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Offshore Outsourcing: Consequences and Challenges for America

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Resumé

Dette working paper giver et overblik over offshore outsourcing i USA. Debatten om offshore outsourcing blev udløst af det voksende handelsunderskud og den støt faldende beskæftigelse i industrien. Desuden betyder teknologiske fremskridt, at stadig flere service-funktioner kan flyttes til udlandet, hvorfor et voksende antal lønmodtagere er udsatte for international konkurrence.

De fleste undersøgelser viser, at den nuværende brug af offshore outsourcing i serviceerhvervene er forsvindende i forhold til antallet af jobs, der bliver skabt i USA. På længere sigt vurderes det dog, at op mod 14 millioner servicejobs er i fare. I industrien bliver stadig flere områder påvirket af konkurrence fra udlandet. Når jobs og opgaver outsources, øges produktiviteten med en tendens til øget efterspørgsel efter højtuddannede medarbejdere, og priserne sænkes, hvilket især kommer lavindkomst-familier til gode. I sidste ende kommer USA ud af det med en gevinst.

Der er dog stigende bekymring for, hvordan offshore outsourcing vil påvirke amerikanske arbejdere og funktionærer, ikke blot overgangsvist, mens økonomiens strukturer ændres, men vedvarende via et permanent nedadrettet pres på lønningerne fra billigere udenlandsk arbejdskraft. Det betyder mere fokus på videreuddannelse og omskoling.

Forudsætningen for globalisering og dermed udnyttelse af international arbejdsdeling er en fortsat fri verdenshandel. Både på føderalt og statsniveau er der en stigende tendens til protektionisme, og Kinas fastkurspolitik samt åbningen af udenlandske markeder for amerikanske produkter og tjenesteydelser er blevet centrale omdrejningspunkter.

Abstract

This paper is meant to provide a general overview of the subject of offshore outsourcing in America. The debate over offshore outsourcing has been triggered by the increasing trade deficit and steep decline in manufacturing employment over the latest business cycle. Furthermore, as technological advances allow for service functions to relocate abroad, a larger segment of workers are now faced with international competition.

Most studies find that the current level of offshore outsourcing of services is benign compared to the net job creation in America. Estimates show that in the longer run, as many as 14 million service jobs are in danger. In manufacturing, still more areas are being affected by foreign competition. The offshore outsourcing of jobs and functions increases productivity and has a tendency to increase demand for higher-skilled labour. It also lowers prices particularly benefiting lower-income families. On an aggregate basis, it provides America with a net gain.

However, there is a growing concern that offshore outsourcing does not only imply transitional costs as the economy undergoes structural change, but that it creates a permanent downwards pressure on wages for many groups in competition with cheaper labour overseas. This entails more focus on the needs for adult training and education.

Free world trade remains a precondition for globalisation and the exploitation of international division of labour. At both federal and state level of government, there is a trend towards more protectionism. The Chinese peg to the dollar and the opening of overseas markets for American goods and services have taken centre-stage.

The author is currently serving as finance attaché to The Royal Danish Embassy in Washington.

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Washington, 21 December 2004

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The new face of globalisation

From the current debate on offshore outsourcing, one would think that businesses today are faced with a completely new set of rules compared to just a decade ago and that globalisation is something that has just been "invented". The integration of the global economy is a continuous process that sometimes moves quicker, sometimes slower in response to changes in economic circumstances, technology and infrastructure. In the coming years, no doubt that thousands if not millions of jobs will move from the most advanced industrialised countries to low-cost countries while millions other – of which we today have no comprehension – will be created in existing and new sectors.

Much of the growth in world trade originates in the multinational firms – in both goods and service. The increasingly open markets and efficient use of technology to relay information and control inventories have allowed large firms in particular to fragment the production chain and place different parts of their operations in geographically unrelated areas either through subsidiaries or a third party supplier. Subcontracting allows a big firm to become more flexible, basically moving some of the risks associated with business cycles to outside producers.

The post-war era has seen a remarkable lowering of trade barriers, both through regional arrangements like the European Union and NAFTA and through world trade agreements within the GATT/WTO-framework. The collapse of communism as an economic bloc has opened markets in Eastern Europe and in Asian countries like Vietnam. In view of the previous poor performances, Latin American countries have embraced free trade while Western Europe has embarked on implementing the Single Market with free movement of goods, services, capital and labour.

Observers point to the 1994 introduction of the North American Free Trade Area, NAFTA, linking the United States, Canada and Mexico, and to the Chinese joining of the WTO in 2001 as two specific watershed events affecting American manufacturing profoundly.

OECD (2004) argues that, on the demand side, increasing competition in international and maturing markets have led firms to focus more on cost-cutting than on revenue-enhancing measures. On the supply side, many low-income countries have invested in education and are now able to offer a labour force of young, motivated and well-educated professionals. It is an increasing worry in America that China graduates in excess of three times more engineers with

bachelor's degrees than the American university system, and India educate far more engineers than most developed countries put together.

The globalisation of manufacturing has been boosted by repeated improvements in infrastructure that have brought down transportation cost: railways, container ships, airfreight, etc. However, until recently the service sector in general had been protected for two reasons: 70 per cent of the service sector was based on direct customer contact (nursing, retail, etc.) and the remainder was protected by the lack of infrastructure to make global competition possible, ref. *Kroll* (2003).

The biggest "threat" to service employment was the increased use of technology, making often tedious and repetitive service jobs as obsolete as corresponding jobs in the manufacturing sector. As the competitive pressure from abroad has been largely absent, productivity gains in the sector as a whole[1] have been weaker than in the manufacturing sector, and prices of services have been able to increase at a rate higher than for those products faced with international competition.

The advances of broadband technology and the use of the Internet have sharply reduced the technological barriers to trade in services and have thus opened a new area to foreign competition. This is true for both lower value-added services like call centres and more demanding areas like back-office functions as well as for some medical tests.

What is offshore outsourcing?

There is no official definition of what constitutes outsourcing, offshoring or offshore outsourcing. The terms are used interchangeably to describe the way some American firms relocate some of their domestic operations abroad or replace American production with foreign imports.

Table 1 The relocation options

	Domestic	International
Own Production	Relocation	Offshoring
Third party	Outsourcing	Offshore outsourcing

[1] Sub-sectors such as retail trade have experienced strong productivity growth as information technology has been implemented.

To be more precise, *outsourcing* is the relocation of a function to a third party producer; that be domestic or abroad. *Offshoring* is the relocation to an own affiliate abroad, whereas *offshore outsourcing* is the relocation to a third party abroad, ref. table 1.

In manufacturing, the automobile industry is a prime example of offshore outsourcing, where technology, parts, software, design, etc. come from a variety of countries, often making an "American" car more of a global product than a domestic one, ref. *WTO* (1999). In services, it can be a software-programming company moving to a subcontractor or an own subsidiary in India or it can be back-office functions in financial institutions.

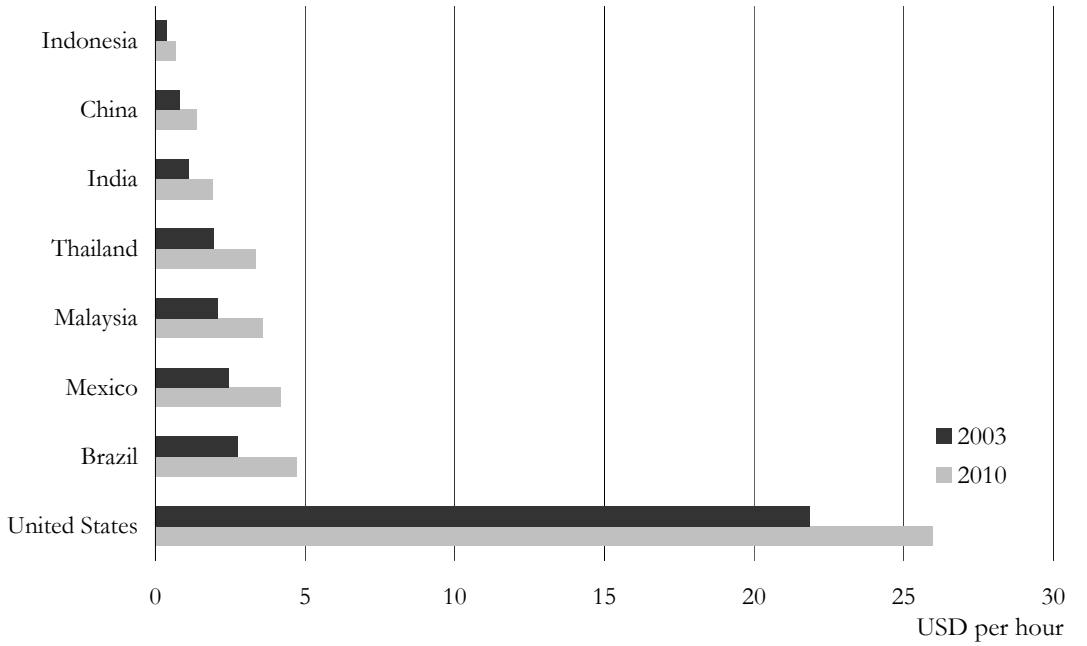
It makes little sense to merely focus on the investment decision of a firm (relocation), as the optimal strategy for any firm includes a combination of trade and investment. Some have already outsourced a function, in which case a decision to substitute the domestic supplier with a foreign one is trade. For the firm not having outsourced the same function, the decision would an investment falling into the strict definition as described above. Furthermore, when a foreign affiliate is chosen for a further expansion in the future instead of the American parent, the initial investment decision carries long-run implications for American employment even if the impact on jobs initially was negligible.

The decision on a mix between relocation and trade is of importance to the firm in question, but in the debate such nuances are of lesser importance. In the debate, the term offshore outsourcing is used to describe a situation in which a displacement of American production and employment takes place either though investment or substituted through trade. This paper will follow the common use of the term.

Why relocate abroad?

All surveys show that cost remains at the centre of a company's consideration to offshore or offshore outsource production. A recent survey conducted by *The Economist* (2004) points to the reduction of labour costs and direct material costs as the most important factor leading to offshore outsourcing. However, also access to unique materials, services and R&D assets as well as market presence and diversification can play important roles. This is particularly important for investments in other developed countries. Wages found in low-cost countries are often a fraction of those found in developed countries, ref. chart 1. Even when factoring in a nominal wages growth in these countries of 8 per cent compared to 2.5 per cent in America, the difference remains staggering in 2010.

Chart 1 Wages in selected countries



Source: Boston Consulting Group (2003), own calculations

However, low wages is a necessary, but not sufficient condition to become an attractive investment destination; if so, Central Africa would be flooded with foreign direct investments. Over the years, the countries in South East Asia have succeeded in combining low wages with an aggressive policy of openness promoting stability, investment protection, rule of law and a generally hospitable environment (e.g. through tax incentives). Together with high investments in education and infrastructure, these elements of good governance have gained increasing attention in assessments of successful development strategies, ref. *Williamsson* (2004).

Additionally, cultural differences and taste create huge and often underestimated problems. As a rule of thumb, the less complicated the function (i.e. phone service versus network design), the more predominant labour costs are in the overall assessment. No doubt many businesses will get the overall cost/benefit analysis wrong and make sub-optimal decisions, either through overemphasising the offshoring or by over-investing in capital at home. A

rush to relocate offshore could also lead to unanticipated costs, from factors such as liability laws and high training costs because of high labour turnover.

Arora and Gambardella (2004) points to language as a necessary (but not sufficient) condition for relocating to a country with re-export of the service function in mind. India, Ireland and Israel have a large pool of English-proficient labour, whereas investments in China and Brazil primarily are aimed at the local market. The Philippines, Malaysia, South Africa and other countries with strong English-speaking traditions are also making a bid for a share of the future flow of offshore outsourcing activity.

For the same reason, French investments in back-office/call-centre services are directed towards French-speaking North Africa. In the Nordic countries, customer support is often pooled outside the Nordic countries, but by default has to be manned by Nordic speakers, thus raising the relative cost of providing a service here substantially.

Leonard (2003) identifies these external factors as driving American manufacturers abroad:

- Excessive corporate taxation.

  America has one of the highest corporate tax rates; however, numerous tax breaks and exemptions exist for targeted sectors. The latest tax reform package from October 2004 was originally meant to benefit exporters of manufacturing goods, but it has also proven to lavish tax breaks on numerous other businesses, including importers of Chinese ceiling fans.

- Escalating costs of health and pension benefits.

  American businesses are more exposed to costs of benefits like health care and pensions than most of its major competitors abroad. In 2003, employers' expenditure on health insurance for employees reached 8 per cent for total compensation.

- Escalating costs of actual or threatened tort litigation.

  In 2001, the costs of the American tort system reached $205 billion, over 2 percent of the GDP. Comparable international data are limited, but estimates suggest that tort costs are much more common in the United States compared to their largest trading partners.

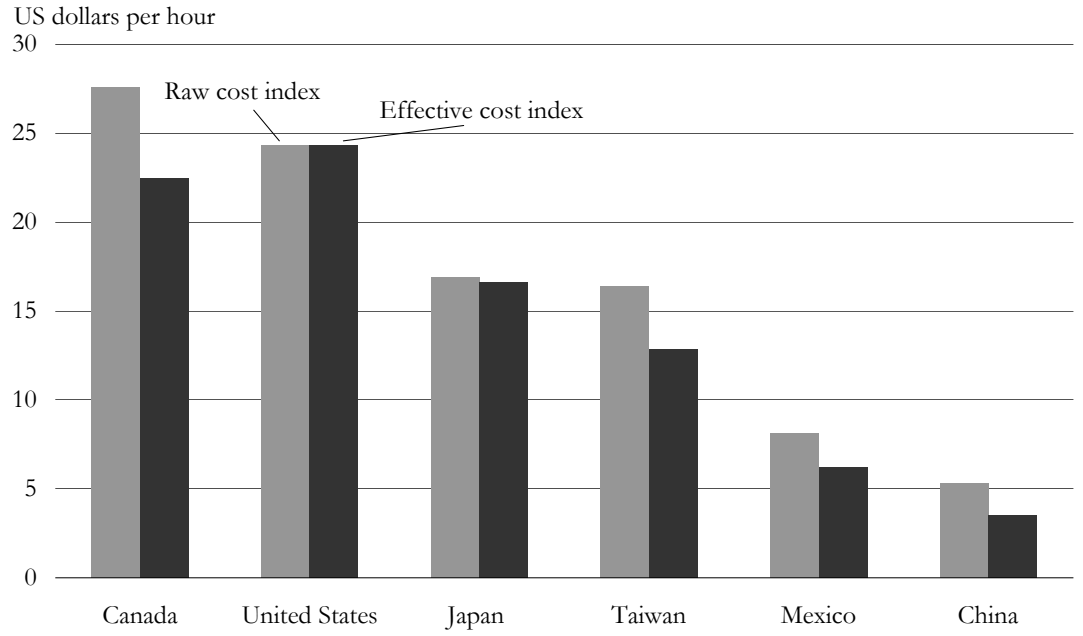
- Escalating compliance costs for regulatory mandates, particularly those related to workplace safety, pollution abatement, and corporate governance.

  Overall, the real expenditure for administering and enforcing regulations nearly doubled from $13.7 billion to $26.9 billion from 1990-2003 (in real terms). In terms of compliance, three areas of regulation are hit particularly hard: consumer safety, workplace safety, and environmental protection. The manufacturing compliance costs were 147 billion dollars in 1997.

- Rising energy costs, particularly natural gas.

Leonard introduces an effective cost index to measure the effects of the burden of the above-mentioned problems. The overall additional or hidden costs faced by American manufacturers are estimated to 22 per cent of the raw cost index, ref. chart 2.

Chart 2 Assessment of impact of external costs, selected countries



Source: National Association of Manufacturers

Relocation overseas: Offshoring vs. outsourcing?

Whether the function is offshored to an own affiliate or outsourced to a third party has significant implications for the company concerned. For both parties, the advantage of outsourcing a function is that they can focus on core businesses and exploit economies of scale. Additionally, outsourcing provides the originating firm with a higher degree of flexibility if problems should arise, lower risks from business cycles and alleviation from the burden of rising expenditure on benefits, particularly on health care. Moreover, the relocation involves a minimum of capital investment.

The drawbacks from outsourcing include the loss of control and the greater efforts necessary when integrating contributions from third parties in the internal production line. The more complicated and integrated the service/process in question, the less likelihood of moving into outsourcing.

Gentle (2004) argues that in the early days of moving operations abroad most firms chose to outsource the activities to other, often local, companies. It was easier, quicker and required less investment capital (hence risk). *Koudal* (2004) argues that a significant slowdown in American manufacturing foreign direct investments in low-cost countries (down from 12 billion dollars in 1999 to 2 billion dollars in 2002) may be attributed to increased use of offshore outsourcing. However, as foreign direct investments around 1999 were at an all-time high, the majority of the decline in investments is most likely attributable to the general weak economic growth and global anxieties.

As offshoring has now become a standard operation and a core component of the financial services business model, an increasing number of businesses choose to offshore, thereby retaining control. In this way, the initial commitment is greater, but the company has the advantage of remaining in control and thus integrating sensitive services in core businesses. Gentle points to this as the model for the future.

Other options include joint ventures and acquisition of an existing firm. However, investment decisions are often subject to specific restrictions depending on the country in question. In addition to being alert to specific challenges, *Cowan* (2004) advises manufacturers to keep essential production technology at home in order to avoid copying of product or subassembly.

For a company contemplating relocating production, the primary objective is to ensure that the perceived benefits from a low-cost environment are achieved. Besides the relative labour costs, other factors like infrastructure

(physical access to market), barriers to entry (regulatory access to market), relocation costs, integration in production chain and the availability of quality labour are among the factors that companies have to face.

According to *Lopez* (2004), risks associated with offshore outsourcing for financial entities fall into four categories: operational, reputational, legal and country-specific. The *operational* risk is the income loss resulting from an internal failure in the business model or from external events. With regard to operational risk, the Bank argues that the transfer of managerial responsibility to a third party (as is the case with the outsourcing of a service) introduces uncertainties and lessen control of the overall exposure.

The *reputational* risk arises when the way by which services are performed by third parties reflects badly on the originating firm. Hence, even if the originator is not legally responsible for the event, the firm can incur a monetary loss from loss of credibility. Especially for financial firms, the breach of confidentiality with regards to customer financial information can cause significant damage. The transfer of data itself as well as imperfections in the service provider's control environment are specific areas of risk.

The *legal* risks arise as offshore outsourcing is based on binding contractual arrangements. Besides "small-print"-problems, risks can arise when specific contractual details become detrimental to the financial firm's business strategy, for example if the contract is of long duration, but the service in question reflects outdated business realities.

The above-mentioned risks are common to all outsourcing arrangements, but moving the service offshore, which tend to lessen direct influence – or at least increase the supervisory burden, exacerbates the risks. Additionally, moving functions offshore creates *country-specific* risks which might include changes in foreign policy as well as political, social, economic, and legal conditions.

In response to the increasing use of outsourcing, the Joint Forum, established by the Basel Committee of Banking Supervision and other international supervisory bodies, issued nine principles for the financial sector with regard to outsourcing. According to the principles, firms should have a number of policies in place before entering an agreement, for example regarding the attainment of direct responsibility and the establishment of a comprehensive risk management system. The specific outsourcing arrangements should be on clear legal footing, identifying rights and responsibilities of all parties. The financial institution should also be vigilant in assuring that the service provider protects cus-

tomer confidentiality. Futhermore, financial supervisors should take into account a firm's outsourcing arrangements and make it an integral part of the monitoring exercise. Additionally, supervisors should be certain that an offshore outsourcing arrangement does not hamper the supervisory work, for example by reducing access to relevant material.

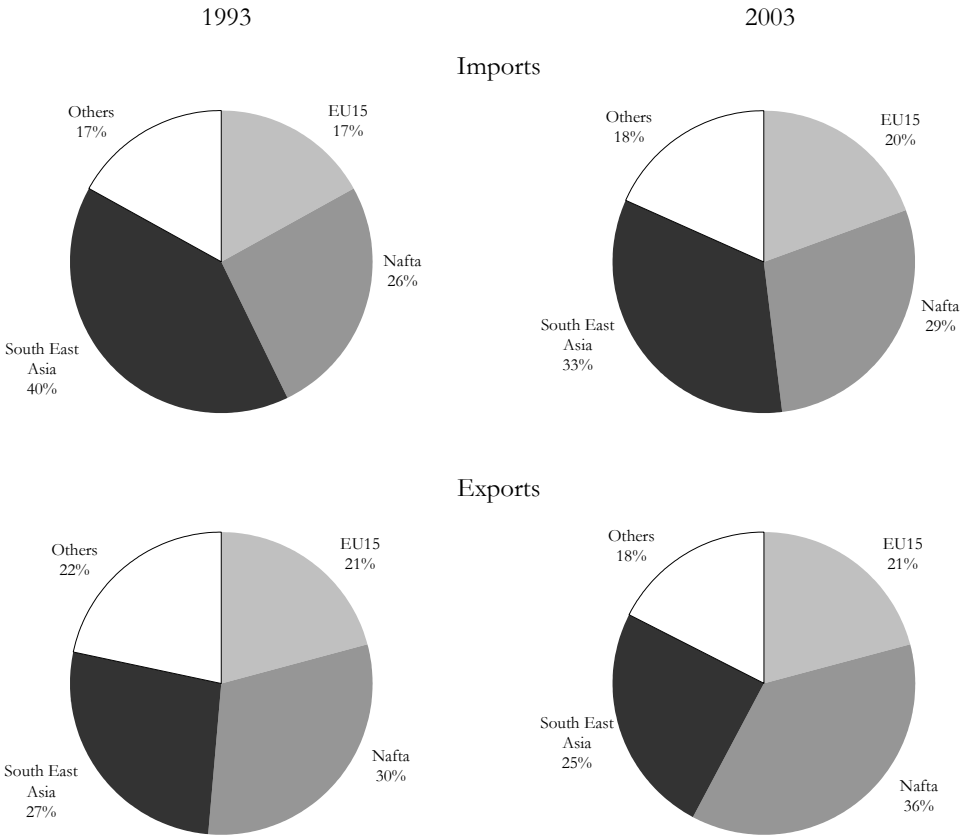
Trends in offshore outsourcing and trade substitution

As trade barriers are being broken down and new technology makes the different parts of the world easier to integrate, firms are able to exploit relative strengths on the micro level and optimise production lines. This development is also reflected on the macro level in the trade statistics. Overall, exports have enjoyed stronger growth rates than most GDPs for a long period of the post-war era, thereby increasing the overall economic interdependence, ref. *WTO* (1999). For America, the external balance and the relationship with the surrounding world has become a major focus of attention as the trade balance has continued to deteriorate. For 2003, the deficit reached nearly 550 billion dollars, and the deficit on 2004 is on track to become even larger.

The increasing deficit combined with heavy jobs losses in the manufacturing sector has shifted focus on corporate decisions to move production abroad, and hence the individual decision on offshore outsourcing. And it has increased the focus on China and its fixed exchange rate vis-à-vis the dollar, as the Chinese trade surplus with America has increased dramatically to 124 billion dollars in 2003 – or 23 per cent of the total American trade deficit in that year. One of the explanations for the increasing overall deficit could be that American multinationals increasingly use foreign affiliates rather than direct exports to satisfy foreign demand. Profits from foreign affiliates of American multinationals are much higher than in the American parent and contribute overall to half of the total profits of the multinationals, but only with one-third of the sales. Hence, capital inflows (royalties and repatriated profits) are increasing more rapidly than direct exports, ref. *Landefeld and Mataloni* (2004).

From a general perspective, the most significant development of the direction of American trade is the increasing trade with Canada and Mexico since the NAFTA-agreement came into force in 1994, ref. chart 3.

Chart 3 American foreign trade, 1993 and 2003



Source: U.S. Census Bureau

Total trade among the three countries more than doubled during the first ten years, and in 2003 Canada and Mexico were the two top destinations for American exports. Exports to Mexico alone are now larger than those to the four European G7-members (the UK, Germany, France and Italy) combined.

Mexico and Canada now account for 29 per cent of total American imports, but more significantly buy 36 per cent of American exports. During the period from 1993 to 2003, the EU and NAFTA increased the share of both imports and exports by 6 percentage points.

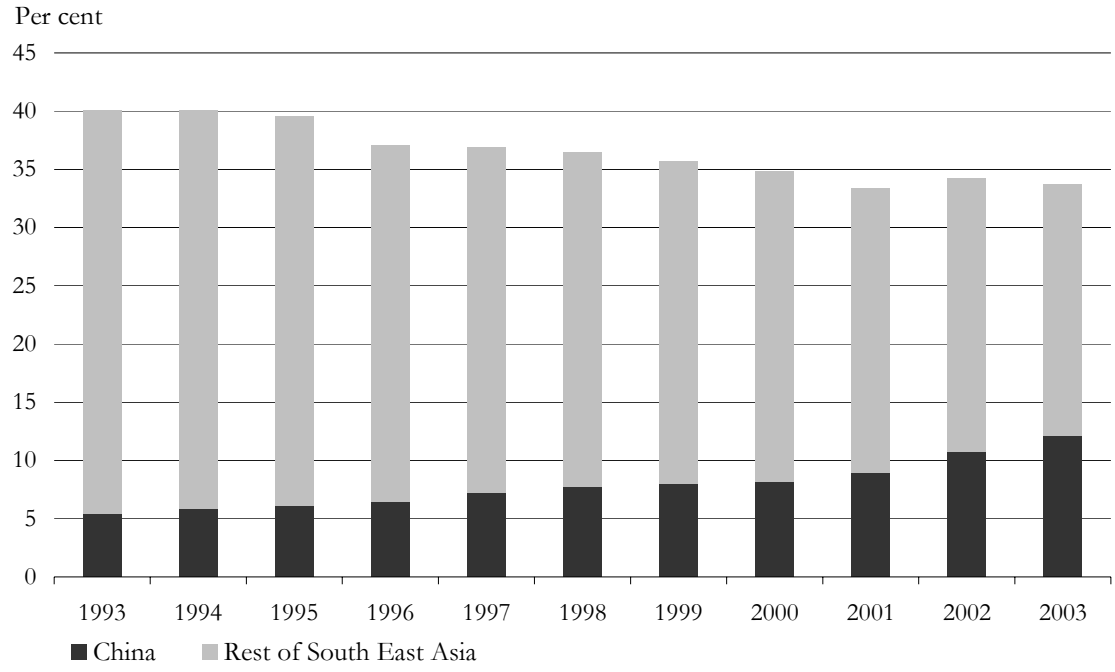
The importance of the developed countries is underscored when looking at investments. During the period 1999-2002, foreign direct investments in high-wage countries fluctuated around 25 billion dollars; in 2002, this equalled 84

per cent of the total investment outflow, ref. *Koudal* (2004). Canada and members of the European Union tend to dominate the top 10 list, while Mexico has slipped in recent years.

The other significant change is the increasing importance of China, as reflected in the increasing trade deficit. After gaining WTO-membership, China has in a short period of time become the final assembler of many goods previously produced in other Asian countries, hence boosting the Chinese exports to America. As input to the assembly is flowing to China from its neighbours, the Chinese trade deficit with these countries is growing, thus offsetting the trade surplus with the United States.

However, this fact is often overlooked in the current political debate. And while imports from China have been the talk of the town, imports from South East Asia as a whole actually decreased from 40 per cent to 33 per cent – a rather significant development during the last decade, ref. chart 4.

Chart 4 South East Asia's share of total American imports



Source: U.S. Census Bureau

The largest American retail chain, Wal-Mart, has implemented a strategy of aggressive cost-cutting and search for cheaper goods in order to increase sales and profits. Wal-Mart's reliance on goods from China is remarkable; in 2002, Chinese exports to Wal-Mart totalled 12 billion dollars; a number which continues to increase. Wal-Mart is now one of Chinas most important export markets and dominates within products such as toys, bags, clothes and shoes.

Critics of China's role in the American economy point to this dominance as a clear indicator that Chinese manufacturing is out-competing American producers. Others counter that production of the goods on which China is currently dominating were already offshored from America a while ago and that these countries, not America, are faced with a China squeeze. So far, there is little indication that a significant number of jobs have moved directly from America to China.

The primary role of China as a final assembler is very much evident in the foreign-direct-investment (FDI) pattern into China. By far the largest FDIs in China come from other Asian countries. European and American companies are in contrast primarily focused on the Chinese domestic market. More than two-thirds of sales from American-owned factories in China originate in the domestic market, ref. *Testa* (2003).

However, the true significance of China's integration in the world economy can only be measured in the longer run. With a market of a billion potential customers and an almost inexhaustible pool of cheap labour, Wall Street analysts have called the Chinese entrance into the global economy a watershed in globalisation and an event that is likely to cause fundamental structural change in the developed countries. *Purushothaman and Wilson* (2003) finds that China within two decades will be the largest global economy. However, an important assumption for this is continuous good policies promoting liberalisation and free trade.

Finally, another significant change that has influenced American trade is the development of India (the other billion+ nation), which is also projected to benefit enormously from offshore outsourcing, and from a general liberalisation of the Indian economy. India has so far attracted significant attention with regard to services, particularly the IT-industry. The growth rates of the liberalised areas of the high-tech sector have been impressive – although the starting point was very low.

The command of English is a very important factor of the Indian experience and should not be underestimated. Not just in the case of call centres, but also because English-speaking Indian IT-professionals were much in demand during the IT-boom years in the 1990's. In call centres, the ability to work around the clock is important. For higher end jobs, (e.g. medical) a long tradition of education plays a dominant role. *Arora and Gambardella* (2004) points to several factors behind the Indian success:

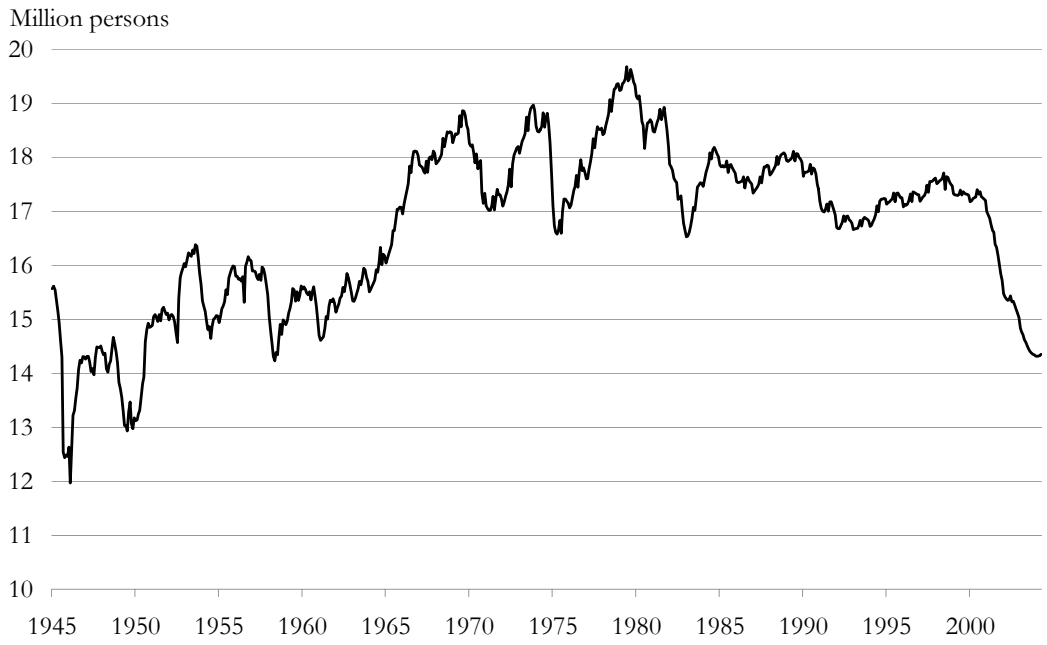
- in the run up to the millennium and the changeover to the euro, lack of it-skills in the industrialised countries forced companies to look to countries like India where they were able to find what they needed at a favourable cost.
- the US visa scheme attracted many Indian IT-workers during the boom years in the late 1990's, but many lost their work permits when the economy turned. Some used their skills and contacts to set up new and competing firms in India.
- Indian companies have worked hard on winning recognition; many are ISO-certified and boost higher standards than in many Western countries, although security and privacy issues remain a major concern.

However, the language requirement limits the current labour pool in India to approximately fifty million, though training is bound to increase that number in the coming years.

The impact on jobs and estimates of job losses

During the last three years, the unprecedented steep decline in manufacturing employment has been one of the catalysts for the debate on competition from low-cost countries, LCCs, ref. chart 5. However, it is hard to tell whether a specific job is lost due to trade/offshore outsourcing or because of the cyclical downturn, the bursting of the dot.com bubble, the recession or just as a result of an acceleration of a trend decline boosted by a leap in technology. The reason is that the different causes are interlinked and hence reinforce one another. Therefore, when increased global competition forces a firm to become more cost-effective, are subsequent gains in productivity then a result of better use of technology or increasing globalisation?

Chart 5 Employment in American manufacturing



Source: Bureau of Labor Statistics

Most analysts agree that offshore outsourcing has only had a limited effect on job destruction over the past cycle. Instead, aggressive cost-cutting and hence high productivity growth is seen as the primary cause of the relatively anaemic net job growth in the current business cycle, ref. e.g. *IMF* (2004). Wall Street analysts point to the boom years of the 1990's when firms not only overdid their capital investments, but also hired too much staff. *Groshen and Potter* (2003) further argues that most of the jobs added during the recovery have been placed in other industries than where the layoffs took place and that this structural trend explains some of the weak hiring: it takes longer to create new positions than to rehire to an existing one.

Table 2 Estimated job losses from offshore outsourcing and trade substitution

Current	
Bureau of Labor Statistics	Official mass-layoff statistics show 4 per cent of an average job loss of 900,000 over last 2 years or less than 50,000 per year. Substantially underestimates actual numbers.
Schultze (2004)	155,000 to 215,000 jobs from 2000 to 2003 in business, professional, and technical services. 185,000 jobs in IT-related services over last four years to India.
Baily and Lawrence (2004)	Between 2000 and 2003, estimated job loss from trade in manufacturing is 256,000-591,000 (argues closer to minimum) and job loss in services to India 275,000 (based on Indian job numbers).
Atkinson (2004) – PPI	840,000 manufacturing jobs and 300,000 service jobs displaced from trade in 2001-04.
Goldman Sachs (2003)	American producers have moved less than 200,000 jobs to overseas affiliates. More than 6 million jobs are at risk in coming decade.
Future	
Bardhan and Kroll (2003)	14 million jobs of the 2001 employment belong to at-risk service occupations – not an estimate of eventual job losses.
Atkinson (2004) – PPI	12 million information-based jobs at risk.
Gentle (2004) - Deloitte Research	By 2010, 20 per cent or 414 billion dollars of financial sector cost base will have moved offshore. 850,000 service jobs in the financial sector at risk of moving.
Forrester Research (2004)	Most sited analysis. Across service occupations 3.4 million jobs expected to move by 2015; 830,000 by 2006
Gartner, Inc. (2003)	500,000 out of 10.3 million technology jobs may move abroad in 2003-04.
Sirkin et al (2004) – Boston Consulting Group	More than 15 per cent of direct-manufacturing jobs in core manufacturing sectors at risk.

Note: All consultant firms mentioned provide in offshore outsourcing.

Source: GAO (2004), Sirkin et al (2004), Schultze (2004), Atkinson (2004b) and Baily and Lawrence (2004).

The official estimate of the impact from offshore outsourcing comes from the Bureau of Labor Statistics, BLS, and its survey of mass-layoffs. Firms with more than 50 employees are asked why layoffs are taking place; one option being moving production overseas. However, an offshoring decision could easily be seen as reorganisation, cost savings, etc. For this reason, and because reply-

ing is voluntary and only larger firms participate, the official number of less than 50,000 jobs per year is likely to underestimate the actual number of jobs lost to trade, ref. table 2.

Based on data from the national accounts, *Baily and Lawrence* (2004) estimates the net loss of manufacturing employment from trade to between 256,000 and 591,000 jobs from 2000 to 2003. As most of the loss is due to lower exports, relocation of production only plays a marginal role. Especially capital goods have been hit hard by lower exports, while the sharp decline in apparel points to strong competition from overseas manufacturers.

BLS has not made official job estimates on the increasing offshore outsourcing of business services to India, which is the other controversial part of the current trend of increased global integration. However, according to *Kozlow and Borga* (2004), imports of other personnel service (not including defence, travel and transportation) accounted for only 700 million dollars in 2002. Imports of non-affiliated business, professional and technical services from India have remained virtually unchanged since 2000 at 209 million dollars.[2] Analysts who are more dismissive of the scope of offshore outsourcing point to the lack of statistical evidence as proof.

However, the decrease in imports of business-related services stands in sharp contrast to surveys of firm behaviour, statistics from India and anecdotal evidence. Critics often point to the trade statistics from India, which show a significant increase in service exports. Whereas the American numbers show flat or falling imports from India, Indian data show an increase in computer software and other information technology from 1.1 billion dollars in 1997/98 to 6 billion dollars in 2002/03, ref. *Schultze* (2004).

Schultze points to a number of different explanations for part of this discrepancy. First of all, the Indian export data include revenues from services performed by Indian firms in America by Indian personnel. This explains for about half the discrepancy. Furthermore, Indian data seems to generally overreport export earnings from services. In 2002, Indian service exports to the world totalled 24.9 billion dollars, whereas the combined service imports from India in America, EU, Japan and Canada only totalled 4.3 billion dollars, leaving 83 per cent unaccounted for, ref. *Kozlow and Borga* (2004). Though part of

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[2] *Schultze* (2004) points out that total service imports by American multinationals from Indian affiliates "were not large enough to add much to these figures."

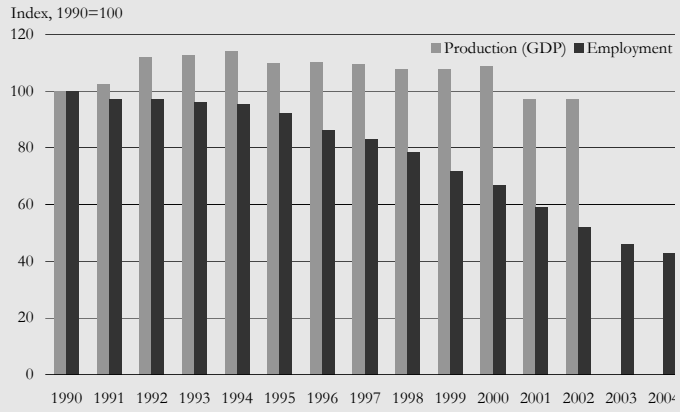
the problem for the overall discrepancy can be found on the Indian side, there is a broad consensus that the puzzling divergence should be examined further.

Box 1 The textile and apparel industry

To many non-Americans, it seems obvious that the textile industry is concentrated in the cotton-producing South. However, the manufacturing of cloth and apparel was originally concentrated in the New York/Pennsylvania area and did not move south until the 1950's – causing heavy job losses in the areas affected.

Whereas production value in current prices has been fairly constant over the past decade, employment has decreased significantly from the mid-1990'es.

Chart b1. American Apparel Production and Employment



Source: BEA and BLS

Hence, average productivity has risen in the same period, and in 2002 average production per worker was almost twice as high as in 1990. This has made the industry more capital-intensive, less labour-intensive and less reliant on cheap labour. The remaining industry is in general more competitive than was the case a decade ago. Total apparel employment constituted 700,000 by August 2004; less than half a percent of total employment.

The termination of the Multifibre Agreement by the end of the year, will undoubtedly spur even further reduction in the domestic industry, although the impact is projected to be much larger in the Americas. Thus, the combined share of India and China in the American textile and apparel import is expected to increase from 20 to 65 per cent if no action is taken. The share of the Americas is expected to drop from 26 to 8 per cent.

So far, a coalition of textile manufacturers, fibre producers and labour unions have announced they will file 13 petitions against China, asking for a 7.5 per cent cap on growth in imports for 12 months as provided under a bilateral agreement between China and America. The petitions cover 10 categories, including cotton and manmade fibre knit shirts, cotton trousers, non-knit cotton and manmade fibre underwear, ref. *Washington Trade Daily* (2004).

In services, *Baily and Lawrence* (2004) estimates the loss of employment based on the number of jobs created in India by increased exports to America[3]. The authors find that the total loss of service sector employment comes to 275,000

[3] The authors assume a one-for-one job transfer, hence no difference in productivity.

over the three year period or less than 100,000 per year, half of which are software jobs. In comparison, the total service sector employment grew by an average of 327,100 per year in the same period.

It is difficult to compare the various estimates, as they tend to cover different professions and sub-sectors. *Schultze* (2004) finds that the aggregate job loss from offshore outsourcing of business, professional and technical services lies between 155,000 and 215,000 from 2000 to 2003. He estimates the loss of jobs to India in IT-related services to 185,000 jobs over the last four years. *Atkinson* (2004b) presents an estimated gross job loss from trade of 840,000 manufacturing jobs and 300,000 service jobs since 2001. However, Atkinson also concludes "the number of service sector jobs that have gone overseas [due to offshore outsourcing] is actually relatively small."

Although the estimates vary considerably, which points to a high degree of uncertainty surrounding the calculations, an average annual total loss of jobs from offshore outsourcing in both manufacturing and services of less than 200,000 per year over the last four years seems to be the general conclusion. This is also the conclusion reached by Goldman Sachs, ref. *GAO* (2004). This should be compared to a gross job loss of between 27 and 35 million per year in the last decade.

Labonte (2004) points out that offshore outsourcing creates an initial gross job loss as goods and services that were previously produced by American workers are now produced abroad. However, the negative impetus on trade deficit that this creates leads to an increase in foreign dollar holdings that can be used to (a) buy American goods, (b) buy American assets, driving down interest rates or (c) buy other currency, driving down the dollar. Thus in all scenarios the initial gross job loss will be offset by a gross job gain, although there may be a transitional period. Only recessions cause sustained lower employment in the longer run.

The longer run

There is little doubt that offshore outsourcing will continue in both manufacturing and services. For manufacturing, both offshore outsourcing and trade substitution is a continuation of a long trend. Most estimates on the future scope of these activities are related to services, reflecting the novelty of service offshore outsourcing. The projections on both job loss and job creation are subject to significant uncertainty – as is true with all long-term projections.

Sirkin et al (2004) estimates that more than 15 per cent of direct-manufacturing jobs in core manufacturing sectors are at risk due to foreign competition. They further divide the manufacturing sector into four categories based on their respective stage of offshoring and potential:

- *Moving early* (10-15 per cent of sampled industrial demand) is part of the early wave in which import penetration is already high. These products arrive as finished products. Electronic equipment in cars is a prime example.
- *Growing fast* (15-20 per cent of sample) will be the big movers in the short run. Low-cost imports have already achieved high import penetration and are continuing their strong growth. Household appliances and consumer electronics are typical in this category.
- *Up and coming* (30-40 per cent of sample) is characterised by low, but fast growing import penetration. This cluster contains major sectors such as aerospace, architectural and structural metal products, and machine shop products.
- *Globalising slowly* (25-30 per cent of sample) are those industries that remain well protected for a longer period. These products are either characterised by low value per weight unit, high technical sophistication not found in low-cost countries or by being absorbed by domestic demand in those countries.

The most quoted number with regard to the offshore outsourcing of service jobs is the Forrester Group, which estimates that a total of 3.4 million service jobs will have moved offshore by 2015; 830,000 of which will have moved by 2005, ref. *Ferranti* (2004). Though the number in itself sounds high, it constitutes about 250,000 jobs per year. The estimate is based on occupation rather than on sector and thus includes service professions in the manufacturing sector. Moreover, it does not only include IT-producers, but also occupations that rely heavily on IT to perform their services like call centres, loan processing, back-office accounting and other business process outsourcing jobs.

Bardhan and Kroll (2003) identifies the characteristics of services subject to potential offshore outsourcing. These are:

- No face-to-face Customer Servicing Requirement
- High information Content
- Work Process is Telecommunicable and Internet enabled

- High Wage differentials with similar Occupation in Destination Country
- Low Setup Barriers
- Low Social Networking Requirement

In essence, jobs consisting of tasks that can be described or systematised in great detail are in danger of either moving overseas or being replaced by technology. *McKinsey Global Institute* (2003) identifies the first functions to be offshored as back-end processing, call centres, and accounting, followed by software maintenance and development, i.e. standardised functions. As the pool of high-skilled labour abroad expands, so will the functions that can be offshored – even moving into the areas like aeronautical engineering and general research and development.

Bardhan and Kroll (2003) estimates that at the outer limit 14 million service occupation jobs of the total 2001 employment are at risk of being outsourced. The estimate is based on the "outsource ability" attributes listed above, applied to the detailed Occupational Employment Statistics compiled by BLS. Furthermore, only occupations in which offshore outsourcing is already taking place or planned according to business literature are included. Bardhan and Kroll finds the Forrester estimate to be conservative given the recent experience in both manufacturing and services. Using a similar method, *Atkinson* (2004b) finds that 12 million information-based jobs are at risk.

A survey by *Gentle* (2004)[4] finds that financial institutions are likely to follow a path similar to that of the manufacturing sector. However, as the need for customer contact is greater, it will not be able to replicate the scale of offshore outsourcing. The survey finds that in 2003, 80 per cent of financial institutions with a market capitalisation of more than 10 billion dollars were engaged in some level of offshoring or offshore outsourcing activity.

Gentle finds that by the end of 2005, 215 billion or 10 per cent of the total financial service cost base of the 100 largest financial institutions will be relocated overseas with a total saving of 32 per cent. Furthermore, by 2010, a total of 20 per cent of the cost base will be relocated with a total saving of 38 per cent. The total number of American financial-sector jobs at risk is about 850,000, ref. *GAO* (2004). Gentle points out that offshore outsourcing is more

[4] The survey is based on the 100 largest global financial institutions, and thus not limited to American entities.

predominant among bigger financial institutions than for the smaller entities. The difference creates a significant cost advantage for the larger institution; a gap that is likely to widen.

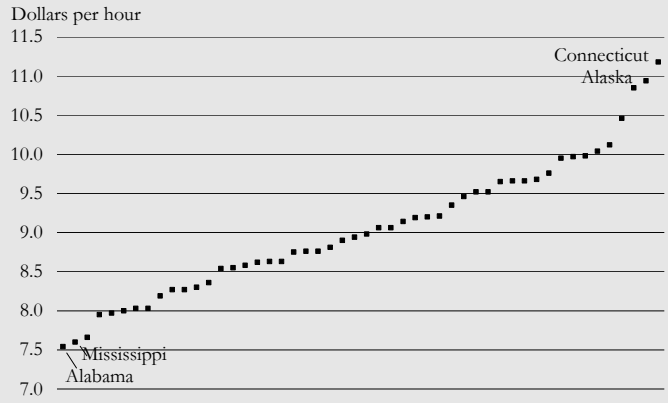
Box 2 Call centres

According to the Bureau of Labor Statistics, the number of workers in call centres was 358,300 in April 2004 – a drop from 414,800 in April of 1999. Call centres have been relocating within America in recent years, moving from the high-cost to low-cost rural areas and small towns in the South and Midwest, thus becoming important employers in isolated areas. In 2002, 77,333 new call centre jobs were created in the America, ref. *Deloitte* (2004). More than one-third of the new jobs were situated in Texas, Florida and Oklahoma, but also South Dakota, Louisiana, Virginia and California had leading positions.

In some areas, these low-wage service sector jobs have replaced lost manufacturing jobs. The major attraction for locating in rural areas is cheap labour with average wages of 7-8 dollars per hour compared to the national average for telephone operators of 12.57 dollars. Indeed in more than half of all states, the 25th percentile wage per hour is below 9 dollars per hour, ref. chart b1.

Cost savings is also the prime reason for overseas relocation. *Deloitte* (2004) found that 53 per cent of communication companies cited cost reduction as the main driver of offshoring – exploiting wages as low as 1 dollar in India factor, though other factors reduce the overall saving, ref. earlier.

Chart b1. Hourly 25th percentile wage by state



Source: BEA

Some companies have experienced problems in establishing call centres in India. An often cited example – and the target of numerous attacks in internet chat rooms – is Dell Inc., who was forced to insource its corporate service centre from India due to customer complaints. Customers complained about thick accents, scripted responses and the lack of knowledge.

Recently, the use of inmates in American prisons has gained attention. The 2,000 inmates working in call centres are paid 11 to 36 cent an hour according to the Federal Bureau of Prisons. Employers consider the prisoners reliable and cheap labour, whereas several unions, including the Communication Workers of America, call it unfair competition. Additionally, there have been some cases in which sensitive information has been misused by inmates.

However, large as the number of threatened jobs might seem, it is important to view them relative to the estimated job creation in America in the coming

decade. The main conclusions from the latest BLS employment projection 2002-2012 are[5]:

- total employment is expected to increase by 21.3 million jobs or 15 per cent, slightly lower than in the previous decade.
- employment growth will be concentrated in the service sector; education and health care as well as professional and business services are projected to experience the fastest growth.
- 9 of the 10 fastest growing sub-industries are health and information technology-related, led by software publishers.
- Manufacturing employment is expected to decline a further 1 per cent with the sharpest declines in apparel and textile as well as in computer and electronics manufacturing.

When assessing the total impact on future employment, it is important to include the dynamic effects, creating both positive and negative scenarios.

Bardhan and Kroll (2003) identifies a scenario in which in which America will continue to attract innovative and high value added jobs, using the lower costs from outsourcing of basic services to boost productivity and competitiveness. This is considered the main scenario by most economists and is built on the dynamic effects seen in *Global Insight* (2004) and *Mann* (2003).

The other scenario is where the relocation of service jobs proves more costly to the economy as a whole than was the case in earlier rounds of manufacturing relocation overseas.[6] This could be the case if centres of high-skilled, innovative professionals are built up around the world, eliminating the current American advantage in new waves of innovations.

The economic impact of offshore outsourcing

On 7 February, the Chairman of the Council of Economic Advisors, Gregory Mankiw, was subject to a rather unfriendly line of questioning from the Joint Economic Committee. The reason? The 2004 Economic Report of the Presi-

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5 The BLS projections do not include a change in the scope of offshore outsourcing.

6 They also present the case for increasing domestic relocation exploiting the advantage of differences in labour and living costs across the states – very much like the call centre-industry already has done, ref. box 2.

dent included the conclusion that *"When a good or service is produced more cheaply abroad, it makes more sense to import it than to make or provide it domestically"* (p. 229).

The conclusion is taken from any standard macroeconomic textbook based on both theoretical and hundreds of years of empirical evidence. Indeed the developed countries' high standard of living is a direct consequence of the exploitation of comparative advantages and the division of labour.

However, in an election year of steep decline in the American manufacturing employment coinciding with healthy growth in countries like China and India, the conclusion seemed insensitive and out of touch with the problems facing many everyday Americans – a growing insecurity about future job possibilities.

The debate over the consequences of NAFTA very much mirrors the arguments used in the debate over offshore outsourcing. *Scott* (2003) finds that the rise of the American trade deficit with Canada and Mexico has caused the displacement of production that supported almost 900,000 jobs, most of which were placed in manufacturing. NAFTA is further thought to have contributed to rising income inequality and reducing real wages for production workers – all in all resulting in a "race to the bottom". *The International Trade Commission* (2003) points out that 10-20 per cent of the increase in wage disparities in the 1990's can be directly attributed to trade, and when productivity gains are included as well – some of which stem from trade – the total impact could explain for up to 40 per cent of the total increase.

This is very much the same argument that is currently being levied against further globalisation. Indeed the prediction of the 1992 presidential candidate Ross Perot that NAFTA would produce a "giant sucking-sound" of jobs going to Mexico sounds vaguely familiar in the current debate.

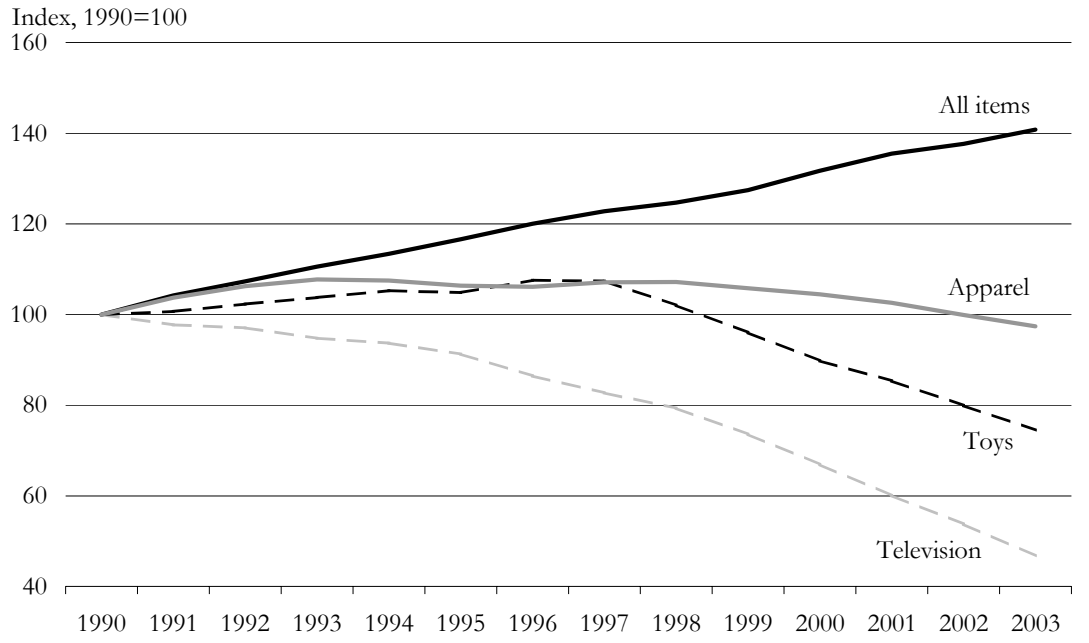
However, not surprisingly, proponents of NAFTA and free trade point to the job boom of the 1990's during which employment rose from 114 in 1994 to 130 million in 2000. *Zoellick* (2001) has estimated that a further 900,000 jobs have been created from increased trade with Mexico. In the period 1994-2000, the American economy underwent a spectacular growth period with high productivity and employment growth at the same time, allowing for a continuous subdued inflation. This is what Greenspan christened *the new economy*.

If lower value-added production had not been moved abroad and labour had not been allocated to new and more productive areas, a tight labour market could easily have become a constraint on domestic growth given the low (and declining) level of unemployment. Hence, if businesses had restrained from

taken up offshore outsourcing, this would not necessarily have saved jobs as lower growth rates would have led to lower job growth.

As argued in the President's economic report, offshore outsourcing and trade substitution makes good economic sense. It exploits the comparative advantages of countries to allocate resources to places where they are put to most productive use. This is true for services as well, allowing firms to invest in jobs that are less routine-based and create higher value. It also allows firms to relieve bottleneck and to provide services that they would otherwise not be able to afford such as man-operated call centres – under threat from further automation as well as from India. Competition also encourages businesses to become more innovative, spurring further economic growth.

Chart 6 Consumer price indices



Source: Bureau of Labor Statistics

One of the problems of improving the public opinion on offshore outsourcing is that the benefits are small to the individual and hard to quantify, whereas the costs in form of a transitional loss of jobs are easily identifiable. To the con-

sumer, one of the most visible advantages of increased global competition is increased variety and the effect on prices. *The Economist* (2004) argues that the perceived danger of deflation in 2003 to a large extend stems from benefits from productivity growth and lower import prices, which is in essence good deflation rather than the kind of bad, anaemic deflation experienced in Japan.

Prices on many consumer goods with high import penetration such as clothes and footwear have been falling or remained unchanged the past decade, hence increasing households' purchasing power of other goods and services, ref. chart 6. However, some of the decline in prices also stems from other factors such as increased productivity and competition in the market place.

As lower income families tend to spend a larger share of their income on goods rather than on services, lower price increases on consumer goods are of greater relative benefit to these income groups. The aggregate should *ceteribus paribus* be higher economic growth. It is somewhat ironic that Wal-Mart – the most ferocious business when it comes to bringing down costs and increasing imports from China, ref. earlier – primarily is targeting the very low-income families whose incomes are most threatened by foreign competition.

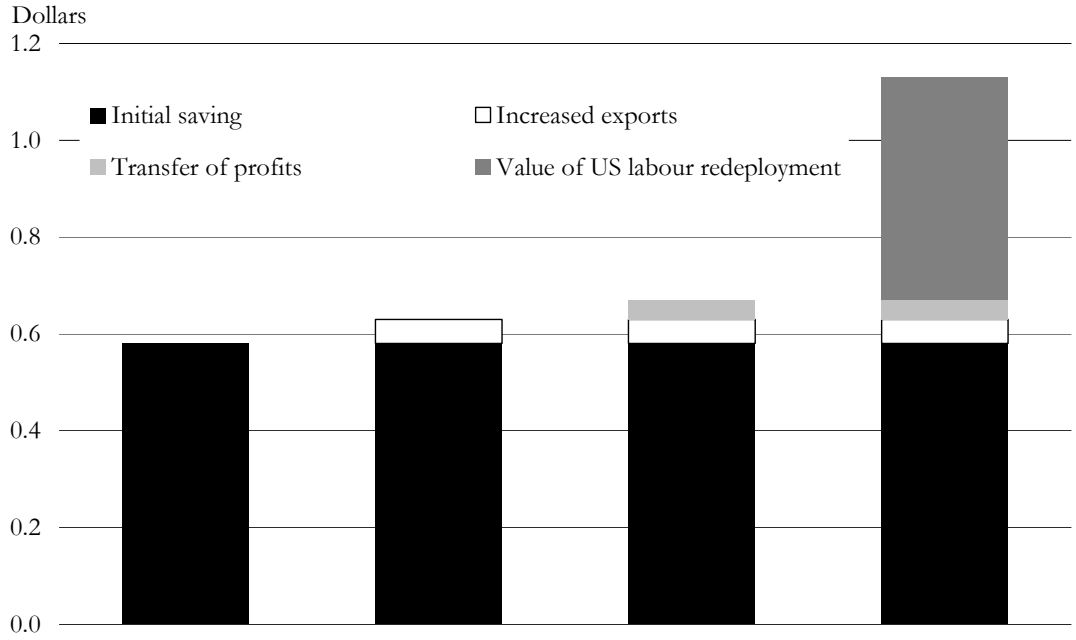
For American producers of intermediate goods and services also offered by competitors in low-cost countries, the lower prices bring both advantages and disadvantages. Lower prices on inputs for those able to exploit the global market mean higher productivity growth and profits. For those competing with foreign firms as subcontractors, it can be a disadvantage if the price offered by for example a Chinese business becomes benchmark for the industry – regardless of quality, reliability, etc. This is the case in the automotive industry, ref. *Shirouzu* (2004). Furthermore, for goods assembled in China, even price-competitive American subcontractors can lose out if distance to the assembly becomes too much of a problem.

Mann (2003) focuses on price elasticity, and thus on how a change in price influences investment behaviour. Mann argues that price elasticity for capital goods is close to 1, why lower prices due to offshore outsourcing will not have significant impact on investment decisions for capital goods. Hence, the subsequent productivity gains are limited, and the dynamic argument for offshore outsourcing less clear (though still positive). Mann finds that the global production of IT-hardware has made prices 10-30 per cent lower than they would otherwise have been. The lower prices can be translated into productivity growth and an accumulated 230 billion dollars in additional GDP for the period 1995-2002; real growth would have been 0.3 percentage point lower if the

globalisation of IT-production had not taken place. The lower prices on IT-hardware have increased the demand for software which has risen from 58 to 69 per cent of IT-spending between 1993 and 2001.

Mann further argues that the IT-investments in hardware only to some extend have been fully integrated in the work function, why a strong potential demand for IT-services persists. As price elasticity for IT-services is much higher than for capital goods (5-7), price reductions made possible by the use of cheaper labour in programming and data entry will promote a demand for IT-services outside the IT-sector and generate a significant boost to overall productivity. This raises potential growth and is the driver of the projection of strong growth in employment of sophisticated IT-workers.

Chart 7 Aggregate American benefits for one offshore outsourced dollar



Source: Baily and Farrell (2004)

Baily and Farrell (2004)[7] argues that of one dollar of corporate spending when a company outsources a service job offshore, the American economy will stand to receive a net gain of 1.12-1.14 dollars, whereas the recipient country captures a gain of 33 cents in form of wages, profits and taxes, ref. chart 7. An important implicit assumption for the calculations is that the displaced workers do not incur an economic loss.

For every outsourced dollar, American companies save 58 cents – a clear telling example of the enormous wage difference. Additionally, some companies have found higher productivity and accuracy in their Indian call centres; though several have recently come to the opposite conclusion and have repatriated the service. The savings can be used for further investments or returned to the shareholders.

Besides the obvious cost savings, the American economy also benefits in other ways. Foreign operations – like call centres – require a wide range of goods and services, many of which are purchased in the United States, hence increasing export. *Haque* (2004), estimates that Indian call centres will need to spend 12 billion dollars over the next four years on new equipment. A growing class of middle-class employees also generates increased demand for Western products. Baily and Farrell estimates the gain from additional export to 5 cents on the dollar. A further 4 cents derive from repatriated profits from American-owned companies, bringing the total direct benefit of offshore outsourcing to 67 cents.

Mann argues that it is uncertain whether an increase in purchasing power and a demand for higher value-added goods will indeed increase exports or whether production of even high-tech products aimed at the local market will be produced there – by western-owned firms. In that case, American workers stand to gain very little directly whereas the shareholders stand to gain. Workers will gain some economic benefits through pension plans, but not enough to off set the initial loss. The subsequent question is whether countries like China will allow foreign capital owners to extract the profits made on exploitation of cheap labour. The experiences from the British colonial empire indicate that this is not the case in the longer run.

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[7] Note that the net return on offshore outsourcing in the *Baily and Farrell*-framework is unique to each country, depending on among other things the flexibility of the labour market. Hence, a survey on Germany showed much smaller net gains.

Baily and Farrell further estimates that an additional 45 to 47 cents of value will be created through higher productivity and growth, bringing the total gain for the offshore outsourcing of one dollar to 1.12-1.14 dollars to the American economy. Part of this gain stems from an additional demand for higher skilled labour receiving higher wages. This is the same effect argued in *Mann* (2003). A survey of Danish industrial CEOs, by *Dansk Industri* (2004) also came to the conclusion that moving lower valued-added jobs abroad would increase investments and the creation of higher value-added jobs domestically.

Global Insight (2004)[8] finds the same dynamic effects of higher productivity, lower inflation and interest rates increasing economic growth. In 2003, this added 33.6 billion dollars to the GDP and *Global Insight* expects it to add another 124.2 billion dollars by 2008. It is further argued that real wages will be 0.44 per cent higher in 2008 due to lower inflation and higher productivity.

The real crunch is whether the direct benefits will result in increased investments at home leading to higher productivity growth (hence protecting jobs by lowering unit labour costs) and more domestic employment in higher value-added occupations. If sufficient labour is available without the loss of low-productivity jobs, i.e. the economy is not in a state of full employment, or if there is a skill mismatch, the offshore outsourcing is not necessarily an aggregate benefit to America. This is a new challenge that the US is facing; as companies are outsourcing production and eventually services to a greater extent, the structure of the American society changes as the middle class shrinks.

Job insecurity and wages

Whereas societies in aggregate stand to gain in the long run, advocates of free trade sometimes tend to neglect the consequences on the micro level and the distributional effect: suppliers of goods and services are being squeezed and workers – blue or white collar – are caught in a global transition process. In more isolated areas, it can threaten the livelihood of entire communities. It may not be a real threat to all those fearing displacement as the hype about China and India has exacerbated the current problem, but the worry is real all the same. This is one of the reasons why the current debate is in danger of running off track: one side accuses the other of being protectionist girliemen and the other accuses the first of being insensitive and out of touch.

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[8] The report was sponsored by Information Technology Association of America, an industry organisation.

There are two important aspects of the debate on offshore outsourcing and wages. The transitional effect as the structural change takes place and the more permanent impact on wage structure and distributional effects.

Transitional costs

As labour and capital shift towards other uses than the ones lost to foreign competition, some workers will become unemployed leading to a period of below potential growth. This period can be longer if the training for a new job is costly. This is the *social cost of adjustment*. For the individual, a loss of job means significant changes in their livelihood – a problem that grows with low-skilled workers with low mobility. These are the *private costs of adjustment*, *WTO* (1999).

Kletzer (2001) focuses on the high import-competing industries, such as apparel, footwear, motor vehicles, metals, toys and electrical and non-electrical machinery, which are the sectors of manufacturing that have been most severely hit by job displacement due to offshore outsourcing. Kletzer finds that a total of 17 million American workers have been displaced from the manufacturing sector between 1979-1999 – about 38 per cent of these were workers in import-competing industries even though this industry only accounts for just under 30 per cent of manufacturing employment. In a more recent study, *Labonte* (2004) finds that from 1999-2001, 4 million workers with tenure of 3 years or more were displaced, and that does not include another 6 million with shorter tenure who were displaced as well.

The number one solution for workers hit by job displacement is reemployment. The likelihood of reemployment varies greatly according to age, education, geography, job tenure, the sector of reemployment and the overall state of the economy and the labour market. Older, rural and less-educated workers have less chance of finding a new and/or equal-paid job. According to Kletzer, 66 per cent of displaced manufacturing workers were reemployed after one year. The same can be said for 69 per cent of non-manufacturing displaced workers, but for only 63 per cent of import-competing displaced workers. About one-third of all high import-competing displaced workers returned to manufacturing after their job loss. Another one-third was reemployed in the non-manufacturing sectors and the remaining one-third was not reemployed at all.

Labonte finds a similar picture in the period 1990-2001, showing that 64 per cent of displaced workers had become reemployed, whereas 21 per cent had not. The last 15 per cent had left the workforce during that period.

Another important aspect of the complex of wage problems is earning losses upon reemployment. In general, manufacturing displaced workers experience large earning losses, 12 per cent on average as opposed to just under 4 per cent for non-manufacturing displaced workers, ref. Kletzer. Among import-competing displaced workers, the earning losses upon reemployment vary greatly; one-third reports of no earning losses or in fact rises in salaries, whereas one-quarter reports of earning losses of more than 30 per cent. Kletzer also finds that reemployment within manufacturing for displaced manufacturing workers reduces earning losses, whereas reemployment within retail might costs the workers about 10 per cent in earning losses. *Groshen*[9] also argues that a replacement job currently is more difficult to find and will pay lower wages.

The core of the federal aid to alleviate transitional problems is The Trade Adjustment Assistance Act (TAA) from 1974. A NAFTA program was created in 1993 in order to supplement workers who lost their job due to increased import from or a production shift to a NAFTA member. In 2002, Congress introduced the Trade Promotion Authority legislation which merged TAA and NAFTA-TAA. To obtain assistance, a group of workers have to file a petition with the Department of Labor. Recipients have to justify that trade is the major cause of their displacement.

The TAA programme[10] offers a number of benefits and services, including help to get reemployed, job search allowances, relocation allowances if workers have to move to a new area, training either on the job or in class room. Workers in full-time training are eligible for Trade Readjustment Allowances for up to 104 weeks. Additionally, workers who receive income support may be eligible to receive a tax credit for 65 per cent of the monthly health insurance premium. The supplement replaces less than 50 per cent of the average workers previous pay. There has been an increase in the number of individuals in the programmes, but even in 2003, less that 50,000 workers were enrolled in training. The total cost has generally been less than 300 million dollars annually.

In 2002, an Alternative Trade Adjustment Assistance (ATAA) was introduced for older manufacturing workers for whom retraining is not appropriate. The

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[9] At the conference: The Future of the American Worker, Cato Institute, 7 October 2004.

[10] More information on the TAA- and ATAA-programmes can be found on http://www.doleta.gov/tradeact/benefits.cfm

programme offers the same services and benefits as TAA, except for training. Instead, the programme offers a wage insurance for workers over the age of 50 and earning less than 50,000 dollars. To create an incentive to move into a new, but lower paid job a worker will get half of the difference between the previous and the new wage from the day he starts working again until 2 years after his initial lay-off up to a maximum of 10,000 dollars per year.

Drezner (2004) points out that with the current eligibility rules, workers cannot apply for TAA unless overall sales or production in their sector declines. However, in sectors with high productivity increases, production does not necessarily have to decline, making TAA unattainable for those workers. Drezner argues that it would make sense to take into account displaced workers even if their firms maintain previous production levels.

Litan and Kletzer (2001) suggested two new benefit programs, wage insurance, and subsidies for health insurance in order to qualify displaced worker upon reemployment. Litan and Kletzer at the time suggested that *all* full time displaced workers (including service-sector employees) should qualify for the wage insurance programme and receive the health insurance subsidy for 6 months or until a new job is found. Receiving the subsidy should be limited to once in any 3 to 4 year period.

Based on 1997 and 1999 figures, Litan and Kletzer estimated that 20 per cent of the reemployed displaced workers would qualify for both wage insurance and health insurance. Assuming an average payment of 50 per cent of the earnings loss, the wage and health insurance program would cost USD 2.9 billion in 1999, when the unemployment rate was 4.2 per cent, and USD 3.6 billion in 1997 when the unemployment rate was 4.9 per cent. *Brainard and Litan* (2004) estimate the cost to 4.5-5 billion dollars per year with unemployment in 2004 around 5.6 per cent.

Agrawal and Farrell (2003) argues that for a small share of the savings from offshore outsourcing, firms could pay for wage and health insurance for displaced workers. They estimate that allocating 4 to 5 per cent of the initial savings to an insurance programme would provide coverage for all displaced workers. This would compensate displaced workers for 70 per cent of the lost wages from the time they lost their jobs till reemployment and pay for health insurance for up to two years.

Longer-run implications

The other important issue with regard to wages is the effect on the wage structure and thus distributional effects. Global Insight argues that real wages will be higher as inflation is lower and productivity higher. However, trade unions and union-affiliated think tanks take a more sceptical approach. They argue that not only do the workers in immediate competition with low-cost countries face a downward wage pressure, but that an persistent unemployment above the long run equilibrium creates a continuous downward pressure throughout the economy.

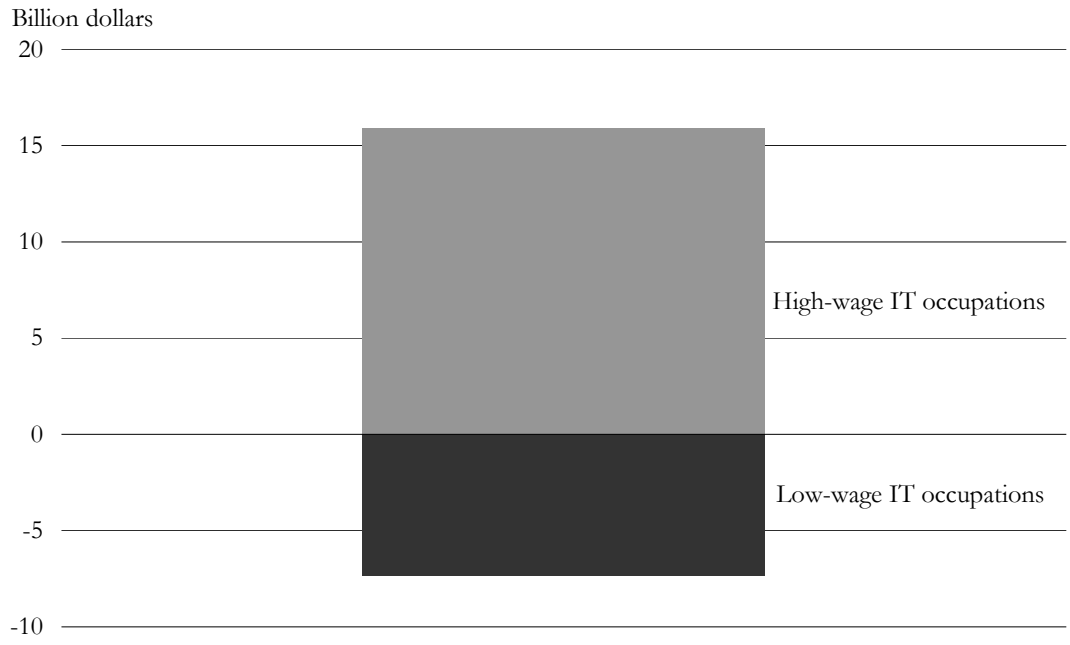
Furthermore, increasing unemployment create a pressure on non-mandatory benefits such as health care. The prospect of loosing health insurance at a time when costs are soaring is a real and intimidating threat. However, others point to the anaemic performance of wages for low-skilled workers as a consequence for an increase in the skills premium, largely brought about by the more widespread use of information technology.

Atkinson (2004b) points out that between 1999 and 2002 employment in the lowest and the two highest wages quintiles increased whereas it remained unchanged in the middle and fell in the second lowest quintiles. During the same period, *Mann* (2004b) finds that employment loss has been particularly large in the lower wage occupations, whereas most high-income has experienced strong employment gains. If the wage sum of the IT-occupations selected by Mann is added together, overall there is a net gain of 8.5 billion dollars, ref chart 8.[11] This is beneficial to the overall economy; however, it does not ease the problems of the displaced workers with outdated skills.

Looking ahead, Mann argues that the diffusion of IT to new sectors will require a strong growth in consultants tailoring basic IT-software to specific customer needs. Those services necessitating close customer contact and a high degree of creativity are not in the foreseeable future prime for offshore outsourcing. *Arora and Gambardella* (2004) further finds that this integration will lead to a greater extend of cross-investments in which Indian firms will move into the American market.

[11] It should be noted that the changes in employment is not only due to offshore outsourcing.

Chart 8 Changes in wage sums for specific IT-personnel, 1999-May 2003



Source: Mann (2004b)

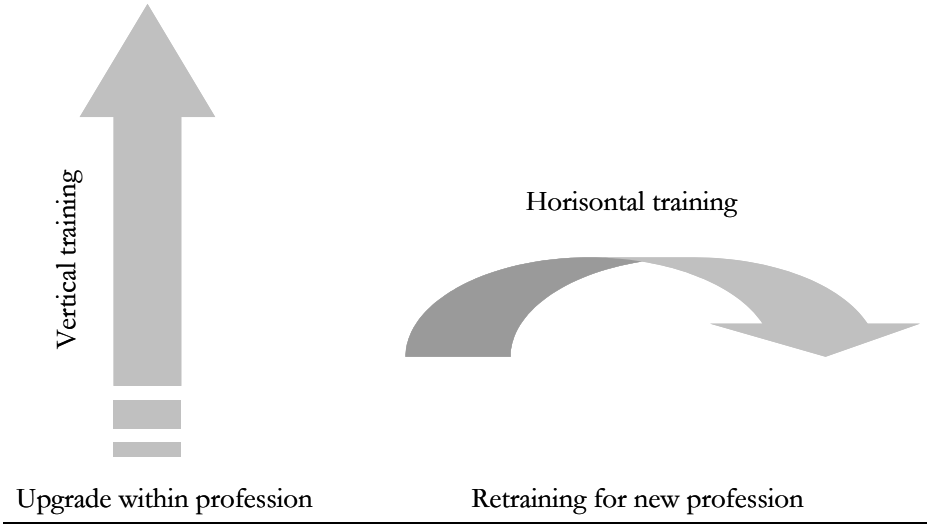
Mann (2004a and 2004b) argues that measures are necessary to improve corporate investment in their human capital in order to accommodate the growing demand for higher-skilled labour. Additional training needs to be supported by a human-capital investment tax credit for firms along the lines of the investment tax credit for capital goods. This tax credit will moderate the disincentive for training workers due to fear of losing them to a competing firm that does not train.

Mann further addresses the question of how to deal with offshore outsourcing of a growing number of what typically have been entry positions for recent graduates. She proposes an internship credit to enable firms to hire graduates and place them abroad in a job previously located in America, thus enabling the graduates to move up the corporate ladder – and gain global experience as an important benefit.

Building on the arguments advanced by Mann, one can argue that the adult training faces two challenges: one is the vertical training for skilled labour already employed or faced with temporary unemployment, ref. chart 9. The fo-

cus for this group is to continuously develop skills within the current professional silo. The other challenge is horizontal training; that is to retrain lower-skilled labour in both manufacturing and services to new positions – primarily in services. Many of these new positions will also require a low level of skills and by nature be protected from foreign competition. However, some of the displaced workers will be needed in more advanced positions if the optimistic outlook for employment and growth is to be achieved.

Chart 9 Policies for upgrading of workforce



Globalisation and neo-protectionism

Over the last decade, support for free trade has eroded and the number of people that favours barriers to protect American jobs has increased, ref. *Poole* (2004). As benefits to the economy coming from increased trade and offshore outsourcing tend to be spread out and costs become more heavily concentrated on the implicated workers, the displaced worker and those fearing displacement constitute – as voters – an important pressure group.

Protecting American jobs through increased focus on "buy American" and preventing imports from overtake American products have been at the centre of the neo-protectionist approach. However, except for a few areas, particu-

larly textile, apparel and furniture, there is little direct competition between American and Chinese producers.

As *manufacturing* has a well-established system of measures within the WTO-framework, most calls are for more active use of these measures. The most important tool with regard to the surge in imports from China is the safeguard mechanism

The safeguard mechanism is a temporary tool designed for facilitating adjustments in an industry and it can be invoked when an increase in imports is causing or threatening the domestic production of a certain good. During the latest presidential term, safeguards have been used against selected products of lesser importance, e.g. brassieres and bedroom furniture from China. [12]

A coalition of textile manufacturers have announced that they will submit 13 requests for safeguards as the quotas originally set in the framework of the Multifibre Agreement will expire on 1 January 2005, ref. box 1. However, estimates show that the protection of textile production in rich countries enjoyed under this agreement has cost consumers 170.000 dollars per saved job through higher prices. The total loss of world income is estimated at 137 billion dollars annually, ref. *WTO* (1999). This should be viewed against an American textile and apparel-employment of less than 0.5 per cent of total employment.

Though the welfare loss from trade barriers is evident, the mixed message from businesses with regard to the use of safeguards is not so much an ideological stance as a reflection of the mixed benefits from trade. Traditionally, the multinationals would typically argue against protectionist measures, as they are heavily involved in all markets, while smaller firms with local presence would argue for protection.

However, taking the furniture industry as an example, the relations with China are more ambiguous than one would think. Many producers, even smaller units, have included finished Chinese products in their assortment. Furthermore, inputs like woodcarvings that have not been produced in America for decades, are purchased in China, enabling producers to present new and better products for their consumers, ref. *King* (2004). Hence, it is not necessarily in the industry's interest to limit imports from China.

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[12] The provisions to cap the growth in imports from China on specific goods to 7.5 per cent for 12 months is part of a bilateral agreement negotiated during the Chinese WTO-accession talks.

Another area of contention is the protection of property rights. This does not only apply to the copying of finished products. As mentioned earlier, businesses setting up production facilities overseas or engaging in offshore outsourcing are encouraged to retain key components at home, thus avoiding having the product line or business model copied. In India, authorities have recently prosecuted individuals that have copied a business model to establish a competing firm. This is seen as a watershed in enforcing ownership rights more broadly.

Services, on the other hand, are new to the WTO, and commitments by countries so far limited. Hence, the WTO-framework does not provide the same well-established traditions for action and most policy responses are in the shape of legislation either at federal or state level – most in form of a "buy American" clause, ref. table 3.

Although numerous legislation proposals have been introduced, it is important to bear in mind that the introduction of legislation in many instances is window-dressing to please constituents and that only a small fraction of proposals actually become law on a federal level.

The legislative proposals[13] typically limit the extent to which firms can use offshore-outsourced functions as part of fulfilling a service contract with a public entity.

The proposals vary immensely in scope and consequences; a new law from Colorado allows for offshore outsourcing, but requires disclosure of the contractor, whereas a proposal from New Jersey allows the state to reclaim payments if all or part of a contract is offshored within three years. In Congress, legislation has been introduced to force companies to disclose whether call centres were located abroad.

Atkinson (2004a) points to three basic flaws in the proposals. First of all, it can prove costly to taxpayers. In New Jersey, a contract was cancelled when it was discovered that a contractor used Indian labour at a cost of 12 million dollars – to save 12 jobs. Secondly, legislation can have unintended consequences and limit businesses' interest of entering into public procurements. Furthermore, legislation to restrict offshore outsourcing could trigger relations and limit the access of American firms to public procurements abroad.

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[13] A complete update on proposals on both state and federal level can be found on http://www.nfap.net/researchactivities/globalsourcing/appendix.aspx

Table 3 Examples of proposed legislation

Measure	Status
Massachusetts – House Bill No. 4850 (amended June 15, 2004). In Section 21 of longer bill it states, "The agency shall prepare a written statement that the services proposed to be the subject of the privatization contract shall not be provided by labor based or employed outside of the United States. No agency shall make a privatization contract and no such contract shall be valid if the services provided are from labor based or employed outside the United States."	Amended bill 6/15/04. Passed legislature. Section 21 was part of Governor's veto on 6/25/04.
New Jersey – Senate Bill No. 1452 (introduced April 29, 2004). Redesignates the Department of Labor to Department of Labor and Workforce Development after reorganizing the State's workforce development system and states the following: "If an employer receiving a grant for customized training services pursuant to this section relocates or outsources any or all of the jobs out of the State for which the customized training services were provided under the grant within three years following the end date of the customized contract, the employer shall, if all of the jobs are relocated or outsourced, return all of the moneys provided to the employer by the State for customized training services, or, if only a portion of the jobs are relocated or outsourced, return a part of the moneys, deemed by the commissioner to be appropriate and proportional to the portion of the jobs relocated or outsourced, and the returned amount shall be deposited into the Workforce Development Partnership Fund."	Passed Both Houses, Assembly (78-0-0) 6/17/2004.
North Carolina – House Bill No. 1414 (introduced May 11, 2004). An appropriations bill that states, "If the Secretary of Administration or a State agency cannot give preference to North Carolina products or services as provided in G.S. 143-59, the Secretary or State agency shall give preference, as far as may be practicable and to the extent permitted by State law, federal law, and federal treaty, to products or services manufactured or produced in the United States. Provided, however, that in giving such preference no sacrifice or loss in price or quality shall be permitted; and provided further, that preference in all cases shall be given to surplus products or articles produced and manufactured by other State departments, institutions, or agencies which are available for distribution."	Passed both houses but differences in provisions, including state preference provision, need to be resolved by conference committee appointed 6/24/04.
Colorado – House Bill No. 1373 (introduced April 24, 2004). Allows state contract work to be done overseas if a department meets certain conditions, including that it not result in a reduction in the quality of services, the contractor discloses that part of the work will be down outside the U.S., and safeguards for non-medical and medical data (under HIPPA) are maintained.	Bill passed House and Senate and sent to Gov. Bill signed by Gov. 6/04/2004.

Source: National Foundation for American Policy

Although the current legislation proposals to a large extend are aimed at preventing offshore outsourcing in public contract, in services there are numerous ways of creating the same kind of technical barriers to trade as the ones

known in manufacturing. These tools include mutual recognition of degrees – an area that has been contentious within the European Union for years.

As services performed abroad become more sophisticated and more intimate in the sense of how they affect life and property, it questions which requirements to place on the medical qualifications of the Indian staff if part of a medical treatment process is to be outsourced to India. Furthermore, privacy laws as well as data and patent protection laws (intellectual property rights) are likely to gain a more prominent role in policy making, as well as in future WTO-rounds, ref. *Mattoo and Wunsch* (2004). They also point out that a possible failure of the developing countries to enact privacy laws in line with European/American standards will exclude them from a growing market. However, enactment of stringent laws could increase the general cost of doing business.

Levelling the playing field

The creation of equal opportunities on the global markets has become a mantra among academics and politicians alike. There are three elements to the levelling of the playing field. First of all, currency reform in Asia, particularly China. Second, the opening of markets to American products and services in countries like India, and third the inclusion of labour and environmental standards in trade agreements.

The Chinese peg to the dollar has become the centre of attack in the debate over the loss of manufacturing jobs. This follows China's growing trade surplus with America and its booming foreign reserves. The foreign reserves increased by 117 billion dollars in 2003 as the Chinese authorities intervened massively in the exchange markets in order to maintain the dollar peg. However, 54 billion dollars of the growth in reserves is due to foreign direct investments and not trade. This is often overlooked in the public debate.

The calls for a Chinese revaluation or float[14] are universal, but for slightly different reasons. Congress, industry associations and trade unions see it as the miracle cure that will make American and Chinese businesses equally competitive, particularly if the move is followed by the appreciation of other Asian currencies.

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[14] The notion that the renminbi would appreciate sharply if China was to remove capital control and allow the currency to float is disputed those who believe that diversification and an ailing Chinese banking system could easily prompt a dollar capital flight.

However, it is unlikely that even a sizable appreciation will change much with regard to manufacturing. First of all, Chinese labour will remain very cheap compared to American wages and the pool of labour in the hinterland inexhaustible – if the infrastructure is developed. Secondly, if Chinese labour were to become significantly more expensive, other countries in the region, like Vietnam, would be more than happy to welcome foreign investment. Thirdly, there is very little direct competition between American and Chinese manufacturers, ref. *Testa* (2003). Workers in other low-cost countries are the ones that have to bear the brunt of Chinese competition. In the longer run, this can change as China becomes competitive in higher value-added goods.

From an American business point of view, calls for a Chinese appreciation has the potential risk of landing between the rock and a hard place: Chinese labour costs continue to be a fraction of the American – and other countries have wages almost as low or lower, even if most of the South East Asian countries were to follow China. Higher benchmark costs in China could have consequences for a decision to move from El Salvador to China, but not from America. If labour costs in China are pushed higher by the exchange rate, it is very likely that producers will try to push costs back down by tapping in to the 800 million people in the hinterland or move somewhere else, ref. *BCG* (2003). Hence, average wages can be suppressed, and the emergence of a middle class with purchasing power and an appetite for Western goods will be prolonged.

Two further arguments have been advanced for a Chinese appreciation, but from the perspective of benefiting the Chinese economy. The Institute for International Economics has long argued that it is in the best interest of the Chinese, as a float and a subsequent appreciation would help dampening domestic growth and hence reduce the risk of overheating and economic collapse. *Mann* (2004b) argues that the under-valuation of exchange rates might benefit the export sector, but at the same time it hampers diffusion of IT across the economy thereby lowering potential growth. Mann finds this to be a general problem in many of the new IT-hardware/software-producing countries.

The opening of markets plays a much more important role in relation to services than to manufacturing as trade rounds have continuously focused on lowering barriers to trade in goods. In services, the current commitments are limited in many countries and both explicit and technical barriers to trade are abundant, ref. *USTR* (2004). The main destination for offshore outsourcing,

India, has liberalised certain sub-sectors within IT. However, many obstacles remain across the service industry. Indeed the 2004 Foreign Trade Barriers Report lists a long series of technical barriers to the Indian service market, e.g. only graduates of an Indian university can qualify as professional accountants and the Indian Bar Council has imposed restrictions on the activities of foreign firms.

Mann (2004b) argues that without the opening of markets to services in which America and other developed countries hold a comparative advantage, the Indian economy will not be able to benefit fully from the current wave of offshore outsourcing. Furthermore, if the lack of export opportunities for American firms were to persist, the overall outcome may not be positive for America, and this would be a bad signal to send better-educated people – and those trying to upgrade their skills and becoming more competitive. That will make the opening of markets hard to sell politically and jeopardise a continuous support for free trade.

Summary and conclusion

In the 1960's, some economists feared that technology would cause massive unemployment and loss of welfare. In fact we have never used as much technology as we do now – and never had higher standards of living. In the 1980's, Japan Inc. was about to take over the global economy. As it happen, Japan is slowly emerging from a decade of recessions and deflation.

However, both technological advances and increased global competition have transitional consequences that leave some as losers in the short run and others in the long run. In many industrialised countries, workers have been forced into lower paid jobs or early retirement as their skills have become obsolete. The debate over offshore outsourcing is essentially an extension of the globalisation debate that took place in the late 1990's.

Manufacturing in developed countries continues to be challenged from low-cost countries that are increasingly liberalising their economies and focusing heavily on education. The move is pushed by firms in the developed countries aggressively slashing costs. This phenomenon is not new. The new face of globalisation is the challenges of the service sector brought about by advances in telecommunication and information-based technology.

For those in services now faced with global competition, it is a rude awakening. It is said (jokingly) among investment bankers in New York is that anyone

working at a desk, using a computer can be outsourced – which to some extend is true. But initially, it is the more routine and repetitive jobs that are under threat; call centres, programmers data entry, etc. However, areas requiring highly educated personnel like research and development are also facing increasing competition. Firms stand before an enormous challenge in finding the most profitable way of exploiting the new possibilities. Although talk of stakeholder value has had prominence, it is the main responsibility of any management to ensure competitiveness and to return value to shareholders.

No doubt that the current flurry of offshore outsourcing activity in the service sector will lead to many mistakes, and decisions will be made without full knowledge of local factors that could later on provide unforeseen expenditures. Furthermore, a failure to include the possibilities of offshore outsourcing in capital-investment decisions might entail an over-investment in capital, also leaving the firm less competitive.

The current level of offshore outsourcing remains debated. But there is little disagreement that it is a phenomenon that will grow in importance in the service sector – to some extend replicating the structural shift of the manufacturing sector. Today, few eyebrows are lifted when different parts from a car come from all over the world. The same will in a few years be the case in services. Some numbers go as high as 14 million service jobs in potential danger. However, new jobs are being created, both in services and manufacturing that we cannot at this stage anticipate, and hopefully such development will change the American public's view on offshore outsourcing for the better. A higher standard of living will increase the demand for on-the-spot services, and more sophisticated technology will require the need for advanced personnel in developing customised solutions to specific organisations. These are all services that today are underdeveloped and require onsite location.

The debate over offshore outsourcing and the subsequent increasing importance of emerging markets in the world economy is important and timely. Simulations suggest that the biggest emerging-market economies will overtake the current economic powerhouses within half a century. However, it is important to put things into perspective. The developing countries' share of the global economy remains small compared to that of the developed countries. The total extend of the relationship between developed countries should not only be measured in trade, but also – and more importantly – by the high level of mutual dependence through direct investments.

The most important consequence of this growing inter-dependence through direct investments is that integration is far deeper than if based on trade or a unilateral flow in investments alone. A trade-based relationship can change over night as a consequence of retaliation, disease, etc. Direct investments have a high content of fixed costs, linking a production facility (manufacturing or service) to the host country and making the overall interest of multinational firms more opaque to the policymakers. Hence, legislation aimed at supporting domestic production either through subsidies or trade barriers can have an adverse impact on national businesses. Measures to help domestic producers in America could help foreign firms with production facilities in America, for example Mercedes and Toyota, whereas measures aimed against foreign producers can in fact among others hurt also General Motors and Ford.

Offshore outsourcing will benefit the American economy, as it provides for cheaper inputs, and it will benefit the consumers through lower prices, more services for the same cost and more variety in products. Cheaper technology will enable diffusion to other sectors, possibly boosting productivity and potential growth. But even free-trade proponents agree that those faced with competition from workers in low-cost countries will see their jobs commoditised and either face a downward wage pressure or lose the job completely.

America and other industrialised countries have to prepare for a world in which trade barriers are decreasing and the impact from lower wages and an almost inexhaustible labour pool, particularly in Asia, will have fundamental structural impact on societies. This necessitates a close look at the American educational and training system and at how to create structures that facilitate innovation. Hence, a continuous investment in human capital seems unavoidable. It also emphasises the need to invest heavily in research and development. As the production of goods and services is increasingly taking place abroad, developed countries have to find a way to remain dominant in cutting-edge technology.

Increased globalisation challenges proponents of free trade to advance the argument even in a situation in which worker anxiety is high – and genuine. However, most analysts and policymakers agree that the need for opening markets for American service export and better protection of intellectual property rights must be addressed in both the short and in the long run. At the moment, all eyes remain on the Chinese fixed exchange rate.

As long as lack of employment is considered a problem, focus will remain on how to protect American jobs against foreign competition and on how to cre-

ate pressure for setting out tougher standards in trade agreements. Furthermore, it can be expected that outside groups and Congress will continue to call for a more rigorous use of countermeasures allowed under WTO-rules and a more active use of the WTO-dispute settlement system. The Administration has so far resisted such calls.

In the end, the response to a process that cannot be stopped, only slowed down, depends on which role government should play in steering the economy. On this, there is little agreement in Washington.

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