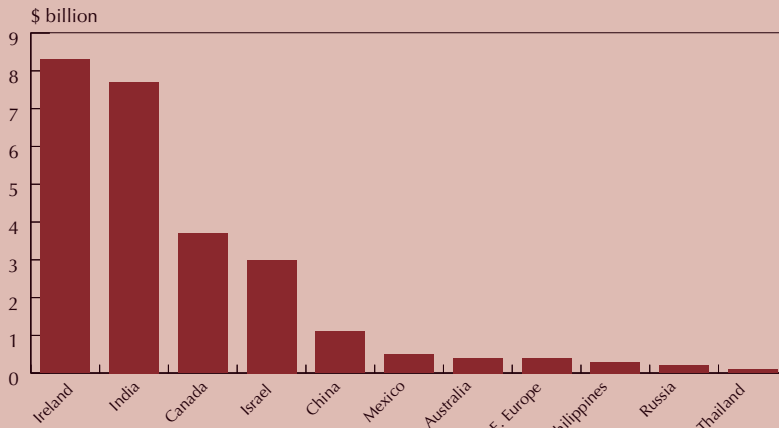


III – Impact of offshoring on the UK economy

Figure 3.1 – Offshore services market sizes (2001)



Source: McKinsey Global Institute

Over the past year, several leading UK companies have announced that they will be transferring significant numbers of back office/call centre jobs to lower cost locations such as India and China. This trend – generally referred to as ‘offshoring’ – has been a matter of some concern in the US, where it has been seen by some as a contributor to the ‘jobless recovery’ seen there in 2002 and 2003. This concern has now spread to the UK, mirroring for parts of the services sector the earlier worries about the loss of UK manufacturing jobs to low cost locations in the Far East and Eastern Europe. While some commentators, such as the McKinsey Global Institute, have argued that ‘offshoring’ will be to the mutual economic benefit of both the country where the jobs move from and the country where they move to, others (such as trade unions in the affected sectors) take a less sanguine view, questioning whether displaced workers in the UK will easily find alternative employment.

In this special article we summarise the available evidence on the offshoring phenomenon and provide a preliminary assessment of the scale of the potential impact, whether positive or negative, on the UK economy as a whole. The discussion is organised as follows:

- **Section III.1** reviews the rationale for offshoring and assesses the scale of the potential cost savings for UK companies;

- **Section III.2** assesses the potential future scale of the transfer of UK jobs due to offshoring and the extent to which this will be offset by other UK job creation;
- **Section III.3** reviews the potential wider implications of offshoring for the UK economy as a whole; and
- **Section III.4** summarises and draws conclusions from the analysis.

III.1 – Rationale for offshoring and potential cost savings for UK companies.

Advances in information and communications technology (ICT) and consequent rapid reductions in the cost of computing and telecommunications have meant that many companies in the services sector have the capability to shift parts of their businesses to lower cost locations overseas. These might range from software development to ‘back office’ activities such as processing application forms for financial products and arranging billing for utility companies. In some cases, call centre-based customer service activities might also be relocated in whole or in part, allowing 24 hour cover to be provided from different parts of the world.

This trend towards offshoring has been most evident in English-speaking countries, such as the US and the UK. This reflects the fact that a large pool of low cost, relatively well educated, English-speaking labour exists in India in particular (earlier Ireland was a popular offshore base for US IT companies for similar reasons). Figure 3.1 shows McKinsey estimates of the relative size of different offshore markets in 2001, since when it is likely that the Indian market has risen sharply, overtaking Ireland as the leading destination. China is also emerging as a major player in this market, with even lower labour costs than India, although English language skills are less widespread there. Other Asian locations such as Malaysia, the Philippines and Thailand have also seen increasing activity.

Another reason why US and UK companies have so far taken a lead in this area is that both countries have relatively large financial and business services sectors that have invested heavily in ICT systems. Relatively relaxed labour market regulations also make it less costly for US and UK companies to move jobs overseas as compared, in particular, to mainland European countries with more protective labour laws.

The potential labour cost savings resulting from offshoring can be in excess of 80%. The New Earnings Survey (April 2003) suggests that a typical call centre worker might earn around £15,500 in the UK, while CS Monitor estimates typical costs in India at only around £2,500. For an IT programmer, corresponding earnings figures might be around £34,000 in the UK, but only around £4,200 in India (although this is increasing).

In addition, there will also be savings in property costs. For Bangalore, Capital Economics' estimates gross rental charges at around £131 per square metre, only around 17% of West End rates (£981) and around half of rates in Sheffield (one of the cheaper major call centre locations in the UK). Combining estimates for labour and gross rental costs for call centre workers, Capital Economics estimates suggest cost savings for major Indian locations of around 76-85% relative to London and around 65-78% relative to Sheffield (see Table 3.1).

McKinsey Global Institute² estimates for a US company moving to India suggest that:

- savings in labour and other factor costs (e.g. rents) might average around 60-65%;
- this would be offset in part by increased telecoms and management costs, reducing the direct savings to around 45-55%;
- but, in addition, there could be opportunities to re-engineer the process when relocating so as to yield total savings of around 65-70% on US cost levels; there might, however, be a question here as to whether this involves double counting savings that could also be made by re-engineering the US operations.

Whether potential UK cost savings are higher or lower than US figures will vary from case to case and will also depend on factors like exchange rate movements that are in constant flux. But the fact that there are significant potential cost savings from offshoring from a corporate view is clear. It should be recognised, however, that there are also important risks involved in relocating businesses to a country such as India, including: possible loss of quality control in relation to customer service in particular, resulting in lower customer retention rates; data protection and security issues; dealing with local bureaucracy; potential additional costs of transporting night workers to out-of-town call centre locations; the longer term tendency of real wages to rise in developing economies that may gradually eat into cost savings; and adverse effects on morale and staff turnover amongst the remaining UK workforce.

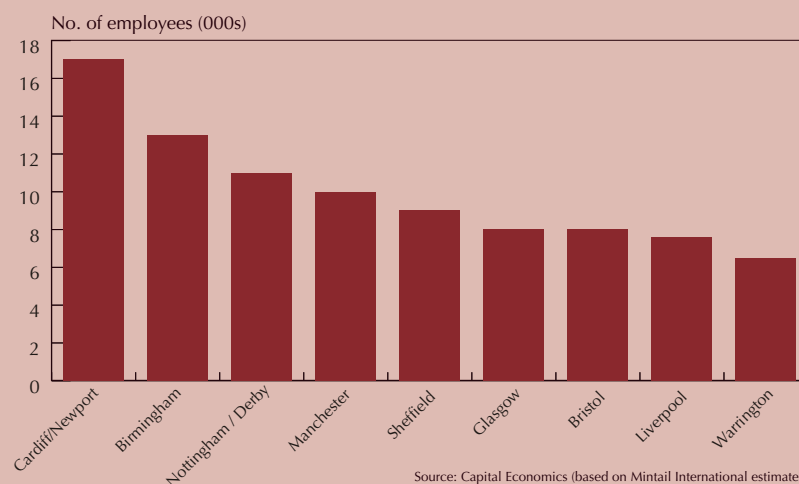
More significantly from our perspective in this article, relocation might be beneficial from a profit-maximising corporate perspective, but it is less clear that it will necessarily benefit the UK economy as a whole given the potential job losses involved. We return to this issue in Section III.3 below, but first we review the potential future scale of the offshoring phenomenon.

Table 3.1 – Relative labour and property cost estimates for UK and Indian call centres

Location	Cost per employee per year (£)	% saving relative to London	% saving relative to Sheffield
London	27,000	-	-
Sheffield	18,500	32%	-
Mumbai	6,500	76%	65%
New Delhi	5,400	80%	71%
Bangalore	4,100	85%	78%

Source: Capital Economics estimates based on data from CBRE, DTZ, CS Monitor and Gerald Eve.

Figure 3.2 – Call centre employment: top nine UK locations



Source: Capital Economics (based on Mintail International estimates)

III.2 – Potential future scale of offshoring by UK companies

Troika, a specialist City consultancy, has estimated that around 100,000 UK jobs in the financial and business services sector could move offshore by 2010 (on top of a total of around 20,000 already moved to India by November 2003), implying an average annual loss of around 14,300³ over a seven year period. This would correspond to an eventual loss of around a quarter of the estimated 400,000 call centre/back office jobs in the UK financial and business services sector at present, although this would represent only around 1.7% of all jobs in this sector (and only around 0.3% of total UK employment). The effects would, however, be more significant in areas where back office and call centre jobs were currently focused, such as Cardiff/Newport, Nottingham/Derby, and Sheffield (see Figure 3.2).

A recent wider study⁴ by the Centre for Economic and Business Research (CEBR) produced a much higher estimate of around 500,000 job losses by 2008 due to offshoring

in the economy as a whole, but argued that this would be more than offset by job gains elsewhere in the economy (as discussed further below).

To provide some further insight into the potential scale of job transfers, we have analysed detailed occupational data by industry sector from the latest available Labour Force Survey (for Autumn 2003). Table 3.2 lists employment in a selection of occupations that might in principle be candidates for offshoring. Many of these jobs will not be at risk, of course, and there could well be other occupations that might be, but this gives some indication of the order of magnitude of the possible effects. We can see that:

- there are a total of around 1.9 million people employed in these 12 'vulnerable' occupations; and
- around 300,000 (15.8%) are in government services, which seem unlikely to be transferred outside the UK at present, but this still leaves around 1.6 million potentially vulnerable, of which just under half (around 726,000) are in financial and

¹ Capital Economics, UK Property Focus, 12 January 2004.

² McKinsey Global Institute, Offshoring: Is it a Win-Win Game?, August 2003. Other references to the McKinsey Global Institute in this article refer to this same report.

³ Some other estimates are lower. For example, Deloitte Consulting put the potential job loss in the sector at around 37,500 by 2008 (around 7,500 per annum).

⁴ As quoted in The Independent ('Outsourcing could create 610,000 UK jobs by 2008', 17/1/2004).

Table 3.2 – UK employment in selected occupations potentially vulnerable to offshoring

Employment (000s)	Financial and business services	Public services	Other sectors	Total for all sectors	Total for all sectors except public services
Call centre agents and operators	27.1	6.9	42.7	76.8	69.8
Software professionals	181.4	26.9	85.4	293.7	266.8
Telephone salespersons	22.2	1.2	54.3	77.7	76.5
IT operations technicians	40.0	36.3	46.4	122.7	86.4
IT operations support technicians	27.6	19.1	20.6	67.3	48.2
Financial and accounting technicians	14.8	4.4	5.5	24.7	20.3
Database assistants and clerks	31.7	20.0	30.5	82.3	62.2
Accounts/wages clerks and book-keepers	190.8	91.9	288.4	571.1	479.2
Credit controllers	17.4	1.5	31.9	50.9	49.3
Filing and other records assistants	19.7	61.2	57.5	138.4	77.2
Pensions and insurance clerks	74.4	4.8	3.0	82.2	77.4
Customer care	79.0	23.0	191.8	293.7	270.8
Total employment	726.2	297.3	858.0	1881.5	1584.2
% of total	38.6%	15.8%	45.6%	100%	84.2%

Source: Labour Force Survey (Autumn 2003); numbers may not add up exactly due to rounding

Table 3.3 – Benefit from \$1 of US spending sent offshore to India (2002 estimates)

Benefits to US	\$	Benefits to India	\$
Savings accruing to US customers or investors	0.58	Labour	0.10
Imports of US goods and services by providers in India	0.05	Profits retained in India	0.10
Transfer of profits by US-owned providers in India back to US	0.04	Suppliers	0.09
Net direct benefits to US	0.67	Central government taxes	0.03
Value from redeployed US labour	0.45-0.47	State government taxes	0.01
Potential net benefit to US	1.12-1.14	Potential net benefit to India	0.33

Source: McKinsey Global Institute

business services; this confirms the general impression that the latter is the sector most exposed to offshoring, though the risks to employment are by no means confined to this sector.

It is impossible to know with any accuracy how many of these UK jobs might actually be lost to offshoring. Clearly many will be with smaller UK firms for which offshoring will not be a viable or attractive option, while others may be too closely linked into critical UK business activities to be able to be moved offshore. But the Troika estimate that around

100,000 jobs might be moved offshore by 2010 in the financial and business services sector would only represent around 1 in 7 of total employment in this sector in the 12 occupations listed in Table 3.2. If we scale up the Troika estimate to allow for the number of private sector jobs in vulnerable locations outside the financial and business services sector, then the figures in Table 3.2 would suggest potential total UK job transfers of the order of around 220,000 over the rest of this decade (or around 0.75% of total UK employment). The CEBR estimate of 500,000 potential job losses in the economy as a

whole due to offshoring still seems rather high, although this is probably based on a view that a wider range of occupations and business processes could be vulnerable to offshoring. This seems unlikely over the next few years, but it would be unwise to rule it out in the long run. On the other hand, as discussed further below, the CEBR study is reported to be optimistic about the potential for offshoring to deliver net job gains for the UK in the medium term.

III.3 – Potential wider implications for the UK economy

Offshoring has obviously led to concerns among affected workers and their trade union representatives. From the perspective of the UK economy, however, there are potential offsetting gains from the following sources:

- given competitive market conditions, a significant part of the cost savings from offshoring should be passed on to UK customers (some service sector companies based in the UK who choose to offshore may have some overseas customers, but this is less likely than with manufacturing companies that are generally much more export-intensive);
- to the extent that savings are not passed on to customers, this will result in higher profits for the UK-based companies concerned and their shareholders; the majority of these shareholders are likely to be UK investors such as pension funds and life insurance companies, although there will be some 'leakage' to overseas investors;
- there could also be some gains to the UK from extra demand created in India as a result of offshoring; this would partly be direct demand arising from Indian providers of offshoring services importing good and services from the UK, and partly indirect effects resulting from generally higher income levels in India (or other offshoring locations), some small part of which might be spent on UK imports; and

- many of the UK workers displaced from jobs as a result of offshoring could expect to be re-employed within a reasonable period; for the US, McKinsey estimates this effect as recouping around 45-47% of the value of the activities transferred out of the US due to offshoring (see Table 3.3).

We have produced some illustrative estimates of these possible effects in a UK context based on the following assumptions:

- total cost savings to the UK company from moving £1 worth of activity from UK to India are assumed to be of the order of 45-55p (based on McKinsey estimates including additional telecommunications and management costs associated with relocation, but without factoring in possible gains from re-engineering the business);
- around half of these gains are assumed to accrue to consumers in the form of lower prices, with around 15% of these gains 'leaking' to overseas customers (a relatively low figure is assumed here³ since offshoring activity is focused on services that are generally less export-intensive than manufacturing);
- the other half of the gains are assumed to accrue to shareholders, around 68% of which are assumed to be UK institutions or individuals (with the remainder going to overseas shareholders in line with official data showing that these owned around 32% of UK ordinary shares on average in 2002); and
- we assume, again in line with McKinsey estimates, that around 5% of the total costs transferred are recouped by increased UK imports to India, primarily as a result of direct demand by the providers of the offshore services.

As shown in Table 3.4, these assumptions imply that the UK economy recoups around 40-47p of each £1 of costs transferred to India via offshoring. In addition, the UK will gain from re-employment of UK workers displaced in this process. We assume here that:

- around 70% of the total costs transferred are related to labour (which seems reasonable in a service centre context);

Table 3.4 – Estimates of potential net benefits to UK from £1 of spending sent offshore to India (2003)

Benefits for UK	£
Total potential cost savings for UK company, of which:	0.45-0.55
- accruing to UK customers in lower prices	0.19-0.23
- accruing to UK shareholders	0.15-0.19
- accruing to overseas customers or shareholders (and so not a benefit to UK)	0.11-0.13
Imports of UK goods and services by providers in India	0.05
Net direct benefits to UK	0.40-0.47
Value from redeployed UK workers	0.40
Potential total net benefit to UK	0.80-0.87

Source: Illustrative PricewaterHouseCoopers estimates

- around 60% of the workers displaced are re-employed within a year (this is somewhat lower than the McKinsey estimate of around 70% for the US because labour mobility is lower in the UK and the McKinsey study also did not fully consider the risk that redeployed workers might displace other potential workers rather than adding to the overall level of employment in the economy, which is what matters here); and
- the new jobs are at an average wage of 95% of original levels (bearing in mind that most call centre and back office work is not particularly well paid in the first place, so you would not expect too great a loss in wages for those getting new jobs; this assumption is in line with that made by McKinsey for the US).

As Table 3.4 shows, these assumptions imply that around an additional 40p of the initial £1 transferred would be recouped by the UK economy through redeployed labour within a year. In the longer run, the re-employment rate would be expected to be higher, particularly given that service sector workers may have more general skills than those working in the traditional manufacturing and mining sectors that suffered most from earlier job losses in the UK. This should allow more value to be 'recaptured' by the UK economy over time. In addition, at least some of the other assets (e.g. property) of the company relocating might be able to be redeployed to alternative productive uses, although we have excluded this from the calculation above due to lack of reliable data on these other potential benefits.

Overall, therefore we estimate that the UK economy should recoup within a year around 80-87p of value for every £1 transferred through offshoring. In the longer term, however, the value recouped by the UK economy might potentially rise to £1 or more given:

- the scope for other assets of the relocating company to be productively re-employed within the UK economy; and
- the gains from increased income levels in India (and other major offshoring locations) feeding back into higher demand for UK goods and services.

As discussed in the McKinsey study, there would also be gains for the Indian economy (and other offshoring locations). In the long run, therefore, and in line with economic theories of comparative advantage, offshoring may bring mutual gains to all parties, even if the initial net effect on the UK economy is slightly negative. This is also the broad conclusion of the recent CEBR study into the economic impact of offshoring, which points to initial net UK job losses of the order of around 200,000 over the next three years, but a net gain in jobs of around 100,000 in the longer term as the benefits of offshoring discussed above feed through the UK economy and create new jobs.

Nonetheless, there will be losers in this process, primarily former UK workers losing jobs that cannot easily find alternative employment (or only at a significantly lower wage). There are a number of possible approaches to this problem, including traditional approaches such as retraining elements in severance packages, or increased government support in the most

³ This assumption is based on the fact that around 15% of private sector services output was exported in 2002

affected areas (although the geographical distribution of the job losses from offshoring seems likely to be more widespread than for earlier job losses in sectors such as manufacturing and mining).

There is also an interesting proposal by Kletzer and Litan⁶, which is also endorsed by the McKinsey Global Institute, for employers in the most affected sectors to provide insurance to their workers against some proportion of their expected wage losses due to failure to find new jobs within a certain period (say, 2 years), or due to reductions in wages when they are re-employed. This insurance could be based on median expected redundancy periods for relevant occupational groups, rather than actual redundancy periods for each individual, in order to reduce moral hazard problems. To avoid undue costs to smaller businesses, the requirement to provide this insurance might be restricted to larger firms, who are most likely to be those involved in offshoring.

Further work would be needed to see if these ideas could be developed into workable proposals, but they have some attractions in terms of making businesses aware of the wider social costs of decisions to move jobs offshore and ensuring that some proportion of the gains are used to mitigate the impacts on UK workers losing their jobs. It would be preferable, however, if this could emerge as a voluntary industry initiative facilitated by government, rather than being imposed as a compulsory insurance scheme.

III.4 – Summary and conclusions

Falling IT and telecommunications costs have made offshoring of services jobs to India and other locations with low-cost, English-speaking workers an attractive proposition for many US and UK companies recently (although there could be offsetting losses in customer service and retention rates in some cases). Analysis by Troika suggests that around 100,000 jobs could move offshore in the financial and business services sector by 2010.

Scaling this up to take account of potential vulnerable jobs in other sectors, we estimate that the total number of UK jobs transferred could be as high as 220,000 over this period. This would, however, still represent only around 0.75% of UK employment and other evidence suggests that the majority of the workers displaced by offshoring would find other jobs within a year, although probably at somewhat lower average wages and in some cases by displacing existing workers. We also estimate that the direct benefit to UK consumers (through lower prices), shareholders (through higher profits) and exporters to India (through higher demand for UK goods and services) would amount to around 40-47% of the value of the activity transferred out of the UK. Adding in the value added by workers reabsorbed into the workforce, we estimate that offshoring UK activity to India would result in offsetting net

gains of around 80-87% of value of activity transferred offshore after a year. In the longer run, this initial net cost of around 13-20% might be offset by further gains to the UK economy as other assets of the business are re-deployed and as the consequent higher income levels in India feed back into longer term gains for UK companies involved in trade and investment in India.

Even if the UK economy as a whole benefits from offshoring in the long run, however, some workers will lose out due to not being able easily to find jobs with comparable terms and conditions. This may be less of a problem with service sector workers whose skills may be more readily transferable than workers in traditional manufacturing sectors who lost their jobs in previous decades, and service sector job losses are also likely to be more evenly spread across the UK. But there will still be a need for government policy to support these workers in helping them back into employment through appropriate support with job search and, where necessary, retraining. In addition, it may be worth considering whether larger companies that most benefit from offshoring should plough back some of these gains through offering some form of insurance to displaced UK employees against long periods of unemployment, or re-employment at significantly lower wages. But further work is needed before a judgement could be made on the practicality of such a scheme.

⁶ Lori Kletza and Robert Litan, 'A Prescription to Reduce Worker Anxiety', Policy Brief 01-2, IIE, February 2001.