The University of Nottingham

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Trade costs under the spotlight at major Malaysia conference

With Asia playing an increasingly important role in global trade, GEP's latest international conference, held in Malaysia and focusing on issues surrounding trade costs, had special significance. Fittingly, the event attracted participants from around the world – and proved an enormous success.

GEP added further strength to its ever-growing reputation in Asia when experts on the region's economy gathered for a prestigious international conference on trade.

Issues surrounding trade costs, trade development and infrastructure were discussed at the event, which also featured two keynote lectures.

Professor David Greenaway, GEP's founding Director and now Vice-Chancellor of the University of Nottingham, delivered the Boustead Annual Globalisation Lecture, while Professor Masahiro Kawai, of the Asian Development Bank Institute, gave The World Economy Annual Asia Lecture, sponsored by Wiley-Blackwell.

Other speakers included GEP's Professor Chris Milner, who presented a pioneering study of how trade costs can be viewed as opportunities for boosting exports.

The research could prove especially relevant to Asia as the region strives to maintain and increase its role as a key hub of the global economy.

Trade costs represent all the costs involved in delivering a good from its producer to its final user overseas, excluding the cost of producing the good itself.

· Masahiro Kawai gave one of two keynote lectures at GEP Malaysia's conference

Previous studies have traditionally focused on costs such as trade barriers, but Professor Milner and his co-authors concentrated on the costs arising from the likes of transport infrastructure, distribution, contract enforcement and legal and regulatory requirements.

Their research, which examined how trade costs affected exports in more than 70 countries and almost 160 industries over

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"All of our conferences have helped us establish an excellent reputation among the academic, think-tank and policymaking communities in Malaysia."

two decades, supports the theory that lower trade costs offer a source of comparative advantage – in the same way that, for example, lower labour or raw material costs do.

When these costs are comparatively low, the study concluded, they should be regarded as an "endowment" that a nation can exploit for competitive advantage within the global economy.

Professor Milner explained: "Economists are increasingly realising issues like poor transport infrastructure, language and the quality of institutions play a much more important role in encouraging or discouraging international trade and that these costs are greater than previously thought.

"Differences in trade costs capture the differences in the overall quality of countries' infrastructure and institutions and in the competitiveness and effectiveness of their business and policy environments.

"We concentrated on how those differences matter empirically to patterns of trade and found that trade costs are actually an 'endowment' that affects the pattern of comparative advantage and export composition.

"This fresh way of looking at trade costs opens up new avenues of research. It should be possible for governments to help enhance trade cost endowments and therefore boost comparative competitive advantage and ultimately the exports of a country's goods and services.

"Effective research in this area could uncover useful insights to help shape government policy and generate significant economic impact."

The conference, Trade Costs, Infrastructure and Trade Development in Asia, took place at GEP in Malyasia at the University of Nottingham's Seminyeh campus on 13 and 14 January.

Delegates from universities in Singapore and Malaysia and representatives from institutions including the Asian Development Bank and the Korea Institute for Economic Policy also addressed the event.

GEP in Malaysia's Cassey Lee, who has organised all three of the centre's international conferences, said: "Many people have remarked to me that the GEP conference is easily the best academic conference for economists in Malaysia. All of our conferences have helped us establish an excellent reputation among the academic, think-tank and policymaking communities in Malaysia." <

Conference welcomes esteemed delegates

GEP in Malaysia's conference on Trade Costs attracted an impressive array of speakers from around the globe. Here GEP PhD student Yoke Fong Hong reports on their contributions to a highly prestigious event.

Trade costs in a broader definition include not only transportation costs but infrastructure, institutional quality, trade policies, enforcement of law and business environment. Given that such costs play a crucial part in determining trade patterns and that Asia's own role in international trade has grown significantly in recent decades, this conference proved especially relevant.

The event began with Douglas Brooks (Asian Development Bank) presenting his paper analysing Asia's melting trade costs, particularly in the context of China and India. This was followed by Prabir De (Research and Information System for Developing Countries, New Delhi), whose discussion on trade costs in Asia focused on price and non-price barriers. Speaking on the issues and challenges faced by Malaysia, Wai Heng Loke (University of Malaya) concluded there is still room for a further reduction in transportation costs.

Chris Milner (GEP, University of Nottingham) discussed his work on how trade costs affect trade patterns and can therefore be viewed as a source of comparative advantage. Looking at inter-country differences in trade costs induced by cross-country differences in the infrastructure and institution characteristics, he concluded that trade costs are a source of comparative advantage at the global rather than local level.

Shandre Thangavelu (National University of Singapore) looked at the impact of non-tariff barriers such as customs and regulatory environments on the export growth and regional integration in ASEAN. While concluding that a reduction of non-tariff barriers tends to have a significantly positive impact on trade performance, Dr Thangavelu pointed out that ASEAN nations are facing several major challenges, among them diminishing marginal returns to economic integration, with ASEAN members as rivals and a lack of leadership among signatories.

In two separate papers, Naohiko Ijiri (Nihon University) and Rasyad Parinduri (GEP, University of Nottingham, Malaysia) discussed the relationships between transportation and trade. Dr Ijiri stressed that air-freight service is an important transportation mode for international trade in Japan, especially for time-sensitive products such as parts and components. Focusing on local trade between villages and cities in Indonesia, Dr Parinduri found that improvements in transportation infrastructure have led to a reduction in transportation costs, in turn bringing about lower prices in villages and a larger volume of trade between villages and cities.

Jayant Menon (Asian Development Bank) employed a general equilibrium framework to analyse the economic effect of

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"Given that Asia's own role in international trade has grown significantly in recent decades, this conference proved especially significant."

• Delegates at GEP in Malaysia's Trade Costs conference, which discussed Asia's ever-increasing role in international trade

infrastructure improvement that seeks to reduce the costs of intra-regional trade. He highlighted the impact of the Second Mekong International Bridge between Mukdahan Province in Thailand and Savannakhet Province in Lao People's Democratic Republic. Besides increasing inter-regional trade in both directions, the project has led to a reduction in poverty incidence in the two adjacent provinces.

Other speakers included Fabrice Defever (GEP, University of Nottingham), who presented his work on the issue of spatial export dynamics; Hea-Jung Hyun (Korea Institute for International Economic Policy), who discussed trade openness and vertical integration in the case of Korea; Chang Liu (GEP, University of Nottingham, China), who spoke on the financial crisis and FDI's interest in China's hinterland; Jai Mah (Ewah Womans University), who examined the special and differential treatment of developing countries with regard to export-promoting policies under the WTO; and Joseph Alba (Nanyang Technological University, Singapore), who studied the effects of hub-and-spoke trade agreements.

As reported in more detail in the following pages, in the Boustead Annual Globalisation Lecture, entitled The Globalisation of Higher Education: The Emergence of Asia, Professor David Greenaway (GEP, University of Nottingham) gave a detailed insight into the direction of higher education in the global age and described how the emergence of Asia has enlarged the global market of higher education significantly. Using the experience of the University of Nottingham through its China and Malaysia campuses as an example, Professor Greenaway explored the role and future prospects of global higher education in Asia.

In the 2010 The World Economy Annual Asia Lecture, sponsored by Wiley-Blackwell and entitled Rebalancing Asia's Growth, Professor Masahiro Kawai (Asian Development Bank Institute) pointed out that, as the global imbalance might have been a cause of the current worldwide financial crisis, Asia should give attention to rebalancing growth. He suggested that, in addition to demand and supply policies, this rebalancing could be achieved by closer policy co-operation among Asian countries in terms of, for example, exchange rates. <

Further details of the papers presented at the conference can be found at www.gep.org.uk.

Asia set to drive globalisation of higher education for years

With the prospects for the further globalisation of university education strong, the process is likely to impact significantly on the development of the higher education sector in the years ahead – and, according to GEP's founding Director, Asia will increasingly be at its heart.

Asia will play a major role in the continuing globalisation of higher education for years to come, GEP's founder told the Centre's conference on Trade Costs.

Delivering the Boustead Annual Globalisation Lecture, Professor David Greenaway highlighted the region as a key driver behind increasing numbers of students studying overseas.

He said: "Asia is a very interesting dynamic. The economic centre of gravity globally is shifting very rapidly to Asia, and the higher education sector there is developing extremely quickly."

Citing statistics from the Organisation for Economic Co-operation and Development, Professor Greenaway said outward student mobility was dominated by Asia.

Of the top 20 countries sending students overseas, more than half are Asian, with the biggest players being China and India.

Also prominent is South Korea, which has more than 100,000 outward students each year from a population of less than 50 million.

In terms of where overseas students choose to study, said Professor Greenaway, Asia is not yet a big player – but this, he added, is set to change.

"The sector is still dominated by the English-speaking countries – the US, the UK, Australia, Canada, New Zealand – but Asian economies are emerging," he said.

"China receives 400,000 students a year and rising. Malaysia has a comparatively small population but still receives 60,000 inwardly mobile students."

Similarly, North American and Western European universities still monopolise the top of the international league tables in the field of research excellence – but Asian universities are rising fast.

"There are some eye-watering investments taking place in many Asian countries at the moment, particularly China and Korea," said Professor Greenaway.

"Others are upgrading their higher education sectors and in the process investing significantly in new markets like Kazakhstan and Vietnam. India has not really started yet, but when it does get its act together we will see it develop into a major player."

Professor Greenaway singled out China as the Asian country making a real impact in the promotion of global scientific research.

"The economic centre of gravity globally is shifting very rapidly to Asia, and the higher education sector there is developing extremely quickly."

• Professor Greenaway addresses the audience for the 2010 Boustead Annual Globalisation Lecture

"Significant investments are taking place in China on a very select basis in order to promote world-class research. Six of the top 20 most-cited papers in chemistry and physics in 2008 were written by Chinese authors," he said.

"The UK and China were second and third respectively in terms of citations in engineering. There is a very strong focus on technology in Chinese education, which spectacularly exceeds that of the West.

"I just don't buy the argument that China produces mainly doers rather than creators – and that will be very important to China's development over the next couple of decades."

Professor Greenaway played down concerns over the after-

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"The truth is that prospects for further globalisation of higher education are actually highly promising."

• Masahiro Kawai, who delivered the conference's second keynote lecture, with Professor Greenaway

effects of the global financial crisis and the impact it has had on public budgets.

"We have had big financial crises in the past, and this one will go away. The truth is that prospects for further globalisation of higher education are actually highly promising," he said.

Three million students worldwide study outside their country of domicile, yet this figure still accounts for only two per cent of students in higher education globally.

Professor Greenaway stressed that this highlighted the vast potential for growth, adding: "Emerging economies in Asia… offer enormous opportunities both for investment in R&D and development of new technology.

"Sure, it will mean increased competition – but it also means more opportunities for collaboration."

Referring to the A T Kearney Globalisation Index, which assesses the extent to which the world's most populous nations are globally connected, he emphasised the absence from the top 40 of China, India, Indonesia, Brazil, Pakistan and Russia.

He told his audience: "These are only six countries, but combined they are home to more than half of the world's population.

"The globalisation process still has a long way to go, and I think that it will impact significantly on the development of our sector." <

GEP welcomes headline-makers

GEP's newest Internal Research Fellow joined the Centre after making international headlines with a proposal to solve the crisis engulfing the eurozone. Meanwhile, the man widely regarded as the world's pre-eminent financial journalist returned to deliver a Levehulme Globalisation Lecture.

John Tsoukalas, a Lecturer at the Nottingham School of Economics, has joined GEP as an Internal Research Fellow.

Dr Tsoukalas's chief research interests are macro and monetary economics. He is currently also working on migration.

He joined GEP shortly after sparking widespread debate by suggesting a two-currency European Monetary Union could be the only solution to the deepening crisis enveloping the euro.

Under the proposed two-tier system a strong euro would be used in the EMU core economies and a weak euro in those nations struggling on the periphery.

Greece's financial woes have sent the euro plunging and called into question the stability of other faltering economies, such as Spain and Portugal.

Dr Tsoukalas said: "The time to consider a two-currency EMU may well now be upon us. Something needs to be done to restore faith in the euro, because at present we face hard facts that simply can't be ignored by policymakers.

"The turmoil in Greece and the growing pressure on Spain and Portugal aren't coincidental. They're symptomatic of a fundamental truth.

"The reality is that the eurozone isn't an optimum currency area. Periphery countries haven't achieved convergence and have actually diverged further.

"What we're seeing is markets responding to unfavourable economic fundamentals, rendering the euro's continued existence increasingly unsustainable."

Dr Tsoukalas and his co-author, Cardiff Business School's Dr Michael Arghyrou, detailed their plan in a discussion paper, The Option of Last Resort: A Two-Currency EMU.

They argued that any solution must meet several prerequisites, including preserving the credibility of the EMU as a low-inflation area and the euro as a strong currency.

It must also avoid favouring one set of taxpayers, be seen as credible by the markets and give under-pressure countries a realistic chance of completing necessary structural reforms.

An EU-based bail-out or IMF involvement were dismissed as too damaging to the EMU's credibility and likely to stretch the tolerance of electorates in core countries "to breaking point".

Allowing national defaults would also jeopardise the "fragile" European economic recovery and leave the credibility of the default nations "in tatters", said Dr Tsoukalas.

He added: "The conclusion has to be that, alongside determination for promoting reforms, the EMU needs a self-preserving plan to be used if all else fails.

"Under the temporary implementation of a two-currency EMU the core countries would continue to use the present currency, the strong euro.

"The periphery countries, for a certain period, would adopt the weak euro, but the bonds and external debt of these countries would stay in strong-euro terms.

"The European Central Bank would implement monetary policy much as it does now, the only difference being it would set two reference rates rather than one.

"Periphery countries would be able to join the strong euro when they have achieved sustainable real convergence. This would also help the EMU's enlargement, giving the young democracies of Central and Eastern Europe a chance of joining – initially as members of the weak euro.

"Above all, if worse came to worst, this proposal would preserve the EMU project, the long-term economic and political benefits of which are plain.

"We very much hope the outlook will improve soon and make the idea redundant – but if it doesn't then this may well prove the option of last resort."

Meanwhile, one of the most influential voices in economics visited GEP to discuss China's ever-growing role at the heart of the world financial system.

Martin Wolf, the Financial Times' Associate Editor and Chief Economics Commentator, delivered his latest Leverhulme Globalisation Lecture in early March.

Often described as the world's pre-eminent financial journalist, Wolf predicted much of the economic crisis in his book Fixing Global Finance.

He has recently turned his attention to Chinese exchange-rate policy, suggesting it has "distorted" not only China's own economy but the rest of the world's.

See the next edition of the Newsletter for a full report on his lecture. <

Interpersonal relationships in international trade

GEP's Nottingham Lectures in International Economics are intended as a "masterclass" for graduate students and faculty. In February the Centre welcomed James E Rauch (University of California, San Diego) to deliver the 2010 series. Here GEP Newsletter editor Alejandro Riaño reports on the visit.

With tariffs and transportation costs falling dramatically over the past couple of decades, focus has turned towards understanding the impact of informal barriers to trade – such as lack of information about investment opportunities and weak contract enforcement – that are more pervasive at an international level.

Attention has switched, too, to the subject of how the existence of information-sharing networks – for example, co-ethnic business societies and transnational business groups – helps to overcome these obstacles and so shape the patterns of global trade.

James E Rauch, Professor of Economics at the University of California, San Diego, shed fascinating light on these particular areas of research when he visited GEP on 16, 17 and 18 February to deliver the 2010 Nottingham Lectures in International Economics. He gave three lectures under the banner title Interpersonal Relationships in International Trade.

In his first lecture Professor Rauch demonstrated how informational frictions act as a trade barrier that is qualitatively different to the usual "iceberg" costs prevalent in trade models. Embedding these informational frictions in an otherwise standard one-good, two-factor model of trade in which production requires a joint venture of two producers delivers novel implications for the impact of international trade on relative wages, providing an explanation for the excess sensitivity of home wages to home endowments.

Professor Rauch's second lecture examined how matching frictions can improve heterogeneous firm models' ability to predict bilateral trade flows. In a setting where exporters do not sell their products directly to consumers in the foreign country but have to find an importing firm, factors such as distance or lack of familiarity with foreign customs worsen the quality of possible matches and have an adverse effect on both the intensive and extensive margins of trade. This is not the case in the standard heterogeneous firm model. Moreover, introducing marketing costs for the importer results in a positive effect of foreign market size on the intensive margin of exports, a robust pattern in the data that also cannot be accounted for in the standard model.

In his third and final lecture Professor Rauch touched on the role of interpersonal relationships in the offshoring of tasks, posing one of the most pressing questions in the current globalisation debate: what jobs are safe from offshoring? Professor Rauch and his co-authors have noted that non-routine tasks that need to be easily adapted to unspecifiable circumstances are more difficult to offshore. If non-routine tasks nevertheless are produced abroad then this is done by multinational subsidiaries, as the chances for opportunistic behaviour and the scope for renegotiation are lower within the boundaries of the firm.

"Attention has switched to how the existence of information-sharing networks helps to shape the patterns of global trade."

• James E Rauch outside GEP's offices during his visit to Nottingham

Professor Rauch argued that the average routineness of a sector has a very strong and negative effect on the share of intra-firm imports. Indeed, quantitatively, routineness appears to be more important than other factors – for instance, capital and skill intensity – previously considered crucial to determining the boundaries of multinational firms. <

Tea with Sugar: from GEP lecture to House of Lords

GEP prides itself on offering students genuine interaction with major figures from the world of economics – a philosophy that was taken to new heights when a government minister invited audience members at a Leverhulme Globalisation Lecture to join him and a special guest in London...

Four students who found themselves invited to the House of Lords when they attended a GEP lecture have met with government "enterprise champion" Lord Sugar.

They travelled to London to have tea with the Apprentice businessman and discuss the growing appeal of entrepreneurship among young people in the UK.

Their trip was one of the most remarkable illustrations yet of GEP's ability to offer students opportunities to interact with major figures from the world of economics.

The four were in the audience for a Leverhulme Globalisation Lecture by Lord Davies, Minister for Trade, Investment and Small Business, when he visited GEP in November.

In his address Lord Davies extolled the UK's talent for innovation and stressed its likely importance to the nation's economic recovery in the coming years.

In a surprise twist, he then concluded his speech by asking if any students regarded themselves as would-be entrepreneurs – and invited four of them to London.

Both he and Lord Sugar met with the group at the House of Lords when they journeyed to the capital in early February.

One of the students, David Freedman, said: "As someone interested in entrepreneurship, I found it really interesting to learn why and how Alan Sugar became an entrepreneur."

Another student, Holly Pyman, added: "It was fascinating to find out how both Lord Sugar and Lord Davies got into business.

"Having met them, it seems to me that one thing they had in common was a firm belief that they would be successful.

"It made me realise that to succeed as an entrepreneur it's important to believe in yourself and your business, even when you're going through difficult times."

Professor Alan Duncan, Head of the Nottingham School of Economics, said the event highlighted GEP's commitment to expanding the student experience beyond mere course work and research.

"Offering students the chance to interact with key figures from the business, policymaking and media communities is one of the things that help set us apart," he said.

"Lord Davies's invitation certainly provided one of the more surprising examples of how that philosophy can present immensely valuable opportunities.

"I'm pleased that our students took full advantage of the chance by listening to what Lord Sugar had to say and even presenting him with a few ideas of their own." <

"Offering students the chance to interact with key figures from the business, policymaking and media communities is one of the things that help set us apart."

• Lord Davies, who extended a surprise invitation at GEP

‘Hands up – who wants to be an entrepreneur?’

David Freedman was the first audience member to accept Lord Davies’s invitation to London. Here he recounts the extraordinary day that unfolded when he and his fellow students joined the Trade Minister and Lord Sugar for tea and an informal chat about the UK economy.

So there I was, face-to-face with Lord Alan Sugar, entrepreneur, tycoon, TV personality and most recently government adviser.

We sat drinking tea in the House of Lords as he spoke about the sound of Golden Wonder crisps and the machinery used for roasting peanuts. It is something of an understatement to say this wasn’t exactly what I expected when I attended a GEP lecture a few months earlier.

Lord Davies, Minister for Trade, Innovation and Small Business, had opened the floor to questions after finishing his Leverhulme Globalisation Lecture address on the UK’s talent for innovation and entrepreneurship and had finally ended the session with some questions of his own: “Hands up – who wants to be an entrepeneur? Who wants to meet Alan Sugar?”

I volunteered and was quickly joined by three fellow students. True to his word, Lord Davies duly invited us to visit him and Lord Sugar at the House of Lords.

Excited and not a little nervous, we arrived on a damp and windswept afternoon. We were met by Lord Davies, who was every bit as engaging as he had been at GEP.

Then Lord Sugar suddenly appeared, striding towards us. Handshakes were exchanged, and we made our way as a group to the Lords’ tea room.

We talked for almost two hours. They seemed genuinely interested in our experiences and our perspectives on entrepreneurship, the prospects for students leaving university and even the UK as a whole. They were also very open about sharing their own thoughts.

Lord Davies voiced his frustration with the prevailing pessimism about the British economy and the media’s reluctance to report good news. He also touched on education and his worries about the prospects for young girls who take celebrities as their role models.

As well as his unexpected interest in food-processing, Lord Sugar voiced a perhaps surprising enthusiasm for manufacturing and innovation. He suggested children should visit factories to stir an interest in production and engineering and that primary school pupils should learn about money and the economic realities of adult life.

Later, when two of the students mentioned their own business ideas, he switched into Apprentice mode to offer some critical advice and more general thoughts about young people’s attitudes to business.

• David Freedman and Holly Pyman prepare to set off for London

I asked Lord Sugar why he went into politics. He said he doesn’t see his role as a political one – he simply has a passion for helping businesses and young people. In that regard, like Lord Davies, it is clear that he possesses an undeniable sense of noblesse oblige. <

Chair of Migration Advisory Committee visits GEP

GEP's successful 2009 Leverhulme Globalisation Lecture Series ended with a timely visit from David Metcalf, Chair of the Migration Advisory Committee. Here GEP PhD student Chris Parsons reflects on Professor Metcalf's lecture and the continuing relevance of migration to the UK economy.

Migration matters. The emotive subject resonates with most people across society, and seemingly everyone has an opinion about it. Immigration in particular is a controversial subject, since immigrants potentially impact upon many social and economic aspects of our lives. Topical and divisive as it is, the polemic surrounding migration remains a favourite battleground for politicians and results in numerous reports in the media.

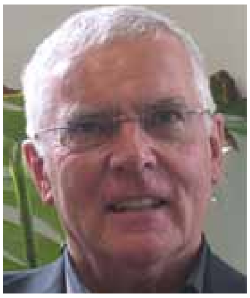
It was in the wake of another journalistic storm brewing over UK immigration – the revelation that a change in Home Office immigration rules had resulted in a surge of applications to "bogus" universities – that GEP welcomed David Metcalf as part of the Leverhulme Globalisation Lecture Series. Professor Metcalf, Chair of the Migration Advisory Committee (MAC), delivered a lecture entitled British Immigration Policy and Work, explaining the role of the Committee and the new Points-Based System and providing an overview of immigration in the UK – thereby dispelling many of the myths that surround the issue.

Against a backdrop of a growing acknowledgment that UK immigration policy had lacked focus, the MAC, under the auspices of the Home Office, was established in September 2007. It is mandated primarily to provide independent, evidence-based advice to the government on specific sectors and occupations in the labour market and to identify where (skill) shortages exist. It comprises five economists who regularly consult stakeholders in a bid to formulate policy advice, with the ultimate aim of maximising the benefits to natives while minimising any negative distributional impacts in wages, especially for the low-paid.

Some 13% of people in the UK of working age are foreign-born, and 68% of these are born outside of the European Economic Area. While the employment rate among the domestic population is 75%, the figure is 68% for foreign-born workers. However, in 2008 just two of every five in-migrants were admitted for work-related reasons. Indeed, the concerns expressed in the media regarding the numbers of non-EU nationals arriving ostensibly for "formal study" were not unfounded. The inflows of these migrants increased substantially from 1993 onwards, especially after 2001.

Immigration potentially impacts upon the labour market through changes in employment, pay and the composition of output and production technologies. Importantly, the number of jobs in the UK is not fixed – i.e. a rise in immigration is not synonymous with an increase in unemployment for domestic workers. Nor is there evidence to suggest that increased numbers of migrants lead to a rise in claimant unemployment (i.e. benefit claims). Evidence does suggest, however, that immigration can and does have small impacts upon the level of employment, especially in specific sectors – for example, the IT sector. The overall average impact of immigration on UK wages has been small – although, given the emphasis on admitting skilled workers, some distributional impacts on wages are somewhat inevitable.

"The audence was left in no doubt that migration continues to be an important economic issue."



• David Metcalf

The recently introduced Points-Based System aims to limit the numbers of immigrants and to concentrate on admitting skilled workers while ensuring the composition of immigration is in keeping with the requirements of the UK economy. Skilled workers, Professor Metcalf argued, are better complements to other factors of production, raise the productivity of other workers, lead to increased innovation, pay more taxes and are more likely to find regular formal employment.

The audience at Professor Metcalf's lecture was left in no doubt that migration continues to be an important economic issue, especially in the context of the global financial climate. Persistently large wage gaps internationally, mounting demographic pressures at home and abroad, the rise in the non-tradable low-skilled service industry, the huge gains to increased migration globally (especially relative to equivalent liberalisations in goods or capital markets) and the perceived opportunities available in the UK all ensure the spectre of immigration and the debate that surrounds it are here to stay. The work of the MAC is proving essential in ensuring these pressures can be better understood so that a cohesive and coherent UK immigration policy can be implemented. This should mean that everyone residing in the UK, both natives and migrants, benefits equally. <

Globalisation still the way ahead, DFID Chief Economist tells GEP

GEP's 2010 Leverhulme Globalisation Lecture Series began in January with a visit from Professor L Alan Winters, Chief Economist at the Department for International Development, who discussed whether globalisation should be scaled back in light of the credit crunch. His simple answer: no.

The worldwide financial crisis should not be allowed to obscure the continuing benefits of globalisation, a leading government economist has told an audience at GEP.

Professor L Alan Winters acknowledged the scale of the credit crunch and its after-effects but stressed: "Now is not the time to back away from globalisation.

"Globalisation is a bit like driving a car. It's risky, and you frequently wish you could do without it – but the truth is that you can't. Therefore you need design and behavioural responses to limit the risk."

Professor Winters, Chief Economist at the Department for International Development, expressed his personal views when he visited GEP to deliver the first in 2010's Leverhulme Globalisation Lecture Series.

Addressing the challenges confronting globalisation in the wake of meltdown, he said the world had faced "the deepest and potentially longest depression in 80 years".

He added: "We were looking into the abyss. This was one hell of a crisis. And in no sense should we be complacent – there are still very serious risks ahead."

Professor Winters, a former Director of the Development Research Group at the World Bank, identified regulatory lapses and global imbalances as the major causes of the crunch.

He described the latter as the "barrel of gunpowder" that was poured on the flames of the former.

Loose monetary and fiscal policy, "perverse incentives", political weakness and an "unwillingness to hear" allowed the situation to spiral out of control, he told his audience.

Criticising the "misbehaviour" of banks and the lack of response from politicians, he said: "No-one wanted to spoil the party. No political organisation wanted to say: 'It's fabulous, but it's got to stop.'"

Professor Winters said the strong policy responses since the crisis had proved effective in limiting the damage, but he warned tougher regulation would be needed in future.

Answering questions from the audience, he said: "We're now seeing more political will to get to grips with the problem than I've ever seen.

"Britain can't do it alone, but that's not to say you have to have every country involved. If the US and London do it then there

"Globalisation is a bit like driving a car. It's risky, and you frequently wish you could do without it – but the truth is that you can't."

• GEP's Chris Milner with L Alan Winters

aren't many other places you would want to take a big bank."

Professor Winters stressed globalisation's role in the world economy was as important as ever, adding: "Should we scale back globalisation? No.

"On the whole markets have done very well over the past 18 months. The financial market was a mess, but others – cars, wheat etcetera – didn't lock up.

"You're still better off producing commodities and selling them than not, even if you're a poor commodity producer."

Professor Winters, Professor of Economics at the University of Sussex, was the first of a series of high-profile speakers from the policymaking, business and media communities to visit GEP this year.

Professor Alan Duncan, Head of the Nottingham School of Economics, told the audience: "The Leverhulme Globalisation Lectures aim to attract academics of international standing. In welcoming Professor Winters we have certainly succeeded in that regard." <

Trade liberalisation and its effects on economic activity

Many studies of the effects of trade liberalisation take an ex-post approach. Holger Breinlich (University of Essex and CEP) uses an "event study approach" to examine stock market reactions surrounding the implementation of CUSFTA, as he explained during a recent presentation at GEP.

What are the effects of trade liberalisation on economic activity? Is free or at least freer trade good or bad for countries and people? This is a perennial question in economics, dating back to the days of Adam Smith and David Ricardo.

In the past decade the analysis of trade liberalisation episodes has been given new impetus by the arrival of so-called heterogeneous firm models, most prominently that of Melitz (2003). These focus on the reallocation of resources within industries rather than across industries.

In particular, they predict exporting firms will benefit from increased access to foreign markets while purely domestic firms will lose out due to tougher import competition. Accordingly, exporting firms will gain market shares, whereas non-exporters will shrink. Together with the assumption that exporters are the most productive firms within each industry, this reallocation of market shares leads to increases in aggregate productivity.

Many features of heterogeneous firm models are consistent with a number of facts to have emerged from a large empirical literature over the years. For example, Bernard and Jensen (1999) provide evidence that exporters are more productive than non-exporters. Tybout (2003) summarises several studies that show market share reallocations have been an important part of trade liberalisation episodes.

A smaller literature (e.g. Bernard, Jensen and Schott, 2006; Trefler, 2004) also provides more direct evidence of the impact of lower trade costs on the reallocation of market shares between exporters and non-exporters.

A common feature of all empirical studies to date is their ex-post character – that is, they track firm-level or industry-level variables such as productivity for a number of years and try to isolate the impact of trade policy changes from a large number of other factors that also influence these variables. Depending on the specific setting of the liberalisation episode, this can pose considerable challenges. This is because a lot of factors will change during the long periods over which such ex-post evaluations are carried out: for example, business cycle conditions vary, other reforms are implemented or new technologies arrive.

In a recent presentation at GEP Holger Breinlich, of the University of Essex and the Centre for Economic Performance, presented a different approach, using the Canada-US Free Trade Agreement of 1989 (CUSFTA).

Rather than evaluating the consequences of this agreement ex-post, Breinlich uses stock market reactions surrounding the implementation of CUSFTA. If the predictions of heterogeneous firm models were right then one would expect to see increases in the stock prices of exporting firms relative to non-exporting firms, since the former benefited more from the implementation of the agreement.

One advantage of such an "event study approach" over traditional ex-post evaluations is that the number of

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"One advantage of such an 'event study approach' over traditional ex-post evaluations is that the number of confounding factors is much more limited."

• Holger Breinlich

confounding factors is much more limited. This is because the focus is on very short "event windows" – periods of one or two days during which the likelihood of the implementation of the agreement varied. In contrast, expectations about future changes in most other factors (such as expectations about future business cycles or technological change) will remain unchanged during these short windows.

Of course, a key requirement for such an approach to testing heterogeneous firm models is the availability of suitable events. Fortunately, CUSFTA is very well suited for an event study in this respect. Its implementation was the main issue in the Canadian general election of November 1988, with the political parties (and voters) almost evenly split on whether it should be introduced.

This resulted in the elections ranking among the closest in Canadian political history, with opinion polls predicting changing majorities until right before the vote. A Gallup poll on 7 November predicted a 12-percentage-point lead for the Liberal Party (opposed to CUSFTA), which made a ratification of the agreement unlikely. Following a complete overhaul of their campaign strategy, the incumbent Conservatives (in favour of CUSFTA) managed to catch up in the polls again.

It was not until 19 November, the Saturday before the election, that the polls correctly predicted an outright majority of parliamentary seats for the Conservatives. The Canadian parliament finally ratified CUSFTA in December 1988.

So how did stock markets react to these events? Let us recall that heterogeneous firm models predict exporters should have gained relative to non-exporters in the same industry on days on which the likelihood of the implementation of CUSFTA increased. This, indeed, is what happened. Also consistent with predictions, exporters lost relative to non-exporters on 7 November, when the Gallup poll predicted the Liberals were likely to win.

Of course, a Conservative election victory might have influenced stock prices of exporters and non-exporters for other reasons. For example, exporters tend to be among the largest firms in each industry, and the Conservatives may have been more "pro-big-business" than the Liberal Party.

So Breinlich provides another piece of evidence by comparing industries with high and low US tariff cuts. The theory predicts that stock price return differences between exporters and non-exporters should be larger in industries with higher foreign tariff cuts (because the higher the cuts, the more exporters benefit). Again, this prediction is borne out by the data.

Overall, stock market reactions thus provide evidence in favour of key predictions of heterogeneous firm models. This backs up the traditional ex-post approaches, evidence from which is also largely in favour of these models (e.g. Bernard, Jensen and Schott, 2006).

Given this strong empirical support, heterogeneous firm models are likely to play a big part in predicting and evaluating the effects of trade liberalisation and globalisation in the years to come. <

"Heterogeneous firm models are likely to play a big part in predicting and evaluating the effects of trade liberalisation and globalisation in the years to come."

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Offshoring and its effects on economic gains

Despite an ever-growing literature, the economic gains of offshoring are still the subject of debate. Andreas Hoefele (GEP, University of Nottingham) examines the phenomenon's effects on an economy's growth path and argues that offshoring might not be beneficial for a country that receives it.

In recent years offshoring has received growing attention in the literature. The academic debate sparked by the topic is still not clear on the gains for economies.

For example, according to Kohler (2004), domestic labour might benefit in terms of increasing wages. Grossman and Rossi-Hansberg (2008) show domestic labour might benefit if what they call a productivity effect dominates the detrimental effects. Markusen (2005) contends that the gains for an offshoring country might vary, depending on the set-up of the model.

Feenstra and Hanson (1996), meanwhile, provide evidence that the relative demand for skilled to unskilled workers has increased due to offshoring. On the other hand, as, for instance, Blinder (2005) points out, the offshorability of tasks does not necessarily depend on the skills needed: rather, whether the jobs have to be done in proximity is important.

An oft-cited example compares a janitor, whose job cannot be offshored, with a radiologist, whose job – given recent advances in communication technology – could be performed abroad. The first job does not need much formal education, whereas the latter requires a higher level of formal education. However, recent empirical evidence from Germany (Becker et al, 2009) indicates it is unskilled workers' jobs that are offshored – at least so far. The issue, then, is how a shift in the relative demand of skilled workers affects the economy in the long run.

Whereas most of the theoretical work addresses the static effects of offshoring on the economy, the dynamical aspect is considered by Glass and Saggi (2001). Developing a one-sector, one-factor growth model of quality ladders, they show an increase in the extent of offshoring raises the aggregate innovation of an economy.

My own research examines the effects of offshoring on the growth path of an economy. In one contribution, by highlighting labour market spillovers from offshoring unskilled labour tasks to skilled labour, I show the economy achieves higher growth if more stages of production are offshored.

Unskilled workers who lose their jobs have to find new occupations within the domestic economy, leading to an increase in the pool of unskilled labour. Due to the (imperfect) substitutability of unskilled and skilled labour in the final good production, the latter can substitute for skilled workers – leaving skilled workers to move to occupations in research. The overall effect is an increase in growth.

The previous discussion focuses on a country that offshores tasks. It is interesting, however, to analyse a country that receives the offshored tasks and exports them. In a second work I show that offshoring might not be beneficial for growth in a country that receives it.

"Labour market spillovers drive the impact of offshoring on growth."

The reason, again, can be found in the labour market implications of offshoring. Labour that is used domestically, either for production or research, is diverted to the production of tasks that will be exported – hence less domestic labour is available in the domestic economy for research, which results in a slowing down of the economy. <

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Why have multinationals been labelled 'footloose'?

Research into the likelihood of multinationals closing their plants has led to them being branded "footloose". Richard Kneller and Danny McGowan (both GEP, University of Nottingham) examine exactly how the label has been earned and whether it is genuinely deserved.

Plants owned by multinational firms are known to possess characteristics that reduce their likelihood of closure compared to non-multinationals. Multinational plants are generally larger, more capital-intensive and more productive – all factors shown in numerous contexts to be negatively associated with the probability of exit.

Conditional on these superior characteristics, however, multinationals are more likely to shut their plants. For example, Bernard and Jensen (2007) find that in the US multinational ownership increases the probability of plant death by 4.5% even after controlling for a wide-ranging set of plant and firm characteristics. Similar evidence has been found in Belgium (van Beveren, 2007), Japan (Kimura and Kiyota, 2006) and Chile (Alvarez and Görg, 2005). In light of such evidence, multinationals have earned the label "footloose".

The theories used to explain the "footloose" nature of these firms emphasise vertical over horizontal FDI motives. Under vertical FDI multinational firms adjust the geography of their production plants in response to changes in local costs (as in, for instance, Antras and Helpman, 2004). They relocate low-skill-intensive activities, for example, in countries that are low-skill-abundant. Other factors – wage costs, labour unrest, tax incentives and governmental subsidies – have also been speculated on as being potential determinants of the multinational location decision. Alternatively, Devereux and Griffith (1998) focus on the roles of taxation and agglomeration and find that, conditional on producing in Europe, industries with lower effective tax rates attract more US multinationals.

A smaller number of papers have examined the consequences of outward FDI decisions for other aspects of the firm. These have found that firms undertaking outward FDI are associated with changes in employment levels and the skill-mix of workers at home. Simpson (2008) finds overseas investment in low-wage economies leads to changes in the structure of UK firms through plant closure. These effects are found to be strongest for multinationals operating in low-skilled industries with affiliates located in low-skill-abundant countries compared to firms in the same industry not investing in low-wage countries.

We build on this literature to investigate additional aspects of the adjustment process. Using plant data for Japan from 1994 to 2005, we firstly confirm that domestic multinationals are "footloose". Conditional on a range of plant and firm characteristics, plants belonging to a multinational are nine percentage points more likely to exit.

We next explore the type of plants that are shut by multinationals, their relative characteristics and how multinational firm behaviour differs with respect to other multiplant firms that do not have overseas affiliates. Regardless of whether a multiplant firm is a multinational, the plants shut down are strongly similar: relatively small and capital-unintensive plants are most vulnerable. Multinationals are more likely to close relatively high-wage plants, however, while plants belonging to importing domestic multiplant firms are more vulnerable to exit. This suggests organisational form influences the firm's reaction to globalisation opportunities when relocating high-cost inputs. Multinationals offshore production; domestic multiplant firms outsource.

Finally, we explore whether it is this process of plant closure that explains why multinationals have been described as "footloose". Once we control for the characteristics of plants relative to the rest of the firm, we find multinationals are actually significantly more likely to retain production in the home country. The "footloose" effect is attributable to multinationals closing their smallest and downstream plants. <

This article is based on Why are Multinationals Footloose?, a GEP Working Paper by Tomohiko Inui, Richard Kneller, Toshiyuki Matsuura and Danny McGowan.

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Trade, technology adoption and the rise of the skill premium

Several different theories have been put forward to try to explain the increase in wage inequality that followed Mexico's increased openness to trade. Alejandro Riaño (GEP, University of Nottingham) examines the link between trade-induced technology adoption and a rise in the skill premium.

One of international trade theory's main insights is that, although it results in an improved allocation of productive resources in an economy, movement towards free trade is associated with distributional conflict.

This result is more forcefully noticed in the Stolper-Samuelson theorem, one of the cornerstone results of the neoclassical model of trade. The theorem states that the real remuneration of unskilled workers should increase in countries relatively abundant in unskilled labour after trade liberalisation, while the opposite should happen for skilled workers.

In Latin America, a region abundant in unskilled labour and characterised by the most unequal distribution of income in the world, the Stolper-Samuelson theorem served as inspiration for the swing towards substantial trade liberalisation during the 1980s and 1990s. What happened afterwards, unfortunately, was not expected.

The skill premium – that is, the average remuneration of skilled workers relative to unskilled workers – increased quite rapidly. Although this phenomenon has been observed in several Latin American countries (see Goldberg and Pavcnik, 2007), Mexico's case is probably the most striking, making it one of the best studies for understanding the distributional effects of increased trade openness.

Mexico went from being a very closed economy to one of the most open in the world. At the same time the skill premium increased by almost 30% between 1985 and 1994, remaining stable thereafter. To put this change in perspective, it is worth noting that it took 25 years for a change of similar magnitude in the skill premium to take place in the United States.

While several different theories have been advanced to try to understand this increase in wage inequality, two stylised facts suggest an important role of technology adoption at the firm level in this process.

Firstly, the share of firms importing machinery and equipment (M&E) increased substantially over this period. This equipment is produced almost entirely in developed countries and is designed to complement their skill-abundant workforces. When Mexican firms decide to adopt these new technologies they need to adjust the skill composition of their workforce to make use of the new equipment.

Secondly, new Mexican exporters show significant skill upgrading at the time of entering foreign markets – a pattern also documented in Argentina by Bustos (2005).

Based on these two facts, Alejandro Riaño, an Internal Research Fellow at GEP, develops a model that can be used to quantify the contribution of trade-induced technology adoption to the dramatic rise of the skill premium in Mexico. The paper features a dynamic model of trade with heterogeneous firms and two types of labour. Firms optimally choose between two production technologies: a "traditional" technology intensive in unskilled labour and a "modern", skill-intensive technology characterised by a higher level of productivity.

> "A substantial increase in the use of imported M&E, coupled with significant skill-upgrading by new exporters, suggests an important role for technology adoption at the firm level in explaining the rise of wage inequality."

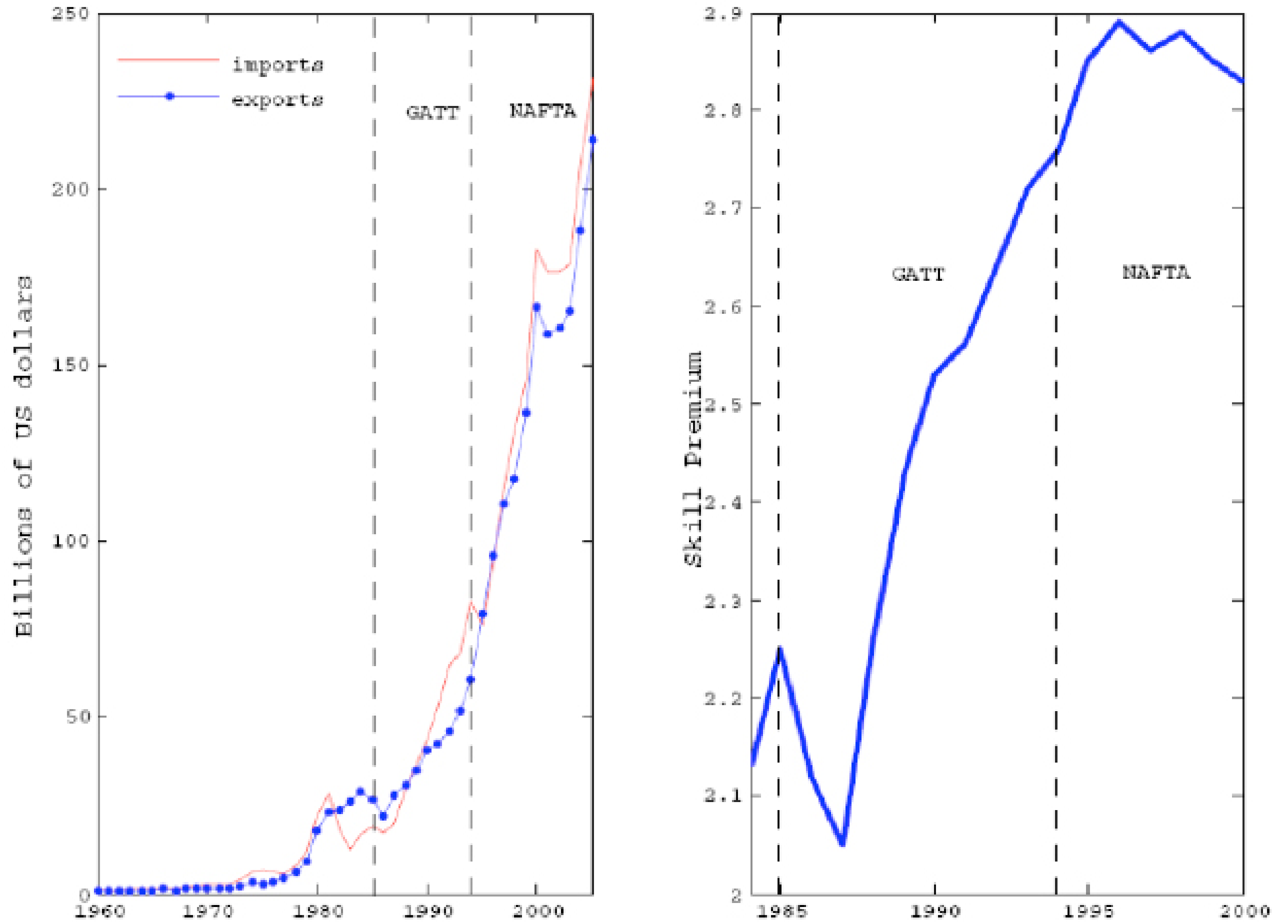
In the model firms face substantial costs to adopt the new technology and service the foreign market, so only the most productive firms will export and use the modern technology. Low-productivity firms tend to be smaller, use less skilled labour, do not import M&E and serve only the domestic market.

The potential profits of exporting increase after trade liberalisation, providing an incentive to adopt the modern technology for firms that still have not done so, as the higher fixed cost of operation can be spread over a higher volume of sales. Thus the number of firms using the modern technology increases.

These firms in turn become larger and more skill-intensive at the expense of firms still using the traditional technology, which contract or exit the market altogether. In the aggregate, the relative demand for skilled workers increases – pushing the skill premium up.

Using a structural econometric methodology that seeks to match firm size distribution, patterns of export participation and M&E imports with simulated quantities obtained by simulations of the model, Riaño recovers the deep parameters of the model that govern the technology adoption, skill intensity and export decisions for manufacturing firms. He finds large adoption costs of technology adoption and significant differences in the fixed cost of operation of firms according to their use of imported technology.

"Counterfactual experiments show trade-induced technology adoption can explain about a sixth if the increase in the skill premium."



• Figure 1: Trade volume and the rise of the skill premium in Mexico (source: World Bank WDI and ENEGI)

One of the main advantages of using of a structural model is that counterfactual policy experiments can be conducted. Riaño asks by how much technology adoption and the skill premium would be affected after a unilateral trade liberalisation of the magnitude undertaken by Mexico in 1985. The results show that lower import tariffs have a positive effect on the number of firms exporting. About one third of these new exporters also start importing M&E.

At the lower end of the size distribution there is exit of small, unskilled-intensive firms. The skill premium increases by about 2.5% – or about a tenth of the observed increase in the skill premium in Mexico – when all these effects are combined. The effect of technology adoption is strengthened when the cost of technology adoption also falls after trade liberalisation.

In this scenario trade-induced technology adoption can explain about a sixth of the increase in the skill premium. This is a quantitatively important effect, considering the great turmoil and various structural reforms undertaken at the same time as the trade liberalisation reforms. <

This article is based on Trade, Technology Adoption and the Rise of the Skill Premium in Mexico, presented by Alejandro Riaño at the Empirical Analysis of Firm Heterogeneity in International Trade Workshop at Queen Mary, University of London.

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