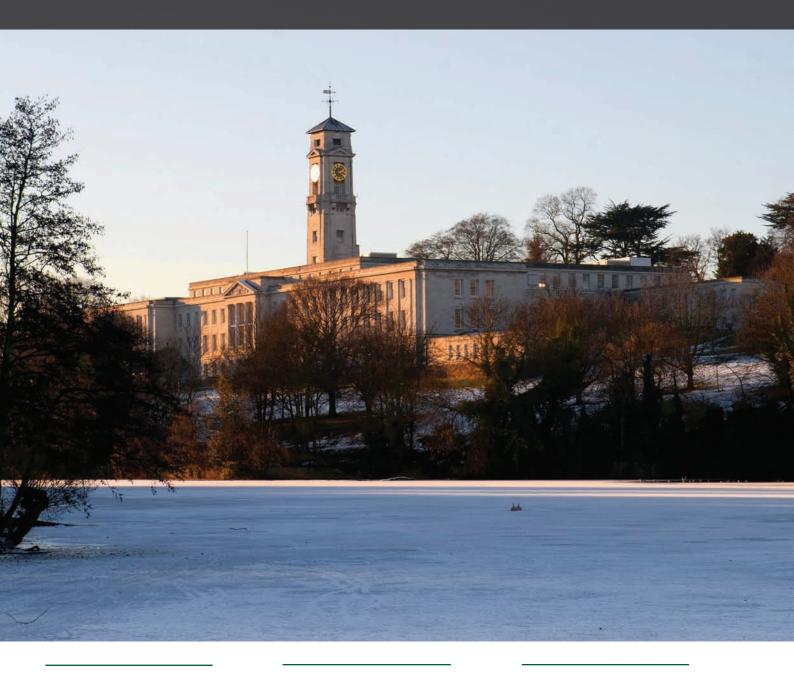


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GEP's Natasha Agarwal examines how credit constraints affect FDI spillovers

The fourth annual GEP in China conference

The Dragon's growing role at the centre of the global economy dominated GEP's latest major international conference in China, held at the University of Nottingham, Ningbo, on 3 and 4 November.

GEP in China welcomed leading academics and economists from around the world for its fourth annual conference, entitled China's External Economic Relations.

Many commentators believe the threat of another global financial crisis is serving to cement the Dragon's seemingly commanding position at the heart of worldwide trade.

With that in mind, delegates addressed issues including exports, regional trade agreements, foreign direct investment and the reform of China's banking sector.

Growth in emerging markets, climate change policies, internationalisation and the relationship between productivity and trading partners were also on a packed agenda.

Among the GEP delegates were Professor David Greenaway, the Centre's founding Director and now Vice-Chancellor of the University of Nottingham; Professor Daniel Bernhofen, GEP's present Director; and Professor Shujie Yao, Head of the University of Nottingham's School of Contemporary Chinese Studies.

The event featured the 2011 The World Economy Annual China Lecture, delivered by Professor Jun Zhang, Director of Fudan University's China Centre for Economic

Professor Bernhofen said: "With such a distinguished array of speakers, it inevitably proved an excellent platform for discussing research and ideas on issues crucial not just to the region but beyond."

Some of the conference presentations highlights included:

Daniel Bernhofen (GEP, University of Nottingham) examined the effect of a trade policy shock on firm behaviour by studying the elimination of the Multifibre Agreement and its successor, the Agreement on Textiles and Clothing, which between them governed world trade in textiles and garments from 1974 until 2005.

China's entry to the World Trade Organisation in 2001 largely coincided with the first three phases of quota removal. Drawing on data from China's customs services, Bernhofen finds that for existing firms - excluding those entering and exiting the market – the elimination of the MFA and the ATC resulted in an average fall in price of around 12%, an effect traceable to the reshuffling of the product mix between companies.

Gabriel Felbermayr (CESifo) investigated the continuing deterioration in China's terms of trade that has accompanied the dramatic rise in trading volume enjoyed by the country since its accession to the WTO. Decomposing the contribution to the terms of trade by sector reveals the deterioration is a result of raw material industries and capital-intensive industries; by contrast, labour-intensive industries appear to contribute to improvements in terms of trade. Explanations for this, suggests Felbermayr, might include the expansion of exports; unreasonable policies regarding industry development; and unreasonable policies regarding export subsidies.

Mary Lovely (Syracuse University) also drew on China's WTO accession, identifying it as a rare opportunity to observe how multinationals respond to changes in property rights in a developing country. Entry to the WTO cut incentives for joint ventures, reduced constraints on wholly foreignowned subsidiaries and provided a more liberal environment for indigenous investors. Using new data on equity joint ventures and changes in registration type, Lovely finds more highly productive firms with greater value added and lower domestic sales shares are likelier to become wholly foreign-owned, whereas less productive firms focused on the Chinese market are more likely to become wholly domestic-owned rather than remain joint ventures.

Hongshik Lee (Korea University) challenged the view that affiliate productivity - as opposed to its parent counterpart -



affects multinational firms' integration strategies. Using detailed data from Korean multinationals, Lee develops a model showing that if affiliate productivity is low a multinational pursues partial globalisation and so exports more back to the parent firm; and if affiliate productivity is high a multinational pursues complete globalisation, exports less back to the parent firm and sells more to unaffiliated entities.

Innwon Park (Korea University) highlighted the links between production networks and the forming of interdependent RTAs. Using panel data covering bilateral country-pairs among 147 countries between 1995 and 2008, he finds that country-pairs' existing RTAs with third nations increase the incentive for those country-pairs to form bilateral RTAs and enlarge existing RTAs. The study does not support existing findings about the competitive formation of new agreements being initiated by existing RTAs in other country-pairs worldwide. Park argues that the interdependence of RTA formation has been more strongly driven by deepening production networks with third world countries than by either lower trade costs or larger market size.

Yasuyuki Yodo (University of Tokyo) investigated whether the privatisation of Chinese state-owned enterprises (SOEs) promotes exports and, if so, what channels generate this effect. Drawing on firm-level data for the Chinese manufacturing sector for the period 2000-2007, the study finds privatised SOEs are more likely to engage in exporting, enjoy more improved productivity and seemingly do not suffer any tightening

of credit constraints. Yodo concludes that the privatisation of SOEs leads to more active exporting through productivity improvements.

Wei Zhao (Zhejiang University) looked at the recent upsurge in Chinese firms' outward direct investment (ODI) and, more specifically, the growth of ODI among the country's private-owned enterprises (POEs). Having compared conventional Western theories on internationalisation with the reality of Chinese POEs' situation, Zhao offers an alternative framework, based on Dunning's eclectic paradigm, that accounts for the manner in which POEs focus on a market-seeking orientation in the early stages of "going out".

Xianguo Yao (Zhejiang University) examined how the food market's evolution - and, most significantly, its urbanisation - has influenced labour migration and regional disparity in China. The study asks whether current trends in production are sustainable and if they threaten local food security. Yao argues that natural endowments and comparative advantages determine the different performances of major production and sales areas in the face of rural labour outflows and that an overall planning policy based on regional disparity therefore represents the key to ensuring food security.



"With such a distinguished array of speakers, it inevitably proved an excellent platform for discussing research and ideas on issues crucial not just to the region but beyond."

GEP welcomes Korean delegates to China

GEP China's fourth annual conference was preceded by another important event that reinforced the Centre's links with the Far East. International Trade, a one-day conference co-hosted with Korea University, examined issues crucial to the growing threat of another financial crisis.

"This conference gave us a valuable opportunity to share our research on the challenges that confront all the world's economies."



GEP underlined its ever-strengthening research links with the Far East when it welcomed a delegation from Korea University to its China branch.

Economists from the UK, South Korea and China gathered at the University of Nottingham Ningbo China for a one-day conference on international trade.

GEP, Korea University and the Korea Institute for International Economic Policy co-hosted the event following the success of a similar collaboration last year.

With fears of another global economic crisis dominating the news agenda, delegates addressed issues including export subsidies and trade liberalisation.

The event, entitled International Trade, also featured the inaugural Youngor Annual Globalisation Lecture, delivered by Sunday Times Economics Editor David Smith.

Professor Daniel Bernhofen, GEP's Director. said: "The importance of Asia and China in particular to the future of the world economy seems to grow by the day.

"Building relationships with other institutions and researchers can only further our

understanding of the Far East's increasingly central role in the story of globalisation."

Among the GEP delegates presenting new research was Dr Zhihong Yu, who recently uncovered novel links between firm performance and importing and exporting behaviour.

Dr Yu and GEP PhD Student Zheng Wang used a unique dataset to identify several patterns yet to be reconciled with heterogeneous firm trade theory.

A feature of their analysis was that it distinguished between ordinary and processing trade, the latter of which involves importing inputs and materials to be re-exported.

This approach allowed them to discover significant heterogeneity within twoway traders depending on such firms' engagement in processing imports/exports.

Dr Yu said: "The past decade has seen a surge in empirical studies to reveal the importance of firm heterogeneity in international trade.

"A well-established regularity emerging from this literature is that exporting firms have

superior performance compared to their non-exporting counterparts.

"But this 'first wave' of trade studies uses data that typically report only the total value of exports at the firm level. It also pays little attention to firm-level import activities.

"We're now able to analyse much more disaggregated and detailed firm-transactionlevel data, which raises the possibility of exploring a new series of questions."

Other GEP delegates included Dr Markus Eberhardt, of the Nottingham School of Economics, and Dr Wai-Heng Loke, of the University of Nottingham, Ningbo.

The Korea delegation was led by Professor Innwon Park, a world-renowned authority on international economics and regional economic co-operation in East Asia.

Professor Park said: "This conference gave us a valuable opportunity to share our research on the challenges that confront all the world's economies."

This International Trade Conference preceded GEP China's fourth annual conference, which was held at the same venue on 3 and 4 November.

China to power on in face of West's woes

The inaugural Youngor Annual Globalisation Lecture was the keynote address at GEP's joint conference with Korea University. Sunday Times Economics Editor David Smith used it to underline the growing strength of the East in the face of the West's financial woes.

The growth of emerging economies will be unaffected by the developed world's worsening slump, a leading Western economist told GEP's conference on international trade.

David Smith, Economics Editor of The Sunday Times, said increasing decoupling between East and West would allow the former to power on in the face of the latter's struggles.

The first global financial crisis has already accelerated the inexorable shift from West to East by up to a decade, he told an audience at The University of Nottingham Ningbo China.

And the threat of further turmoil, with the eurozone crisis deepening and Western economies in general running cold, would not halt the rise of the likes of China and India, he said.

Delivering the inaugural Youngor Annual Globalisation Lecture, Smith said: "Long-term growth in emerging economies is becoming much less dependent on what is happening in the developed world.

"Trade dependency is declining as emerging economies increasingly trade with each other as opposed to the developed world.

"Between 2003 and 2007 emerging economies grew 5% faster than advanced economies in evidence that decoupling was already occurring. Then the financial crisis hit emerging economies hard, giving the theory of decoupling a bad name.

"However, the growth gap between developing and developed economies continued to widen in 2009 and was maintained during the 2010 upturn. It is clear a large element of decoupling is taking place."

The world economy rebounded strongly in 2010, with global growth up 5.1% and global trade up 13%. Two thirds of this growth came

from emerging economies, said Smith, and this will continue until 2030.

Emerging market economies in general are in much healthier fiscal positions than their advanced counterparts, he added.

Not only is their government debt as a proportion of GDP falling: unlike developed economies, they have the ability to deliver impactful firepower when required – as evidenced by China's \$586bn stimulus plan, which sustained economic growth following the financial crisis.

Smith, author of The Dragon and the Elephant: China, India and the New World Order and, more recently, The Age of Instability, said: "We are in the middle of a very profound shift in the world economy.

"Economic divergence will persist, and emerging economies will be able to grow during a period of significant economic weakness in the developed world.

"I'm no outrageous optimist about China, given the serious challenges it faces, but it is better to face challenges from a position of strength rather than the position of extreme weakness currently experienced by advanced economies."

The darkest cloud hanging over the world economy is the eurozone crisis, said Smith, but the outcome is unlikely to impact on the long-term growth of BRIC countries.

The combined GDPs of the BRICs – Brazil, Russia, India and China – may exceed the combined GDPs of the G6 developed economies by 2040, he added.

Smith criticised eurozone leaders for failing to foresee the pitfalls of liberally inviting a host of European countries to join the euro without ensuring policies across the region were integrated.

He said: "The eurozone crisis is the result of a gamble that hasn't paid off. My view more than a decade ago was that if Europe wanted to proceed with the euro they would have to be extremely careful about whom they chose to join the single currency.

"After inviting 17 countries, policies diverged rather than converged. Countries thought that by joining the euro they had bought credibility – but you have to earn credibility."

The possibility of Greece leaving the euro may prove a "blessing in disguise", according to Smith.

He said: "One potential solution is to allow Greece to leave the eurozone, default and effectively do an Argentina. The eurozone leaders can then respond by recapitalising the banks, ring-fencing the rest and making it clear that Greece was a mistake and should never have been allowed to join the single currency."

The future, though, said Smith, belongs to the likes of China and India as they rapidly regain the influence they once had 2,000 years ago, when between them they made up 60% of the global economy.

"India has a considerable demographic advantage over China, despite much of its population living in poor rural areas," said Smith.

"Around three quarters of the Indian population is under the age of 35. China, on the other hand, has an ageing population without the pension system that exists in developed economies to back it up.

"Never before have we had the huge populations of China and India growing together at such a fast pace and for so long. This is a huge moment for the BRICs and other emerging economies – there is little doubt that they have the capacity to meet the growth challenges in the coming decades."

Global advancement must start at home

China's is now the world's second-largest economy, but its ambition to grow into a truly rich and powerful nation will require its multinationals to flourish overseas, argues Shujie Yao (GEP, University of Nottingham). A version of this article originally appeared in China Daily on 18 June 2011.



"If Chinese companies fail to make an impact in ultra-competitive Western markets it is highly unlikely that China will be able to sustain another 20 or 30 years of rapid growth."

Shujie Yao Professor of Economics and Chinese Sustainable Development Head of the University of Nottingham's School of Contemporary Chinese Studies

China officially overtook Japan to become the world's second-largest economy earlier this year, but the efficacy of its efforts to create compelling business cases for Chinese multinationals in developed economies lags that of its eastern neighbour.

Its failure to emulate Japan and South Korea in producing world-famous brands, such as Toyota and Samsung, highlights the fundamental weaknesses of its domestic economic structure that are continuing to dent its global competitiveness.

There is evidence that China's "go global" strategy is gathering momentum. According to the Asia Society, Chinese overseas direct investment could reach as high as \$2trn by 2020. Yet international success will not equate to the sheer volume of money poured overseas.

Future economic growth in China is tied to the fate of its multinationals. If Chinese companies fail to make an impact in ultracompetitive Western markets it is highly unlikely that China will be able to sustain another 20 or 30 years of rapid growth.

China's leaders have long recognised the need to register commercial success abroad. Having officially implemented the "go-out policy" in 1999, their global strategy is clear: let state-owned enterprises (SOEs) enjoy monopoly at home, allowing them to accrue abnormal profits, and subsidise them with generous bank credits so they can flex superior monetary muscle in front of foreign counterparts.

But the flaws in this nuance-free approach are deepening. Cash reserves alone are insufficient for Chinese firms to secure long-term, profitable footholds in developed markets overseas.

The uncomfortable truth for Chinese SOEs is their dearth of experience of genuine competition. Profits have been too easy to come by, thanks to the monopolistic

environment in which SOEs operate at home. Last year the total combined profit of China's two most profitable SOEs was equivalent to that of the largest 500 private firms. In 2010, the total profits of just over 100 large SOEs were about 2trn yuan – and only a tiny fraction of those profits was delivered to the state.

SOEs lack incentives to innovate and develop a technological expertise capable of rivalling that of Western business giants. Unlike South Korea and Japan, China has a seemingly limitless domestic market; and firms can record impressive growth without crossing borders.

I have met the chairmen of two of China's largest private companies, both of whom were formerly among the country's top five richest men, according to the Hurun wealth list. Neither has ever had any plans to enter developed markets overseas, citing high risks, poor technology and products that often fail to meet minimum quality standards required by the European Union.

In addition, private firms in China lack state support, business scale and, crucially, access to bank credit. As a measure of the discrimination that still plagues the private sector in China, two thirds of all bank loans are channelled to the public sector, despite accounting for only 15% of employment.

They also struggle with human capital. Educated graduates are lured by the prestige and higher pay that working for government organisations and SOEs in China brings, and employment in the private sector is seen as the last resort. Salaries in the state sector are 1.8 times higher than those in the private sector, and a government job offers attractive pension schemes and far greater security.

China's march across the globe has instead centred on energy deals and mergers and acquisitions. It has enjoyed plenty of success in locking in a stable supply of natural resources, securing loans-for-oil deals and

purchasing majority stakes in Western mining companies.

A significant part of this shopping spree has taken place across Latin America, a region that has traditionally been a US stronghold. Chinese companies have secured long-term oil supplies from Brazil and Venezuela and commodities such as soybeans and wheat from Argentina.

Mergers and acquisitions serve to accelerate China's push into Western markets, but there are reservations over the sustainability of such a strategy. Acquisitions carry high price tags, and China is not yet adept at managing the purchased assets.

Chinese car-maker Geely's takeover of Volvo is a case in point. It has given China little access to technology, as the innovation engineers are all non-Chinese. Aggressive manoeuvres can also attract political opposition, as state-owned mining company Chinalco found in its failed bid for Rio Tinto.

Furthermore, an acquisition strategy deflects attention from the need to develop strong Chinese brands known to Western consumers and restore credibility to a madein-China label repeatedly knocked by safety scandals. Memories of contaminated pet food and toxic toothpaste still weigh heavy on the minds of global consumers.

Computer maker Lenovo is perhaps the Chinese company that is closest to establishing a truly global brand. Yet witness the headline that accompanied a recent profile of Lenovo senior vice-president Milko van Duijl published by the Daily Telegraph: "Lenovo: the biggest computer-maker most people have never heard of."

Lenovo is the fourth-largest computer-maker in the world, having built on its purchase of IBM's PC business six years ago, but it is significant that the majority of its senior executives are not Chinese nationals. According to the Daily Telegraph article,

"Without its own respected brands, China will always languish at the lower end of the value chain."

Lenovo will soon launch in Germany and has already agreed to buy 37% of German computer company Medion AG.

The outcome of Lenovo's entry into the German market will give a strong indication of the company's future prospects in Western economies. Chinese automakers will also be watching closely as they continue to invest heavily in creating attractive domestic brands such as Chang'an and the BYD electricitypowered models, which they hope will make an impact in the US and Europe.

Meanwhile, China's leaders must translate the ambitious promises set out in the 12th Five-Year Plan (2011-2015) into action. Rapid economic expansion has been largely based on export processing and lowlevel manufacturing of consumer goods, capitalising on abundant cheap labour and relying on technologies imitated or imported from the developed world.

To overhaul its economic structure, China plans to invest aggressively in science, technological innovation and education to boost the labour productivities of its industries. The government should start by establishing an incentive programme to encourage greater domestic competition, allowing private enterprises to compete fairly with state-owned firms. Bank credit needs to be loosened for private companies, and a tough regulatory regime should be set in place to guard against state monopoly.

China needs intelligent investment. Through its Project 985 - a commitment to university research funding – the government has increased research investment by 20% every year for the past decade, but, since universities are treated like government organisations and not autonomous institutions, the efficiency of this investment has been called into question.

Can China succeed in hauling itself up the technological ladder? It will be a painful and lengthy process. The country still has a large reservoir of cheap, rural labour, meaning the pressure for innovation and technology upgrading has not reached its peak.

Although labour costs have risen in recent years, an increasing number of low-tech manufacturing firms have been moving from the more expensive coastal and eastern regions to inland and western areas.

More rural workers, formerly economic migrants, are choosing to stay and work in their local cities for even lower levels of pay. In Guangdong, in particular, rural migrant workers have shown a growing reluctance to return to work each year after the annual Spring Festival.

A slowdown in inter-provincial migration reduces regional inequality and environmental damage to densely populated coastal cities. However, labour costs will eventually rise across all provinces, calling for acceleration in technological progress.

China's total GDP may well surpass that of the US by 2020, but its per capita GDP will still be less than one quarter of the US level. In other words, when China becomes the largest economy in the world it will still be a developing country.

Its ambition to grow into a rich and powerful nation will require Chinese multinationals to flourish overseas. Without its own respected brands, China will always languish at the lower end of the value chain. China's future will ultimately depend on its ability to create, not replicate.

Enter the Dragon

Most commentators agree the West's continuing financial woes can only strengthen China's position, but is the Dragon making the most of its situation? GEP's Natasha Agarwal, whose latest research examines how credit constraints affect FDI spillovers, suggests the time for new policies is nigh. A version of this article originally appeared in the Financial Times publication Investment Adviser on 7 November 2011.



"China will one day possibly quite soon - need to move on to policies that are conspicuously more balanced."

Natasha Agarwal PhD student at GEP. University of Nottingham

This article is based on GEP Working Paper 2011/21, Credit Constraints and FDI Spillovers in China, co-authored with Chris Milner and Natasha Agarwal (both GEP, University of Nottingham).

"China is right at the centre of the world market," declared Guo Zhuqing, chairman of the China Construction Bank, during September's World Economic Forum meeting in Dalian. With business leaders from around the globe practically falling over themselves to prove as much at the event, few dared argue.

Figures released just a few days earlier also suggested it was no idle boast. Foreign direct investment in China in the first eight months of 2011 totalled \$77.63bn, an increase of 17.7% on the same period in 2010. In August alone, according to the Ministry of Commerce, investment from overseas amounted to \$8,45bn, an 11,1% improvement on the previous year.

That foreign direct investment (FDI) has been crucial to China's extraordinary economic rise is beyond dispute. The government has consistently implemented policies designed to attract more FDI, and Premier Wen Jiabao was quick to use the latest statistics to restate a commitment to promoting growth through the continued opening of the Chinese economy to overseas investors.

The rationale for increased efforts to appeal to foreign firms often stems from the belief that, in addition to the direct capital inflows and employment that accompany it, FDI generates positive externalities in the form of productivity gains, technology transfers, the introduction of new processes, managerial skills and know-how, employee training, international production networks and access to other markets. These "spillovers", as they are known, are not automatic and might occur through various channels such as imitation, skills acquisition, competition and exports.

Yet the doubts surrounding the Dragon's ability to sustain its meteoric ascent through the relentless courtship of FDI persist. One common criticism is that domestic conditions, particularly the nature of local financial

markets, may limit Chinese firms' capacity to maximise FDI's benefits.

It is universally recognised, for example, that China's state-owned enterprises (SOEs) enjoy substantial financial backing in terms of loans and grants from state-owned banks. Until 1998, when the constitution was changed, these banks were instructed to lend exclusively to SOEs, and even now they deem private businesses riskier.

In 2003 a World Bank investment climate survey concluded Chinese firms had much less access to formal finance than firms in any other Asian country examined at that point. Companies with more than 100 employees obtained around 29% of their working capital from bank loans, less than in Indonesia, Malaysia, the Philippines, Thailand or Korea. Firms with fewer than 100 employees obtained only 12% of their working capital from bank loans, compared with, for instance, Malaysia's 21% and the Philippines' 28%. In other words, many Chinese firms face credit constraints entirely unrelated to the probability of their eventual success.

Understandably, any company hamstrung by such crippling restrictions might find it hard to take advantage of the new knowledge FDI makes available. Chinese firms may be able to finance their new requirements through internally generated funds, alternative financing resources such as trade credit, the efficient management of working capital or the forming of industrial clusters; but the greater the technological gap between extant and new practices, the greater the need for external finance. Funds are inevitably required to invest in, adopt and even imitate foreign technologies. Implementing organisational changes, purchasing equipment, hiring new managers and skilled labour - all are difficult, if not impossible, if resources are scarce or simply unavailable.



Such a situation raises genuine concerns as to whether the status quo in China, with all its acknowledged inflexibility, truly allows domestic firms to take full advantage of FDI. According to new research by GEP, it does not.

The study set out to investigate the role financial frictions play in influencing productivity spillovers from foreign to domestic firms, focusing on annual accounting reports covering more than 20,000 Chinese manufacturing companies for the period 2001 to 2005. Analysing standard information including input costs, employment, ownership, location, fixed assets, affiliation and export sales, the research factored in the amount of FDI in a sector and province to investigate if outputs were higher or lower than they would have been without the presence of FDI.

It was discovered that credit-constrained Chinese manufacturing firms receive lower or even negative FDI spillovers. Furthermore, the reduction in spillovers is systematically greater in sectors with higher levels of dependence on external finance.

So, for instance, firms producing non-electric or wood products benefit less than firms that produce clothes or iron goods. Significantly, companies in the former sector finance approximately 30% of their investment through external funds, while those in the latter rely almost entirely on funds generated internally.

Industrial characteristics also play a part. Domestic firms in sectors that are capitalintensive, highly tangible and manufacture durable and highly tradable goods enjoy greater FDI spillover benefits than their counterparts in sectors that are labourintensive, less tangible and manufacture non-durable and less tradable goods.

In addition, despite the preferential treatment they receive from state-owned banks and the resultant easier access to external financing,

"The doubts surrounding the Dragon's ability to sustain its meteoric ascent through the relentless courtship of FDI persist."

SOEs fail to maximise the potential benefits of FDI. This is because of widespread inefficiencies in management and asset allocation.

These findings are merely the latest to question the long-term wisdom of China's existing structural rigidity, which represents the biggest challenge to the successful realisation of the gains associated with FDI. The ongoing provision of special incentives to foreign enterprises is rooted in FDI's perceived "growth-development" spin-offs, but in many ways it is domestic conditions that demand attention.

Between 1984 and 2004 the total stock of FDI in China amounted to US\$562.1bn. During the same period, according to the United Nations Conference on Trade and Development, annual FDI inflow increased from US\$2.7bn to US\$60.6bn. As Mr Zhuqing's soundbite so unequivocally underscored, businesses will surely continue to turn to China to bolster sales as rising unemployment and government indebtedness damp confidence in developed nations. Europe's debt crisis and the US's budget troubles have served only to strengthen the Dragon's position.

Yet China will one day - possibly quite soon - need to move on to policies that are conspicuously more balanced.

Financial market reform, by allowing further expansion of the private sector through credit availability, may well be the next engine of sustained growth. The current divisions and

inequalities cannot endure indefinitely, and the culture of haves and have-nots, however gradually or discreetly, will ultimately have to make way for a system that is more encompassing and equitable.

The broader implication is that policymakers should weigh the merits of policies aimed at attracting FDI against the merits of policies that seek to improve local conditions. As well as improving access to formal finance, better local conditions not only attract foreign companies but also allow host economies to maximise FDI's supposed bounty.

As the banners that lined Dalian's streets proclaimed: "Cooperation, harmony and win for all." The syntax might be lacking, but the sentiment is well worth pursuing.

Government policies and microfinance growth

Microfinance is a growing phenomenon in many developing nations but recent research by Alex Newman (GEP and University of Nottingham, Ningbo) suggests it is failing to flourish in China. A version of this article was originally published by Caijing, the Beijing-based magazine devoted to economics and finance in China, on 4 November 2011.



"The government's failure to properly regulate 'public interest' microcredit companies has led to a 'commercial logic' dominating the Chinese microfinance industry."

Alex Newman

GEP Fellow and a Lecturer in International Business at Nottingham University Business School, Ningbo, China

This article is based on his recent paper, Institutional Influences on the Development of Microfinance in Emerging Economies: Insights from China, co-authored with Daniel Borgia and Wu Wei (both The University of Nottingham Ningbo, China).

Efforts to alleviate poverty in rural China are being undermined by measures that are stunting the growth of the country's microfinance industry, according to new research by GEP.

Excessive government interference and the authorities' refusal to grant money-lending NGOs legal status are among the root causes of the problem.

Despite a third of all citizens in the world's most populous country still lacking access to formal financial services, regulations imposed by the government - including interest-rate caps and credit restrictions remain more stringent than those in other emerging economies.

As a result, says the study, microcredit NGOs acting in the public interest to stimulate entrepreneurship in remote rural areas are struggling to expand in China - in contrast to countries in which they are recognised by law. The authors argue that regulations need to be modified to create a more robust and competitive microfinance industry to better serve China's rural poor.

According to Dr Alex Newman, a GEP Fellow and Assistant Professor of International Business and Entrepreneurship at Nottingham University Business School, Ningbo, the situation is clearly inhibiting the development of the Chinese microfinance sector.

He said: "Although the government has made efforts to support the growth of the microfinance sector, its failure to properly regulate 'public interest' microcredit companies has led to a 'commercial logic' dominating the Chinese microfinance industry.

"As a result the majority of microfinance providers are targeting loans to support the growth of small and medium-sized enterprises rather than microfinance initiatives aimed at alleviating poverty among the rural poor, as original microfinance practitioners envisaged."

Researchers conducted 30 in-depth interviews with senior executives and loan officers at seven microfinance organisations operating in rural China between May and August this year. They also shadowed loan officers in the field and analysed company documents.

The microfinance providers studied were either village and township banks (VTBs), which can accept deposits and provide loans worth between 5,000 and 500,000 yuan (\$783 to \$78,340) or more traditional "public interest" microcredit companies (MCCs).

MCCs tend to be run by NGOs or local governments and have an average loan size of around 5,000 yuan. Since they are not registered as financial institutions, they are prohibited from accepting deposits.

Because of the low interest-rate cap imposed by the central government, many VTBs are reluctant to provide small and micro loans to borrowers with little or no credit record.

They are permitted to charge only twice the Central Bank's interest rate, which makes it difficult to recoup the substantial transaction costs incurred through approving, monitoring and collecting loans.

The Grameen Bank, the Bengali microfinance organisation founded by Nobel Peace Prize winner Muhammad Yunus, typically charges a flat interest rate of 22% - double the rate Chinese VTBs were allowed to charge in August this year.

The research concluded the absence of legal and regulatory support mechanisms for microfinance providers, coupled with significant government intervention, has cemented a reliance on borrowing from family and immediate social networks in rural China.

The study found credit-tightening policies introduced by the People's Bank of China (PBOC) in 2011 to tackle inflation are preventing some VTBs from meeting customer demand, impacting on client trust.

One of the organisations that took part in the interviews revealed it planned to lend over 200 million yuan in 2011 but found itself restricted to 50 million yuan.

Another VTB told how a PBOC regulation published in May 2011 stated the credit it provided to clients should be less than double the amount of registered capital. This VTB used up its entire quota of credit by the end of March, leaving it at risk of breaking contracts with clients.

Government-imposed geographical operating restrictions also prevent VTBs and MCCs from setting up subbranches outside the district in which they are formally registered unless they undergo the costly and timeconsuming process of applying for a separate licence.

In addition, the growth of MCCs is being hampered by a law that prevents them from collecting deposits from savers, the study said.

The research also found that Chinese MCCs generally have irregular access to capital and insufficient cash flow to cover financing and operating expenses, meaning they must identify and solicit alternative sources of funding primarily from individual and corporate donations.

Much of these donations comes from outside China, but MCCs also face difficulties in transferring funds from overseas because of regulations on foreign exchange

They are required to apply for an exchange certificate from the State Administration of Foreign Exchange (SAFE), and there are limits on the value of funds that can be transferred. One MCC's SAFE certificate took six months to obtain - only for the organisation to find it could exchange no more than \$5,000.

The study argues that the prevalence of informal financing mechanisms - such as borrowing from family members or social networks - poses a "significant challenge" to the development of an efficient formal microfinance system in China. It is estimated that informal financing continues to account for around 40% of all the country's private sector financing.

Dr Newman said the government should modify regulations to create a more robust and competitive microfinance market to better serve the rural poor.

He said: "Policymakers should consider removing the interest rate imposed on VTBs, along with credit and geographical operating restrictions, while at the same time keeping the restrictions in place on urban financial institutions that the policy was arguably designed to affect.

"They should also consider providing legal status to MCCs in addition to permitting them to accept deposits, making charitable donations tax-deductible and removing foreign exchange transaction hurdles and limitations.

'Government officials and policymakers can also help microfinance providers to connect to the informal social and professional networks that already exist. This is particularly true for 'public interest' MCCs, which are unable to operate without the close cooperation of local government officials."



Trade costs and trade composition

Research into trade costs has traditionally focused on issues such as their size or their impact on trade volumes. Danny McGowan (GEP and Bangor University) expands the literature by turning attention to an alternative factor whose implications may prove just as important.



Danny McGowan Lecturer in Economics at Bangor Business School

This article is based on GEP Working Paper 2011/11, Trade Costs and Trade Composition, co-authored with Chris Milner (GEP, University of Nottingham).

In spite of myriad initiatives designed to reduce and eliminate formal barriers to trade between countries during the past 50 years, we continue to observe a high degree of concentration in economic interaction within borders. Although the source of these frictions, trade costs, is currently of great interest (Anderson and van Wincoop, 2004; Obstfeld and Rogoff, 2000; Hummels, 2007; Jacks et al, 2011), studies have by and large been confined to explorations either of the magnitude and/or subsequent impact on trade volumes. This paper builds on the literature by considering the effect trade costs have upon the *structure* of trade.

Defined broadly, trade costs include all costs incurred in delivering a traded good from its producer to a final user overseas (other than the marginal cost of producing the good itself).

Anderson and van Wincoop (2004) define trade costs so as to include transport costs (freight and time), costs induced by tariff and non-tariff barriers, information costs, contract enforcement costs, legal and regulatory costs and local distribution costs in export markets.Reviewing a range of literatures and methodologies to provide direct and indirect (inferred) estimates of the individual components of aggregate or countrywide trade costs, they report an overall (average) ad valorem tax equivalent for trade costs for a representative industrial country (the United States) of 170% - broken down multiplicatively into local distribution costs (55%) and international transaction costs (74%).

The comprehensive measurement of country trade costs is challenging methodologically and in terms of data demands. In this paper we use the micro-founded gravity model approach outlined by Novy (2008) to calculate bilateral trade costs.

The advantages of using this technique are that it eliminates the problematic multilateral resistance terms from the gravity model by instead specifying them in terms of intranational trade, meaning trade costs between countries may be calculated using widely available data on exports and output. We then generate measures of aggregate (or national) trade costs as the weighted average of the bilateral trade cost estimates.

In general we find aggregate trade costs fell substantially over the period, from an ad valorem tax equivalent of approximately 110% in 1990 to 66% in 2004. Inevitably, the data hide substantial variation between countries over the period: for example, trade costs fell by approximately 50% in China compared with a 24.6% decline in the US.

The largest reduction in trade costs occurs in the case of Argentina, for which trade costs fell from 443% in 1990 to 133% in 2004. However, there are apparent differences among countries according to their level of industrialisation or income. Industrialising economies are found to have considerably higher trade costs compared to industrialised countries, reflecting the differences in infrastructure and institutional quality between these groups.

We then turn to the question of whether changes in countries' trade costs have shaped the composition of their export baskets and therefore act as a source of comparative advantage or disadvantage. In other words, we are interested in how changes in aggregate trade costs affect each industry's share of world exports. Indeed, there are reasons to believe trade costs may also affect the composition of trade, since recent evidence shows institutional quality, a component of national trade costs, shapes comparative advantage.

Institutions represent a sub-set of the influences on trade costs that affect transaction and production costs, raising information and procurement costs in institutionally inferior environments.



For example, Levchenko (2007) shows institutional quality to be a significant determinant of the import shares of 116 countries into the US in 1997, with countries endowed with better institutions capturing a larger share of imports in more institutionally intense industries. Similarly, Nunn (2007) finds empirical evidence that the ability to enforce contracts affects a country's comparative advantage in the production of goods requiring relationshipspecific investments.

Our econometric design arises out of a belief that other time-varying country-specific and industry-specific factors are likely to affect export shares and are collinear with trade costs, leading to a correlation with the error term in our model and therefore biased coefficient estimates.

For instance, these country-time factors might include the deregulation of international trade through reductions in tariff and non-tariff barriers, as well as institutional reforms and endowment factors for which there exists little data. Similarly, at the industry level difficult-to-measure factors such as transport and distribution costs may be contained within the error term, leading OLS to yield inconsistent estimates.

Our identification assumption is that there are inherent characteristics of the production conditions within an industry that determine its sensitivity to changes in aggregate trade costs (an approach similar to that in

Rajan and Zingales, 1998; Romalis, 2004; and Nunn, 2007). We therefore proxy this "trade cost intensity" using data on the share of imported intermediates used in the production of exports in the industry.

Our results provide strong evidence that trade costs act as an endowment source of comparative advantage in ways similar to human and physical capital endowments.

The intuition behind this finding is straightforward: where trade costs are high (low) the cost of acquiring intermediate inputs from abroad that are necessary in the production of exports is higher (lower), meaning the cost of production in that country is relatively high (low) compared with a low trade cost country. Where an industry is more reliant on imported intermediates in this production process the effect of trade costs upon production costs is magnified.

Having conducted a number of robustness tests, we continue to find trade costs act as a source of comparative advantage - conditional on a number of potentially confounding country and industry factors.

"Our results provide strong evidence that trade costs act as an endowment source of comparative advantage in ways similar to human and physical capital endowments."

Trade finance: theory and evidence

Trade finance has been widely offered as one of the causes of international trade's decline during the global financial crisis, yet precisely how it works remains little-known. Tim Schmidt-Eisenlohr (University of Oxford and CESifo) seeks a simple explanation of the role of differing kinds of payment contracts.



"Why are there so many different payment contracts in use, what are the choices faced by firms and how do they decide which payment type is best for them?"

Tim Schmidt-Eisenlohr Research Fellow at the University of Oxford's Centre for Business Taxation, an Associate Member of Nuffield College and an Affiliate of CESifo, Munich

This article is based on Trade Finance: Theory and Evidence, a paper he presented at a GEP Seminar on 13 June 2011.

Why did international trade decline so sharply during the recent financial crisis? One reason given by experts was trade finance.

During the crisis a G20 policy initiative suggested governments and institutions provide support of \$250bn for trade finance. Yet, although the magnitude of this sum underlines the perceived importance of the topic, very little is known about the exact functioning of international trade finance.

In particular, why are there so many different payment contracts in use, what are the choices faced by firms and how do they decide which payment type is best for them?

The most common payment forms are cash in advance (CIA), where the importer pays and the exporter then delivers the product; open account (OA), the reverse case, where the exporter delivers and the importer then pays; and letter of credit (LC), where banks are employed to facilitate the trade transaction and reduce the risk involved.

In a recent paper I provide a simple theoretical explanation of why we have these different payment contracts and how firms choose between them. The main idea is that, since international trade is riskier and takes more time than domestic transactions. the role of payment contracts is twofold: to determine who has to pre-finance the transaction and to allocate risk.

The fact that all three types of payment contracts mentioned above are in use can be explained by differences across countries in the costs of financing and the degree of contract enforcement.

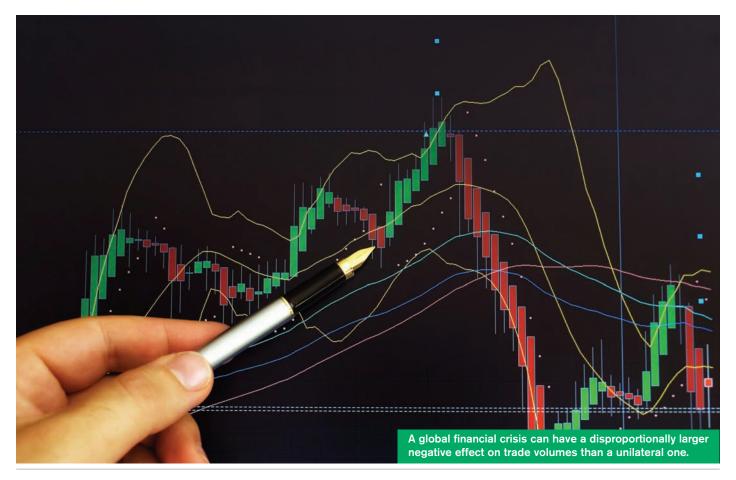
Firstly, take the example of cash in advance. Because pre-financing is the responsibility of the importer, the financing costs in the destination market matter. The exporter, because he receives payment before sending the goods, might have an incentive to keep the money without delivering the product or to supply a product of inferior quality; but this moral hazard is reduced if the source country has a good level of contract enforcement.

Open account constitutes the reverse case. With the exporter pre-financing the transaction, financing costs arise in the source country. The importer now receives the goods before payment and so might have an incentive not to pay for the product or to reduce or delay payment - moral hazard problems that in this case are reduced by a good level of contract enforcement in the destination country.

Firms therefore compare source and destination countries in terms of financing costs and levels of contract enforcement when choosing optimally between cash in advance and open account.

In the case of a letter of credit, meanwhile, a bank acts as an intermediary that releases the payment to the exporter only upon proof of delivery of product. This payment method is especially useful when there are severe problems of contract enforcement in both countries and when firms trade with each other for a limited time. Anecdotal evidence suggests letters of credit are particularly used in developing countries and for more risky transactions.

Although trade finance payment contracts imply new and interesting predictions for the patterns of international trade flows, research has so far concentrated on the question of whether financial conditions in the source country affect exports. Yet payment contracts also provide an importer with an explicit role in the financing of trade - that is, in terms of the destination country's financial market - as only open account corresponds to pure exporter finance.



The data support the theoretical predictions, with two new and notably interesting empirical results emerging.

Firstly, I find international trade flows are highly correlated with the financial conditions in the destination country. In other words, importer finance matters. Even more strikingly, destination market effects are significantly larger than the effects of the financial market in the source country, suggesting importer finance matters more than exporter finance.

Secondly, this effect increases with the distance between two trading partners. The rationale behind this is that the further apart two trading partners are, the more time is needed to transport goods from exporter to importer. This in turn implies a larger working capital financing requirement and therefore stronger effects from changes in financial markets.

The ability to use different payment contracts also has implications for the role of trade finance in a financial crisis. If there is a unilateral crisis, one that affects the financial market in one country, a switch of payment contract to finance the transaction on the other market can allow the two trading partners to isolate themselves from the

negative shock. If there is a multilateral financial crisis, one that affects both financial markets simultaneously, firms are no longer able to shield themselves from the problems by changing the payment contract. The model therefore implies a global financial crisis can have a disproportionally larger negative effect on trade volumes than a unilateral one.

To summarise, the paper shows trade finance is conducted through the financial markets of the source and destination countries and that conditions in the two interact in a non-trivial way.

Moving beyond the simple exportermanufacturer model still prevalent in much of international trade theory can deliver many new insights and bring models closer to the data. A more detailed model of exporterimporter interactions might also help address issues beyond those of trade finance.

"International trade flows are highly correlated with the financial conditions in the destination country. In other words, importer finance matters".

Incomplete contracts and the impact of globalisation

The impact of relocating production to low-wage countries has been the subject of a number of recent studies. Fabrice Defever (GEP, University of Nottingham) adds to the literature by examining how the difficulties associated with contract enforcement in developing countries can have implications for consumers in developed nations.



"In the space of just two vears - 1991 and 1992 - most of the production capacity of central and Eastern European manufacturers in the automotive sector was acquired by only four Western firms."

Fabrice Defever Lecturer in Economics The University of Nottingham

This article is based on GEP Working Paper 2011/08, Incomplete Contracts and the Impact of Globalisation on Consumer Welfare.

One commonly observed pattern corresponding to the increasing fragmentation of production is that a growing number of firms have relocated production to low-wage countries while siting their strategic functions (e.g. headquarters and R&D centres) in developed nations.

The wave of production relocation triggered by the opening of Eastern European markets in the '90s offers a case in point. For instance, in the space of just two years - 1991 and 1992 - most of the production capacity of central and Eastern European manufacturers in the automotive sector was acquired by only four Western firms: Volkswagen, General Motors (Opel), Renault

Renault shut down plants in Billancourt, France, in 1991, Setubal, Portugal, in 1996 and Vilvoorde, Belgium, in 1997. In 2006 the main trade union at the firm denounced what it called "a strategy that consists in looking for the highest profit on each vehicle [without any] fall in price to stimulate consumer demand".

Given that the principal argument in favour of relocating to low-wage countries is precisely the expected fall in costs and retail prices, this criticism, printed in the daily French newspaper Liberation, might seem bizarre. Yet a study published by the OECD in 2006 confirmed globalisation has only a small impact on consumer prices.

According to the OECD, from 1995 to 2005 the net effect of imports from low-wage countries was small: between -0.04 and 0.21 percentage points of inflation in the US, between -0.04 and 0.06 percentage

points in Japan and between 0.00 and 0.30 percentage points in the eurozone. Consumer price inflation in Japan and the US during the same period "might have even been lower in the absence of globalisation" (OECD, 2006). Similarly, many empirical works have suggested the impact of Chinese exports on global import prices over the '90s was fairly modest.

It is important to bear in mind that prices might not be decreased and consumer welfare might well be reduced if each sub-contractor extracts a share of the profit before passing any savings on to consumers. Thus offshoring – i.e. the relocation of part of the production in a developing country - could lead to greater profits but not necessarily to lower prices. In extreme cases consumers might even end up worse off.

Incompleteness of international contracts could well be at the heart of this distortion. In fact, incomplete contracts lead to some inefficiency in firms' investments and to higher profit margins and higher prices/ mark-ups, which in turn likely affect consumer welfare negatively. Hence the weak contractual environment in low-wage countries may help us to understand why increasing world trade does not seem to have squeezed consumer prices as much as might have been expected.

Recent papers have introduced search frictions or inefficient organisation form to study the effect of trade liberalisation.

Antràs and Costinot (2011) propose a model of international trade with intermediation to study the impact of regional integration on welfare. Producers in this model must



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