PROGRAMME AND PROCEEDINGS OF 1996 WARWICK SUMMER RESEARCH WORKSHOP ON "MODELLING FIRM BEHAVIOUR" HELD IN THE DEPARTMENT OF ECONOMICS 7-26 JULY 1996

471
(Special Paper)

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PROGRAMME PRINCIPAL ACADEMIC ORGANISERS:
Michael Waterson
Morten Hviid
with the assistance of Aydin Hayri

SOCIAL DOMESTIC AND ORGANISATIONAL ARRANGEMENTS:
Gill Pearce

SPONSORS
We are very grateful to the following for supporting aspects of the academic programme:
Economic and Social Research Council (UK)
European Community
Royal Economic Society
Annex 1

Academic and Social Programmes
**MONDAY 8 JULY**

- **am** Opening/organisational session
- **4.30 - 6 pm** Severin Borenstein
  *Sticky Prices, Inventories and Market Power in the Wholesale Gasoline Market*

**TUESDAY 9 JULY**

- **am** Scott Masten
  *Internal Organisation of Higher Education*
- **4.30 - 6 pm** Gerry Faulhaber
  *Voting on Prices: The Political Economy of Regulation*

**WEDNESDAY 10 JULY**

One-day 'ESRC Network of Industrial Economists' Workshop, speakers to include Colin Mayer and Stephen Nickell.

Organiser: Martin Conyon,
Warwick Business School
Venue: Radcliffe House

(Programme attached)

**THURSDAY 11 JULY**

- **11.30 am - 12.30** Informal presentation
  Jonathan Haskel
  *Competition and X efficiency*
- **4.30 - 6 pm** Aydin Hayri
  *Restructuring in the Czech Republic: Beyond Ownership and Bankruptcy*

**FRIDAY 12 JULY**

Discussions with representatives of regulated network firms (To include economists from National Grid, British Gas Transco, Anglian Water, British Telecom).

Organiser: Catherine Waddams,
Warwick Business School
Venue: A0.23

**MONDAY 15 JULY**

- **10.00 am** FACTORY VISIT
  Massey Ferguson Tractors
- **4.30 - 6 pm** David Audretsch
  *The Geography of Firm Location and Innovation*

**TUESDAY 16 JULY**

- **11.30 am - 12.30 pm** Andrew Oswald
  *What makes an Entrepreneur?*
- **4.30 - 6 pm** Stefan Szymanski
  *Spatial Dependence Through Local Yardstick Competition: Theory and Testing*

**WEDNESDAY 17 JULY**

- **11.30 am - 12.30 pm** Laura Rondi
  *The Impact of Financial Pressure on Firms' Employment Decisions: Evidence from a Panel of Italian Companies*
- **4.30 - 6 pm** Francine Lafontaine
  *The Dynamics of Franchise Contracting: Evidence from Panel Data*

**THURSDAY 18 JULY**

- **11.30 am - 12.30 pm** Bruce Lyons
  *Contract Duration and Specific Investment: A Test of Incomplete Contract Theory*
- **4.30 - 6 pm** José Mata
  *On the Evolution of the Firm Size Distribution: Facts and Theories*

**FRIDAY 19 JULY**

- **11.30 am - 12.30 pm** Alfredo del Monte
  *Internal Organisation and Market Structure*
- **2.30 - 4 pm** Informal presentation
  Fred Raines
  *Alternative Models of Corporate Behaviour*

**MONDAY 22 JULY**

- **9.30 am** FACTORY VISIT
  GPT Telecommunications
- **4.30 - 6 pm** Kathryn Graddy
  *International Pricing Behaviour of Cigarette Manufacturers*

**TUESDAY 23 JULY**

- **11.30 am - 12.30 pm** Don Sull
  *The Ties That Bind*
- **4.30 - 6 pm** Reinhilde Veugelers
  *Market Power in the Leasing Market*

**WEDNESDAY 24 JULY**

- **11.30 am - 12.30 pm** Massimo Colombo
  *Ownership Structures in Vertically Related Markets with Imperfect Regulation*
- **4.30 - 6 pm** Mark Ivaldi
  *Product Differentiation and Durable Goods: A Microeconometric Application to the Market of the Household Telephone Equipments*

**THURSDAY 25 JULY**

- **11.30 am - 12.30 pm** Pedro Marin
  *Market Power and Multimarket Contact: Some Evidence from the Spanish Hotel Industry*
- **4.30 - 6 pm** Ig Horstmann
  *Does Advertising Signal Product Quality? Evidence From the Market for Compact Disc Players*

**FRIDAY 26 JULY**

- **11.30 am - 12.30 pm** Peter Mollaard
  *Government-Assisted Oligopoly Coordination? A Concrete Case*
- **3 - 4.30 pm** Lars Sorgard
  *Semi-collusion in the Norwegian Cement Cartel*
CORPORATE GOVERNANCE AND ECONOMIC PERFORMANCE

ESRC NETWORK OF INDUSTRIAL ECONOMISTS
WEDNESDAY 10 JULY 1996 - RADCLIFFE HOUSE

PROGRAMME

9:00 - 10:00 Registration in Radcliffe House - Coffee

10:00 - 11:00 Andy Dickerson, University of Kent
Myopic corporate behaviour and CEO quality: How to choose a king?

11:00 - 12:00 Colin Mayer, University of Oxford
The role of large share stakes in poorly performing companies

12:00 - 13:30 Lunch and Coffee

13:30 - 14:30 Mari Sako, London School of Economics
Supplier relations and performance in the car industry:
Evidence from Europe, Japan and the US

14:30 - 15:30 Stephen Machin, University College London / London School of Economics
Compensation structures within organisations

15:30 - 16:00 Coffee

16:00 - 17:00 Stephen Nickell, University of Oxford
Corporate governance and economic performance

17:15 Conference ends

Attendance is free to Workshop participants but if you would like to have lunch, you should note that you will need to register on Monday 8 July and pay for the lunch.

Organised by Martin Coneyon
Warwick Business School

DEVELOPMENTS IN UK REGULATION

ECONOMISTS MEETING WITH REGULATED INDUSTRIES
9:00 - 1:00 FRIDAY 12 JULY 1996
ROOM A.023

as part of the Warwick Economics Summer Workshop

PROGRAMME

9:00 - 9:45 Jon Carlton, National Grid Company
Comparison of competition proposals in the US and the UK

9:45 - 10:30 Jonathan Wright, British Gas TransCo
A view of UK regulation

11:00 - 11:45 John Smith, Anglian Water
Recent Development in Structural and Conduct regulation of the UK Water Industry

11:45 - 12:30 Jeremy Turk, British Telecom
UK Telecommunications: Does deregulation change the game?

12:30 - 1:00 General Discussion

Organised by Catherine Waddams
Warwick Business School
**SUNDAY 7 JULY**  
~ WELCOME BARBECUE ~  
3-6PM ~ Barbeque on playing field area behind Tocil flats, see map in welcome pack. Food provided, bring your own drink.

**MONDAY 8 JULY**  
~ WELCOMING RECEPTION ~  
6.00PM ~ Reception to be held in the foyer area of Social Studies Building. Finger buffet and glass of wine.

**WEDNESDAY 10 JULY**  
~ WORKSHOP MEAL EVENING ~  
7.30PM ~ Workshop meal evening to be held aboard a barge near Leamington. Free for limited numbers of Workshop participants. Transport available by coach. Sign up sheet will be placed on noticeboard in Common Room.

**FRIDAY 12 JULY**  
~ MACBETH - EVENING PERFORMANCE ~  
Evening performance of Macbeth at Royal Shakespeare Theatre, Stratford. Limited tickets available from Gill (6 @ £27 / 6 @ £12.50).

**SATURDAY 13 JULY**  
~ VISIT TO LEICESTER WITH MORTEN HVID ~  
2.30pm ~ Afternoon includes guided walk by an industrial archaeologist.

**SUNDAY 14 JULY**  
~ VISIT TO VILLAGE GARDEN ~  
3-6pm ~ Afternoon visit to Warington Village Gardens, further details with Gill. Transport by coach to and from Warington.

**WEDNESDAY 17 JULY**  
~ WORKSHOP DINNER ~  
7.30 FOR 8PM ~ Workshop dinner to be held at Brooklands Grange Hotel, Coventry. Free to all Workshop participants, partners to be paid for. Transport available by coach to and from hotel. Sign up sheet will be placed on noticeboard in Common Room.

**FRIDAY 19 JULY**  
~ TROILUS & CRESSIDA - EVENING PERFORMANCE ~  
Evening performance of Troilus & Cressida at Royal Shakespeare Theatre, Stratford. Limited tickets available from Gill (10 @ £5).

**SATURDAY 20 JULY**  
~ VISIT TO KENILWORTH CASTLE ~  
This day is self-organised, but special events at castle are available.

**SUNDAY 21 JULY**  
~ GARDEN PARTY ~  
2.30-6.30PM ~ Garden Party to be held at chez Wallis. Transport available by minibus to and from party.

**TUESDAY 23 JULY**  
~ WORKSHOP EVENING PARTY ~  
7.30PM ~ Evening party to be held at Waterson house. Transport available by minibus to and from party.

**THURSDAY 25 JULY**  
~ WORKSHOP MEAL EVENING ~  
7.30PM - Workshop meal evening to be held at Pizza Piazza, Warwick. Free to all Workshop participants, partners to be paid for. Transport available by coach to and from restaurant. Sign up sheet will be placed on noticeboard in Common Room.
Annex 2

Participants' Names and Institutions
WARWICK SUMMER RESEARCH WORKSHOP
"MODELLING FIRM BEHAVIOUR"
8 - 26 July 1996

PARTICIPANTS' NAMES AND INSTITUTIONS

AUDRETSCH, Prof D ................................................. WZB, Berlin
BEETSMA, Dr R ................................................. University of Limburg, The Netherlands
BORENSTEIN, Prof S ............................................. University of California, USA
COLOMBO, Prof M ................................................. Politecnico de Milano, Italy
CONYON, Dr M ....................................................... Warwick Business School, UK
COSTA GATA, Dr J .................................................. University of York, UK
CRESSY, Dr R ......................................................... Warwick Business School, UK
CROOK, Dr J .......................................................... University of Edinburgh, UK
CUKROWSKI, Prof J ................................................. CERGE, Czech Republic
DELGADO, Mr J ....................................................... Universidad Carlos III de Madrid, Spain
DEL MONTE, Prof A ................................................. Università Degli Studi Di Napoli Federico II, Italy
DOBSON, Dr P ......................................................... University of Nottingham, UK
FAULHABER, Prof G ............................................... University of Pennsylvania, USA
FENG, Ms X .......................................................... London School of Economics, UK
GEROSKI, Prof P ...................................................... London Business School, UK
GIULIETTI, Ms M ..................................................... University of Exeter, UK
GRADY, Dr K ......................................................... London Business School, UK
GREEN, Dr R .......................................................... University of Cambridge, UK
HASSEL, Dr J .......................................................... Queen Mary & Westfield College, UK
HORSTMANN, Prof I ............................................... University of Western Ontario, Canada
IVALDI, Dr M ........................................................... Institut D’Economie Industrielle, Toulouse, France
KAMBHAMPATI, Dr U ............................................... London School of Economics, UK
KHALIL, Prof F ........................................................ University of Southampton, UK
LAFONTAINE, Prof F ............................................... University of Michigan, USA
LUKÁCS, Dr P .......................................................... University of Leeds, UK
LYONS, Prof B ........................................................ University of East Anglia, UK
MAHER, Dr M M ..................................................... Birkbeck College, UK
MANJON, Mr M C ................................................. University Rovira i Virgili (Tarragona), Spain
MARIN, Dr P .......................................................... Universidad Carlos III, Spain
MARTINA, Prof R .................................................... Universita Degli Studi Di Napoli Federico II, Italy
MARTINEZ, Prof A .................................................. Universidad de Valladolid, Spain
MASTEN, Prof S ..................................................... University of Michigan, USA
MATA, Prof J .......................................................... Universidade Nova de Lisboa, Portugal
McCLOUGHAN, Dr P ............................................... University of Liverpool, UK
McGEE, Prof J ......................................................... Warwick Business School, UK
MOLLGAARD, Prof H P ............................................. University of Aarhus, Denmark
MORRIS, Ms C ........................................................ University of Manchester, UK
PIGA, Dr C ............................................................. University of York, UK
RAINES, Dr F .......................................................... Visitor, University of Warwick, UK
REYNIERS, Dr D ..................................................... London School of Economics, UK
RONDI, Dr L .......................................................... CERIS, Italy
SEMBENELLI, Prof A ................................................................................. CERIS, Italy
SIMONETTI, Mr R .................................................................................. The Open University, UK
SLADE, Ms M ........................................................................................ University of British Columbia, Canada
SLEUWAEGEN, Prof L ............................................................................ KU Leuven, Belgium
SORGAARD, Dr L .................................................................................. Norwegian School of Economics, Norway
STOREY, Prof D ..................................................................................... Warwick Business School, UK
SULL, Prof D .................................................................................................. London Business School, UK
SZYMANSKI, Dr S .................................................................................... Imperial College, UK
TEJERINA, Prof F .................................................................................... Universidad de Valladolid, Spain
TOME, Ms M A ........................................................................................ Portugal
TROSTEL, Dr P ........................................................................................ Hong Kong University of Science & Technology, Hong Kong
VAN REENEN, Dr J .................................................................................. The Institute for Fiscal Studies, UK
VEUVELERS, Dr R .................................................................................... KU Leuven, Belgium
WADDAMS, Prof C .................................................................................. Warwick Business School, UK

plus faculty members and graduate students from the Department of Economics

Two intended participants, not listed above, withdrew shortly beforehand for personal reasons.
Annex 3

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<td>Internal Organisation of Higher Education</td>
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<td>Government-Assisted Oligopoly Coordination? A Concrete Case</td>
<td>Svend Albæk, H Peter Møllgaard and Per B Overgaard</td>
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<td>What Makes an Entrepreneur?</td>
<td>David G Blanchflower and Andrew J Oswald</td>
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<td>Selected Stakeholder Corporation and Related Literature: A Reader's Guide</td>
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<td>The Impact of Financial Pressure on Firms' Hiring and Firing Decisions: Evidence from a Panel of Italian Companies</td>
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<td>Tariff Jumping DFI and Export Substitution: Japanese Electronics Firms in Europe</td>
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Abstracts of Papers
R&D Spillovers and the Geography of Innovation and Production

By David B. Audretsch and Maryann P. Feldman

More than most other economic activities, innovation and technological change depend upon new economic knowledge. Thus, Paul Romer (1986), Paul Krugman (1991a, b), and Gene Grossman and Elhanan Helpman (1991), among others, have focused on the role that spillovers of economic knowledge across agents and firms play in generating increasing returns and ultimately economic growth. In fact, several recent studies have identified the existence of spatially-mediated knowledge spillovers. An important finding of Adam B. Jaffe (1989), Zoltan Acs et al. (1992, 1994), and Feldman (1994a, b) is that investment in R&D by private corporations and universities "spills over" for third-party firms to exploit. If the ability to receive knowledge spillovers is influenced by distance from the knowledge source, then geographic concentration should be observed, especially in industries where knowledge spillovers are likely to play a more important role. The purpose of this paper is to examine the extent to which industrial activity clusters spatially and to link this geographic concentration to the existence of knowledge externalities. Of course, as Jaffe et al. (1993) point out, one obvious explanation why innovative activity in some industries tends to cluster geographically more than in other industries is that the location of production is more concentrated spatially. Thus, in explaining why the propensity for innovative activity to cluster geographically varies across industries, we need first to explain, and then to control for, the geographic concentration of the location of production.

As Alfred Marshall (1920) and, later Krugman (1991b) argue, there may be geographic boundaries to information flows or knowledge spillovers, particularly tacit knowledge, among the firms in an industry. Although the cost of transmitting information may be invariant to distance, presumably the cost of transmitting knowledge rises with distance. That is, proximity and location matter. While there is considerable evidence supporting the existence of knowledge spillovers, neither Jaffe (1989), Jaffe et al. (1993), nor Acs et al. (1992, 1994), and Feldman (1994a) actually examine the propensity for innovative activity to cluster spatially. But implicit in the knowledge production function model is the assumption that innovative activity should concentrate geographically in those industries where the direct knowledge-generating inputs are the greatest and where knowledge spillovers are the most prevalent. No one, to date, has examined the underlying propensity for industrial activity to cluster spatially. While one of the central themes in the industrial organization literature is to explain the degree of concentration of economic activity within an industry (F. M. Scherer and David Ross, 1990), the focus has typically been on the extent of dispersion across different enterprises and establishments within a single spatial unit—the country. The emerging importance of location as a unit of observation argues for examining both production and innovation within a geographic context. We empirically
Sticky Prices, Inventories, and Market Power in Wholesale Gasoline Markets

Severin Borenstein* and Andrea Shepard†

January 1996

Abstract: We present and test an explanation for lags in the adjustment of wholesale gasoline prices to changes in crude oil prices. Our simple model with costly adjustment of production and inventories implies that output prices will respond with a lag to cost shocks even in the absence of menu costs, imperfect information, and long-term buyer/seller relationships. The model predicts that futures prices for gasoline will adjust incompletely to crude oil price shocks occurring close to the expiration date of the futures contract. We test and confirm this implication. The model also predicts that firms with market power will choose a different price adjustment path than would perfectly competitive firms. We examine the responses of prices in 188 local wholesale gasoline markets and find evidence that greater market power leads to slower output price adjustment.

For helpful comments, we thank Tim Bresnahan, Dennis Carlton, Robert Pindyck, and seminar participants at U.C. Berkeley, University of Toronto, University of Chicago, Purdue University, and the National Bureau of Economic Research. Wedad Elmaghraby provided excellent research assistance.

* University of California Energy Institute, 2539 Channing Way, Berkeley, CA 94720-5180, U.C. Davis, and NBER. email: sjborenstein@ucdavis.edu.

† Graduate School of Business, Stanford University, Stanford, CA 94305-5015, and NBER. email: fshepard@lira.stanford.edu.
OWNERSHIP STRUCTURES IN VERTICALLY RELATED MARKETS WITH IMPERFECT REGULATION*

Massimo G. Colombo, Università di Pavia, Dipartimento di Economia Politica e Metodi Quantitativi and CIRET-Politecnico di Milano

Andrea Rossini, CIRET-Politecnico di Milano

Abstract

This paper analyses the implications for allocative efficiency of different ownership structures of vertically related industries in a rather simple game-theoretic setting. The upstream sector is monopsonised and regulated, while the downstream sector is imperfectly competitive. Regulation is imperfect in the sense that the regulatory authority suffers from adverse selection and/or moral hazard problems and is not able to enforce optimal regulation. We consider both homogenous and differentiated composite goods. We also take into account incentives to efficiency enhancing investments on the part of the upstream monopolist under different regulatory regimes and vertical ownership structures. It generally turns out that in spite of the additional incentive for the upstream monopolist to manipulate accounts in order to raise rival’s costs, preventing him from entering the downstream industry is socially undesirable, unless the independent downstream rival enjoys a substantial production cost advantage. Such reasoning especially applies when composite goods are close substitutes for one another and the regulator’s enforcement capabilities are limited. The inclusion of upstream investments reinforces such results: vertical separation deters upstream investments and lowers welfare with respect to asymmetric vertical integration, independently of regulation.

March 1996

(*) Research for this paper has taken advantage of grants from 1995 MURST 60% funds and the C.N.R. research project “Gestione strategica dell’innovazione”. The work has been jointly developed by the authors; however, Massimo G. Colombo has written pars.1-3, and Andrea Rossini pars. 4-6.

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INTERNAL ORGANISATION AND MARKET STRUCTURE

ALFREDO DEL MONTE
UNIVERSITY OF NAPLES

INTRODUCTION

A conventional result of microeconomic theory is that competition and free entry will eliminate differences between firms.

In the real world heterogeneity between firms in the same industry is quite frequent and probably more common than homogeneity.

The evaluation of welfare implications of models with heterogeneous firms is in general more complex than with homogeneous ones. Therefore in many cases it will not be possible to give simple rules for public policy to encourage a particular industry structure different from that chosen by the market. The paper investigates these issues.
Voting on Prices: The Political Economy of Regulation

Gerald R. Faulhaber

Abstract

Economists have long recognized that regulation is an imperfect solution to market failure. Do the inefficiencies of regulation outweigh the inefficiencies of market failure? In this paper, we develop a stylized model of a monopolist offering two services, one more widely demanded than the other. We compare aggregate surplus from unregulated monopoly with aggregate surplus from a median voter model of price setting in a (perfectly) regulated monopoly. We find that (i) median voter pricing can yield substantially lower aggregate surplus than monopoly pricing; and (ii) empirical evidence of the recent evolution of US telecommunications prices confirms the model.

JEL Classification Codes: D72, L51

Keywords: Regulation, Political Economy, Median Voter, Telecommunications, Pricing.

*Professor, Department of Public Policy and Management, Wharton School, University of Pennsylvania, Philadelphia, PA 19104. The author would like to thank Profs. Franklin Allen and Robert Inman for their comments, as well as workshop participants at the Universidad Carlos III, Madrid, for theirs. J. Lande and others at the FCC provided crucial data, as did P. Srinigesh at Bellcore. Sue Kim provided excellent research assistance for the project. Direct all correspondence to: 215-898-7860, fax 215-898-9463, Internet faulhaber@wharton.upenn.edu .

Draft

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International Pricing Behavior of US and UK Cigarette Manufacturers

Kathryn Graddy  Richard Spady
London Business School  Nuffield College, Oxford

July 1996

Abstract

This paper develops and estimates an empirical model of product differentiation using data from US and UK cigarette exports. We find that in Germany and the Netherlands the data is consistent with a model of product differentiation in which US and the UK firms have minimal market shares and is inconsistent with a model of perfect competition.
Restructuring in the Czech Republic—Beyond Ownership and Bankruptcy

Aydin Hayri†
Department of Economics
University of Warwick, Coventry CV4 7AL, England

and

Gerald A. McDermott†
Department of Political Science
M.I.T., Cambridge MA 02139 USA

Program on Central and Eastern Europe Working Paper Series #36

Abstract

Restructuring of large industrial holdings in the Czech Republic (S-firms) depends on probes into new markets. The development and financing of probes generates internal holdups and stalemates among the government, banks, and S-firms. The government tries to preserve the value of just-privatized S-firms while avoiding subsidies; banks, facing their delinquency, cannot force bankruptcy since keeping them as clients is as important as maintaining capital adequacy. A compromise arises, IMBR (intricate monitoring based restructuring), where the outside parties condition their involvement on a peculiar reorganization of the firm. We provide the empirical and theoretical underpinnings of IMBR, the emergence of which is neither deliberate nor accidental. (Keywords: Restructuring, privatization, incomplete contracts, monitoring)

†We use aliases for the names of their companies and their managers to protect their privacy. An earlier version of this paper was presented at the Ford Foundation Conference on CR transition at CERGE-EI, Prague CR, May 1994.

The research was conducted at CERGE-EI, Prague CR, where Hayri was a visiting professor and McDermott is a visiting researcher. McDermott’s dissertation research was supported by generous grants from the US-CR Fulbright Commission and the Center for European Studies, Harvard University. The authors would like to thank CERGE-EI for its gracious administrative support and hospitality and the following people for insightful comments and help: Suzanne Berger, Ales Capek, Zhiyuan Cui, Jeremy Edwards, John Griffin, Miroslav Hmeir, Mike Jetton, Tony Levitas, Richard Locke, Ivana Mazalkova, Gerard Roland, Charles Sabel, David Stark, Frantisek Turnovec, and participants in a seminar at the University of Warwick.
Does Advertising Signal Product Quality?  
Evidence from the Market for  
Compact Disc Players

Ignatius J. Horstmann  
Department of Economics  
University of Western Ontario

Glenn M. MacDonald  
W. E. Simon Graduate School of Business Administration  
and  
Department of Economics,  
University of Rochester;  
and  
Economics Research Center/NORC

Revised  
May 1996

Abstract

This paper explores panel data on advertising and product pricing for firms in the compact disc player market over the period 1983-92. In the data advertising and price move together, with both rising initially and remaining above introductory levels for approximately five years after product introduction and falling below subsequently. Coordination between advertising and pricing is apparent.

A positive association between price and advertising is strongly inconsistent with formalizations of Nelson's (1974) signaling model. The imperfect consumer learning model developed by Horstmann and MacDonald (1994) implies a positive association, but does not predict the decline to below-introductory levels. An extension of the imperfect learning model can explain this observation, as can a model in which advertising is innately informative and firms learn better technologies over time. While these extensions are consistent with the observed similarity between the time paths of price and advertising, neither demands it.
Product Differentiation and Durable Goods:
A Microeconometric Application to the
Market of Household Telephone Equipments

Jérôme Foncel
GREMAQ and Université des Sciences Sociales, Toulouse

Marc Ivaldi
GREMAQ-EHESS and Institut D’Économie Industrielle, Toulouse

March 1996
Preliminary Version
(to be completed)

* We would like to thank Alain Bousquet and Pascal Favard for helpful comments on this work. All remaining errors are our own.
THE DYNAMICS OF FRANCHISE CONTRACTING: EVIDENCE FROM PANEL DATA

ABSTRACT

In this paper, we model the determinants of franchise contract terms, namely royalty rates and franchise fees, using a unique panel data set of about 1000 franchisors for the period 1980-1992. We focus on the extent to which firms adjust the terms of their contracts as they become better established, and find that adjustment is relatively infrequent and that firms do not systematically raise or lower their royalty rates or franchise fees when they do adjust them. These results tend to refute a number of existing theories of franchising that are based on risk-sharing, asymmetric information, and certain incentive structures, but support those based on franchisor opportunism and to some extent double-sided moral hazard. Our results also suggest that when industrial organization economists do not have access to panel data, their work may well suffer from the omitted variable bias caused by unobserved firm effects.

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Contract Duration and Specific Investment: 
A Test of Incomplete Contract Theory

by

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Presentation to Warwick Summer Workshop 
on 
Modelling Firm Behaviour (July, 1996)

1. What does Incomplete Contract Theory predict?
2. How to allocate authority using penalty clauses
3. An incomplete contract theory of contract duration
4. Questionnaire survey
5. Econometrics on duration (and penalty clauses)
MARKET POWER AND MULTIMARKET CONTACT

Some Evidence from the Spanish Hotel Industry

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and

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July 1996

This paper analyses the effect of multimarket contact on firms' price behaviour. We develop a model of competition where firms set their prices according to an infinitely repeated game. By using data from the Spanish hotel industry, we find that the omission of variables measuring multimarket contact creates a downward bias on the effect of concentration on prices. We also find that it increases prices in markets where it is difficult to collude and, at the same time, it reduces prices where collusion is easier to achieve. These results support recent theoretical developments that emphasize the potential for strategic behaviour of firms in a multimarket setting.

We would like to thank Miguel Benavente, Samuel Bentolilla, Javier Campos, Jorge Padilla and Richard Scitce for their helpful suggestions. We are grateful to the Spanish Institute of Tourist Studies for providing us the raw data. The usual disclaimer applies.
THE INTERNAL ORGANIZATION OF HIGHER EDUCATION;
OR WHY UNIVERSITIES, LIKE LEGISLATURES, ARE NOT ORGANIZED AS MARKETS

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Draft: July 6, 1996

*Any similarities between individuals and events described in this research and actual individuals and events are purely coincidental.
On the Evolution of the Firm Size Distribution: Facts and Theories

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this draft: July 1996

Abstract

Past conventional wisdom has held that expected firm growth rates are independent of size (Gibrat’s Law), and that the firm size distribution is stable and approximately log normal. Recent empirical evidence, however, shows that the first of these facts does not hold when considering more complete data sets than those used in the past. In this paper, we show that the second fact—a stable, log normal distribution of firm size—also fails to hold in more complete data sets. Rather, the firm size distribution seems quite skewed to the right but evolving in time toward a more symmetric one.

In addition to presenting a series of stylized facts regarding the firm size distribution and its evolution over time, we propose a series of theoretical explanations for these facts, including models of learning-by-doing, sunk costs, and financing constraints.

*We are grateful to Paul Geroski, Pedro Portugal and to seminar participants at Nottingham, SPIE 96, Rochester, and Wisconsin-Madison for useful comments. The usual disclaimer applies.
Government-Assisted Oligopoly Coordination?
A Concrete Case*

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Abstract

Danish ready-mixed concrete is produced in regional oligopolies. Firms rely on price discrimination through secret discounts. Antitrust authorities interpret this as lack of competition and has decided to activate its chief weapon against dormant competition: To make the market more transparent it now regularly publishes list prices and discounts of 5-7 firms and two grades of concrete in three regions. Following initial publication, average prices of reported grades increased by 15-20 percent while other prices increased by a mere 1-2 percent. The paper investigates whether this may be due to a business upturn, capacity constraints, seasonality, etc., but none of these seem to have much explanatory power. In addition, prices of various non-reported grades moved in line with the general price level suggesting that a better explanation is the facilitation of tacit coordination brought about by the antitrust authority.

JEL: D43, L11, L13, L71, L74
Keywords: Competition policy, Tacit collusion, Observability

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What Makes an Entrepreneur?

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and

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University of Warwick

First version February 1988
This version October 1995

The first version of this paper dates back to 1988, and was in one of its iterations NBER Working Paper #3252. We thank the ESRC and the UK Department of Employment for financial assistance. Steve Machin contributed a crucial piece of technical help on this paper. Useful suggestions were also made by participants in seminars at Cambridge (UK), LSE, Harvard, Dartmouth, Aberdeen, Glasgow, Guelph, McMaster, Oxford, the London Business School, Swansea, Uppsala, FIEF (Stockholm), and Warwick, and by Peter Abell, Graham Beaver, Joan Beaver, Fran Blau, George Borjas, Mark Casson, Andrew Clark, Robert Cressy, Peter Elias, Roger Gordon, Al Gustman, Tom Holmes, Peter Johnson, Bruce Meyer, Chris Pissarides, Gavin Reid, David Storey, Steve Venti, Alex Zanello, and a referee.
Selected Stakeholder Corporation and Related Literature

A Reader's Guide

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What follows is an initial and limited attempt to bring together literatures from several different fields that appear to be addressing a similar concern: namely, a need to develop a positive and normative model of the corporation in a Post-Taylorist world. These fields include, but are not limited to, Industrial Organization, Industrial Relations, Labour Economics and Business Ethics. Since I can claim some expertise in only one of these fields (labour), I am very much in the position of learning by doing (a labour concept). Nevertheless, I wish to maintain that a bona fide alternative paradigm for corporate behavior, the Stakeholder Theory, has emerged; that this theory, while still inchoate, receives at least implicit support from a variety of sources, particularly from Labour and IR studies; and that a motivation for re-examining "the theory of the firm" is a growing dissatisfaction with current contract theory. In this brief exercise I will only suggest the literature that purportedly supports these claims.
WARWICK SUMMER WORKSHOP
on
"MODELLING FIRM BEHAVIOUR"

THE IMPACT OF FINANCIAL PRESSURE ON FIRMS' HIRING AND FIRING
DECISIONS: EVIDENCE FROM A PANEL OF ITALIAN COMPANIES

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CERIS-CNR
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SUMMARY

In this paper we investigate whether financial distress does affect the costs of adjusting employment.

A large body of microeconometric evidence suggests that finance affects firms' operating decisions, or "real-side" behaviour in various ways. Capital market imperfections and asymmetric information have provided the background for investigating the influence of liquidity constraints on capital accumulation or inventory investment across subsamples of firms with different size, ownership structure, bank or group affiliation.

Any kind of investment activity is likely to be adversely affected by a rise in the costs of borrowing, including the hiring of new employees.

Very preliminary draft
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Please do not quote without authors' permission
TARIFF JUMPING DFI AND EXPORT SUBSTITUTION: JAPANESE ELECTRONICS FIRMS IN EUROPE

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ABSTRACT

Analysis of micro data on Japanese electronics firms establishes that the rapid increase in Japanese manufacturing investments in the late 1980s has for a substantial part been induced by EC antidumping and other trade restricting measures targeting Japanese firms. Evidence is found at the firm level that such ‘tariff jumping’ investment has substituted for exports from Japan. On the other hand, firms which invested in EC distribution activities, acquired EC firms, or produce components within a vertical Keiretsu, export relatively more to Europe. The latter finding suggests that subcontractor firms were able to expand components exports by supplying the European manufacturing plants of their parent firms.

JEL Codes: F23, F13
Keywords: Export, Direct Foreign Investment, Multinational Firms, Trade Policy, Antidumping

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Semicollusion in the Norwegian Cement Market* 

by

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This version: July 1996
Preliminary draft

Abstract:
A model of semi-collusion, where firms collude on prices and compete on capacity, is tailor-made to the characteristics of the Norwegian cement market and tested empirically on a unique data set for this particular market for the period 1927-82. The results indicate that the rapid increase in capacity and thereby in exports in the period 1956 to 1967, the late phase of the price cartel, best can be explained by the market sharing agreement: each firm overinvested in capacity to receive a large quota in the domestic market.

J.E.L. Classification: C22, D43, L13, L61, N64

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SUMMARY OF FINDINGS

• Outside CEO strongly influenced timing of closure
  - \( P_{\text{outsider}} \text{(close)} \geq P_{\text{insider-outsider}} \text{(close)} > P_{\text{insider}} \text{(close)} \)
  - CEO stock-based compensation had no impact and negative sign
  - New CEO had unpredicted negative sign

• Plant-level expected profitability strongly affected which plants would ultimately be closed, but not timing
  - Firm share of market had no discernible impact on the probability of plant closure

• Except for financial leverage, capital markets had little impact on the probability of closure
  - interest coverage was consistently significant (p<.001 - .01)
  - board composition had only a weak impact on closure probability
  - the market for corporate control played a limited role (71% of the plants ultimately closed were shuttered prior to the first raid in the tire industry in 1982)
Spatial dependence through local yardstick competition
Theory and testing

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Stefan Szymanski, Imperial College Management School

June 1996

Abstract: We propose a model local yardstick competition for natural monopolies located around a circle. Where principals have differing objective functions and agents are risk averse patterns of spatial dependence are generated. Competitive tendering eliminates spatial dependence. We test this prediction using spatial econometrics on UK data which covering a regime shift from local yardstick evaluation to (compulsory) competitive tendering.

Keywords: yardstick competition, spatial econometrics
JEL Classification: H73, L43, C51

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AN EMPIRICAL ANALYSIS OF STRATEGIC PRICE SETTING IN THE BELGIAN LEASING MARKET

by

Reinhilde Veugelers and Cynthia Van Hulle
Associate Professor and Full Professor
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and

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UFSIAntwerpen and UFSIAntwerpen

April 1995

Abstract

A study of the quarterly standard leasing rates for financial mid-sized lease contracts for 16 companies over a 6 year period provides evidence for leasing companies to tie to the NSCI, the market leader in investment credits, a substitute for leasing. This tying behavior is further shown to be company and time specific. Particularly in times of thin margins, incumbent firms tie significantly stronger than entrants. No significant evidence was found for the impact of multi-market contact as well as the entry of new firms.