Panel 1

THE NEW GLOBAL DIVISION OF LABOUR – HOW IS THE WORLD ECONOMY AFFECTED BY OUTSOURCING AND OFFSHORING?

Introduction

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Outsourcing

Outsourcing is a term which has been the focus of both a theoretical literature spawning models of a firm's decision to outsource and the impact on industry equilibrium outcomes, and an empirical literature which seeks to measure it. Broadly defined, the term outsourcing refers to the purchase of goods and services that were previously produced inside a company. The company providing the goods and services can be located in the same country (domestic outsourcing) or outside the country of the purchasing company (international outsourcing). The international component of outsourcing relates to switches of sourcing from within to between countries. Feenstra and Hansen (2005), for instance, explicitly formalize and estimate a model of ownership and control in outsourcing to China.

There are, however, many variants of and elaborations on outsourcing discussed in the literature. Grossman and Helpman (2002) emphasize the vertical disintegration of production which seems to be involved, but stress that to them outsourcing means more than the purchase of raw materials and standardized intermediate products. It also means "finding a partner with which a firm can establish a bilateral relationship and having the partner undertake relationship-specific investments so that it becomes able to produce goods and services that fit the firm's particular needs". They then model firm choice of relationship-specific partners in either a technologically and legally advanced North or a low-wage South emphasizing the search process involved, the need to convince potential suppliers to customize products for their needs, and the incompleteness of contracts available for enforcement.

Bhagwati et al. (2004) in contrast focus their discussion of outsourcing on services, and specifically long distance purchases of services by electronic media such as phone, fax, or internet and discuss alternative cases where providers and purchasers of services have differing degrees of mobility along the lines of Modes 1 to 4 of the General Agreement on Trade in Services (GATS). The motivation they offer is the characterization by the US President's Council of Economic Advisors in 2004 of outsourcing of professional services as a new type of trade.

OECD (2006), in a recent survey of outsourcing literature, point out that outsourcing and offshoring are terms that are frequently used interchangeably. Offshoring refers to the purchase of goods and services previously produced inside the purchasing company from companies in locations outside the country. As such, to them the terms include not only international outsourcing but international insourcing with the foreign affiliates of domestic parent companies exporting to their parents.

These and other literature-based notions of outsourcing in part reflect attempts to delineate and categorize the various channels through which economic integration is proceeding globally between various economies, and centrally reflect the concern to better understand the changing nature of global production processes in both manufacturing and services. How this pattern of production is changing is conjectural, and theoretical literature often relies on anecdotal support. Examples such as the global production of American cars, the globally fragmented production of Barbie dolls, and other items are frequently appealed to. But for many years, large OECD manufacturing firms have had many component suppliers, and outsourcing as such is not new; Boeing is reput-

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ed to use over a million components in aircraft assembly, and General Motors has long had thousands of component suppliers. The issue is how the process of working with these component suppliers is changing for large OECD manufacturers as global integration proceeds across national boundaries involving low-wage economies such as China's.

On the one hand, manufacturers seemingly prefer component suppliers to be geographically close so that it is easier to monitor them and communicate over product quality and dialogue over the frequent small changes to components that are required in meeting changes in market tastes. Just in time inventory management is also easier to accomplish with geographically close suppliers, and there can also be an accumulation of person to person links with individuals in supplying firms which makes switching suppliers costly. But if low-wage (and hence low-cost) reliable and high quality component suppliers become available elsewhere, the cost savings can justify resourcing across national borders even with the geographical barriers involved. The impression of recent outsourcing activity involving low-wage economies such as China is that improved infrastructure, growing reputation for product quality and on time delivery, the reliability of middlemen to organize transactions (often via Hong Kong), and an improved legal structure in China are also all important elements.

Public concern in the OECD over outsourcing, however, stands in some contrast to the research literature. It largely focuses on potential job loss and downward wage pressures as outsourcing abroad occurs rather than seeking to provide analytics for firm decision making on vertical cross-border unbundling (or disintegration) of production processes. As such, the policy concern is over the adjustments implied by international integration, rather than understanding exactly what form the production unbundling takes, and production disintegration via intermediate product outsourcing is but a part of this concern.

Given this adjustment focus, there thus seems to be little reason why debate on outsourcing should limit itself to resourcing of intermediate products and components. OECD retailers resourcing supplies from domestic to foreign firms generate adjustment pressures in the OECD in the same way that cross-border production unbundling does. Also, more channels for the impact of integration processes exist than the resourcing of component suppliers stressed in outsourcing literature.

These additional channels include firms in low-wage countries buying an OECD firm; keeping the firm's distribution system in the OECD, but moving production of manufacturing back to the low-wage country. One could term this insourcing, for want of a better term. Also, a considerable portion of China's integration into the global economy has been facilitated by trade transactions orchestrated and conducted via middlemen in Hong Kong, Taiwan and Korea. The size of these transactions is large, as are the trade impacts. There are speculative estimates that profits from Mainland China accruing to Taiwanese companies are around 70 percent of the profits of companies quoted on the Taiwanese stock exchange. This set of activities might be called through-sourcing, again for want of a better term, to distinguish it from conventional outsourcing.

There are often further elements of the integration process in the Chinese case that involve investment funds of Chinese origin flowing abroad and returning to China to benefit from preferential policies towards foreign invested enterprises. These include, among other things, considerably preferential tax treatment for foreign invested over domestic enterprises, but to qualify for this tax treatment threshold tests of export sales must be met. Xiao (2004) reports an estimate that the ratio of round trip FDI via Hong Kong to total FDI inflows to China could be 40 percent. Again the transactions seem large and have significant impacts on China's trade volumes. This could be termed roundabout sourcing, also for want of a better term.

Thus, not only is the definition of outsourcing in the current literature somewhat ambiguous and seemingly a little narrow but a wider variety of channels of interaction with the global economy are at issue and go beyond those that conventional outsourcing literature focuses on. And if the concern over outsourcing in OECD countries is adjustment costs, more so than understanding changes in the nature of production processes, then all of these seemingly merit discussion when outsourcing is under investigation.

Measurement of outsourcing

Attempts to both measure outsourcing and assess its impact on OECD wage rates have accompanied the analytical literature referred to above. Abraham and Taylor (1996) document an increase in the outsourcing of business services in thirteen U.S. industries. Campa and Goldberg (1997) measure outsourcing of imported intermediate inputs for various industries for Canada, Japan, the UK, and the U.S., and show that except for Japan there is a doubling in the share of imported inputs between 1975 and 1996 for all manufacturing in the US and that the UK demonstrates a large increase in outsourcing. Feenstra (1998) measures all imported components used in production by US firms and computes various measures of outsourcing, also arguing that all have increased since the 1970s.

In terms of wage impacts from outsourcing, there are two distinct trends in the literature; one on the indirect effects on bargaining power of unions in OECD labor markets from the threat to outsource production, and the other on the direct effects on OECD wage rates as production increases offshore. The first of these effects is emphasized in Rodrik (1999) and Gaston (2002). Recent empirical work by Dumont et al. (2006) and Dreher and Gaston (2005) reports results indicating that various measures of globalization are negatively correlated with union bargaining power and union membership.

In terms of impacts of outsourcing on wage rates, Feenstra and Hanson (1996, 1997) find that outsourcing has lead to an increase of the wage of skilled versus unskilled labor in both the U.S. and Mexico. Feenstra and Hanson (1999), in a subsequent paper, find that US outsourcing has raised the real wage of non-production workers by 0.16 percent/year and, in addition, also raises the real wage of production workers slightly (by 0.01 percent/year). Wage impacts in the OECD for now thus seem mild and positive, reflecting the efficiency gains from greater outsourcing raising the real wage of both skilled and unskilled labor.

While these findings seem to indicate to be a change occurring in the volume of outsourcing as more narrowly defined in the conventional literature, there is an issue of how large the initial base is around which this change is occurring and this is less well researched. Tomiura (2005) studies Japanese firms and their outsourcing activities and reports that relatively few Japanese firms outsource across national boundaries. The impression from US business activity is that still today a large part of component purchases occur from smaller component suppliers that are located in relatively close geographical proximity to larger scale manufacturing establishments so as to maintain close coordination and contact.

Thus, the issue is not only the rate of change of cross border outsourcing (however it is defined), but also the initial base around which changes are occurring. The impression (but with no firm data to confirm it) is also that more significant components of foreign trade of low wage countries involves final products than is true of OECD countries, indicating that outsourcing as conceived of in the theoretical literature may for now be relatively small. For instance, significant Chinese exports occur in clothing and assembled electronics; and much of Chinese export activity builds on relationships with retailers and distributors in the OECD anchored in Hong Kong, Taiwanese, and Korean businesspeople with long experience of how these distribution systems work. There are speculations, for instance, that WalMart is the eighth largest trading partner of China, and may have more trade with China than the whole of the UK.

Finally, there is recent literature on the productivity effects of US outsourcing. Amiti and Wei (2006) find that between 1992 and 2000 service outsourcing in the form of technical support, medical claims processing, and software development account for around 11 percent of productivity growth in US manufacturing, compared to a 3 to 6 percent gain from imported material inputs. Although service outsourcing is still seemingly small compared to intermediate component outsourcing, the potential is for it to contribute to OECD growth at ever more significant rates in the future.

Potential future adjustments from outsourcing

As I note above, the public concern in the OECD over outsourcing is not only a reflection of current job loss attributed to resourcing and production relocation through outward FDI, it is also a reflection (and seemingly predominantly so) of expectations as to how large the adjustments attributable to these integration processes might be in the future. The issue is whether we are at an early stage of a historic transformation in which large portions of global manufacturing and service activity progressively relocate to low-wage economies to arbitrage wage differences supported by OECD immigration restrictions; or whether this will be only a more limited adjustment that will slowly dissipate in future years.

Seemingly, the betting money would be on a lengthy adjustment process which will accelerate in future years if growth in the low-wage economies continues at current rates. China figures as a central part of the concerns since China is so large and her GDP and trade are growing rapidly. Current estimates are that cumulative FDI inflows into China may run in the region of $500 billion (Whalley and Xian (2006)). If OECD GDP is in the region of $25 to 30 trillion (Antkiewicz and Whalley (2006)) and the OECD capital output ratio is in the region of 3, the OECD capital stock may be in the region of $75 trillion. The amount of capital that through depreciation and reinvestment could flow to China over a period of 30 to 40 years thus seems very large and hence the prospect is for even larger future adjustments in OECD markets if this process continues.

Mundell, in a well known paper some years ago (Mundell (1957)), showed a formal equivalence between goods flows in the presence of fixed factors across countries which achieved factor price equalization, and freely flowing factors across national borders where goods are immobile achieving the same result. To some degree, global integration and current developments with the low-wage economies mirror this situation. With international restrictions on factor flows (and especially labor), flows of goods are generated as a way of arbitraging international wage differentials indirectly through goods which embody labor. Were the world economy a single integrated economy in which factors, including labor, could flow without restraints across national borders, international factor price differentials (and especially wage rate differentials) would greatly narrow and trade in goods would fall significantly.

China is the largest of the low-wage economies currently outside of the OECD (China and India account for 40 percent of the world's population). The amount of labor that has been involved thus far in the trade which has been generated by these low-wage differentials is small since FDIs in China account for well over 50 percent of exports, but employ only 3 percent of the work force. The potential for even larger adjustments to occur globally, as the Chinese integration into the world economy, and the world's integration into China continues and even accelerates, would seem to be large.

Thus, outsourcing as a phenomenon is seemingly studied in recent academic literature in terms of strategic decisions to resource component supply across national borders, not so much in terms of the potential job loss and adjustments that such transactions create. The wider public concern over outsourcing in OECD media and public discourse is over job loss and labor market disruptions. Conventional outsourcing is but one part of the adjustment process associated with the global integration of the large low-wage economies, and this process may only be in its infancy given the size of the low-wage labor pool.

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Panel

The panel was chaired by **John Peet**, Europe Editor of *The Economist*, London. Panellists included, in addition to John Whalley and Hans-Werner Sinn, business executives from major international companies.

Samuel DiPiazza, Global Chief Executive Officer of PricewaterhouseCoopers introduced himself by saying that speaking after two "very capable academics" and before two executives active in the outsourcing business he was "only an accountant", but one who tries to deal "with what's happening in reality with PWC's clients all over the world" and as such representing "some sort of independent view": "What we have seen over many years is that companies and economies that do not allow markets to work and do not work to comparative advantage are not sustainable."

Markets, he emphasised, are an undeniable force. Outsourcing is clearly a driver, and it is not about lowering costs alone. If one looks at the new markets that are resulting from the outsourcing and offshoring phenomena, "there is no question that there is a huge win game going on". With most of the outsourcing contracts signed in the past 24 months coming out of Europe, it is also clear that this has become a European game.

But, he warned that outsourcing and offshoring are very complex. "If you're the IT programmer in Munich who loses his job to offshoring or outsourcing, this is only a lose game." This calls for being very sensitive to such issues, and playing the game "very, very carefully".

The next speaker, **N. Chandrasekaran,** Executive Vice-President and Global Head of Sales and Operations of TATA Consultancy Services in Mumbai, represents a firm active in every form of outsourcing. "The global division and migration of labor is a worldwide reality today", he said, illustrating the assertion with the fact that close to 200 million people worldwide live outside their countries of birth, that 25 percent of Switzerland's and 10 percent of Germany's and the Netherlands' populations are migrants, and that the Philippines, a country of 75 million that churns out 380,000 college graduates each year, has an oversupply of accountants trained in US accounting standards. India already has 520,000 IT engineers delivering IT solutions to global corporations.

Attributing this development to globalisation and the availability of new technologies, he asserted that the world is slowly moving beyond the information economy and towards a global knowledge-based economy. Outsourcing and offshoring, "fundamental drivers of change in labour and the world economy", will be more of a competitive necessity than a strategic advantage in the near future, one that works both ways, benefiting the outsourcing country as well as the host country.

The last speaker was **François Barrault,** President of BT International and another epitome of globalisation: a Frenchman working for a British company with a Dutch CEO located in Brussels. His views on the matter were crystal clear: "Without offshoring and outsourcing we could not have been successful in the past four years." The question of whether globalisation is good or bad, he said, "is totally obsolete". You may like it, you may dislike it, but the fact is "globalisation is there". He sees it as a journey, one that in not yet finished. "We are on that journey and there is no way we can stop it".

With the new business models and possibilities it has engendered, he regards globalisation as a *"new ecosystem that has been created, and we need to take advantage of that".* During the ensuing discussion, he stressed the point further: *"Globalisation calls for observing the dynamics of the world and playing with that, rather than just being a victim."*

Tapani Ruokanen, Editor-in-Chief of *Suomen Kuvalehti,* Helsinki, asked the panellists about the long-term risks of China and India being so different, the one the world's largest democracy, the other a communist country. Mr. Chandrasekaran diplomatically pointed out that progress is being made in China: WTO membership, respect for intellectual property and the like. Mr Barrault added that India and China have different agendas: the one is the back-office of the world, the other the world's workshop. John Whalley, however, warned that although they are two very different countries, it is a mistake to think of them as separate cases. They have a commonality of interests and are an emerging block of very populous, fast-growing entities.

Mats Hellström, Governor of the County of Stockholm and Chairman of the Swedish Institute for European Policy Studies, said that Sweden's experience with outsourcing to Poland and the Baltics shows that not only profits have increased, but also employment in the mother companies. Still, he sounded a note of warning: if you outsource your core competencies, you might lose the competence to develop your core.

Kristiina Ojuland, Chairwoman of the Committee on European Union Affairs and a member of Estonia's Parliament, remarked on her country being mentioned during the panellists presentations in a positive light regarding globalisation. "One key is taxation policy and a business-friendly environment", she explained. While Mr DiPiazza echoed this strategy ("Tax policies drive the actions of companies"), Mr Sinn warned that low taxes are good, but one must not lose sight of the fact that the state has to finance itself. To this, **Martin Mansergh,** a Senator in the Joint Committee on Finance and the Public Service of Ireland, replied that his country's newish 12.5 percent tax rate maximised state revenues, inflows being now "many thousand percent higher than when the rate was 50 percent". Furthermore, he lauded the success of Ireland's policy of importing workers instead of exporting jobs, which prompted John Peet to wonder whether it was rational for countries such as Germany to keep the door shut to immigration, given that the countries that allowed immigration from eastern Europe seem to have benefited from it.