PROGRAMME AND PROCEEDINGS OF
1996 WARWICK SUMMER RESEARCH WORKSHOP
ON "MODELLING FIRM BEHAVIOUR"

471
(Special Paper)

WARWICK ECONOMIC RESEARCH PAPERS

THE UNIVERSITY OF WARWICK

DEPARTMENT OF ECONOMICS

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)

TABLE OF CONTENTS

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

❖ ❖ WEEK 1 ❖ ❖

MONDAY 8 JULY

a m — Opening/organisational session

4.30 - 6 pm — Severin Borenstein
Sticky Prices, Inventories and Market Power in the Wholesale Gasoline Market

TUESDAY 9 JULY

a m — 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
(Programme attached) Venue: Radcliffe House

THURSDAY 11 JULY

11.30 am - 12.30 — Informal presentation
Jonathan Haskel
Competition and X efficiency

4.30 - 6 pm — Aydin Hayri
Restructing 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
(Programme attached) Venue: A0.23

2.30 - 4 pm — Leo Sleuwaegen
Tarriff Jumping and Export Substitution

❖ ❖ WEEK 2 ❖ ❖

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

❖ ❖ WEEK 3 ❖ ❖

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 Houshold 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 Mollgaard
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 Conyon
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 Barbeque ~

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 Hviid~

2.30pm ~ Afternoon includes guided walk by an industrial archaeologist.

❖ ❖ ❖ ❖ ❖

❖ ❖ ❖ ❖ ❖

Sunday 14 July

~ Visit to Village Garden ~

3-6pm ~ Afternoon visit to Warmington Village Gardens, further details with Gill. Transport by coach to and from Warmington.

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
GRADDY, Dr K .... London Business School, UK
GREEN, Dr R .... University of Cambridge, UK
HASKEL, 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 .... Keynes College, Kent, 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 & Techology, Hong Kong
VAN REENEN, Dr J ....The Institute for Fiscal Studies, UK
VEUGELERS, 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

List of Workshop Papers

List of Workshop Papers

Name of Paper	Name of Authors
R&D Spillovers and the Geography of Innovation and Production	David B Audretsch *and* *Maryann P Feldman*
Sticky Prices, Inventories and Market Power In Wholesale Gasoline Markets	Severin Borenstein *and* *Andrea Shepard*
Ownership Structures in Vertically Related Markets with Imperfect Regulation	Massimo G Colombo *and* *Andrea Rossini*
Internal Organisation and Market Structure	Alfredo Del Monte
Voting on Prices: The Political Economy of Regulation	Gerald R Faulhaber
International Pricing Behaviour of US and UK Cigarette Manufacturers	Kathryn Graddy *and* *Richard Spady*
Restructuring in the Czech Republic: Beyond Ownership and Bankruptcy	Aydin Hayri *and* *Gerald A McDermott*
Does Advertising Signal Product Quality? Evidence from the Market for Compact Disc Players	Ignatius J Horstmann *and* *Glenn M MacDonald*
Product Differentiation and Durable Goods: A Microeconometric Application to the Market of Household Telephone Equipments	*Jérôme Foncel and* Marc Ivaldi
The Dynamics of Franchise Contracting: Evidence from Panel Data	Francine Lafontaine *and* *Kathryn L Shaw*
Contract Duration and Specific Investment: A Test of Incomplete Contract Theory	Bruce R Lyons
Market Power and Multimarket Contact: Some Evidence from the Spanish Hotel Industry	*Nerea Fernandez and* Pedro L Marin

Internal Organisation of Higher Education	Scott Masten
On the Evolution of the Firm Size Distribution: Facts and Theories	*Luís M B Cabral and* José Mata
Government-Assisted Oligopoly Coordination? A *Concrete* Case	*Svend Albæk,* H Peter Møllgaard *and* *Per B Overgaard*
What Makes an Entrepreneur?	*David G Blanchflower and* Andrew J Oswald
Selected Stakeholder Corporation and Related Literature: A Reader's Guide	Fredric Raines
The Impact of Financial Pressure on Firms' Hiring and Firing Decisions: Evidence from a Panel of Italian Companies	Laura Rondi *and* Alessandro Sembenelli
Tariff Jumping DFI and Export Substitution: Japanese Electronics Firms in Europe	*René Belderbos and* Leo Sleuwaegen
Semicollusion in the Norwegian Cement Market	*Frode Steen and* Lars Sørgard
The Ties that Bind	Don Sull
Spatial Dependence through Local Yardstick Competition: Theory and Testing	*Roger Bivand and* Stefan Szymanski
An Empirical Analysis of Strategic Price Setting in the Belgian Leasing Market	Reinhilde Veugelers, *Cynthia Van Hulle, Eddy Durinck and Eddy Laveren*

Annex 4

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

* Audretsch: Wissenschaftszentrum Berlin für Sozialforschung and the Centre for Economic Policy Research, Reichpietschufer 50, D-10785 Berlin, Germany; Feldman: Institute for Policy Studies, Johns Hopkins University, Baltimore, MD 21218. This article was written while Maryann Feldman was visiting at the Heinz School of Public Policy and Management, Carnegie Mellon University. We thank Richard Baldwin, Paul Krugman, James Markusen, and participants at the CEPR Conference on the "Location of Economic Activity: New Theories and New Evidence," 17–20 December, 1993, Vigo, Spain, for their useful comments. We also thank Jim Adams, Zvi Griliches, Bronwyn Hall, Frank Lichtenberg, Richard Nelson and Mike Scherer and the participants in the discussion at the 1995 AEA Meetings. We would also like to thank the anonymous referees for useful comments and suggestions. Gail Cohen Shaivitz provided invaluable research assistance.

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 monopolised 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.

Corresponding author:

Massimo G. Colombo
CIRET-Politecnico di Milano
Dipartimento di Economia e Produzione
P.za Leonardo 32
20133 Milan, Italy
Ph. n: (2) 2399-2748;
Fax: (2) 2399-2710
E-mail: Colombo@mail.ecopro.polimi.it

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 .

International Pricing Behavior of US and UK Cigarette Manufacturers

Kathryn Graddy — London Business School

Richard Spady — 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.

DRAFT
Do not quote out of context
All data are preliminary

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 Hrncir, 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.

Wendy Carter

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 intially 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'Economie 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.

NBER Working Paper 5585
May 1996

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.

Francine Lafontaine
University of Michigan Business School
701 Tappan Street
Ann Arbor, MI 48109
and NBER

Kathryn L. Shaw
Graduate School of Industrial Administration
Carnegie Mellon University
Pittsburgh, PA 15213
and NBER

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

by

Bruce R. Lyons
(University of East Anglia, Norwich)

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)

Preliminary and incomplete version Comments Welcome

MARKET POWER AND MULTIMARKET CONTACT

Some Evidence from the Spanish Hotel Industry

Nerea Fernandez
CEMFI

and

Pedro L. Marin
Universidad Carlos IIII de Madrid

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 repeateed 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 Sicotte for their helpful suggestions. We are grateful to the Spanish Institute of Tourist Studies for providng us the raw data. The usual disclaimer applies.

Preliminary and incomplete
For discussion purposes only

Comments welcome

THE INTERNAL ORGANIZATION OF HIGHER EDUCATION; OR WHY UNIVERSITIES, LIKE LEGISLATURES, ARE NOT ORGANIZED AS MARKETS

Scott E. Masten*
University of Michigan Business School
701 Tappan
Ann Arbor, MI 48104-1234
(313) 764-1389
semasten@umich.edu

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

Luís M B Cabral*
London Business School, Universidade Nova de Lisboa and CEPR

José Mata
Banco de Portugal and CEPR

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*

Svend Albæk, Inst. of Econ., Univ. of Copenhagen & CIE†
H. Peter Møllgaard, Dept. of Econ., Copenhagen Business School & CIE‡
Per B. Overgaard, Dept. of Econ., Univ. of Aarhus & CIE

First draft: July 1995. This version: June 1996.

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

---

* Thanks are due to Steen Asmund of the Competition Council Secretariat, and Morten Kyhn and Elisabeth Møllgaard of the Danish CSO for providing us with data and to Svend Hylleberg, Stephen Martin, Louis Phlips and Robert Porter for discussions and helpful suggestions. The usual disclaimer applies.

† CIE: Centre for Industrial Economics

‡ CORRESPONDENCE: H.P. Møllgaard, Department of Economics,Copenhagen Business School, Nansensgade 19, DK-1366 Copenhagen K. Phone: +45-38152584; Fax: +45-38152665; e-mail: hpm/eco@cbs.dk.

What Makes an Entrepreneur?

David G. Blanchflower
Dartmouth College and NBER

and

Andrew J. Oswald
Centre for Economic Performance, London School of Economics
and
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

Fredric Raines
Dept. of Economics
Washington University, St. Louis
U.S.A.

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

Laura Rondi and Alessandro Sembenelli

CERIS-CNR

Turin, Italy

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

Please do not quote without

authors' permission

July 1996

TARIFF JUMPING DFI AND EXPORT SUBSTITUTION: JAPANESE ELECTRONICS FIRMS IN EUROPE

René Belderbos
Science Policy Research Unit
University of Sussex

Leo Sleuwaegen*
Department of Applied Economics
Catholic University Leuven
and
Department of Economics
Erasmus University Rotterdam

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

*Leo Sleuwaegen
Department of Applied Economics
Catholic University of Leuven
Naamsestraat 69
B-3000 Leuven
Belgium
Phone: +32 16 326913
Fax: +32 16 326732
Email: Leo.Sleuwaegen@econ.kuleuven.ac.be

Semicollusion in the Norwegian Cement Market[*]

by

Frode Steen and Lars Sørgard
Norwegian School of Economics and
Business Administration

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

Correspondence: Department of Economics, Norwegian School of Economics and Business Administration, Helleveien 30, N-5035 Bergen-Sandviken, Norway. e-mail addresses: Frode.Steen@nhh.no and Lars.Sorgard@nhh.no

[*]With the usual disclaimer, we thank Tore Ellingsen, Joe Harrington Jr., Jan Tore Klovland, Kjell Gunnar Salvanes and seminar participants at the University of Oslo and at the Stockholm School of Economics for helpful discussions and suggestions. Our research has been partly financed by the Research Council of Norway through SNF.

THE TIES THAT BIND

DON SULL
LONDON BUSINESS SCHOOL, UK

SUMMARY OF FINDINGS

- Outside CEO strongly influenced timing of closure
  - $P_{outsider}$ (close) $\geq$ $P_{insider\text{-}outsider}$ (close) > $P_{insider}$ (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

Roger Bivand, Institute for Geography, Norwegian School of Economics and Business Administration and University of Bergen

Stefan Szymanski, Imperial College Management School [1]

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

We are grateful to seminar participants at the Norwegian School of Economics and Business Administration for helpful comments. This paper was written while the second author was visiting the Norwegian School of Economics and Business Administration whose financial support is gratefully acknowledged.

---

[1]Corresponding address: Stefan Szymanski, Imperial College Management School, 53 Prince's Gate, Exhibition Road, London SW7 2PG, UK.
e-mail: szy@ic.ac.uk
telephone: (44) 171 594 9107
fax:(44) 171 823 7685

Katholieke
Universiteit
Leuven

Faculteit Economische en toegepaste economische wetenschappen
Naamsestraat 69
B-3000 Leuven (Belgium)

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

by

Reinhilde Veugelers	and	Cynthia Van Hulle
Associate Professor		Full Professor
K.U.Leuven		K.U.Leuven

and

Eddy Durinck	and	Eddy Laveren
Full Professor		Associate Professor
UFSIAntwerpen		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.

Telefoon (016) 32 66 12 - Telefax (016) 32 66 98