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Leverhulme Centre for Research on Globalisation and Economic Policy

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PAPERS



STRUCTURAL CHANGE AND THE LABOUR MARKET EFFECTS OF GLOBALISATION

The effects of globalisation may differ across countries according to the institutional set up of the country. Here **Doug Nelson** considers how differences in labour market institutions might impinge on aspects of fiscal policy following increased globalisation. Doug has recently accepted the position of a Professorial Research Fellow in GEP on a part time basis in addition to his position as a Professor in Economics at the Murphy Institute of Political Economy.

Why is the average citizen so worried about globalisation and the average economist so unworried? It is surely true, but unuseful, to say that the citizen and the economist simply do not understand the benefits and costs of globalisation in the same way. There are good reasons why the economist feels comfortable arguing that, at least at an aggregate level, globalisation is either no big deal or a

the citizen is simply wrong, with the obvious implication being that a little bit more effort at public education would help reduce globalphobia. There may be a significant element of truth here but the consequences of introducing irrationality, ignorance and learning, into our models are substantial. It seems to us to be useful to consider the possibility that the widespread concern with substantial boon. It would be globalisation emerges as a comforting to conclude that result of changes that are, to

some extent, obscured when we apply standard tradetheoretic methods to understand globalisation. In this research we are interested in effects of globalisation that operate on the labour market indirectly by transforming the structures that support one set of equilibria and induce change in those equilibria. We develop our analysis in terms of the interdependence between economic and

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WHAT DOES THE WTO DO FOR **DEVELOPING COUNTRIES?**

In recent years the WTO has been criticised for failing to provide enough attention to development issues. Here, in a summary of his Leverhulme Globalisation Lecture, Sam Laird (UNCTAD) outlines how the concerns of developing countries have been addressed in the recent Doha Round. Sam is a member of the GEP Policy Forum.

In Doha, WTO Ministers agreed to launch "a broad and balanced work programme which includes an expanded negotiating agenda and other important decisions and activities necessary to address the challenges facing the multilateral trading system". The work programme, now being referred to as the "Doha Development Agenda" (DDA), was intended to overcome concerns expressed by developing countries in recent years, most notably at

Seattle, about the lack of attention of the WTO system towards development issues. The concerns led developing countries to oppose attempts to launch a wider set of negotiations than those covered by the built-in agenda (essentially, agriculture and services). The DDA, while not a "round", in fact contains the main elements of a round,

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WHAT DOES THE WTO DO FOR DEVELOPING COUNTRIES? CONTD

although negotiations on issues such as investment and competition policy are not fully agreed. Apart from the builtin agenda on which work began early in 2000 and the discussions on implementation. Doha is essentially the start of a process that entails an immediate extension of the negotiations and discussions intended to lead to yet further negotiations, provided there is consensus at the Fifth Ministerial Meeting. Thus, while the DDA gives the WTO a much-needed success after the debacle at Seattle, what it does for development cannot be taken for granted and will need to be given substance in the work programme now under way.

The implementation issues reflect the developing countries' concerns that that they had been promised all sorts of gains as a result of the Uruguay Round, but that these promises were unful-Promised market access gains filled. in agriculture, textiles and clothing had not been delivered. Many commitments to help the developing countries were in the form of "best endeavours". They are also concerned about the heavy costs and inadequate transition periods that they faced in meeting their own obligations. Thus, an integral part of the package agreed in Doha, was the separate Ministerial Decision on Implementation-Related Issues and Concerns, intended to address some of these problems, although action is still ahead on some key points.

As part of the WTO Agreement signed in 1994, new negotiations - a "Built-In Agenda" (BIA) - started in 2000 in agriculture and services, and good progress is being made in defining modalities for work in these areas, covering market access, subsidies and rules.

At Doha, WTO Ministers also agreed to extend the immediate negotiating agenda to the areas of market access in industrial goods, WTO rules regarding anti-dumping, subsidies (including in fisheries) and countervailing measures, environment, dispute settlement and regional agreements.

Perhaps the most difficult and controversial decisions at Doha were to plan future negotiations or future discussions to include investment, competition, government procurement and trade facilitation. In these areas it was agreed that negotiations could be launched if "explicit consensus" is reached on modalities of negotiations during the Fifth WTO Ministerial Conference, scheduled for 2003. At the final session of the Doha meeting, the Chairman of the Ministerial Conference made it clear that non-agreement on modalities would block negotiations Without this statement, it is doubtful whether India and other developing countries could have agreed to the Ministerial Declaration.

The Ministerial Declaration also lists a number of matters that are to be further examined in various WTO bodies, some of which are of particular interest to the developing countries: the relationship between trade, debt and finance, transfer of technology, problems faced by small and vulnerable economies, etc.

The Doha Declaration contains frequent references to the need to take special account of the needs and capacities of developing countries and to provide technical assistance for capacity building - hence the reference to the work programme as the Doha Development Agenda. A separate paragraph approves a work programme on special and differential treatment of developing countries with a view to making such provisions "more precise, effective and operational". However, this will need to be given substance as the work programme proceeds. The Declaration also draws attention to the pressing need of "addressing supplyside constraints of LDCs and extension of the [Integrated Framework for Trade-related Technical Assistance] model to all LDCs".

The Doha meeting briefly reaffirmed the Singapore decision that the International Labour Organisation (ILO) was the competent body to set and deal with internationally recognised core labour standards. The Singapore Meeting had also stated that the issue of labour standards was not on the WTO's agenda, that no new work had been organised on the subject in the WTO and that the WTO had no competence in the matter.

Apart from the Ministerial Declaration itself. Ministers also took a number of decisions, which, although not formally linked, may

be seen as part of the same political deal. Among the more important of these were those on Implementation-Related Issues and Concerns, public health issues un-TRIPS der the Agreement, the extension of the period time transition for the elimination of export subsidies, the ACP waiver, and bananas.

"If substance decisions is not given to these new promises, Doha may yet prove to be a bomb waiting to explode."

As a result of the reform programmes of the last 10-15 years,

the developing countries participated actively in the Uruguay Round, but have become disillusioned with the results and have held up the WTO agenda. Doha will give them some satisfaction on certain implementation questions as well as the repeated references in the Doha texts to the need to take account of the needs and concerns of the developing countries. But much of this is in the future, yet to be delivered. If substance is not given to these new promises, Doha may yet prove to be a time bomb waiting to explode.



STRUCTURAL CHANGE AND THE LABOUR MARKET EFFECTS OF GLOBALISATION CONTD....

political structures in a given national economy. Because the economic and political structures are related, changes in the relationship of a national economy to the global economy can produce profound changes in the politicaleconomic arrangements of a country. In addition to affecting equilibrium wages and employment, such changes could well be unsettling in themselves.

As an approach to this problem, we develop a simple model of a small open economy with a unionized sector and an unemployment benefit funded from payroll taxes.

"It is surely true, but unuseful. to say that the citizen and the economist simply do not understand the trade): benefits and costs of globalisation in numerous than unthe same way"

In the unionized sector, union hierarchy may have preferences over the contract with firm management that differs from that of the union rank-andfile. First we consider the effect of a utilitarian policymaker and show that with increased globalization (in this international case, unemployment benefits are higher when incumbent union workers, whose employment is secure, are more organized workers, but an aggressive pursuit of wage gains by union lead-

ers or wage-employment contracts that expose workers to excessive amounts of employment risk are balanced by lower unemployment benefits. The effects of a trade liberalisation are twofold: first, lower import tariffs and export subsidies increase competition, which increases unemployment and raises benefits; but lower tariff or tax revenues affect the government's budgetary position, so in the case of lower import tariffs there is pressure on the benefit to rise due to greater import competition, but there is an offsetting pressure on the benefit to fall due to

fiscal concerns

Next we suppose that the level of the benefit, subject to the budget constraint, is determined in a political economy model of the menu-auction type. Because the level of the benefit affects the outcome of the union-firm bargain, members of the union take this fact into account in their lobbying behaviour. In this case, we find that countries with labour-oriented or leftwing governments have higher unemployment benefits than those countries with conservative or right-wing gov-The demand for higher ernments benefits by incumbent union workers is driven by what is often termed the "wage formation effect". The stronger is this wage effect, the higher are unemployment benefits. Likewise, an elastic response of employment to higher benefits would counteract the wage formation effect.

Next we implement estimate an empirical model based on the theoretical framework using data for 17 OECD countries, in which the dependent variable is the proportion of expected income from work that is replaced by unemployment and related welfare benefits (the gross benefit replacement rate). This variable is then regressed on a set of variables that includes measures of openness, political orientation of the government, union density, government debt, and a variable constructed by interacting the openness and debt variable.

From this empirical model we find that left-wing governments and widespread coverage of workers by union bargaining raise unemployment benefits, as predicted in the theoretical analysis. The results on these variables are consistent with those in the large empirical literature in comparative political economy focussing on the link between labour market institutions, political orientation, and welfare state outputs. As suggested by our model, and consistent with the widely remarked link between openness to international trade and size of welfare state interventions, we find a significant, positive relationship between the trade openness variable and the size of the unemployment benefit. Finally, since the government faces a balanced budget constraint in our model, we introduce a measure of the magnitude of debt as an indicator of how closely the constraint binds. The sign of the coefficient is negative, as predicted, but it is not statistically significant.

Our preferred specification also includes an interaction between government debt and openness. With this variable included, our political valence, union density, and openness measures remain significant and correctly signed, but the debt measure now becomes significantly positive. However, the interpretation of trade openness and government debt become more delicate. Specifically, the values of the coefficients on openness and government debt now vary with each other's levels. In this case, the negative interaction term captures the notion that, at any given level of openness to trade, a standard deviation increase in the government debt to GDP ratio lowers the response of the benefit replacement rate to openness by about 1.1 percentage points.

From a political economy perspective, institutional features of the labour market help to explain observed trends in public insurance policies. When wage bargaining is extremely decentralised, the lobbying influence of unions allied with the lobbying activities of employers encourages policy-makers to ease tax burdens and cap increases in unemployment benefits. When the risk of unemployment is lower and collective bargaining is more centralised, workers prefer high employment risk-high wage contracts, and this serves to increase the demand for publiclyprovided unemployment insurance. While still preliminary, the research reported here suggests the importance of controlling for the endogeneity of policy and institutions in the analysis of the labour market effects of globalization. We hope to pursue these issues in considerably more detail in future work.

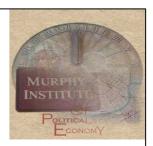




Workshop

INTERNATIONALISATION

AND POLICY TRANSFER



Tulane University, New Orleans

11th to 12th April 2003

With increasing globalisation of economic activity, there are increased opportunities to 'learn' from experiences of policy interventions elsewhere. Although it continues to be the case that the public and social policy decision making process is fashioned largely by national priorities, it is nonetheless also the case that more than ever before national policy decisions are being informed by international experiences and policy structures. The arena of policy transfer is broad, yet the mechanisms, consequences and limitations of co-ordination, convergence or transfer of policy have only recently begun to be explored. Alan Duncan (Nottingham) and Doug Nelson (Tulane) are organising an international workshop to discuss these important and topical issues.

The Leverhulme Centre for Research on Glob- and relevant phenomenon? What are the mechaalisation and Economic Policy (GEP) at the Uni- nisms and effects of policy transfer? Are there any versity of Nottingham and the Murphy Institute practical or theoretical limitations to this pheof Political Economy at Tulane University are nomenon? And what prospects are there for poljointly organising a two-day workshop "Internationalisation and Policy Transfer", to be held at Tulane University, New Orleans on 11th and 12th April 2003. The idea behind the workshop is for experts in the fields of public, social and trade policy and political economy to present their views on policy transfer and the internationalisation of policy. To what extent is policy transfer, policy coordination or policy convergence a real

Confirmed speakers include:

Bruce Chapman (Australian National University)	Robert Palacios (World Bank)
Richard Disney (Nottingham)	Mark Pearson (OECD, Paris)
David Dolowitz (Liverpool)	Tom Prusa (Rutgers University)
Rob Franzese (Harvard)	John Karl Scholz (IRP, Wisconsin-Madison)
David Greenaway (Nottingham)	John Stephens (North Carolina)
Kevin Grier (Oklahoma)	Diane Stone (Warwick)
Richard Hemming (IMF)	Robert Walker (Nottingham)
Michael Keen (IMF)	Graham Wilson (Wisconsin-Madison)
Chris Milner (Nottingham)	Michael Wiseman (George Washington)

on icy convergence in the future?

The workshop will target three specific themes; (i) theoretical and methodological issues in the study of policy transfer and convergence; (ii) internationalisation and policy coordination in trade, macroeconomic & development policy; (iii) evidence and lessons from the international transfer of public policy.



Only the Good Survive (and thrive): A summary of the GEP conference on firm level responses to international trade

In October GEP held a special one-day conference on the issue of firm level responses to international trade, at the University of Nottingham. The conference brought together leading-edge researchers from the UK, Europe and the US, while in attendance were a mixture of academics and policy makers. Of the empirical papers, three exclusively considered the effects of, and response to, the firms decision to start exporting, one how firms respond to greater import competition and two considered the response to falling trade costs on domestic firms (both exporting and non-exporting) more generally. The general conclusion from the day was that firms respond to international trade in very different ways but responses of the firm can be predicted by the inherent ability of the firm. Good firms can both survive and thrive from the opportunities presented by international trade. Of the exporting papers, Jose Farinas (Universidad

Complutense Madrid) 'Exporting and productivity: An application to Spanish data'(with Ana Martin-Marcos) and Richard Kneller (University of Nottingham) 'Does exporting lead to better performance? A microeconometric analysis of matched firms' (with Sourafel Girma and David Greenaway) considered the effect of the decision to start exporting on the productivity of the firm. Using very different statistical techniques, both papers find that export firms have better performance characteristics than firms that do not export. They are on average larger, more productive and pay higher wages. Kneller reported results that starting to export improved the productivity of UK

firms in later time periods, whereas Farinas found the same effect in Spain only for young firms. Holger Gorg (University of Nottingham) '*Price cost margins and exports: Evidence from UK manufacturing*' (with Frederick Warzynski) asks a related question, namely whether export firms change their behaviour (their price-cost margin) in response to greater competition following the decision to export. Gorg concludes there is enormous heterogeneity in the response of firms across industries.

The remaining three papers presented at the conference were all research undertaken by a combination of Andrew Bernard (Dartmouth College), Peter Schott (Yale) and Steve

Redding (London School of Economics). Peter Schott 'Survival of the best fit: Competition from low wage countries and the (uneven) growth of US manufacturing plants' (with Andrew Bernard and Bradford Jenson) considered how firms respond to import competition. They find that productivity and employment growth is slowest in industries that face the greatest competition from low wage countries and there is also greater plant-death in those industries. Interestingly though, not all plants die. Many choose to move into industries where low-wage competition is less. Andrew Bernard 'Falling trade costs, heterogeneous firms, and industry dynamics' (with Peter Schott and Bradford Jenson) considers the response of domestic (exporting and non-exporting) firms to falling trade costs more generally. Falling trade costs stimulate both greater import competition but also make it easier for domestic firms to start to export.



Participants at the GEP Special One Day Conference

The response of domestic firms depends on the productivity level of the firm low productivity firms exit the industry and die whereas high productivity firms instead start to export. These effects were greatest in industries where trade costs had fallen most. The empirical regularities of this paper were brought together in a theoretical model by Steve Redding '*Intra-industry dynamics in a model of heterogeneous firms and industry dynamics*' (with Andrew Bernard and Peter Schott).

Further information on this conference and copies of the papers presented can be found on the GEP websites.

by Richard Kneller

TRADE LIBERALISATION COMPENSATION AND WELFARE

While the benefits of trade liberalisation are felt by the many, the costs such as (short-term) job losses and re-skilling are felt only by the few. If workers are compensated for these adjustment costs but the compensation scheme itself distorts worker incentives then aggregate welfare may fall below the first best solution. **Carl Davidson** and **Steve Matusz** (both Michigan State University) consider these welfare losses for various types of compensation schemes. Carl and Steve are both External Fellows of GEP.

Abstracting from terms of trade effects and other distortions, most economists tend to agree that trade liberalization generates positive net benefits for the liberalizing economy. However, the benefits of liberalization do not accrue to all workers. For example, if labor is not free to move between sectors, then those workers who are employed in the export sector benefit from liberalization, while those who are trapped in the importcompeting sector find that liberalization induces a decline in their real wage. Moreover, if some workers are able to flee the importcompeting sector, they may bear substantial adjustment costs as they re-tool and search for jobs in the export sector. If there were no incentive effects involved with compensating workers for their losses, the existence of positive net benefits of liberalization would guarantee that it would be possible to compensate everyone for their losses without changing the aggregate level of welfare. Moreover, any compensation scheme that did not influence incentives would be equivalent.

If compensation schemes do impact incentives, then providing compensation introduces a new distortion, reducing the level of welfare below the first best, freetrade level. In addition, if different compensation policies have differential impacts on incentives, then some policies create smaller distortions than others and therefore lead to higher social welfare. In our paper, we explicitly model the tranbetween sition tariffdistorted and free-trade states, allowing for a variety of compensation policies that impinge on worker incentives. Our purpose is to find the policy that fully compensates workers for their losses while providing the highest level of aggregate welfare. Toward this end, we explicitly consider four policies: wage subsidies; unemployment compensation; employment subsidies; and training subsidies.

Our primary finding is that the factor that determines how effective a policy is at achieving full compensation depends on the manner in which it affects the average worker in the targeted group relative to its impact on the marginal worker in that group. The policy's impact on the average worker determines how big a program will be needed to compensate the group. Only a modest sized program is required to fully compensate the targeted group if the welfare of

the average worker in that group is highly sensitive to the policy parameter. On the other hand, even a modest sized program might trigger a great deal of inefficient relocation by workers if the welfare of the marginal worker in the targeted group is sensitive to the policy parameter. Therefore, we conclude that the best policy has a large impact on the average worker and a small impact on the marginal worker. Applying this rule to the four policies that we considered, we find that a temporary, targeted wage subsidy is the best way to compensate those who switch sectors after liberalization. This follows since the marginal worker (the one who is just indifferent between staying in the importcompeting sector and moving) has lower ability, and therefore a lower wage than the average mover and since the wage subsidy is correlated with the wage. By contrast, the best way to compensate those trapped in the import-competing sector is with a temporary, targeted employment subsidy. In this case, the marginal worker has higher ability (and therefore a higher wage) than the average worker who remains the in import-competing sector.

Finally, we calibrate our

model to get some sense of the overall cost of compensating those who lose from liberalization. We find that, if the proper policy is chosen, the overall cost, measured as lost welfare relative to the free trade first-best level, is extremely modest. However, implementing the wrong policy generates extremely large distortions and can be very costly. In the

> "If compensation schemes do impact on incentives then providing compensation introduces a new distortion"

most extreme case, all of the benefits of liberalization could be eaten away by the compensation scheme.



The World Economy Annual Lecture 2003



Professor Richard Freeman

Harvard University

26th June 2003

At the University of Nottingham

Public Lecture; All Welcome

Conference on

Trade and Labour Perspectives on Worker Turnover

University of Nottingham

 27^{th} and 28^{th} June 2003

Convened by

Carl Davidson (Michigan State University), Steve Matusz (Michigan State University), Richard Upward (GEP, University of Nottingham), Peter Wright (GEP, University of Nottingham)

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BRITISH IMMIGRANTS: EMPLOYMENT AND EARNINGSOF REFUGEE AND ECONOMIC MIGRANTSJo Lindley

The flow of asylum seekers into the European Union has increased in recent years. Total asylum applications to EU member states increased by 18 percent in 1999, most notably to Belgium, France and the United Kingdom. Applications for asylum (excluding dependants) in the UK rose by 25,000 between 1998 and 1999 to 71,000, whilst only 7,600 were removed or deported (only 10 percent of the total asylum applications that year). Given such increasing numbers, this group may form an important future source of EU labour.

British immigrants should not be treated as one homogenous group since migrants come to the UK under different circumstances. International migrants can be separated into two distinct groups. These are refugees and economic migrants. If economic migrants are volunteers they might be thought to self-select. However, although coming from very different cultures and social norms, refugees are forced to move. As a consequence, one might expect economic migrants to perform better in the labour market than refugees.

Previous studies investigating the labour market performance of British immigrants show ethnic unemployment and earnings penalties to all immigrant groups, where these are over and above English language fluency, religious affiliation and other human capital and socio-economic characteristics. However few studies have attempted to distinguish between refugees and economic migrants. A contributing factor is the lack of available data.

Using micro data from the *Quarterly Labour Force Survey* (*QLFS*) and various immigration statistics, immigrants can be separated into refugees and economic migrants based on their country of origin and time of arrival in the UK. The data used consist of a pooled sample of working age economically active individuals from 1995 to 2000. The foreign born respondents are then reclassified as a refugee or non-refugee. An individual is classed as a refugee if their country of origin is identified as a refugee sending country by the Department of Immigration, Asylum and Nationality at the Home Office and/or by the United Nations High Commission for Refugees (UNHCR), during the decade that they arrived in the UK. This provides information on the human capital and socio-economic characteristics of 20,373 migrants from refugee sending countries and 58,088 from non-refugee sending countries.

Figure 1 shows the proportion of economically active refugees and economic migrants surveyed over the sample period. The proportion of economic separate employment regressions for males and females shows refugee immigrants to exhibit higher unemployment penalties, where these are over and above all other human capital and socio-economic characteristics (including cohort effects and ethnicity). Refugee males (females) experience a 3.29 (3.89) percentage point increase in the likelihood of unemployment, relative to economic migrants. However, estimating earnings equations for males and females shows only female refugees to exhibit significantly larger earnings penalties (5.21 percent), relative to female economic migrants.

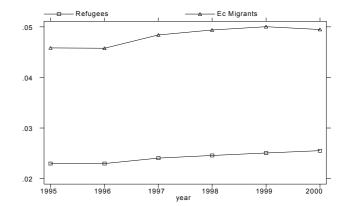


Figure 1: Proportion of economically active refugees and economic migrants sampled from the Spring Quarterly Labour Force Survey 1995 to 2000

migrants exceeds that for refugees, although both have increased over the period.

If economic migrants do self-select, then one might expect migrants to possess more transferable country specific human capital than refugees in the UK labour market. Indeed, the raw data show refugee immigrants to exhibit higher unemployment rates and lower average earnings than non-refugee immigrants. We next consider whether it is the case that economic migrants generally poses better employment and earnings enhancing characteristics than refugees (for example they may be highly qualified) since the latter are forced to moved; and whether significant unmeasurable differences exist between the two groups. Estimating

Separate unemployment probits for Whites, Blacks, South Asians and other Non-whites show significant refugee penalties to Whites, Black females and other Non-whites, relative to their economic migrant counterparts. Hence there are no significant differences between refugee and economic migrants that are from South Asia or who are Black males. The evidence here therefore suggests that some highly motivated economic migrants selfselect, in contrast to refugees who are forced to move. As a consequence refugees possess unmeasurable characteristics (which might include less transferable country specific human capital) which make them perform worse than economic migrants in the UK labour market.



Visitors to GEP 2002/3					
July	August	September			
	Professor Peter Dawkins				
October	University of Melbourne November	December			
Arvind Panagariya	Dr Joakim Gullstrand	Professor Alan Deardorff			
University of Maryland	Lund University	University of Michigan			
	Dr Catia Montagna				
	Dundee University				
	Dr Fredrik Sjoholm				
	Stockholm School of Economics				
January	February	March			
Professor Ray Riezman		Professor Carl Davidson			
University of Iowa		Michigan State University			
		Professor Todd Sandler			
		University of Southern California			
April	May	June			
	Professor Steven Matusz	Professor Richard Freeman			
	Michigan State University	Harvard University			

GEP Fellows have recently presented papers at the following

International Conferences

Environmental and Resource Economists Congress	Monterey
Public Economic Theory Conference	Paris
European Economics Association	Venice
European Meeting of the Economics Society	Venice
International Institute for Public Finance	Helsinki
Association Francaise de Sciences Economiques	Paris
European Association of Labour Economists	Paris
European Trade Study Group	Kiel
IEA Annual Meeting	Lisbon
IDB/World Bank Conference on FDI	Washington
Mid-West International Economics Meeting	Notre Dame
ASSET Annual Meeting	Cyprus
De Nederlandsche Bank Conference	Amsterdam



Leverhulme Globalisation Lectures

Todd Sandler

University of Southern California

'Economic Perspective of Transnational Terrorism'

17th March 2003

At the University of Nottingham

No tickets required; all welcome

Martin Wolf

Chief Economics Commentator *The Financial Times*

'Financial Integration Today and a Century Ago'

30th April 2003

At the University of Nottingham

No tickets required; all welcome



RESEARCH UPDATE Globalisation, Productivity and Technology

GEP's research and dissemination activities are structured around three Research Programmes, linked by the common theme of globalisation. These are: Globalisation and Labour Markets (GLM); the Internationalisation of Economic Policy (IEP); and Globalisation, Productivity and Technology (GPT). Periodically the research carried out to date in one of these three themes will be detailed. This issue features the work carried out in GPT.

This note documents past and ongoing research in the GPT Programme. Broadly put, this Research Programme examines the transmission mechanism of new technologies between firms, along with the incentive to invest in R&D and the role that globalisation has on these. A further body of work compares productivity growth at the crosscountry level. The research can be separated into the following areas:

1. Research and Development (R&D)

2. Mergers and Acquisitions and firm performance

3. Entry, exit, FDI and firm performance

4. Productivity spillovers from FDI

5. Exporting, FDI and productivity

6. Productivity in the service sector

7. Cross country comparisons of productivity growth

1. Research and Development (R&D)

Wakelin (2001) analyses the relationship between productivity growth and R&D expenditure for 170 UK manufacturing firms. A positive and significant role is found for the firm's own R&D expenditure in influencing productivity growth.

Bougheas, Görg and Strobl (2001) examine the effect of liquidity constraints on R&D investment. The theoretical section extends the neoclassical investment theory by introducing R&D and liquidity constraints. The empirical analysis uses plant level data for Irish manufacturing firms. Results provide evidence that R&D is indeed financially constrained, a finding in line with research on US firms.

2. Mergers and Acquisitions and firm performance

Conyon, Girma, Thompson and Wright (2001, 2002a,b) examine the impact of mergers on company employment, wages and productivity using data for UK manufacturing firms.

Girma and Görg (2001, 2002a) look at the effect of foreign acquisition on survival, employment growth, returns to scale and productivity of the domestic takeover target. They use establishment level data from the ARD database for the UK.

3. Entry, exit, FDI and firm performance

Disney, Haskel and Heden (1999) investigate the determinants of entry, exit and survival of manufacturing establishments in the UK. In a companion paper, Disney, Haskel and Heden (2000) analyse the sources of productivity growth in UK manufacturing. They distinguish productivity growth due to "internal restructuring" (such as technology and organisational change) and "external restructuring", i.e., entry and exit of establishments. External restructuring is found to be an important source of productivity growth.

Görg and Strobl (2000, 2002a,b) use plant level data to investigate the effect of the presence of foreign multinationals on entry and survival of domestic firms in Irish manufacturing. They find that foreign presence has positive effects on both entry and survival of plants but reduces plant size at entry. In a related paper. Görg and Strobl (2002c) compare plant survival and employment persistence for domestic and foreign plants using the same data source for Irish manufacturing plants. They find that, all other things equal, foreign plants are more likely to exit but that jobs generated in foreign plants are more persistent than in domestic plants.

4. Productivity spillovers from FDI

Görg and Strobl (2001) and Görg and

NEWSLETTER

GLOBALISATION PRODUCTIVITY AND TECHNOLOGY RESEARCH UPDATE

C O N T D

Greenaway (2002) present critical reviews taking stock of the large literature on productivity spillovers. The former paper focuses on econometric methodologies while the latter paper emphasises policy implications of the findings of the literature.

A series of papers (Girma, Greenaway and Wakelin, 2001; Girma and Wakelin, 2001; Girma, 2002, Girma and Görg, 2002b) analyse whether there is evidence for productivity spillovers from foreign multinationals to domestic firms in UK manufacturing. These papers use firm or establishment level panel data to investigate this issue. Girma, Greenaway and Wakelin (2001) present an overview using data for all manufacturing industries. Girma and Wakelin (2001) focus on the regional dimension of spillovers while Girma (2002) and Girma and Görg (2002) are particularly concerned with the role of domestic establishments' absorptive capacity for determining whether or not they benefit from spillovers.

Görg and Strobl (2002d) focus on one particular channel for productivity spillovers, namely, movement of workers from multinationals to domestic firms. Specifically, they investigate whether domestic firms run by owners who worked for or were trained by multinationals before joining the domestic firm have higher productivity growth than other firms. Using firm level data for Ghana they find evidence for such spillovers through worker movements.

5. Exporting, FDI and productivity

Greenaway, Sousa and Wakelin (2002), Girma, Greenaway and Kneller (2002) and Barrios, Görg and Strobl (2001) investigate the determinants of exporting, in particular the role of market access spillovers from multinationals for domestic firms' export performance, using firm level data for the UK and Spain.

Girma, Greenaway and Kneller (2002) also investigate the effect of the export decision on firm performance (productivity, employment, output and profits). The business performance of firms in the periods before and after they start exporting for the first time is compared against firms with similar initial characteristics but who did not start to export. In contrast to the existing literature the authors find evidence that the decision to start exporting does have some beneficial impact on firm performance.

Future work will seek to explain why firms benefit from starting to export and what if anything they do to realise these performance improvements. An additional research theme will be to explore the decision to enter export markets.

6. Productivity in the service sector

Girma and Kneller (2002) examine productivity in the service sector of the economy. Like the manufacturing sector, productivity levels are found to differ significantly across firms within the same service sector industry. They are also found to differ significantly according to the size of the firm and ownership status. As in the manufacturing sector foreign owned firms have a higher average productivity level than domestically owned firms, however unlike the manufacturing sector very small firms have higher productivity levels than large firms and medium sized firms.. The authors also suggest from their results that the nature of technology transfer in the service sector may be very different from that of the manufacturing sector. In contrast to the literature on convergence among manufacturing sector firms there is evidence that service sector firms converge to the same technical frontier within a given industry. Permanent differences in the level of productivity between firms do not exist.

It is intended that future work will document the role that globalisation has had on this convergence process.

7. Cross country comparisons of productivity growth

A number of researchers within the Centre have considered the relationship between openness to international trade and economic growth at the crosscountry level. Recent work in the growth literature has questioned the reliability of previous results that have found a strong empirical relationship between openness and growth: Henry (2002) considers robustness to changes in the measure of productivity. The results lead Henry to conclude that the relationship between openness and growth is generally robust to alternative measures of productivity, but is not robust to changes in the measure of openness to international trade.

Greenaway, Morgan and Wright (2002) and Kneller (2002) compare the growth rate of countries before and after trade liberalisation. Using annual data the former find a J-curve effect, growth initially dips and then rises. They argue that this result may help to explain contradictory results in the existing literature. Kneller compares the growth effect of trade liberalisation over slightly long time periods. He finds that growth in the period 5-years after liberalisation is not significantly higher than the 5year period before liberalisation when liberalising countries are compared to countries that never liberalise. Some evidence is found to suggest trade liberalisation may have an indirect effect on growth through changes in fiscal policy used to finance increased government

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welfare provision.

Gemmell and Kneller (2002) examine whether the cross-country and crosstime variations in growth rates are consistent with a model of technology transfer that is subject to random shocks. External shocks explain the variability of LDCs productivity growth rates but only over the short-run: within 5 years; whereas faster growth of the technical frontier in innovating countries is associated with faster productivity growth in LDCs on average over the long-run.

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REDUCING UNEMPLOYMENT, JOBLESSNESS AND INEQUALITY IN A GLOBALISING ECONOMY: THE CASE OF AUSTRALIA

Increasing income inequality or unemployment are often seen as part of a diabolical trade-off that results from globalisation. Here Peter Dawkins (Director of the Melbourne Institute of Applied Economics Research) examines whether it is possible to avoid the downside costs of globalisation use as a case study Australia, which has strongly pursued a globalising strategy over the last twenty years ... This work is a summary of a GEP seminar given by Peter during his visit to Nottingham in the Summer of 2002.

Over the last twenty years, Australia has deliberately pursued a strongly "globalising" economic policy strategy, dismantling the high level of industry protection that was in place for most of the twentieth century, along with a range of other microeconomic reforms.

A stylised view of globalisation and labour markets is that globalisation (along with skill-biased technological change) increases income inequality through the widening of wage differentials and that attempts to reduce inequality through labour market protection of low wage earners would cause unemployment. Thus, in this stylized view, there is a trade-off between wage flexibility (and an associated income inequality) on the one hand and unemployment on the other, that is sometimes called the "diabolical trade-off."

This paper is concerned with whether the diabolical trade-off can be avoided in a globalising economy like Australia. It is concluded that it can.

There is a lack of evidence from the Australian labour market that skill differentials have widened. However, there has been a widening wage dispersion due to a strong growth of employment of high skilled labour. Similarly, the dispersion of private (pre tax and transfer) household incomes has increased over the last twenty years. Taxes and transfer have largely negated this, but there is tentative evidence that the top part of the income distribution has had incomes rising slightly faster than the middle and lower parts. The major driver appears to be the widening distribution of jobs.

Thus, in terms of the debate that there

has been about whether it is trade or technology that has been causing any tendency for increasing wage and income dispersion, the evidence tends to support the view that it is skill-based technological change. The labour market has been moving in favour of skilled labour. It is quite possible, however, that this technological change has is for two reasons. First, low wage jobs are well spread around the household distribution of income. Second, many low wage earners in low income families face very high effective marginal tax rates, due to Australia's heavily means tested income support system, and therefore gain little from minimum wage increases.

Table 1: Comparison of employment rates and jobless household rates, 1982 to 1997/	Table 1:	1: Comparison of	employment rates and	jobless household rates	, 1982 to 1997/9
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	Employ- ment rate	Recipient rate of major income support payments	Jobless h	ouseholds	Working ag jobless ho		Dependent jobless ho	children in ouseholds
	%	%	Ν	%	N	%	Ν	%
1982	70.43	15.40	558,343	12.67	801,352	9.45	432,274	10.11
1986	71.90	14.88	641,127	14.88	925,112	10.76	496,474	11.52
1990	74.22	15.82	649,466	14.20	948,166	10.49	511,367	11.2
1994/95	73.06	20.44	751,886	15.48	1,112,880	11.79	616,341	14.20
1995/96	74.30	20.91	754,398	15.11	1,068,740	11.18	565,060	12.92
1996/97	72.79	22.92	821,939	16.77	1,161,142	12.27	686,529	15.88
1997/8	73.69	21.26	819,442	16.28	1,165,596	12.11	660,242	15.00

been partly caused by the globalisation process, and this requires further research.

Australia has a strong tradition of trying to use regulated wages as an antipoverty device and has one of the highest national minimum wages in the world, and a regulated structure of minimum award wages for workers with higher skill levels. But it is shown that raising minimum award wages is not an effective anti-poverty strategy in the contemporary labour market. This Just as there has been a growth in the number of households with multiple jobs at the top end of the income distribution, there has also been a strong growth of jobless households at the bottom end. The growth of jobless households in Australia is documented (see Table 1) and the particular problem of jobless households with children emphasised. Australia, in common with Britain, has a very high rate of jobless households with children

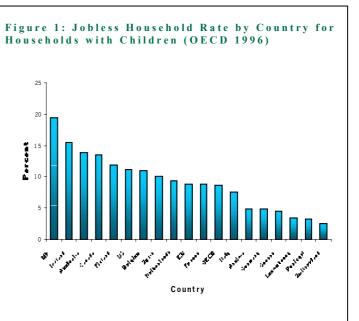
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(see Figure 1 for an international comparison from 1996). Approximately one in six children now live in a jobless household. It is argued that reducing the incidence of jobless households with children should be a major policy priority.

The author was a member of the Review of the Australian Welfare System, which led to the McClure Report in 2000. Previously he was one of five economists who wrote a letter to the Australian Prime Minister in 1998, proposing, amongst other things, a wage tax trade-off to reduce unemployment (involving the use of an employment tax credit). The ideas of the McClure Report and of the 'five economists' are canvassed, and the likely effects of their proposals evaluated. This includes some results of a behavioural microsimulation analysis, undertaken in association with Alan Duncan of the University of Nottingham.

It is concluded that an appropriate policy package can be devised which would reduce unemployment, reduce the incidence of jobless families and reduce income inequality in Australia, thus avoiding the diabolical trade-off. This will involve a range of policies to increase both the supply of and demand for labour from jobless households. An employment tax credit should be part of this strategy and if such a boost to the incomes of low-wage earners in lowincome families can help to restrain the growth of minimum award wages it will have a significantly positive effect on labour demand as well as labour supply. Thus the diabolical trade-off can be avoided.



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INTERNATIONAL TRADE AND RENT SHARING IN DEVELOPED AND DEVLOPING COUNTRIES

Globalisation is often viewed as an inequitable process, favouring capital holders and multinational firms at the expense of workers and small firms. Here Daniel Mirza (GEP Research Fellow, University of Nottingham) considers how the extra profits associated with globalisation are shared amongst a countries employers and employees in practice.

Since the WTO's Seattle meeting, NGOs, unions and other repre- ing countries. Accordingly, a growing body of the literasentatives of the civil society have called for more equity in the ture has explained changes in the wage premium by globalisation process. According to these claims, today's global- changes in rents consecutive to openness. The basic idea isation would firstly benefit capital holders and multinational is given by Abowd and Lemieux (1993) and Borjas and firms at the expense of workers and other smaller, possibly non- Ramey (1995): foreign firms that enter the market shift exporting, firms. In this article, we ask whether some extra profits rents from domestic firms that would be otherwise shared --known as 'rents' in the economic vocabulary-- are captured from with employees. Although they do not test this idea diopenness and how are they shared among countries, employers rectly, the authors' investigations appear to be consistent and employees? Our results show that in developed countries with Canada and US data. Harrison and Hanson (1999) trade tends to be profitable, and the related profits seem to be review the literature on trade policy and the labour marshared with employees. However, in some developing regions ket adjustment, based on studies of Mexico and Mosuch as Asia or, to a lesser extent Latin America, trade and wages rocco, and report that openness had a small impact on do not seem to be related by such a rent sharing mechanism. This, wages and employment. The main reasons, the authors our theory suggests, is due to a lack of unions' power or insuffi- argue, come from the organisation of the labour and cient specialisation in high profit industries in these countries.

In recent years, a particular attention has been paid to the role of profits in the impact of trade on labour in developed and develop- Many issues are still puzzling. This 'modern' literature on

product markets in these developing countries that is consistent with the rent sharing theories.



trade and wages was particularly interested in one aspect of openness: import penetration. However, if trade shifts some rents to foreign firms selling on the domestic markets, then why not examine whether some extra profits can be made and then shared with employees through exporting?

Moreover, we ask whether openness through its two vectors, imports and exports, impact the wage premium identically in developed and developing countries. In the latter group of countries, rents accruing to protected factors may be important as well, while rents to be captured by exporting might be more limited. As a matter of fact, opening those economies may be associated with the loss of large rents on the domestic market in industries characterised by imperfect competition, while these countries would tend to specialise and export in rather competitive industries with respect to their comparative advantage.

In this paper, we address these questions by building and testing a theoretical model based on rent sharing. To make the theoretical relation between trade, rents and wages clearer we account for some assumptions that are widely used in the fields of industrial organisation and international trade. We end up deriving a very simple equation linking the industry wage premium to both domestic and foreign market share variables. These variables are linked to wages by a channel of adjustment that represents an interaction between the market power of the firms and the negotiation power of unions. In fact, when selling to a domestic or a foreign market, a national industry extracts rents as long as its firms on average benefit from sufficient market power. Whether Page 17

these rents are shared with employees then depends on the power of unions. If either firms or unions lack market power in the commodity or labour markets then the channel between openness and the wage premium breaks down.

In that respect, the purpose of the applied part of the study is to investigate whether this channel of adjustment exists between the wage premium and the domestic and/or foreign market shares at the industry level for different groups of countries. We construct a dataset that matches trade, activity and labour-related data for around 29 industries in 65 countries, during the 1981-1997 period. We find for OECD countries that an increase in export as well as domestic market shares is associated with an increase in wages in a small majority of the industries. This supports the idea that in rich countries an increase in export or domestic market shares is a source of rents that is then shared with employees in the majority of the industries. In Latin America and Mediterranean countries, rents seem to be acquired and then shared with employees when there is an increase in domestic sales only. No significant positive relationship is found when selling abroad. From these two observations we deduce that unions do have some market power in Latin America and the Mediterranean, although it is only used to shift domestic rents and not the extra profits from exporting. Finally, in Asian countries neither domestic nor foreign sales have significant and positive effects on the wage premium. This suggests that Asian firms are either specialising in competitive industries in which there are no rents to be extracted, or they are acquiring rents through trade but unions in these countries are not strong enough to shift them to employees.

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