#### PROGRAMME AND PROCEEDINGS OF 1998 WARWICK SUMMER RESEARCH WORKSHOP ON "ECONOMIC ASPECTS OF GLOBALISATION"

(Special Paper) No. 517

#### WARWICK ECONOMIC RESEARCH PAPERS



**DEPARTMENT OF ECONOMICS** 

#### PROGRAMME AND PROCEEDINGS OF 1998 WARWICK SUMMER RESEARCH WORKSHOP ON "ECONOMIC ASPECTS OF GLOBALISATION" HELD IN THE DEPARTMENT OF ECONOMICS 13-25 JULY 1998

#### (Special Paper)

#### **TABLE OF CONTENTS**

Annex 1	Academic and Social Programmes
Annex 2	Participants' Names and Institutions
Annex 3	List of Workshop Papers
Annex 4	Abstracts of Papers

#### PROGRAMME PRINCIPAL ACADEMIC ORGANISERS:

Ben Lockwood Marcus Miller Ted To John Whalley

#### SOCIAL, DOMESTIC AND ORGANISATIONAL ARRANGEMENTS:

Gill Pearce with assistance from Margaret Walton

#### **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

WEEK 2

"GLOBALISATION AND TAXATION" Workshop Organiser: Prof Ben Lockwood	Monday 20 July 10.30 - 12.00 Soren Bo Nielsen (Copenhagen) Border Inspection and Commodity Tax Competition 2.00 - 3.30 Bishnupriya Gupta (St Andrews)	The International Tea Cartel in th	4.00 - 5.30 Sam Bucovetsky (York)  Tax Block Formation Among Leviathans	Tuesday 21 July 10.30 - 12.00 Guttorm Schjelderup (Bergen) and Andreas Haufler (Konstanz) Corporate Tax Systems and Cross Country Profit Shiffing	2.00 - 3.30 Arthur van Riel (Utrecht) The Political Economy of Late Weimar Unemployment	4.00 - 5.30 Pascalis Raimondos-Moller (Copenhagen) The Optimal Design of Transfer Pricing Rules: A Non-Cooperative Analysis	Wednesday 22 July 10.30 - 12.00 Taxing Multinationals	2.00 - 3.30  Albrecht Ritschl (Barcelona) Those German Transfer Problems: A Lesson in Sovereign Debt Theory	Foreign Ownership and the Location of Investment Within the UK:  An Empirical Analysis Using Plant Level Data  Thursday 23 Iuly	10.30 - 12.00 Guttorm Schjelderup (Bergen) Joint Ventures and Transfer Pricing Rivalny	Mar. Dealing with Country Risk without 1	4.00 - 5.30 Harry Huizinga (Tilburg)  Does Partial Tax Coordination Make Sense?	Friday 24 and Saturday 25 July "World Capital Markets and Financial Orises" Conference
"GLOBALISATION AND TRADE" Workshop Organiser: Dr Ted To	Monday 13 July  David Collie (Cardiff) 10.30 - 12.00  A Rationale for the WTO Prohibition of Export Subsidies: Strategic  Export Subsidies and World Welfare	~2 0	Tuesday 14 July 10.30 - 12.00 Trade and Wasses: The Content of Earlor Content	2.00 - 3.30  Robin Mason (Cambridge)  Economic Analysis of Internet Pricing	4.00 - 5.30 Katy Wakelin (Nottingham) Innovation, Technological Spillover and Export Behaviour at the Firm Level	Wednesday 15 July 10.30 - 12.00 Unilateral versus Multilateral Reforms of Trade Policy and the Pure	I neory of Customs Union 2.00 - 3.30  Danny Quah (London School of Economics)  Economic Performance on the Internet	Jim Cassing (Pittsburgh) and Thomas Kuhn (Chemn Trade in Trash: Strategic Environmental Policies When Ther International Trade in Waste Produ	Thursday 16 July 10.30 - 12.00 Foreign Direct Investment Responses of Firms Involved in Antidumping Investigations	2.00 - 3.30 Chris Doyle (London Business School) Self Regulation and the Internet	4.00 - 5.30 Partha Sen (Delhi) Non-uniqueness in Krugman's Balance of Payments Crisis Model	uly	GALLI and WLO Conference  Workshop participants are welcome to attend the two 2-day conferences.  Conference programmes are detailed on separate sheets.

#### "GATT AND WTO" CONFERENCE Organiser: Professor John Walley

DAY ONE - FRIDAY 17 JULY:

9.00-10.30 am

ARRIVAL AND REGISTRATION

Coffee available

10.30-12.15 pm

**OPENING SESSION** 

Chair: Professor Richard Higgot (University of Warwick)

Speaker 1: Professor John Whalley (University of Warwick)

'The Content of a Future Round?'

Speaker 2: Professor Bob Staiger (University of Wisconsin)

'Theoretical Underpinnings of the GATT/WTO'

12.15-1.30 pm

**LUNCH** 

1.30-3.00 pm

SESSION TWO

Chair: tbc

Speaker 1: Professor Andre Sapir (Free University of Brussels)

'Achieving New Liberalisation in Services'

Speaker 2: Professor Dean Spinanger (Kiel Institute of World

Economics)

'Textiles Beyond the MFA Phase Out'

3.00-3.30 pm

AFTERNOON TEA

3.30-4.30 pm

SESSION THREE

Chair: Dr. Deanne Julius (Monetary Policy Committee, Bank of

England)

Speaker 1: Professor Stefan Tangermann (University of Goettingen)

'Future Liberalisation: New Mini Round in Agriculture?'

Speaker 2: Dr Yongzheng Yang (Australian National University)

'Completing GATT/WTO Accession Negotiations'

7.00-8.00 pm

**DRINKS RECEPTION** 

8.00 pm

DINNER

Host: Richar Higgot, Director, CSGR, University of Warwick

Guest Speaker: Jesus Seade, Deputy Director-General, WTO

#### DAY TWO - SATURDAY 18 JULY:

9.00-10.30 am

SESSION FOUR

Chair: Mr Jim Rollo (Foreign and Commonwealth Office)

Speaker 1: Professor Arvind Panagariya (University of Maryland)

'Regional Trade Agreements and the WTO'

Speaker 2: Professor Diana Tussie (FLACSO, Argentina)

'Global Trade and Environmental Arrangements'

10.30-11.00 am

**MORNING COFFEE** 

11.00-12.30 pm

SESSION FIVE

Chair: Professor Tony Payne (University of Sheffield)

Speaker 1: Professor David Greenaway (University of Nottingham)

'Interindustry Trade/Competition Policy and the WTO'

Speaker 2: Dr Jan Aart Scholte (Institute of Social Studies, The Hague)

'The WTO and Civil Society'

12.30-2.00 pm

**LUNCH** 

2.00-3.30 pm

SESSION SIX

Chair: Professor Susan Strange (University of Warwick)

Briefing by the WTO Secretariat on

'Electronic Commerce and the Role of the WTO'

Speaker 2: Ms Debbie Leilani Shon (Former Assistant US Trade

Representative)

'Possible WTO Initiatives on Corruption and Trade'

3.30-4.00 pm

AFTERNOON TEA

4.00-5.00 pm

**CLOSING SESSION** 

Panel on the Future of the Trading System

Chair: Professor Richard Higgott

Panel members:

Professor Arvind Panagariya Professor Robert Staiger Professor Diana Tussie.

For further information and a registration form please contact Jill Southam, Centre Administrator: Fax (0)1203 572548, Tel: (0)1203 572533, Email: <a href="mailto:csgr@warwick.ac.uk">csgr@warwick.ac.uk</a>

#### "WORLD CAPITAL MARKETS AND FINANCIAL CRISES"

#### A CEPR/ESRC/GEI Conference University of Warwick, 24/25 July 1998

#### REVISED PROGRAMME

	REVISED PROGRAMME
Friday 24 July	
09.30-10.35	What Caused the Asian Currency Crises? Giancarlo Corsetti (Università di Roma Tre and Yale University) Paolo Pesenti (Princeton University) Nouriel Roubini (Stern School of Business, New York University and CEPR)
Discussant:	Willem Buiter (University of Cambridge and CEPR)
10.35-11.05	Coffee
11.05-12.10	The Asian Crisis: The End of 'Papering Over the Cracks'? Jennifer Corbett (St Anthony's College, Oxford and CEPR) David Vines (Balliol College, Oxford and CEPR)
Discussant:	Christopher Bliss (Nuffield College, Oxford)
12.10-13.15	Capital Markets and the Instability of Open Economies Philippe Aghion (University College London, EBRD and CEPR) Philippe Bacchetta (Studienzentrum Gerzensee, Université de Lausanne and CEPR) Abhijit Banerjee (Massachusetts Institute of Technology)
Discussant:	Sayantan Ghosal (University of Warwick)
13.15-14.15	Buffet Lunch
14.15-15.20	Financial Bailouts and Financial Crises Timothy J Bond (International Monetary Fund) Marcus Miller (University of Warwick and CEPR)
Discussant:	Jagjit Chadha (Bank of England)
15.20-16.25	Financial Crises and Financial Intermediation - with Reference to the Asian Crisis Jorge A Chan-Lau (International Monetary Fund) Zhaohui Chen (International Monetary Fund)
Discussant:	Kenneth Kletzer (University of California, Santa Cruz)
16.25-16.55	Tea
16.55-18.00	A Theory of the Onset of Speculative Attacks Stephen Morris (University of Pennsylvania) Hyun Song Shin (Nuffield College, Oxford and CEPR)
Discussant:	Jonathan Thomas (University of Warwick and CEPR)

Conference Dinner at Coombe Abbey

19.00

09.30-10.35 **Korean Crisis** 

In-Ho Lee (University of Southampton)

Discussant: Alan Sutherland (University of York and CEPR)

10.35-11.05 Coffee

11.05-12.10 **Assessing Emerging Market Currency Crisis Risk** 

Manmohan Kumar (Credit Suisse First Boston) Uma Moorthy (Birkbeck College, London)

William Perraudin (Birkbeck College, London and CEPR)

Discussant: Paul Mizen (University of Nottingham)

High Public Debt and Currency Crises: Fundamentals versus 12.10-13.15

**Signalling Effects** 

Benigno Pierpaolo (Princeton University)

Alessandro Missale (IGIER, Università Degli Studi di Brescia and

Bank of England)

Discussant: Berthold Herrendorf (University of Warwick and CEPR)

13.15-14.30 **Buffet Lunch** 

14.30-15.35 Capital Mobility and Crises in a Second Best World

Joshua Aizenman (Dartmouth College)

John Driffill (University of Southampton and CEPR) Discussant:

15.35-16.05 Tea

16.05-17.10 The New Architecture of the International Financial System

Marc Uzan (Reinventing Bretton Woods Committee)

17.10 Round Table on policy implications

> Vinod Aggarwal (BASC, University of California) Charles Goodhart (London School of Economics) Manmohan Kumar (Credit Suisse First Boston) Richard Portes (London Business School and CEPR) Jim Rollo (Foreign and Commonwealth Office) Philip Turner (Bank for International Settlements)

David Vines (Balliol College, Oxford and CEPR)

19.00 Dinner at Rootes

#### Arrangements for Discussant and Round Table participants to be arranged.

Organisers:

Marcus Miller (University of Warwick and CEPR)

William Peraudin (Birkbeck College, London and CEPR)

Jonathan Thomas (University of Warwick and CEPR)



Welcome 'drinks reception' for all workshop participants to be held at 6pm in Economics' Common Room. Partners are welcome. Evening dinner is to be served in Rootes Restaurant at 7pm.

## TUESDAY 14 JULY

Evening at the Taipan Oriental Restaurant in Birmingham's China Town. Chopsticks at the ready for 7.30pm, coach will leave Student's Union bus lay-by at 6.30pm. Please let Gill know if you are interested in joining this evening social or sign the 'sign-up sheet' on arrival to the department. We will need to know the exact number of places to book by noon on Monday 13 July. This social event is free to workshop participants, partners must be paid for (£18).

# WEDNESDAY 15 JULY

An evening for individual social arrangements or team sport event on or off campus. Your interest is sought - watch the noticeboard for sporting events!

# THURSDAY 16 JULY

An evening performance of 'The Tempest' at The Royal Shakespeare Theatre, Stratford. Limited tickets for sale (£12) by Gill on a first-come-first-serve basis. Transport available to and from campus.



### RIDAY 17 JULY

GATT/WTO conference dinner in Scarman House at 8p.m.. Please let Gill know if you are attending this dinner or sign the 'sign-up sheet' on arrival to the department.

# SATURDAY 18 JULY

A day free for all workshop participants who are not attending the GATT/WTO conference. A minibus can be arranged to take you to Warwick via Kenilworth if enough interest is sought. Information on Warwick Castle is available from Gill's office (room S2.135). Please let Gill know as soon as possible to enable transport arrangements to be made.

# SUNDAY 19 JULY



House/Garden party to be held from 1pm at the home of Philip Trostel - a pleasant walk from the campus, location map available from Gill if required. Lunch and drinks provided. Partners and families are welcome.

## MONDAY 20 JULY

An evening for individual social arrangements or team sport event on or off campus. Your interest is sought - watch the noticeboard for sporting events!

## TUESDAY 21 JULY

Evening house party to be held at the home of Mike Waterson from 7pm. Transport to and from campus will be available. Please sign the 'sign-up' sheet on arrival to the department or let Gill know that you are interested in attending. Meal and drinks provided. Partners and families are welcome.

# WEDNESDAY 22 JULY

An evening for individual social arrangements or Frisbee' team sport event on campus. Your interest is sought - watch the noticeboard for sporting events!

## THURSDAY 23 JULY

Workshop Dinner at The Brooklands Grange Hotel, 7.30p.m. Coach will leave the Students' Union bus lay-by at 6.45pm. Smart dress. Please sign the 'signup' sheet on arrival to the department or let Gill know that you are interested in attending by afternoon of Tuesday 21 July for exact number of places to be booked. This social event is free to workshop participants, partners must be paid for (£18)



## FRIDAY 24 JULY

CEPR conference 'Mediaeval Banquet' at Coombe Abbey. A unique dining and theatrical experience - an evening of music, mirth and merriment. Smart casual dress, no jeans. Arrive at the abbeygate for 7pm, coach will leave Student's Union bus layby at 6.30pm. This evening social has limited spaces available, please let Gill know you are interested in joining by Tuesday 14 July or on arrival to the department. This social event is free to workshop participants, partners must be paid for (£20)

#### Annex 2

Participants' Names and Institutes

### WARWICK SUMMER RESEARCH WORKSHOP "ECONOMIC ASPECTS OF GLOBALISATION" 13 - 25 JULY 1998

#### LIST OF PARTICIPANTS

ATHDEVE Cumo	TT
	York University, Canada
DE CANTIC Debests	
DEVEDELLY Mishest	Kiel Institute of World Economics, Germany
	London Business School, UK
	University of Nottingham, UK
	Ecole des Hautes, France
	International Monetary Fund, USA
	Institute for Fiscal Studies, UK
	University of Birmingham, UK
	University of Copenhagen, Denmark
HAUFLER, Andreas	University of Konstanz, Germany
	Ministry of Business and Industry, Denmark
	Libera Universita Internazionale, Italy
JACOBSEN, Rasmus	
JHA, Raghav	Indira Gandhi Institute of Development Research, India
KUHN, Thomas	
LAHIRI, Sajal	
LOCKWOOD, Ben	
LUANGARAM, Pongsak	
MASON, Robin	
MISHRA, Ajit	
NIELSEN, Soren Bo	EPRU, Copenhagen Business School, Denmark
	London School of Economics, UK

RAIMONDOS-MOLLER, Pascalis	EPRU, Copenhagen Business School, Denmark
RAY, Indrajit	University of York, UK
RITSCHL, Albrecht	Universitat Pompeu Fabra, Spain
ROSSETTI, Stefania	University of Roma, Italy
SCHJELDERUP, Guttorm	Norwegian School of Economics, Norway
SEN, Partha	Delhi School of Economics, India
SMITH, Stephen	
TANG, Paul	
TO, Ted	University of Warwick, UK
TRACA, Daniel	
VALLA, Natacha	European University Institute, Italy
VANDENBUSSCHE, Hylke	University of Antwerp, Belgium
VAN RIEL, Arthur	
VESPASIANI, Daniele	
	University of Nottingham, UK
WHALLEY, John	
	University of Nottingham, UK
ZISSIMOS, Ben	

plus faculty members and graduate students from the Department of Economics.

Annex 3

List of Workshop Papers

#### **List of Workshop Papers**

Names of Authors	Titles of Papers
BLONIGEN, Bruce	Foreign Direct Investment Responses of Firms Involved in Antidumping Investigations
BUCOVETSKY, Sam	Tax Block Formation Among Leviathans
CASSING, Jim and KUHN, Thomas	Trade in Trash: Strategic Environmental Policies When There is International Trade in Waste Products
Collie, David	A Rationale for the WTO Prohibition of Export Subsidies: Strategic Export Subsidies and World Welfare
DEVEREUX, Michael	Taxing Multinationals
Doyle, Chris	Self Regulation and the Internet
FALVEY, Rod	Mergers in Open Economies
FLANDREAU, Marc	Dealing with Country Risk without the Multilaterals, 1870-1914
GRIFFITH, Rachel	Foreign Ownership and the Location of Investment within the UK: An Empirical Analysis Using Plant Level Data
Gupta, Bishnupriya	The International Tea Cartel in the Great Depression: The Response of Firms in India and Ceylon
HAUFLER, Andreas and SCHJELDERUP, Guttorm	Corporate Tax Systems and Cross Country Profit Sharing
HUIZINGA, Harry	Does Partial Tax Coordination Make Sense?
MASON, Robin	Economic Analysis of Internet Pricing
NEARY, Peter	Unilateral versus Multilateral Reforms of Trade Policy and the Pure Theory of Customs Union
NIELSEN, Soren Bo	Border Inspection and Commodity Tax Competition
PANAGARIYA, Arvind	Trade and Wages: The Content of Factor Content
QUAY, Danny	Economic Performance on the Internet
RAIMONDOS-MØLLER, Pascalis	The Optimal Design of Transfer Pricing Rules: A Non-Cooperative Analysis

RITSCHL, Albrecht	Those German Transfer Problems: A Lesson in Sovereign Debt Theory
SCHJELDERUP, Guttorm	Joint Ventures and Transfer Pricing Rivalry
SEN, Partha	Non-uniqueness in Krugman's Balance of Payments Crisis Model
VAN RIEL, Arthur	The Political Economy of Late Weimar Unemployment
Wakelin, Katy	Innovation, Technological Spillover and Export Behaviour at the Firm Level

Annex 4

Abstracts of Papers

### "Foreign Direct Investment Responses of Firms Involved in Antidumping Investigations"

Bruce Blonigen
Dept. of Economics
University of Oregon

#### **ABSTRACT**

This paper examines the foreign direct investment (FDI) responses of Japanese firms involved in U.S. antidumping (AD) investigations that were filed from 1980 through 1990. I find evidence of tariff-jumping FDI by Japanese firms in the investigated product after affirmative AD decisions, but less than one might expect. In addition, the number of employees in Japanese-owned U.S. plants producing products that have been subject to AD investigations is a small fraction (less than 5 percent) of total U.S.-affiliate employees by Japanese firms. I present a model that explains the low amount of tariff-jumping by foreign firms as stemming from their ability to obtain lower AD duties subsequent to the case through administrative reviews by the U.S. Department of Commerce. The empirical results confirm that the administrative review process of AD investigations substantially lowers the probability of observing tariff-jumping FDI by investigated Japanese firms. I also examine whether AD cases increase FDI by investigated firms across all their operations (not just the investigated product) and whether keiretsu-affiliated firms increase FDI in the United States when member firms are investigated. I find no evidence for AD investigations to indirectly increase FDI through either of these channels.

#### TAX BLOCK FORMATION AMONG LEVIATHANS

S. Bucovetsky

Department of Economics

York University

North York ONT M3J 1P3 CANADA

e-mail: sam@dept.econ.yorku.ca

**Abstract**: The effects of tax competition are well-known. In particular, if capital is mobile internationally, then competition reduces revenue from source-based taxes. This paper has two main goals. The first is to take a specific look at how the size distribution of countries ( or of blocks of countries ) affects the degree of tax competition. The second is to examine the incentives for policy coordination, in an environment where small countries can ( and do ) act as free-riding tax havens.

To get my specific look, I make very strong assumptions : output is assumed quadratic in a country's capital stock, and governments are assumed to care only about tax revenue. These strong assumptions lead to a ( relatively ) simple measure of tax competition : tax levels depend on a concentration index of the size distribution of countries.

Not surprisingly, any increase in this concentration measure will increase tax rates. On the other hand, in this model it is the smaller countries which do better (using tax revenue per capita as the government's measure of economic performance). If policy coordination involves agreeing to set the same tax rate as other countries in the block, there are advantages and disadvantages from joining a block. The higher concentration raises taxes everywhere, but joining a block increases a country's effective population share. It turns out that the larger party to any two-country policy coordination must gain, but the smaller party may lose.

Numerical results are much stronger here than analytic results. In every "reasonable" example, there must be some merger between countries which is mutually advantageous. The exceptions arise when there are extreme disparities among all countries, or when there are only two countries in the world, or when all rents from capital ownership have been taxed away. If countries are free to form blocks, and blocks are free to join into larger blocks, then the only stable outcomes are a world with two blocks of very different size, or a world in which all the rents have been taxed away. While small countries are tax havens, their ability to free-ride is not a serious impediment to global tax harmonization - at least in this model.

#### WARWICK SUMMER RESEARCH WORKSHOP 1998 James Cassing and Thomas KUHN

### TRADE IN TRASH: STATEGIC ENVIRONMENTAL POLICIES WHEN THERE IS INTERNATIONAL TRADE IN WASTE PRODUCTS

**James Cassing** 

mailing address: University of Pittsburgh

Department of Economics

Pittsburgh, PA 15260, USA

phone:

412 648 8746

fax:

412 648 1793

email:

jcassing+@pitt.edu

Thomas Kuhn

mailing address:

University of Technology Chemnitz

Department of Economics and Business Administration

09107 Chemnitz, Germany

phone:

0049-371-5314941

fax:

0049-371-5314343

email:

t.kuhn@wirtschaft.tu-chemnitz.de

#### **ABSTRACT**

This paper deals with international trade in hazardous waste products when there is an international oligopoly market for waste, and both waste importing and waste exporting countries act strategically to utilize national environmental policies to attach rents arising from trade in waste. We model a multiple stage game where waste is generated in an industrialized country as a by-product of production, and potentially is exported to some less developed countries, if not abated locally, or imposed on local residents at a cost of an environmental tax. In the market for waste, we assume an oligopsonistic supply, while we assume that the demand for waste is perfectly competitive, with waste processing firms guided by marginal disposal costs and environmental taxes levied by foreign countries. With each country playing Nash, we find domestic and foreign taxes to be distorted from the Pigouvian taxes in such a way that the domestic (waste exporter) tax rate is set below, and the foreign tax rate is set above, the Pigouvian taxes. However, if waste importing countries cooperate, they can gain by a further increase of their tax rates. Also, in the case of damage spillovers among foreign countries, we find that taxes will have to be increased, with even higher rates in the cooperative setting. Finally, we find that a second best solution for a global optimum requires tax distortions in the opposite direction, in the sense that foreign environmental taxes must be set below the Pigouvian tax rate.

**Key Words:** International Trade, Waste Products, Imperfect Markets, Strategic Environmental Policy,

**JEL:** F1, H2, L13, Q2

# A Rationale for the WTO Prohibition of Export Subsidies: Strategic Export Subsidies and World Welfare

David R Collie
Cardiff Business School, Cardiff University,
Aberconway Building, Colum Drive,
Cardiff CF1 3EU, United Kingdom
E-mail: Collie@Cardiff.ac.uk

#### **Abstract**

This paper presents a model that provides an economic rationale for multilateral agreements, such as the WTO, that prohibit export subsidies. The model is a multi-country version of the well known Brander and Spencer (1985) analysis of profit-shifting export subsidies with the addition of an opportunity cost of government revenue greater than unity, as in Neary (1994), to capture the fact that the export subsidy will typically be funded by distortionary taxation. It explains the unilateral incentive for welfare maximising governments to provide export subsidies, and shows how the multilateral prohibition of export subsidies may increase world welfare.

Keywords: Multilateral Agreements, Export Subsidies, Strategic Trade Policy. JEL Classification Numbers: F12, F13, F15.

#### TAXING MULTINATIONALS

#### Michael P. Devereux

Department of Economics Keele University Staffordshire ST5 5BG United Kingdom +44 1782 713143 mailto:eca14@keele.ac.uk

#### R. Glenn Hubbard

Graduate School of Business Columbia University 609 Uris Hall; 3022 Broadway New York, NY 10027 +1 212 854-3493 mailto:rgh1@columbia.edu

This draft: July 6, 1998

#### Abstract

Theoretical and empirical analysis of effects of tax policy on foreign portfolio investment and foreign direct investment (FDI) has focused on the incentive effects of effective marginal tax rates on investment. While such an emphasis is arguably reasonable for portfolio investment, it is questionable for FDI, which is usually associated with strategic choices, imperfect competition, and the generation of economic rents. In the case of FDI, the relevant concept of tax is the effective average tax rate on profit. In this paper, we build on recent models of multinational firm decision-making to develop a framework for considering effects of tax policy on the strategic choices of multinationals and on national welfare.

Our principal findings are two. First, in the absence of foreign taxation, deferral of home-country taxation until earnings on FDI are repatriated is generally superior to including those earnings in current income. Moreover, this is the case even if the home country taxes domestic investment less generously. The intuition is that the tax system should aim at least not to worsen the outcome of strategic choices made by competing multinationals. Second, this result generally carries over (though the welfare gain from deferral is attenuated) when foreign taxes are included. Because foreign governments then capture some of the pre-tax economic rent from the home-country FDI, that FDI provides a smaller benefit to the home country. We consider both the choice between deferral and accrual taxation and the choice between a deduction and partial credit regimes in dealing with foreign taxes. A tax regime with deferral and a partial foreign tax credit – as under current US and UK law, for example – generally raises national welfare relative to accrual taxation of foreign-source income with deduction of foreign taxes, when foreign tax rates are not too high relative to the domestic tax rate. This result stands in sharp contrast to the conclusions of existing studies which do not consider economic rents and strategic choices of multinationals.

**Acknowledgements** The authors are grateful to the International Tax Policy Forum for financial support. Devereux is also grateful to the Leverhulme Trust for a research fellowship, which also supported the research in this paper. We are grateful to Bill Gentry, Peter Merrill and John Samuels for helpful comments and suggestions.

#### SELF REGULATION AND THE INTERNET

#### Chris Doyle London Business School

#### **Abstract**

The internet is an immensely complex economic structure involving many different actors. To date regulation and the use of economic signals have been limited. This state of affairs was not a problem when the internet served a largely non-commercial function. In recent years, however, the commercial presence in the internet has grown markedly and this has led to calls for greater regulation. In this presentation I look at some regulatory aspects relevant to the internet. Many incumbent actors within the internet community attribute its success to the relative unimportance of statutory regulation and the presence of self-regulation. I shall present a preliminary model looking at self and statutory regulation and examine the implications for the future regulation of the internet.

#### **MERGERS IN OPEN ECONOMIES**

ROD FALVEY University of Nottingham

#### Abstract:

This paper considers the welfare effects of horizontal mergers in an open market where firms produce a homogeneous good but have different technologies. The conditions for a merger to be profitable to the participants and welfare improving in a closed economy are derived. The market is then "opened", and the effects of trade liberalisation on the profitability of national and international mergers considered. Finally the distribution of the welfare costs and benefits arising from mergers are examined, with a view to considering the scope for integrating or harmonising merger policies across countries.

### Audits, Accounts, and Assessments: Dealing with Sovereign Risk without the Multilaterals 1871-1913

#### Marc Flandreau\*,

Research Fellow, Ecole des Hautes Etudes en Sciences Sociales, Paris

Research associate, Observatoire Français des Conjonctures Economiques, Paris

Research Affiliate, Center for Economic Policy Research, London

This version, 24 June 1998

#### Abstract

This paper studies how private banks dealt with sovereign risk before W.W.I. At that time there was no multilateral institution to bail out borrowers in default, and sovereign risk assessment by rating agencies had not yet developed. As a result, all the burden of information collection and processing was borne out by individual banks. We focus on the experience of Crédit lyonnais which grew over the period into the largest bank in a country that was the second largest world creditor. In 1871, the Crédit lyonnais set up Service d'Etudes Financières (SEF), a research department whose aim was to study the economies of borrowing countries. The lending spree of the late 1880s, and the bust which ensued (its most famous casualties were the Comptoir d'escompte in France and Baring in the UK) provided the impetus for a massive expansion of SEF, which then developed techniques to analyze sovereign risks. We argue that these methods are an essential aspect of the market mechanism as it operated before World War I: given the prominence of the Crédit lyonnais on the international scene, its perceptions influenced the size and direction of capital flows. We conclude with a number of lessons for today.

<sup>\* .</sup> Paper prepared for the Woodrow Wilson School/German Historical Institute Conference held in Princeton University, NJ, April 16-17 1998. The comments of conference participants are gratefully acknowledged. The author wish to thank Roger Nougaret, Conservateur des archives historiques du Crédit lyonnais for his kind and patient help. His expertise, his good humour, and his friendliness, make the archives of Crédit lyonnais a place of choice for research in economic history.

Thanks also to Lucette Levan-Lemesle and Luc Marco for their precisions on the parisian political economists of the nineteenth century.

Address for correspondence: OFCE, 69 Quai d'Orsay, 75007 Paris, France. Tél: (33 1 44 18 54 05) email: flandreau@ofce.sciences-po.fr

#### PRODUCTIVITY AND FOREIGN INVESTMENT IN UK ESTABLISHMENTS

Rachel Griffith Institute for Fiscal Studies

June 1998

#### **Abstract**

How does foreign investment affect productivity? Previous work investigating this issue has used measures of the flow of financial capital as measured by foreign direct investment (FDI). However, the concept of control and the flow of information in the theoretical literature is more closely measured by capital expenditure by foreign owned firms or by the stock of foreign owned assets. In this paper the difference between these two concepts is discussed and the empirical difference described for the UK. A novel plant level data set is used to look at the impact of foreign investment on productivity.

### THE INTERNATIONAL TEA CARTEL IN THE GREAT DEPRESSION: THE RESPONSE OF FIRMS IN INDIA AND CEYLON

Bishnupriya Gupta\*

Dept. of Economics

University of St.Andrews

St. Andrews KY16 9AL, UK.

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#### **Abstract**

We use data from an international sample of 349 British owned firms to analyze the effectiveness of the International Tea Agreements of 1930 and 1933. These agreements were effective in reducing output overall; however, there were significant regional differences in the extent of compliance, with the firms located in Eastern reducing output to a greater extent than firms in Ceylon or South India. These differences can be attributed to differences in firm size and organizational structures in these regions. We also use archival material to argue that the failure to collude in 1931 and 1932 was mainly due to a bargaining conflict between established producers and the newer plantations of Java/Sumatra.

JEL Classification: L13, n50, N55

Keywords: collusion, bargaining conflicts

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### CORPORATE TAX SYSTEMS AND CROSS COUNTRY PROFIT SHIFTING

by

Andreas Haufler (*University of Konstanz*)

and

Guttorm Schjelderup (Norwegian School of Economics and Business Administration and Norwegian Research Centre in Organization and Management)

#### **ABSTRACT**

The paper analyses optimal taxation of corporate profits when governments can choose both the rate and the base of the corporation tax but are constrained to collect a given amount of corporate tax revenue. In a standard two-period model of investment and international mobility of portfolio capital only, the optimal tax system allows a full deduction for the costs of capital (cash-flow taxation). However, when foreign direct investment is permitted and firms can shift profits between countries through transfer pricing, it will be optimal for each government to distort investment decisions in order to reduce tax rates and limit the incentive for profit shifting. This result conforms with recent reforms of corporate tax systems, which have generally reduced tax rates while broadening tax bases.

#### DOES PARTIAL TAX COORDINATION MAKE SENSE?

Harry Huizinga
CentER and Department of Economics
Tilburg University

and

Søren Bo Nielsen Economic Policy Research Unit Copenhagen Business School

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JEL Classification: F20, H87

**Abstract:** International tax coordination in practice is rather piecemeal. Tax coordination in one area then affects tax competition in other areas. This paper examines partial tax coordination in a model where capital and managerial labor are internationally mobile. A coordinated increase in the capital income tax leads to a reduction in the noncoordinated tax on managerial labor. The overall welfare implications depend on the production structure and on factor supply elasticities. For the case of a CES production structure, this paper shows that the effects on welfare of partial tax coordination may well be negative.

### An Economic Analysis of Internet Pricing

Dr Robin Mason
Centre for Communications Systems Research and
Department of Applied Economics
University of Cambridge

#### **ABSTRACT**

The purpose of this paper is to assess whether a particular Internet pricing proposal, 'Paris Metro Pricing' (PMP) is compatible with profit maximisation by network owners, under different market structures. In the process, the paper makes contributions to the theory of competition between multiproduct firms. The analysis shows that a monopolist has an incentive to Paris Metro price; but that this pricing scheme is not robust to competition, at least in the simplest case when networks have exogenously fixed capacities.

### UNILATERAL AND MULTILATERAL REFORM OF TRADE POLICY AND THE PURE THEORY OF CUSTOMS UNIONS

J. Peter Neary University College Dublin

9 July 1998

#### **ABSTRACT**

This paper extends the theory of trade liberalisation to derive rules for tariff reform that guarantee Pareto improvements for the members of a "large" customs union (i.e., one which accounts for a significant fraction of world trade). The union's first-best tariff structure involves uniform internal tariffs and an optimal common external tariff. Pareto improvements are guaranteed for uniform radial reductions and concertina reforms of members' "shadow premia," the deviations of actual tariffs from their first-best values. The results synthesise the standard results for unilateral and multilateral reform with the Ohyama-Kemp-Wan theorem on customs unions.

#### **ABSTRACTS**

The first paper entitled 'A simple model of commodity taxation and cross-border shopping', sets up a simple model of commodity taxation and cross-border shopping. Two countries, differing in geographical extent, engage in tax competition originating in the opportunities for cross-border shopping. Both tax competition and various coordination initiatives are examined. Then follow two extensions: (i) inclusion of costs of transportation for goods; (ii) inclusion of border inspection. These extensions allow us to conclude that both a drop in transportation costs and the abolishment of border control intensify commodity tax competition and lower tax rates. However, qualitative results as to the effects of coordination measures are not altered.

The second paper, entitled 'Border inspection and commodity tax competition' (work-in-progress with Morten Hviid), takes up a thread from the last section of the first paper. It uses the same simple model of commodity taxation and (illegal) cross-border shopping to investigate the relationship between commodity tax competition and inspection at the border. We first characterize the effects of introducing border control on commodity tax rates, the extent of cross-border shopping, and tax revenues. Then we find tax strategies in the two countries for given and positive probabilities of detection at the border. Lastly, we attempt to use this information to derive non-cooperative tax-and-inspection equilibria, if they at all exist (this latter part incomplete).

#### TRADE AND WAGES: THE CONTENT OF FACTOR CONTENT

#### Arvind Panagariya University of Maryland College Park USA

#### **ABSTRACT**

Traditionally, factor content calculations have been applied exclusively to testing of factor proportions theory. Recently, however, Borjas, Freeman and Katz (BFK) (1992) have taken these calculations into an entirely new realm, applying them (without analytical justification) to the estimation of the effect of trade on wage inequality. They identify skilled and unskilled labor contents of net imports as additions to existing factor supplies and, employing a constant economy-wide elasticity of substitution between the two factors, convert them into relative-factor-price effects.

There are, therefore, three main questions that I address in this paper:

- (1) Given only broad and "conventional" restrictions on the model used e.g., concave utility functions and convex production sets can the BFK procedures *always* map factor content calculations into changes in wage differential (suitably defined)
- (2) If not, can we think of a set of narrower restrictions that would suffice to do so, and
- (3) Are these restrictions "reasonable" or are they so demanding and "unrealistic" that the BFK procedure cannot serve as a useful guide to measuring the effects of trade on wage inequality?

In this paper, I conclude that the BFK procedure is invalid under "conventional" restrictions as argued by Bhagwati (1991) and Bhagwati and Dehejia (1994), that it will work under restrictions specified in Deardorff (1997) and further explored here, and that these restrictions are sufficiently stringent that BFK procedure should not be used as a reliable guide to investigating the effect of trade on wage inequality.

#### ECONOMIC PERFORMANCE ON THE INTERNET

by

Danny Quah

July 1998

#### **Abstract**

Technical progress has over long stretches of time accounted for most of the improvement in economic welfare in the advanced economies. But it is in computing and telecommunications where most recently and most rapidly technical progress has advanced. The Internet is one concrete expression of these developments. This paper studies some potential implications of such changes. First, it documents some of the history and disparate and dispersed empirical regularities on Internet activity and usage. Then, in a model of nonlinear global spatial distribution dynamics, these empirical observations are used to generate dynamic predictions of economic concentration based on timezone separation, rather than geographical, spatial distance.

### OPTIMAL DESIGN OF TRANSFER PRICING RULES: A NON-COOPERATIVE ANALYSIS

Pascalis Raimondos-Moller EPRU Copenhagen Business School Nansensgade 19, 5 fl. DK-1366 Copenhagen K., Denmark.

#### ABSTRACT:

The literature on the regulation of multinationals' transfer prices has not considered the possibility that governments choose their transfer pricing rules in a non-cooperative fashion. The present paper fills this gap and shows that a non-cooperative equilibrium is characterised by above-optimal levels of effective taxation in comparison with a cooperative solution. We also derive conditions under which harmonisation of transfer pricing rules lead to a Pareto improvement, and show that harmonisation according to the "arm's length" principle --- the form of harmonisation advocated by international organisations such as the OECD --- is not Pareto improving relative to the non-cooperative outcome.

#### Those German Transfer Problems, 1920-1953: A Lesson in Sovereign Debt Theory

by
Albrecht Ritschl
Dept. of Economics
Universitat Pompeu Fabra/Barcelona
and CEPR

#### **Abstract**

In this paper I want to readdress the German Transfer Problem from an incentive-based perspective, focusing not so much on Germany's capacity to pay but rather on her willingness to pay. With an eye to the sovereign nature of the reparation debt owed to the Allies and exploiting the results of an earlier paper (Ritschl 1995) I argue that the various different reparation agreements, notably the Dawes and Young Plans of 1924 and 1929, created very pronounced incentive effects on German policy-making that were fully understood and exploited by the Germans at the time. I identify a sequence of reparation regimes that cover the period from the beginning of the German hyperinflation to the establishment of Nazi autarky policies. Through the international capital flows they set in motion, these reparation arrangements had a strong impact on the amplitude of the German business cycle of the interwar years, which is markedly more volatile than those of the neighboring countries of Western Europe.

The paper is organized as follows. The next section will present the sovereign-debt reasoning underlying the argument in an intuitive way and place it in contemporary perspective. Section III briefly discusses the initial reparations bill and the possible connections between the reparation problem and the German hyperinflation, covering what will be called the first reparation regime. Sections IV and V discuss the key issues of this paper, the incentives created by the Dawes and Young Plans, which established the second and third reparation regime. Section VI extends the argument to an analysis of the autarky policies pursued by Nazi Germany, and Section VII concludes with a look into the long-term consequences of the German transfer quarrels for the institutional setup for post-war stabilization and the macroeconomic starting position of Germany after World War II.

### JOINT VENTURES AND TRANSFER PRICING RIVALRY

Guttorm Schjelderup

#### **ABSTRACT:**

The paper studies the performance of joint ventures where upstream firms sell inputs to a production joint venture. It is found that joint ventures lead to overinvoicing of input prices (transfer prices) compared to integrated firms resulting in lower aggregate profits. Tax and tariff policy may improve the organizational inefficiencies of joint ventures. The analysis suggests that firms must have other reasons for forming joint ventures than those guided by production efficiency and benefits from delegation of decision-making.

#### MULTIPLE EQUILIBRIA IN THE FIRST GENERATION BOP CRISIS MODELS

Partha Sen Department of Economics Delhi School of Economics Delhi University

#### **ABSTRACT**

It is generally believed that in Krugman's model of a balance of payments crisis, the timing of the crisis is well defined. In Flood and Garber's terminology this occurs when the shadow floating rate is equal to the fixed rate. I show that in Krugman's model the timing of the crisis is indeterminate and that there are a continuum of shadow exchange rate paths. Sunspots could determine the choice of paths. Credibility issues become important. And the distinction between the first and second generation models of balance of payments crisis become blurred.

#### THE POLITICAL ECONOMY OF LATE WEIMAR UNEMPLOYMENT

#### Arthur van Riel Utrecht University

#### **Abstract**

For some two decades, students of German interwar politicoeconomic history have been enveloped in what has become known as the 'Borchardt debate' on the economic foundations of the political instability and eventual demise of the Weimar Republic. Ever since Knut Borchardt's famous 1979 address before the Bavarian Academy of Sciences, economic historians have fiercely debated the source of accumulated wage increases between 1924 and the 1929 onset of the Great Depression. Drawing upon a dataset of monthly labor market flows and a quarterly macroeconomic mondel in the Layard-Nickell tradition, this article delimits the essential aspects of labor market performance in relation to budgetary and monetary policy decisions to evaluate the extent of predetermination. Conversely, the scope for finding domestic and international politics at fault in the dissipation of German interwar democracy.

Innovation, Technological Spillovers and Export Behaviour at the Firm Level

Katharine Wakelin

Economics Department, University of Nottingham, University Park, Nottingham, NG7 2RD, UK.

Tel: 0115 9514734, Fax: 0115 9514159,

Email: Katharine.wakelin@nottingham.ac.uk

Abstract:

This paper considers the role of innovation and spillovers of innovation in

export behaviour. The sample includes innovating and non-innovating UK

firms and the determinants of trade are found to vary across the two groups.

The export behaviour of the innovating firms is found to be influenced by

skills, size, capital intensity and the R&D intensity of firms in their own sector,

and from different sectors. In contrast, only the R&D spilling over from other

sectors has a positive impact on the export behaviour of non-innovating firms

along with size, costs and skills. While the past innovation status of the firm

influences trade behaviour, the diffusion of innovation also appears to play an

important role.

JEL classification: F14

23