Leverhulme Centre
for Research on Globalisation and Economic Policy

Newsletter

Issue 32, **Autumn 2010** **www.gep.org.uk**

In this issue

Cover story

Trade Policy and Unemployment: The World Economy Annual Lecture 2010

- Conference report
- Workshop round-up
- GEP in China
- Plus Marcel Smolka, Erhan Artuc, Veysel Avsar and Harald Fadinger

The University of Nottingham

Trade Policy and Unemployment: The World Economy Annual Lecture 2010

Given that its ultimate goal is to improve the welfare of citizens, should trade policy be influenced by unemployment? This was the question posed by Carl Davidson, Professor of Economics at Michigan State University, when he delivered the 2010 The World Economy Annual Lecture, Trade Policy and Unemployment, at the University of Nottingham on 24 June.

There is an obvious and growing divide between the public and academia with regard to this issue. Politicians' rhetoric about trade policy and survey evidence on the public's trade policy preferences clearly indicate that both groups tend to focus on trade's impact on job destruction and job creation, with wages as an afterthought. These attitudes have intensified since the late 1990s as there has been a significant shift in public support away from trade liberalisation with a plurality of the public now holding the view that in net terms trade hurts wages and destroys jobs (Baldwin and Magee, 2000; and Scheve and Slaughter, 2001). The bottom line is that politicians and the public view trade policy and unemployment as inextricably linked.

Almost universally, however, academic economists ignore unemployment when analysing the determinants and results of trade policy. All of the models that serve as the workhorses for the field assume full employment, and the chapter on the political economy of trade policy in the Handbook of International Economics does not even mention the word "unemployment".

Davidson argued that this odd dichotomy is not due to ignorance on the part of the public. Survey evidence clearly indicates that the public understands the costs and benefits of trade but a plurality simply weigh the costs more heavily than the benefits (Scheve and Slaughter, 2001). Possible explanations for this phenomenon can be found in the research on the "economics of happiness". This research finds that job loss, often a product of trade reform, is one of life's most traumatic events, ranking as more traumatic than separation from a spouse. The fact that job loss leads to greater stress can have significant health implications – layoffs more than double the risk of heart-attack and/or stroke for older workers, and workers losing their jobs face an 83% higher risk of developing stress related health problems. Moreover, evidence indicates that even workers who find re-employment rather quickly, sometimes at higher wages, report that losing one's job has a permanent scarring effect.

Davidson argued that the public's concerns about trade and unemployment go beyond worries about private employment risk, with individuals caring about the employment risk faced by others as well. He pointed to research by political scientists showing that "sociotropic voting" (i.e. voting for measures that are expected to increase social welfare) is more common than "pocketbook voting" and that sociotropic concerns appear to be more closely tied to unemployment than inflation. Given the public's strong aversion to employment risk, it should come as no surprise that they might weigh the costs of trade reform, which include job displacement as the economy adjusts to new trade patterns, very heavily.

Davidson's fear is that by continuing to abstract away from unemployment the profession is largely ignoring the adjustment costs that accompany trade reform which are of paramount importance to the public. This leaves the profession open to criticisms about the credibility and practical relevance of their work in the policy debates. Moreover, Davidson pointed to empirical studies that find a robust and positive link between unemployment and protection (Bohara and Kaempfler, 1991; Tefler 1993; Mansfield and Busch, 1993; and Bradford, 2003, 2006), suggesting that, regardless of the profession's view, unemployment does in fact seem to influence trade policy.

While there has been some research relevant to this topic – e.g. Davidson, Martin and Matusz (1994) and Costinot (2009) – the literature remains limited. Davidson hopes to begin to fill the void, arguing that by developing new trade models that allow for the labour market imperfections that generate unemployment we can start to analyse policies designed to aid the unemployed.

The model Davidson proposes attempts to rationalise some of the public's concerns regarding the scarring and sociotropic effects of unemployment. He and his co-authors, Steven Matusz and Douglas Nelson, do this through the use of behavioural preferences that serve as a political constraint in a simple model of endogenous trade theory with unemployment, thus allowing public anxieties to surface within his results. The behavioural preferences in their model are novel in that they explicitly account for the scarring effects from unemployment and the sociotropic concerns about the employment risk faced by others.

A number of results arise from the model, three of which are particularly noteworthy.

Ultimately, trade economists must take the concept of compensating those harmed by globalisation much more seriously than they have in the past.

First, starting from free trade, the government can raise welfare by instituting policies that marginally reduce total unemployment – a result that is directly tied to the public's sociotropic concerns. Consequently, it is in the government's interest to decrease unemployment by shifting resources to the sectors with relatively high marginal job creation rates and relatively low job destruction rates. Such policies raise welfare by reducing the sociotropic concerns about employment risk without sacrificing too much in terms of the value of production. In practice, this could be interpreted as a policy preference for sectors with "good jobs" – jobs that are durable and are tied to sectors in which a large number of jobs could be created if resources are pushed in their direction.

The second result that flows from the model is that the government has an incentive to pursue this policy gradually. Doing so allows society to spread out and reduce the adjustment costs that are incurred as the economy reallocates factors across sectors. In particular, when policies are phased in unemployment and the social costs that accompany it are lower along the adjustment path to the new equilibrium. Davidson subsequently argued that Active Labour Market Policies, which provide incentives for unemployed workers (but not the currently employed) to seek jobs in targeted industries, are consistent with this notion of gradualism.

The final result that Davidson highlighted provides new insight into the relationship between the generosity of the welfare state and openness – an issue that has been the topic of debate both in political science and economics. In political science, the Embedded Liberalism Thesis posits that the post-WWII move toward freer trade was facilitated by new government policies that compensated those harmed by free trade (i.e. the Welfare State). However, empirical work has provided only limited support for this theory – some studies have found that more open economies are supported by larger welfare states, others have found an inverse relationship, and some have found no statistically significant relationship at all. Davidson's model helps to rationalise these mixed results by illustrating that the relationship between the welfare state and openness may be more complex than is often suggested. The reason for this is that an expansion of the Welfare State has two conflicting effects on openness. On the one hand, there is the intended benefit – by providing support for the unemployed, the scarring effects from unemployment are reduced and the sociotropic concerns about employment risk are eased and this makes trade liberalisation more appealing to the public. On the other hand, there are unintended consequences as well – by reducing the personal cost of unemployment, the government makes the high unemployment sector relatively more attractive. This shifts resources towards that sector, increases the economy-wide unemployment rate and makes trade liberalisation less attractive.

This last result points towards the need for research aimed at developing a better design of welfare state policies. For example, a programme that couples unemployment insurance with wage subsidies (which reward workers for finding jobs and shorten spells of unemployment) might be able to provide the intended benefits of the Welfare State while minimising the unintended consequences. Davidson pointed out that, while there is significant research in macroeconomics on optimal social insurance programs, the same cannot be said for the field of international trade. He argued that this is unfortunate, since the insights from macro models may not generalise to open economy settings in that closed economy models miss the critical links between labour market policies, labour market structure and the pattern of trade.

Ultimately, trade economists must take the concept of compensating those harmed by globalisation much more seriously than they have in the past. This will allow us to address the public's concerns surrounding the adjustment costs of trade reform. Opposition to liberalisation might ease if such a well-designed Welfare State existed – and the work of academic economists with regard to trade policy might achieve greater credibility if their work acknowledged the existence of unemployment and its social costs.

International trade, firms and workers

Theoretical and empirical researchers from around the world gathered at the University of Nottingham for International Trade: Firms and Workers, a two-day conference co-organised by GEP to explore the links between firm and worker heterogeneity and increased globalisation. GEP Research Fellow Alejandro Riaño looks at some of the research presented at the event.

Recent developments in international economics have stressed the importance of firm heterogeneity in explaining trade patterns and the effects of increased globalisation. This has coincided with the increasing use of datasets that link information on individual workers to the firms that employ them.

Held on 24 and 25 June and co-organised by GEP and Michigan State University's Centre for International Business Education and Research, International Trade: Firms and Workers sought to bring together these theoretical and empirical aspects to address the various issues arising from them.

Some of the research presented at the event – Harald Fadinger's work on trade policy and firm boundaries and Ehran Artuc's study of young and old workers' attitudes to free trade – is featured in greater detail elsewhere in this Newsletter, as is the 2010 The World Economy Annual Lecture, delivered by Carl Davidson, Professor of Economics at Michigan State University.

Here we examine other topics highlighted at the conference – among them offshoring, labour force globalisation and comparative advantage.

Priya Ranjan (UC Irvine) presented a model combining heterogeneous firms and the heterogeneous costs of offshoring. The model shows a reduction in the cost of offshoring has several potentially confounding effects on the extensive and intensive margins of employment.

Firms already engaged in offshoring will procure a greater fraction of inputs from abroad. On the one hand, this has a direct negative effect on domestic jobs. The productivity boost caused by lower input prices increases the market share of these firms vis-à-vis firms that procure their inputs domestically, thus generating a positive effect on employment. Non-offshoring firms, on the other hand, unambiguously experience higher job destruction, either by contracting or exiting the industry altogether.

The predictions of the model are tested using data from the National Establishment Time Series (NETS) database, which contains the entire universe of establishments in California's manufacturing industry from 1992 to 2004. The principal result emerging from the empirical analysis is that reductions in trade costs for an industry are associated with less job creation and greater job destruction.

Peter Wright (University of Nottingham and GEP) used the Inquiry into International Trade in Services, which provides information on individual transactions in services between the UK and the rest of the world, to gauge the labour market impact of offshoring.

He finds no evidence that importing intermediate services is associated with job losses or greater worker turnover: if anything, firms that import services have faster employment growth than those that do not. This appears to result from the cost-saving effects of offshoring, which give rise to an increase in the scale of production.

Marc Muendler (UC San Diego) presented an analysis of the relationship between in-house offshoring and the composition of workers and tasks for German multinational enterprises. He finds offshoring is associated with skill-upgrading at the parent firm in Germany, as workers there perform more non-routine and interactive tasks. The contribution of offshoring to changes in the wage-bill share of workers with upper-secondary education is estimated in the order of 10%, a modest effect compared to the 15-40% contribution of overall imports to the change in the wage-bill share of non-production workers in the US.

The influence that the globalisation of labour forces has on firms' performance was a recurring theme at the conference. There is substantial evidence that exporters pay higher wages than domestic firms, so do imports – the mirror transaction of exports – have an effect on wages?

Using data from Portugal, **Pedro Martins** (Queen Mary, University of London) presented a study showing imports do have an important impact on wages at the firm level – and that the effect is similar in magnitude to that of exports. Even after controlling for several other wage determinants, his research suggests firms that increase their exports of high-technology products or their imports of intermediate-technology products tend to raise their salaries.

Jakob Roland Munch (University of Copenhagen) offered an analysis showing how high-productivity firms are more likely to hire foreign specialists who bring highly specialised skills. He finds manufacturing firms experience a 15% boost in total factor productivity after hiring such specialists – though a positive effect does not seem to be present in firms in services industries.

Richard Upward (University of Nottingham and GEP) provided evidence that the presence of foreign workers in

Delegates at International Trade: Firms and Workers, pictured outside GEP's offices at the University of Nottingham

plants increases the likelihood of those plants exporting their output. Using a linked employer-employee dataset from Germany, Upward finds a significant effect of worker nationality on exporting that is not driven by the industrial, occupational or locational concentration of migrants. The effect is much stronger for senior occupations – e.g. managers, engineers and senior executives – who are more likely to have a pivotal role in exporting decisions by the plant.

On the theory front, **Jonathan Vogel** (Columbia University) presented a model combining exogenous sources of comparative advantage (resulting from sectoral productivity differences and factor endowment differences) with endogenous sources of comparative advantage (arising from the interaction between the entry and production decisions of heterogeneous firms).

Vogel shows how the sources of endogenous comparative advantage – i.e. within-sector technological heterogeneity, endogenous selection of firms into markets and endogenous entry – shape the traditional Stolper-Samuelson effect, linking changes in trade costs with changes in factor rewards. In addition, he demonstrates how the sources of endogenous comparative advantage affect the skill premium only through the determination of the factor content of trade.

Nick Sly (University of Oregon) offered a model of trade with heterogeneous firms and workers where changes in trade costs affect both the skill acquisition decision of workers and the composition of jobs and performance contracts offered by firms.

Sly shows how trade liberalisation induces greater skill acquisition by workers and how the provision of incentive contracts becomes available only to the most talented workers. Overall, trade liberalisation causes employment to become more polarised – that is, trade increases the employment share of high-skill and low-skill occupations while reducing the share of middle-skill occupations in total employment.

Who really benefits from migration?

Macroeconomics and Migration, a joint workshop co-organised by GEP, brought together economists from around the world to discuss various aspects of migration, including trade, political economy, labour markets, business cycles and monetary policy. GEP Research Fellow John Tsoukalas reflects on the event.

Co-organised by GEP, the University of Athens and the Bank of England, Macroeconomics and Migration, a one-day workshop held in London on 7 May, attracted an impressive array of researchers and delegates from academia, Central Banks and policy institutions.

Doug Nelson (Tulane University and GEP) opened the event with a theoretical paper proposing a simple model combining migration and trade. The novelty of the model is to allow for skill heterogeneity in a two-country, two-good set-up, so letting the authors focus on skilled migration – a sizeable component of migration flows in recent years.

The first result to be demonstrated is that migration and trade are complements – that is, that more trade encourages migration. The second is that migration increases welfare – including that of the migrants themselves – in both countries. However, because of heterogeneity among workers, migration entails losses for groups of workers.

The authors conclude that the political economy implications of the model are quite rich. While citizens in both countries will most probably favour migration, it is not entirely clear whether compensation policies for the "losers" will be adopted: this is likely to depend on whether migrants are allowed to vote in referendums.

Chris Parsons (University of Nottingham and GEP), used a rich country-level dataset to study the link between trade and migration. Parsons has carefully constructed a global dataset (175 countries over the period 1960-2000) that is ideal to examine whether robust global trade-migration links exist and, if so, how these have evolved over time.

Controlling for other determinants of trade, Parsons proposes an empirical specification aimed at identifying the effect of migration on exports and imports. He finds a portion of the 1990-2000 increase in global trade can be attributed to migration links, in effect reflecting the reduction in barriers to trade that higher migration brings about.

Ian Preston (UCL) presented a study investigating the effects of immigration on British wages over the period 1997-2005. The research combines data from the Labour Force Survey and the Census to obtain information on wages, labour flows and various worker characteristics, including skill levels and education.

The findings presented clearly suggest migration is beneficial both for the receiving and originating countries.

Although a priori it is not clear how the presence of immigrants affects the distribution of wages (as this would depend on immigrants' skill distribution), Preston estimates the overall (average) effect of immigration on native wages is positive. There is, however, some heterogeneity across the wage distribution. Preston's results suggest low-wage workers lose out and medium-wage and high-wage workers gain. A positive average effect can be explained in terms of an immigration surplus created for the natives by the downward movement along the labour demand curve as the supply of labour expands.

Michael Ben-Gad (City University) offered a paper aimed at addressing the question of whether it is welfare-improving for governments to shift the burden of taxation to immigrants, either through an increase in labour income taxes (lowering capital income) or through a shift in taxes over time (with an increased burden to fall on future immigrants).

Ben-Gad's analysis uses an optimal growth model with overlapping generations. Tax smoothing is the optimal policy in a model without immigrants, but when immigrants are allowed the representative native faces a trade-off: an increased cost when deviating from the optimal policy against the benefit from shifting taxes that fall on the yet-to-arrive immigrants. Ben-Gad's preliminary simulations show there is much scope for shifting taxes across time rather than shifting them between labour and capital. The paper suggests countries that expect to receive large inflows of migrants might find it tempting to run deficits and accumulate debt today.

Kostas Katirtzidis (University of Athens) presented a paper investigating (i) whether and how migration affects optimal monetary policy and (ii) whether it tends to lower inflation in the context of a dynamic New Keynesian model with sticky prices – the workhorse model in monetary policy institutions. Katirtzidis's model is calibrated to match data from the US economy and analyses the mechanics of the model when migration flows of the same magnitude as those experienced by the US in the past 10 years are fed in.

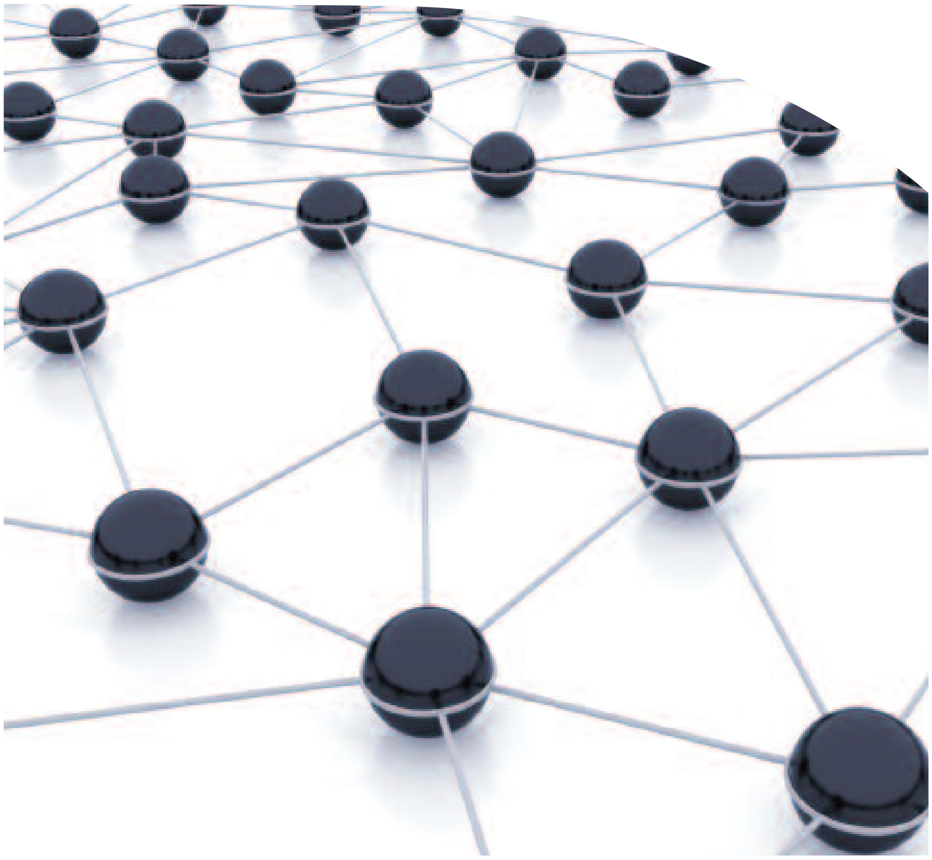
The first interesting result is that migration initially creates a small recession (i.e. a fall in per-capita output) due to the fact that the capital labour ratio initially falls. However, over the medium term (eight to 20 years from the initial flow) output is higher and inflation lower. Thus migration is disinflationary – an effect that comes through the reduction in the cost of labour. Optimal monetary policy continues to be strict inflation-targeting, so migration does not create any additional trade-off for the policymaker apart from the need to minimise the distortion created by sticky prices.

Tony Yates (Bank of England) continued in the same spirit by examining migration in an international business cycle model. Aiming to study responses to productivity shocks, Yates has developed a New Keynesian, two-country model in which agents can choose to locate in either country.

This analysis delivers several results. Firstly, it finds migration does not affect either optimal monetary policy or inflation dynamics. Secondly, migration reduces business cycle co-movement, suggesting it cannot be a force behind the recent business cycle synchronisation. Thirdly, migration increases the volatility of output for a given volatility of inflation.

Morten Ravn (UCL) closed the workshop by delivering the event's concluding remarks. He argued that the findings presented at Macroeconomics and Migration, alongside existing work, clearly suggest migration – especially of the skilled type – is beneficial both for the receiving and originating countries.

Nonetheless, despite the clear economic arguments, migration continues to be a source of tension for the citizens of developed countries. Morten hypothesised that these tensions are born of the potential costs – for example, those arising from illegal migration and the enlargement of the welfare state – which economists may have to some extent ignored so far and which therefore merit further research.



Trade policy and firm boundaries

Does globalisation lead to the convergence of firms' organisational structure across countries? Harald Fadinger (University of Vienna), in research presented at GEP's International Trade: Firms and Workers conference, investigates whether market prices affect decisions to produce inputs internally or source from outside suppliers.

Harald Fadinger

References/further reading

- Alfaro L, P Conconi, H Fadinger and A Newman (2010): Trade Policy and Firm Boundaries, NBER Working Paper w16118.
- Conconi, P, P Legros and A Newman (2010): Trade Liberalisation and Organisational Change, mimeo, Boston University.
- Legros, P and A Newman (2009): A Price Theory of Vertical and Lateral Integration, mimeo, Boston University.

Building on earlier work by Legros and Newman (2009) and Conconi, Legros and Newman (2009), we develop a model that shows a systematic relationship between, on the one hand, firms' decisions to integrate or outsource the production of their inputs and, on the other, the market price of their products. In its starkest form, the prediction is that the higher the market price, the more integrated firms will be.

The reason for this relationship is that managers care about not just revenues or profits but private, non-contractible benefits from the organisation (e.g. doing things their way). Managers make decisions independently when production of intermediates is outsourced, taking more account of their private benefits, and this results in poor coordination and low output; by contrast, vertical integration puts decisions in the hands of a single headquarters with strong incentives to coordinate so as to maximise overall benefits to the organisation. Outsourcing is thus associated with high private benefits and low coordination, integration with high coordination and high private costs.

Market prices matter because they directly affect profits but have relatively little impact on private costs. When enterprise profitability (market price) is high this trade-off is made in favour of integration, since the organisational goal is relatively more valuable than private goals; at low prices the trade-off goes the other way, in favor of outsourcing. Anything that affects equilibrium prices will therefore have an indirect effect on the degree of integration.

In an industry in which several enterprises face the decision whether to integrate or to outsource, of course, market quantity and price will depend on choices of ownership structure. If integration is more productive and all enterprises integrate then too much to be taken up by existing demand might be produced; price would then need to fall, encouraging some firms to switch to non-integration and thus reducing the quantity supplied. Product-market clearing will therefore jointly determine quantity, price and ownership structures.

Trade policy provides an ideal proving ground for our model, since it generates a plausibly exogenous source of equilibrium price variation. The degree of trade protection will obviously affect equilibrium prices; however, it is likely to be independent of firms' organisational choices.

The first-order effect of a tariff is to raise the price of the imported good. Thus, all else being equal, the higher the tariff, the more integrated firms in the industry should be. Similarly, if two countries' tariffs for the same industry are close then prices – and thus ownership structures – should be similar. Our theory therefore predicts convergence in ownership structure between countries with similar levels of protection.

Moreover, if two countries are members of a regional trade agreement, all else again being equal, enterprises in those two economies should have similar organisational structures. This effect should be more pronounced for customs unions, since the elimination of internal trade barriers and the adoption of common external tariffs should lead to price and organisational convergence between member countries.

The absence of an international dataset sufficiently comprehensive to support studies of firm organisation across a wide range of countries has limited empirical analysis on the effects of trade policy on organisational choices, but we overcome this by using a new dataset from Dun and Bradstreet (D&B) that contains both listed and unlisted plant-level observations for a large set of countries and territories in 2004. For each plant the dataset includes information about primary and secondary activities, as well as ownership (e.g. the domestic or global parent). By combining this information with US input-output tables we are able to construct firm-level measures of vertical integration.

By way of a concrete example, the input-output tables tell us that 7.8 cents of "automotive stampings" are required to produce one dollar's worth of a car; and the firm-level dataset tells us whether a particular car producer owns a plant that produces those stampings. Repeating this exercise for all inputs necessary to produce a car, we construct an index of vertical integration for the car producer.

Our empirical analysis relies on exogenous price variation induced by trade policy. In particular, we exploit the cross-country and cross-sectoral variation in most-favored-nation (MFN) tariffs. We obtain data on applied MFN tariffs at the four-digit SIC industry level for all World Trade Organisation members for which this information is available. We also collect systematic information on all regional trade agreements (RTAs) in force in 2004.

We examine first the relation between tariffs and organisational structure. In line with the predictions of our theoretical model, we find higher tariffs lead to more vertical integration at the firm level. The impact of tariffs on vertical integration is sizable. In our preferred estimation, a 100% tariff increase leads to a 2.15% increase in the vertical integration index, which implies that raising manufacturing tariffs from 1% to their mean level of around 5% increases vertical integration by more than 8%.

The theoretical framework also suggests trade policy should, through its effect on prices, affect the degree of organisational convergence across countries. In other words, convergence in corporate organisation – the tendency of industries to be characterised by the same ownership structure across countries – may result from standard neoclassical market forces: namely, the law of one price. In line with our predictions, we find differences in average sectoral vertical integration for a given country pair are significantly greater in those sectors in which differences in MFN tariffs are larger.

Moreover, we examine the relationship between the degree of sectoral organisational convergence and common membership in an RTA. Our theory suggests that, all else being equal, liberalisation of product markets between two countries should lead to more similar product prices and thus more similar ownership structures within industries. Our empirical results show ownership structures are, indeed, more alike for members of RTAs. We find the difference in average sectoral vertical integration to be around 9% smaller for country pairs engaged in RTAs; in line with the predictions of our model, this effect is found to be stronger for older trade agreements, which are more likely to have fully eliminated trade barriers among member countries.

Our model also suggests price and organisational convergence should be stronger for customs unions, in which members impose common external tariffs vis-à-vis non-members, than for free trade areas. Indeed, we find customs unions are characterised by a lower difference (approximately 18.5%) in vertical integration indexes.

In summary, we find strong evidence that firms' decisions regarding whether to vertically integrate or source inputs at arm's length are, indeed, affected by product market prices. In particular, higher prices imply more vertically integrated firm structures. Moreover, we show globalisation, by leading to convergence of product market prices, causes firm structure to be more similar across countries in a given sector.

This article is based on Trade Policy and Firm Boundaries, co-authored by Laura Alfaro (Harvard Business School), Paola Conconi (Université Libre de Bruxelles), Harald Fadinger (University of Vienna) and Andrew Newman (Boston University).

Partisanship and protection: tariff versus antidumping

Antidumping has become the most important contingent protection tool in the past 20 years. Veysel Avsar (Florida International University) looks at a much-discussed phenomenon from a new point of view. His work was joint winner of the Best Paper Prize at this year's GEP Postgraduate Conference.

Veysel Avsar

Limited to developed countries until the late 1980s, the use of antidumping (AD) has increased worldwide over the past decade. According to Bown (2008), more than 40 members of the World Trade Organisation have become active users of AD. WTO records show there were 4,364 AD cases initiated between 1991 and 2007.

The main difference between AD and other protection tools is that a firm has to file an investigation and provide evidence that an exporter's price is lower than the "fair price" normally charged in the home market. In addition to this, it has to prove the domestic industry is "materially injured" by this different pricing in different markets (WTO 1995, Articles 2.1 and 3.4).

Aggarwal (2007) notes three possible perspectives for the rationale behind the proliferation of AD: the political perspective, the political economy perspective and the economic perspective.

The first two argue that AD is a GATT/WTO legal trade remedy used to provide protection to domestic firms damaged by the imports of foreign competitors – in other words, that AD activity is motivated by protectionism. On the other hand, according to the economic perspective, AD is a policy aimed at preventing predatory dumping, a situation where unfair pricing drives domestic firms out of the market.

Building on the political economy perspective to AD, my paper finds evidence that the political ideology of governments has an effect on AD filing and the decision to impose AD duties.

The theoretical framework is motivated by the Stolper-Samuelson theorem, which suggests it is capital owners who gain from a shift towards protection of capital-intensive goods and wage earners who suffer from a shift towards protection of labour-intensive goods. This is where the role of political ideology becomes a consideration.

The political economy literature suggests a party to the left of the ideological spectrum represents workers and one to the right represents capital owners. In addition, trade policy is one of the policy instruments that might enable a political party to differentiate itself from others to compete for votes. Political economists who emphasise partisan-based trade policy have to date used its redistributive consequences as their pivotal argument.

Consequently, an increase in leftist orientation for a government can be interpreted as an increase in the weight placed on the welfare of wage earners compared to capital owners. The result is reflected in an increase in the protection for labour-intensive goods, whereas the opposite holds for capital-intensive goods.

Since tariff is the major protection tool, I first investigate how a government's political ideology affects tariffs for three-digit ISIC industries. Following the argument that AD is a substitute policy instrument for industries that do not receive adequate protection via tariffs, I also explore the link between political ideology and the probability of AD initiations. Finally, my focus turns to a government's decision to impose AD duty and the role of partisan preferences in this decision.

The analysis is based on recently available data on three-digit ISIC industries' trade, production and protection, as well as the well-known Global AD Database – both of which are provided by World Bank. The findings can be summarised as follows.

The tariff level for an industry increases with the labour intensity of that industry when a left-wing (pro-labour) government in is power. In addition, following the substitution argument regarding tariff and AD initiations, I show an increase in the leftist orientation of a government makes labour-intensive industries – which already grant higher protection via tariff – less likely to file an AD petition. Evidence regarding the decision to impose AD duty also demonstrates that left-wing governments, which tend to increase the returns to labour, are more likely to approve AD cases involving industries that are more labour-intensive.

These findings – subjected to a number of robustness checks, including the different treatment of ideology measure and the correction of sample selection in the set of AD initiations – are in line with earlier works on partisan trade policy.

However, the main contribution of this study is that it uses industry data to analyse the role of political ideology for the first time in the political economy literature. The AD exploration also represents the first attempt to integrate AD in an analysis of partisan trade policy. Although AD is an administrative protection tool that includes a set of necessary procedures and rules to follow, this study clearly points out the political bias in AD actions in the form of partisan preferences.

References/further reading

- Aggarwal, A (2007): The Antidumping Agreement and Developing Countries, Oxford University Press.
- Beck, T, G Clarke, A Groff, P Keefer and P Walsh (2001): New Tools in Comparative Political Economy: The Database of Political Institutions, World Bank Economic Review, 15, 165-176.
- Bown, C P (2008): The WTO and Antidumping in Developing Countries, Economics and Politics, 20(2), 255-88.
- Bown, C P (2009): Global Antidumping Database, available at www.brandeis.edu/~cbown/global_ad/.
- Dutt, P and D Mitra (2005): Political Ideology and Endogenous Trade Policy, Review of Economics and Statistics, 87, 59-72.
- Epstein, D and S O Halloran (1996): The Partisan Paradox and the US Tariff, 1877-1934", International Organisation, 50, 301-324.
- Milner, H and B Judkins (2004): Partisanship, Trade Policy and Globalisation: Is There a Left-Right Divide on Trade Policy?, International Studies Quarterly, 48(1), 95-119.
- Nicita, A and M Olarreaga (2006): Trade, Production and Protection, 1976-2004, World Bank Economic Review, 21(1).
- Prusa, T J (2001): On the Spread and Impact of Antidumping, Canadian Journal of Economics, 34(3), 591-611.
- Zanardi, M (2004): Antidumping: What Are the Numbers to Discuss at Doha?, The World Economy, 27(3), 403-433, 15:1, 165-176.

The mirror effect: young and old workers' views on free trade

Are young and old workers' subtly differing attitudes towards trade liberalisation due purely to psychological factors? In research presented at GEP's International Trade: Firms and Workers conference, Erhan Artuc (Koç University) argues that economic considerations also form part of the explanation.

Erhan Artuc

"In most cases, despite the presence of youthful protesters in Miami, young and old alike hold similar, supportive views of trade. Differences in the intensity of that support reveal some age differences but show that older people are less likely to express strong support for increased trade." – Pew Research Centre Commentary, November 2003

According to the 2002 Pew Global Attitudes Survey, both young and old show support for free trade, with the young more supportive in most of the countries that participated. We can see a similar pattern in General Social Survey's question about the North American Free Trade Agreement, as well as in polls relating to Poland's accession to the Customs Union. Here, to shed more light on this issue, I summarise the results of my own research.

As illustrated by, for example, Na and Duckitt (2003) in their study of attitudes among Koreans, old people are generally less open to change. The reason for the generational difference in support for trade liberalisation might be psychological, but – without rejecting this plausible explanation – I will try to show why there is also an economic factor that should be taken into account.

The standard Heckscher-Ohlin model assumes perfect labour mobility across sectors and therefore factor price equalisation. Same-type workers, regardless of their sectors, will be affected by free trade in the same way, as it is assumed they can switch sectors easily. However, it is also assumed workers cannot change occupations and so will be split according to their occupations, some of which will support free trade and some of which will oppose it. It therefore appears mobility has something to do with being unanimous or divided in supporting free trade.

We can combine this simple intuition from trade literature with the models of labour economists who find younger workers are more mobile than older workers. Using these two considerations, we might conclude young workers will be more unanimous and old workers more split in their support for free trade.

A recent paper by Falvey, Greenaway and Silva (2010) reports that in a skill-abundant country after trade liberalisation it will be more difficult for older workers to acquire new skills, thus making older workers more likely to lose out than younger workers. Falvey, Greenaway and Silva use skill mobility to explain the generational differences in supporting free trade, but other types of mobility might affect support as well.

For example, older workers are more likely to hold sector-specific human capital, which will be destroyed if they change sectors after a trade shock. Implicit contracts might reduce mobility of older workers, since they get closer to the surplus they have been promised implicitly; or they might simply have a better job match. There might also be personal reasons limiting the mobility of older workers, who are more likely to own a house, to have children, to have a spouse working in the same city – the sort of non-pecuniary moving costs first introduced to the literature by Groot and Verberne (1997).

All possible mobility explanations go in the same direction: older workers are less mobile and therefore more likely to get hurt if they are in the import competing sector. However, there is another basic factor that would affect their support in the opposite direction.

Older workers have less time to work ahead of them and so might be less worried about their wages and more concerned about the purchasing power of their savings. Free trade should reduce consumer price indexes, so workers close to retirement should be happy about free trade if they will be able to consume more with their pensions.

Unfortunately, although they all seem equally important, it is impossible to combine all mobility explanations from the literature in the analysis. Focusing on sectoral experience, non-pecuniary mobility costs and time horizon, I estimate a model based on Keane and Wolpin (1997) and Artuc, Chaudhuri and McLaren (2008), using the Current Population Survey and the National Longitudinal Survey of Youth.

I find sectoral experience is more important than market experience and older workers will lose most of their human capital if they change sectors after trade liberalisation. I also find non-pecuniary moving costs are large and increase further with age, further reducing the mobility of older workers.

After the estimation exercise I simulate a trade liberalisation in the US metal-manufacturing sector, which, particularly in the case of the steel industry, has been especially vulnerable to trade shocks. The simulation shows young workers who are more mobile compared to old will leave the metal sector rapidly, while the adjustment process for older workers will be much slower. Although wages of young and old workers both decrease, young workers, because they can change sectors, are affected only mildly.

The welfare of workers does not depend purely on their current wages: the present discounted value of future wage flows also plays a part. Mobile workers can choose a sector with higher wages in the future, so even if their current wages decrease they might be better off if pay in alternative jobs rises. We can think of this concept as akin to the "options" in finance literature. Much as a financial option will always have a positive value even if the expected return is negative, so younger workers will have the option to change sectors – while older workers will not.

After a trade shock wages in the metal sector will decrease – but option values will increase, since wages in other sectors will go up. Young workers' losses in wages will therefore be partially compensated by the increase in their option values, which will not be the case for those who are middle-aged or older. Thanks to their time horizons, those very close to retirement will not be greatly affected.

Finally, the opposite will apply in other sectors. Young workers in exporting sectors will enjoy the wage increase but suffer from the drop in their option value, since they will lose the option of working in the metal sector; meanwhile, older workers in exporting sectors will benefit. Overall, young workers in the metal sector will lose only a little, while young workers in the exporting sectors will gain only a little; and older workers in the metal sector will lose a lot, while older workers in the exporting sectors will gain a lot. This is the mirror effect.

References/further reading

- Artuc, E (2006): Essays on Trade Policy and Labour Mobility: Intergenerational Effects of Trade Liberalisation, University of Virginia dissertation.
- Artuc, E, S Chaudhuri and J McLaren (2008): Delay and Dynamics in Labour Market Adjustments: Simulation Results, Journal of International Economics, 75.
- Falvey, R, D Greenway and J Silva (2010): Trade Liberalisation and Human Capital Adjustment, Journal of International Economics, 81.
- Groot, W and M Verberne (1997): Aging, Job Mobility and Compensation, Oxford Economics Papers, 49.
- Keane, M and K Wolpin (1997): The Career Decisions of Young Men, Journal of Political Economy, 105.
- Na, E Y and J Duckitt (2003): Value Consensus and Diversity Between Generations and Genders, Social Indicators Research, 63(2).

Contractual frictions and global sourcing

The issue of how firms sort themselves into global sourcing models has attracted major interest, yet the empirical relevance of the resulting theories remains unclear. Marcel Smolka (Tübingen University) sheds new light on the question. His work was joint winner of the Best Paper Prize at this year's GEP Postgraduate Conference.

Marcel Smolka

Recent contributions to the theory of international trade argue that the way in which firms organise trade in intermediate inputs is intimately related to a country's relative factor endowment and an industry's production technology (see Antràs, 2003, 2005).

This result derives from a combination of the property-rights theory of the firm in the spirit of Grossman and Hart (1986) and a monopolistic competition model of international trade along the lines of Helpman and Krugman (1985). In the presence of incomplete contracts and customised inputs, the contractual relationship between a headquarter firm and an intermediate input supplier is plagued by a hold-up problem, which materialises in ex-post Nash bargaining over the production surplus and provokes inefficient ex-ante investment levels in a sub-game perfect Nash equilibrium.

Headquarter firms face a choice of organising global sourcing of their inputs: they may engage in inputs trade at arm's length (international outsourcing) or they may access a foreign input source within firm boundaries of control (vertical foreign direct investment). The choice of organisational form thus appears as an instrument for restricting the efficiency loss induced by hold-up by allocating residual rights of control over the supplier's input (and thus enhanced investment incentives) to the party that bears the lion's share of production costs. In a world of heterogeneous firms – and considering both domestic and offshore sourcing opportunities – the theory generates an appealing set of predictions in terms of how firms sort themselves into global sourcing modes (see Antràs and Helpman, 2004, 2008).

The ingenuity of this theory notwithstanding, the empirical relevance of Antràs-type global sourcing models remains largely unclear. Arguably, this is due to (a) the fact that a full test of the theory is hugely demanding on the data and (b) the large and almost bewildering number of possible industry equilibria predicted by the model, depending on the underlying parameter constellations. According to Antràs (2010): "The preliminary results of this empirical research agenda seem broadly consistent with the predictions of our theory, although future work is needed to better discriminate our model from alternative theoretical explanations of the evidence. The increasing availability of firm-level data on the sourcing decisions of firms should facilitate this task." Indeed, conclusive evidence remains highly desirable, because whether the Antràs theory holds has fundamental normative implications (see Antràs and Staiger, 2008, and Ornelas and Turner, 2008).

Against this backdrop, our research attempts to approach empirically the global sourcing decisions of firms by using a rich survey-based dataset with information on Spanish manufacturing firms' sourcing behaviour for the years 2006 to 2008. Our work, which is still in progress, comprises three consecutive steps, each intended to examine the topic from a different angle.

Firstly, we explore the micro-structure of our data along several dimensions, most relevantly the location choice (domestic versus foreign) and the organisational mode (integration versus outsourcing) of firms' input sourcing. In so doing we establish a number of stylised facts that have gone largely unnoticed in the literature.

We find pure outsourcing strategies are relatively common, while integration is more common as an integral part of increasingly complex sourcing strategies that involve more than one location and organisational form. Such complex strategies are far more prevalent among large firms that are also heavy exporters than among smaller firms. In the Spanish case offshoring is mainly an affair of obtaining inputs from high-wage countries within the European Union rather than arbitraging on low-wage foreign labour, as assumed in most of the theoretical literature.

When we investigate the productivity-sourcing nexus in more detail, estimating the sourcing premia of firms with different sourcing strategies, our regression results substantially underpin the relevance of firm heterogeneity in both the location and the organisational choice of global sourcing. Generally speaking, firms source through foreign integration perform best in terms of total factor productivity, whereas firms exclusively outsourcing to domestic suppliers perform poorest. There is also evidence that firms pursuing foreign outsourcing are on average more productive than domestic-integration firms, but we identify multiple sourcing modes as a key driving force behind these patterns.

In the second stage of the study our focus shifts towards a more explicit treatment of the Antràs and Helpman (2004) model. We start with a theoretical characterisation of the voluminous set of potential industry equilibria, highlighting the interplay among fixed and variable costs, firm productivity and the relative weight of the supplier's input in the contractual relationship as a whole. Based on a theory-grounded estimation of total factor productivity as a firm-specific, time-varying phenomenon, our analysis then reverts to non-parametric estimation techniques to identify relevant cases of this complex interplay, assuming the model is correct.

Applying a unified regression framework and bringing in a number of controls, we subsequently find that, given the relevant cases identified through non-parametric methods, the outcome can be rationalised as an Antràs and Helpman (2004) data-generating process. Since the survey information is available for three consecutive years, we are in a position to test whether firms self-select into specific sourcing modes based on ex-ante productivity differentials, as suggested by the model. The data point towards a selection pattern consistent with the theory.

Finally, building on our results so far, we intend to isolate the effect on a firm's sourcing strategy of what Antràs and Helpman (2004) dub the headquarter intensity of production in interaction with the firm's relative productivity level. In addition, we implement the idea of varying degrees of contractual frictions in the supplier input in the sense of Antràs and Helpman (2008).

If it is true that technology determines the importance of the supplier input in the production process (and thus the headquarter intensity of production) then we should observe productivity to be a determinant of the integration-versus-outsourcing choice only for sufficiently high headquarter intensities. This proposition derives from a certain fixed cost ranking of sourcing categories, which we have shown to be predominant in the previous steps of our project. The difficulty lies in measurement of headquarter intensity, which in previous studies has been straightforwardly proxied by an industry's capital intensity. Following a similar approach, we obtain promising yet not fully conclusive results at this stage of the analysis.

This article is based on Do Contractual Frictions Shape Global Sourcing? Evidence From Spanish Firm-Level Data, co-authored by Marcel Smolka and Wilhelm Kohler (both Tübingen University).

References/further reading

- Antràs, P (2003): Firms, Contracts and Trade Structure, Quarterly Journal of Economics, 118(4), 1375-1418.
- Antràs, P (2005): Property Rights and the International Organisation of Production, American Economic Review Papers and Proceedings, 95(2), 25-32.
- Antràs, P (2010): International Trade and Organisations, NBER Reporter 2010 No. 2, Research Summary.
- Antràs, P and E Helpman (2004): Global Sourcing, Journal of Political Economy, 112(3), 552-580.
- Antràs, P and E Helpman (2008): Contractual Frictions and Global Sourcing, in E Helpman, D Marin, and T Verdier (eds), The Organisation of Firms in a Global Economy, Harvard University Press, 9-54.
- Antràs, P and R W Staiger (2008): Offshoring and the Role of Trade Agreements, NBER Working Paper No. 14285.
- Grossman, S J and O D Hart (1986): The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration, Journal of Political Economy, 94(4), 691-719.
- Helpman, E and P Krugman (1985): Market Structure and Foreign Trade, MIT Press.
- Ornelas, E and J L Turner (2008): Trade Liberalisation, Outsourcing and the Hold-Up Problem, Journal of International Economics, 74(1), 225-241.

China: the next steps towards superpower status

China's economic rise has continued apace since GEP established a centre at the University of Nottingham, Ningbo, two years ago. Now the country's next steps towards superpower status are to come under the spotlight at a prestigious conference.

GEP's centre in China will welcome leading academics and economists from around the world in November when it hosts its third major international conference.

The event, Enterprise and Labour Market Adjustment in China's Transition, will examine the likely next phases of the nation's journey to economic superpower status.

The prestigious gathering will mark two years since GEP underlined its commitment to studying China by opening a branch at the University of Nottingham, Ningbo.

The country's role at the heart of the global economy has only been reinforced by the financial crisis, with China widely seen as the "engine-room" of worldwide recovery.

Delegates at the conference, to be held on 9 and 10 November, will address themes including enterprise adjustment, foreign direct investment, labour markets and trade.

The event will also feature the third The World Economy Annual China Lecture, to be delivered by Martin Wolf, Chief Economics Commentator of The Financial Times.

Earlier this year Wolf, one of the most influential voices in economics, used a speech at GEP in Nottingham to call on China to do more to fulfil its growing obligations.

He argued that China's future interests lie in maintaining a stable global system – with a dangerous world of "power politics" a likely result if it chooses otherwise.

Wolf said: "China is one of the few countries that must take account of the impact of its actions on the world economy. It cannot just 'import order' – it must 'export order', too."

Other speakers in Ningbo will include Professor Shujie Yao, co-ordinator of GEP's China and the World Economy programme.

Professor Yao recently called for "mutual compromise" amid suggestions of deterioration in relations between China and the United States in the wake of the credit crunch.

Writing in China Daily, he said: "The rapidity of China's advancement in the aftermath of the financial crisis – and the simultaneous weakening of the US's clout – has undoubtedly shocked many in the US.

"But the US needs China for its huge market and low-cost exports – and China needs the US because it is the biggest consumer market in the world and possesses the technology China requires."

Professor Yao, also head of the University of Nottingham's School of Contemporary Chinese Studies, said: "As ever, we are delighted to be returning to Ningbo.

"It is vital for us to have a presence and a profile in a country that has an ever-growing importance in the story of globalisation and the world economy in general.

"The standard of speaker we have been able to attract yet again demonstrates our foresight in establishing GEP in China and our faith in its continued success."

The conference is being sponsored by GEP, the School of Contemporary Chinese Studies, Fudan University's China Centre for Economic Studies and Zhejiang University's College of Public Administration.

A full report on the event will feature in the next GEP Newsletter.

The University of Nottingham, Ningbo, China

Chinese SMEs forced to wine and dine to survive

The importance Chinese business places on "guanxi", the art of informal networking, is well known, but research by GEP in China's Alex Newman (University of Nottingham, Ningbo, China) has shed new light on how utterly crucial it is to many companies – raising worrying implications for the nation's small and medium-sized firms.

Alex Newman

Continued discrimination by banks has made splashing out on entertaining vital to the survival of many new firms in China, research by GEP has revealed.

According to a pioneering study, small and medium-sized private companies have little choice but to wine and dine key contacts if they hope to endure.

On average they spend almost 7% of their total assets on building up "social capital" – the web of relationships that helps them thrive.

Such an approach is crucial to gaining leverage in a system that still heavily favours China's state-owned enterprises.

The findings, widely published in the Chinese media, highlight the continuing importance of "guanxi" – informal networking – in the sphere of Chinese business.

But they also expose the problems faced by the nation's privately-owned small and medium-sized enterprises (SMEs).

Study co-author Alex Newman said: "Chinese companies are clearly influenced by the social and business relationships they have.

"These relationships might be with executives at other firms, bank officials or government officials.

"They allow companies to gain preferential access to a whole host of scarce information and resources, including financial capital.

"This is especially important when China's state-owned banks still discriminate against the private sector in their lending practices.

"But informal financing isn't necessarily appropriate if China wants to develop world-class private firms than can compete globally.

"A generous expenses account can only get you so far, and in the long term policymakers need to improve access to bank financing."

The research examined data from annual accounting reports filed with the National Bureau of Statistics by 65,551 firms from 2000 to 2006.

Newman, a Lecturer in International Business at Nottingham University Business School, Ningbo, China, described the amount of entertainment expenditure as "significant".

He said: "It's likely to result from the fact that private companies in China were and continue to be discriminated against by the banking sector.

"Until 1998, when the constitution was changed, state-owned commercial banks were instructed to lend only to state-owned enterprises.

"Even now banks still consider private enterprises riskier than their public-owned counterparts – and the problem is even bigger for SMEs.

"This is why an SME's entertainment expenditure represents such a crucial investment in building business and social relationships."

The study concluded that for many SMEs social capital effectively acts as a substitute for fixed assets as security for short-term lending.

By contrast, firms that are able to access long-term financing generally have less need to splash out on meals, gifts and other expenses.

The research warns such obvious and widespread reliance on guanxi might not benefit Chinese SMEs or the country itself in the long term.

Co-author Alessandra Guariglia, of Durham Business School, said: "Without adequate social capital, SMEs may face huge difficulties in obtaining the short-term financing so vital for them to survive their early years.

"But managers should also recognise the consequences of becoming over-reliant on these relationships, as well as what they might entail."

Fellow author Jun Du, of Aston Business School, added: "Wining and dining might have supported the growth of Chinese SMEs until the present day but may not necessarily take it much further."

To see China Daily's coverage of the research visit http://www.chinadaily.com.cn/business/2010-07/29/content_11065837.htm

Forthcoming events

www.gep.org.uk/events

Conferences, seminars and public lectures have always been a crucial element of GEP's outreach strategy. One of the key purposes many of these events serve is to offer students the chance of genuine interaction with some of the most important figures in the sphere of economics.

The Annual GEP in China Conference

Enterprise and Labour Market Adjustment in China's Transition

9 and 10 November 2010

University of Nottingham, Ningbo, China

Leverhulme Globalisation Lectures

Roger Bootle, Managing Director, Capital Economics

12 October 2010

Andrew McLaughlin, Head of Communications and Group Chief Economist, RBS Group

25 November 2010

GEP Seminars

Johannes van Biesebroeck, Katholieke Universiteit Leuven

15 November 2010

Nicolas Coeurdacier, London Business School

22 November 2010

Ariell Reshef, University of Virginia

9 December 2010

For further details contact sue.berry@nottingham.ac.uk

New GEP Research Papers

www.gep.org.uk/research_papers

Most of GEP's output is published first through the GEP Research Papers Series. Papers are generally submitted to peer-reviewed journals in the wake of comment and feedback, featuring in publications including the Journal of International Economics and the European Economic Review.

2010/18
Spiros Bougheas and Raymond Riezman
Market Entry Costs, Underemployment and International Trade

2010/17
Emmanuel Amissah, Spiros Bougheas and Rod Falvey
Financial Constraints, the Distribution of Wealth and International Trade

2010/16
Andreas Hoefele
Offshoring and Growth With Two Factors

2010/15
Paulo Bastos and Peter Wright
Exchange Rates and Wages in Unionised Labour Markets

2010/14
Richard Upward, Zheng Wang and Jinghai Zheng
Weighing China's Export Basket: An Account of the Chinese Export Boom, 2000-2007

2010/13
Jun Du, Alessandra Guariglia and Alexander Newman
Does Social Capital Affect the Financing Decisions of Chinese Small and Medium-Sized Enterprises?

GEP Researchers

www.gep.org.uk/leverhulme/people/people_index.php

GEP's core of Internal Research Fellows allows it to retain its respected standing as one of the largest clusters of academics anywhere in the world studying the economic aspects of globalisation. This core is backed up by a global network of External Research Fellows and Policy Associates.

Internal Research Fellows

Professor Daniel Bernhofen (Director), Dr Marta Aloi, Dr Spiros Bougheas, Dr Fabrice Defever, Dr Bouwe Dijkstra, Professor Sourafel Girma, Professor David Greenaway, Dr Andreas Hoefele, Dr Richard Kneller, Professor Chris Milner, Dr Stephen Morgan, Dr Arijit Mukherjee, Professor Doug Nelson, Dr Alejandro Riaño, Professor Lina Song, Dr John Tsoukalas, Dr Richard Upward, Dr Maria Garcia Vega, Professor Shujie Yao, Dr Zhihong Yu, Dr Jing Zhang

External Research Fellows

Kym Anderson (University of Adelaide), Professor Bruce Blonigen (University of Oregon), Professor John Brown (Clark University), Professor Marius Brülhart (University of Lausanne), Professor Paul Collier (University of Oxford), Professor Carl Davidson (Michigan State University), Professor Alan Deardorff (University of Michigan), Dr Agelos Delis (Cyprus University), Dr Hartmut Egger (University of Bayreuth), Professor Peter Egger (Swiss Federal Institute of Technology, Zürich), Dr Robert Elliot (University of Birmingham), Professor Simon Evenett (University of St Gallen), Professor Rod Falvey (Bond University, Australia), Dr Switgard Feuerstein (Erfurt University), Dr Joakim Gullstrand (Lund University), Professor Jonathan Haskel (Queen Mary, University of London), Dr Tom Ivlevs (Bristol Business School), Dr Liza Jabbour (Manchester University), Dr Beata Javorcik (Oxford University), Professor Wilhelm Kohler (Tübingen University), Professor Udo Kreickemeier (Tübingen University), Dr Maurice Kugler (Harvard University), Professor Xiaoxuan Liu (Chinese Academy of Social Sciences), Professor Sugata Marjit (Centre for Studies in Social Sciences, Calcutta), Professor Steve Matusz (Michigan State University), Dr Daniel Mirza (University of Rennes), Dr Catia Montagna (University of Dundee), Professor Innwon Park (Korea University), Professor Pascalis Raimondos-Møller (University of Copenhagen), Professor Ray Riezman (University of Iowa), Dr Fredrik Sjöholm (Research Institute of Industrial Economics, Stockholm), Professor Constantinos Syropoulos (Drexel University), Professor Mathew Tharakan (University of Antwerp), Professor Vitor Trindade (University of Missouri, Columbia), Professor Jim Tybout (Penn State University), Professor Rod Tyers (Australian National University), Professor Hylke Vandenbussche (Catholic University of Leuven), Professor Ian Wooton (University of Strathclyde), Dr Zhihao Yu (Carleton University), Dr Xufei (Florence) Zhang (Middlesex University)

Policy Associates

Mary Amiti (New York Federal Reserve Bank), Bob Anderton (European Central Bank), Paulo Bastos (Inter-American Development Bank), Heather Booth di Giovanni (UK Trade and Investment, Department for Business, Innovation and Skills (BIS)), Cletus Coughlin (Federal Reserve Bank of St Louis), Peter Dodd (Department for Business, Innovation and Skills (BIS)), Andrew Gurney (HM Treasury), Tim Harcourt (Australian Trade Commission), Bernard Hoekman (The World Bank), Sébastien Jean (Centre de Recherche de Versailles-Grignon), Nannan Lundin (OECD), John Martin (OECD), Mauro Pisu (OECD), Joana Silva (The World Bank), Ken Warwick (Department for Business, Innovation and Skills (BIS))

The Globalisation and Economic Policy Centre

GEP – the Globalisation and Economic Policy Centre – is the major centre in Europe studying the impacts of globalisation and economic policy. One of the biggest of its kind in the world, the Centre has an impressive international reputation. Its academics have advised organisations including the Treasury, the OECD, the World Bank and the WTO.

GEP was established at the School of Economics at the University of Nottingham in 2001. Its research dissemination activities are structured around four research programmes that are linked by the common theme of globalisation:

- Theory and Methods
- Globalisation and Labour Markets
- Globalisation, Productivity and Technology
- China and the World Economy

GEP supports both basic scientific and policy-focused research. Its core staff comprises a group of Research Fellows based at Nottingham; a network of External Fellows from a number of universities in Western Europe, North America and Australia; and a forum of Policy Associates based in the policymaking community.

GEP publishes its own Research Papers Series, sponsors regular conferences and workshop programmes and supports a range of other outreach activities.

For more information visit **www.gep.org.uk.**

Further information

To learn more about GEP and related research activities please contact:

Sue Berry
Centre Manager
Leverhulme Centre for Research on Globalisation and Economic Policy
School of Economics
University of Nottingham
University Park
Nottingham NG7 2RD

Telephone: +44 (0) 115 951 5469

Email: sue.berry@nottingham.ac.uk

GEP Newsletter Editor: Alejandro Riaño

Leverhulme Centre
for Research on Globalisation and Economic Policy