van der Lijn, *Development of competition in EU postal markets: influence of the regulatory framework on the pattern of competition*, in: Competition and Regulation in the Postal and Delivery Sector, M. Crew & P.R. Kleindorfer (Ed.), Edward Elgar, (forthcoming) 2008.

Nick van der Lijn, Arno Meijer, Bjørn Volkerink, *Productivity in Network Sectors, An Empirical Analysis*, study for the Dutch Ministry of Economic Affairs, ECORYS (2004).

de Bas 1

# Abstract for 16<sup>th</sup> Conference on Postal and Delivery Economics 28 – 31 May, 2008

# Some Welfare and Pricing Implications of Alternative Regimes For Value Added Taxation of Postal Services

Philippe De Donder<sup>1</sup>, Helmuth Cremer<sup>2</sup>, Frank Rodriguez<sup>3</sup> and Paul Dudley<sup>3</sup>
University of Toulouse, IDEI & CRNS-GREMAQ<sup>1</sup>, University of Toulouse, IDEI & GREMAQ<sup>2</sup>
and Royal Mail Group<sup>3</sup>

At present in Europe, national postal operators in most countries are exempt from charging value added tax (VAT) on postal services. However, because they are VAT exempt, national postal operators are unable to recover VAT they pay on inputs so these unrecovered tax payments enter their cost base in forming the prices of their postal services. At the same time, in most European countries other postal operators generally are required to charge VAT on the postal services they offer but because these companies are rated for VAT purposes they are able to recover input tax. Note also that that the customers of postal operators may be VAT exempt or rated themselves and this in turn affects the effective price they pay for postal services because of their ability or otherwise to recover VAT charged on postal services as input tax. The operation of the VAT regime, through these interactions, then has complex implications for costs, prices, demand and welfare.

Although the VAT regime for posts as set out above is the position in most European countries, it is clearly not the only possible one. This has been an area of interest in Europe with a possibility of there being changes to the tax regime at some future date. An analytical assessment of the possible effects and impacts of alternative VAT regimes on prices and demand in the postal sector and associated impacts on economic welfare would be an important component of a rational evaluation of the effects of a change in the tax regime. The purpose of our paper is to make a contribution towards improving understanding of the economic effects of alternative VAT regimes on postal services.

We use the model and approach developed in our recent papers for the Rutgers' conferences. For this paper the main additional dimension is the introduction of some customers with VAT exempt and other who are VAT rated, combined with a national postal operator who is either VAT exempt or VAT rated.

The effect on prices, demand, costs and welfare of the VAT status is considered where the national operator is a monopoly. The paper also considers a market open to competition, where other postal operators with a VAT rated status can enter the market to compete with the incumbent national postal operator who may have either a VAT exempt or a VAT rated status. We calibrate our analytical model in order to highlight likely main economic effects of alternative VAT regimes for postal services.

"The Interaction between Regulatory and Antitrust Policy in the Postal Sector"

# John C. Panzar Northwestern University and the University of Auckland

#### **ABSTRACT**

Postal liberalization has brought many changes to the sector, especially outside the United States. In the European Union and elsewhere, recent decades have seen the "corporatization" of postal operators. Posts have been transformed from Ministerial entities into more or less traditional business enterprises. While privatization has been relatively rare, posts are typically subject to economic regulation by an independent regulator. The "full market opening" of the postal sector (scheduled in the EU for 2009) will mostly likely bring with it additional scrutiny from competition authorities.

The liberalization experiences of other vertically network industries such as telecommunications and electric power have illustrated that regulatory policy and competition policy are likely to be closely linked. Obviously, the issue of *competitive access* is of concern to both regulatory and competition authorities in any network industry with a so-called "monopoly bottleneck." The issue is especially controversial in the postal sector for the following reasons:

- (1) The relative lack of sunk costs in the delivery network.
- (2) Universal Service (and uniform pricing) Obligations.
- (3) "Two-sided" characteristics of competitive postal markets.
- (4) State ownership of postal operators.

The paper will analyze the importance of each of the above characteristics (and their interrelationships) on the formulation of regulatory and antitrust policies in the postal sector. For example:

- (1) The relative lack of sunk costs in the natural monopoly component of postal networks raises serious issues about whether the role of "essential facilities." When must access be granted for competition policy purposes? What regulated rate should prevail?
- (2) In the postal sector, the USO will typically entail pricing below marginal and/or average incremental costs for some users. Is this "anticompetitive"? What regulatory policies are required to reconcile the USO with competition?
- (3) Both mailers and recipients derive benefits from the postal network. In an "unbundled," competitive environment, the "sender pays" approach introduced by Rowland Hill may have to be abandoned. What are the implications for competition and regulatory policies?
- (4) The absence of a profit seeking residual claimant makes it difficult to ascertain what it is a postal incumbent is maximizing. This leads to well-known efficiency concerns under monopoly. Do this lead to concerns over predatory behavior in a competitive setting?

Abstract for the 16th Conference on Postal and Delivery Economics

"Liberalization: Lessons from the Airline Industry"

James I. Campbell Jr. (Brown Rudnick, LLP)

Background. Policymakers are gradually but inexorably moving the postal world towards a more liberalized regulatory framework. In several respects, the policy course now being trod by the postal sector resembles that taken by the U.S. airline industry during its "deregulation" period in the 1970s. In that period, I was deeply involved in the development of airline deregulation legislation. This was the first major sector liberalization in the United States in the modern period (and probably in the world). Looking back, it is easy to see that in many respects events unfolded differently from what was predicted by the experts. For the makers of postal policy, as well as for those affected by changes in postal policy, it may be useful to consider the discrepancies between policy prognostication and industry outcome that experience now offers in the airline industry and ask what imply lessons may be implied for the final stages of postal liberalization.

Approach of the paper. The paper will first summarize the development of the U.S. industry in order to explain the policy choices facing Congress and the Administration in the early 1970s. It will then summarize the policy arguments surrounding airline deregulation, with an eye towards similarities in the current postal sector, and the outcome of that legislative debate. This portion of the paper will draw on my own knowledge and notes of that era. The paper will then contrast the predictions made during the pre-deregulation debate with the actual development of the industry during the last 25 years. I will make use of airline statistics and the academic literature to describe how things that we thought would happen did not happen (at least

as we thought they would) and how things that we did not foresee in fact played a crucial role. I will also look at the strategies of specific air carriers: which succeeded and which failed and why. Finally, I will suggest some lessons that might drawn from this experience by today's postal policymakers, as well as by public postal operators and others affected by postal policy.

**Originality**. I am unaware of any paper on this topic.

Relationship to previous Conference papers. I am not aware of a similar paper. In 1997, I did a paper called "The Roots of Deregulation: Why Aviation and Telecommunications But Not the Post Office." This paper examined how and why the political momentum for liberalization coalesced in the airline and telecommunications industries but not in the postal industry. While the proposed paper, like the earlier paper, involves comparisons between the airline and postal sectors, the nature of the comparison is quite different.

Why the paper is likely to be interesting. The airline story is one of prescient wise men and block-headed fools (only now it is possible to tell who was who), of radical change and continuing truths, of the extinction of great companies and the survival of (some of the) great innovators. For those who may be embarking on a similar adventure, the potential lessons would seem almost intrinsically interesting. More specifically, I would hope that legislators, regulators, and public postal operators might be stimulated to look more closely at parallels between liberalization of the airlines in the 1970s (and its aftermath) and the postal sector of the early twentieth century (and its future).

**Timeliness**. The timeliness of this paper emerges, I think, from the above comments.

### ABSTRACT: RICHARD ECCLES

# 16<sup>TH</sup> CONFERENCE ON POSTAL AND DELIVERY ECONOMICS May 28 – 31 2008, Albufeira, Algarve, Portugal

# EU LAW PRINCIPLES TO BE FOLLOWED BY NATIONAL REGULATORS By Richard Eccles, Partner, Bird & Bird

Nearly all national postal regulatory systems in the EU involve retail price controls and requirement on the incumbent not to discriminate, and some European countries impose controls on the grant of access to the incumbent's postal network. Each of these subjects is governed by the EU Postal Services Directive.

The EU Directive requires member states to ensure non-discriminatory provision of the universal service, possibly at a uniform tariff, and sets out requirements on cost-pricing requirements concerning both retail services and access services. Further, the Directive imposes a proportionality requirement on member states to ensure that individual authorisations or licence obligations go no further than is necessary to safeguard the universal service. More generally, EU law requires the principles of proportionality and of purposive interpretation to be applied to EU directives and national implementing measures.

With regard to retail price controls, this paper will explain how retail price controls must reflect fully distributed costs, taking into account the pricing obligations in Article 12 of the Postal Services Directive and the requirement for fully distributed cost accounting in Article 14. With regard to downstream access pricing, Article 12 of the EU Directive requires that tariffs take account of the avoided cost.

The Postal Services Directive imposes non-discrimination requirements both in relation to universal service (retail) pricing and network access pricing. National regulatory prohibitions on discrimination need to be assessed not only by reference to the EU law requirements of proportionality and purposive interpretation, but also by reference to the specific principles in the EU competition case law on abuse of dominant position. This case law shows that in order for discriminatory conduct to be abusive, there must, be a material effect on competition, and foreclosure or elimination of competition. In addition, case law and European Commission guidance shows that the "meeting competition" defence should be allowed where a dominant operator reduces its prices as a proportionate response to genuine competition. National regulatory controls on incumbents should be consistent with these principles.

This paper will therefore clarify the EU law obligations on postal regulators and address some important areas of debate which arose at last year's conference.

Richard Eccles, Bird & Bird 14 December 2007



# Abstract for a Paper Center for Research in Regulated Industries 16th Conference on Postal and Delivery Economics

#### Title:

«The EU postal services and public procurement law: new legal and regulatory issues for the postal sector»

#### Abstract:

Public procurement law, which is a fundamental guarantee for the EU internal market, has often raised controversial issues in its application to Member States and their public companies, such as public postal operators.

The role of public procurement in the designation of the universal service provider(s) and as a means of financing universal service obligations will be of particular relevance for the postal sector over the next years: the new EU Directive now includes procuring universal services through a competitive tender as a means of financing universal service obligations.

At the same time, EU public procurement law is evolving. Following the entry into force of the EU Public Procurement Directives, on 20 November 2007 the Commission adopted a package of initiatives aimed at fostering the full development of the EU single market, which, amongst other, addresses the application of public procurement law, as well as the interplay between public procurement and State aid rules.

In addition, an increasing number of Member States are applying to the Commission under Article 30 of the Public Procurement Directive (Utilities) to have their universal service providers exempted from the application of public procurement rules with respect to some of their activities.

The article aims at discussing the application of EU public procurement law to the postal sector under the abovementioned aspects, in order to provide some useful insights on the legal and regulatory issues that will arise in the post-liberalization scenario.

### Authors:

Alessandra Fratini (Partner) and Fabio Filpo (Associate), FratiniVergano – European Lawyers