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# OFFSHORING IN TURBULENT TIMES

IT and ICT-enabled services are growing in world trade. Increased broadband connectivity in a rising number of countries has facilitated the reorganization of the production of many services. Activities that once required face-to-face contact can now be split up into smaller components, which in turn can be undertaken in places offering the best locational advantages.

The resulting offshoring of services has only just begun but is expected to continue to expand geographically and sectorally as well as across business functions. Moreover, the process is partly irreversible. Once companies learn to exploit the opportunities created by pooling services and locating them where they can be most efficiently produced, they are unlikely to return to “traditional” ways of organizing their business processes.

From a development perspective, the offshoring of services is an attractive proposition with potential benefits for all parties concerned. For the global economy as whole, it can generate efficiency gains from international specialization and trade. Importing companies and countries can access services at

lower cost and focus on activities where they enjoy a comparative advantage.

For the exporters of the services, offshoring can imply the creation of attractive employment opportunities, industrial diversification, export revenues, knowledge transfers and economic upgrading (UNCTAD, 2004; ECLAC, 2009). Meanwhile, as shown below, new countries are emerging on the radar screen as offshoring locations. Unsurprisingly, many governments are now seeking to design effective policies to boost related exports by local and foreign firms.

Measuring and understanding offshoring are no easy tasks, however. There is a lack of internationally agreed definitions of offshoring and there are many data limitations. An additional challenge is that the phenomenon is rapidly

evolving. This section starts by reviewing different sources of data to gauge how offshoring of services was evolving until the current crisis erupted. It highlights the main industries and countries involved by reviewing various sources of information.

After discussing the role of ICTs in the context of offshoring, the section turns to the implications of the crisis, distinguishing between the more immediate impacts and longer-term consequences. The overall picture that emerges is considerably more optimistic than in the case of ICT goods.

## RECENT TRENDS

The offshoring of services grew rapidly during the past decade. While the phenomenon still accounts for a modest

contribution to world trade, more and more companies in a growing number of industries and countries are embracing the opportunities created by ICTs for the specialization and internationalization of services. Offshoring of services occurs in different ways (Table I). It can be done internally by moving the production from a parent company to its foreign affiliates (often referred to as “captive offshoring”). It may also involve the international outsourcing of services to a third party services provider – domestically or foreign-owned.

The scope of activities that are affected by offshoring continues to expand. There is no internationally agreed approach to categorize the kinds of services that can be offshored, but it is common to make a distinction between IT

services and ICT-enabled services (table II). The latter group covers front office services, back office services and various forms of knowledge process offshoring (KPO). Some activities relate to specific industries while most are generic and relevant for businesses in virtually all industries.

The skills involved range from relatively low levels of qualification (data entry, certain call centres) to very high levels (research and development, design, medical testing and financial analysis). As companies have grown more accustomed to the practice, supplier capabilities have improved and the quality of the fibre optic network has expanded, the offshoring of services with higher added value has gradually become more common (see e.g. KPMG, 2008). The extent to which different services are exposed to offshoring varies considerably. Offshoring of traditional IT services such as programming and applications development are approaching a high level of maturity (table III). Today, companies considering offshoring these services can choose among many suppliers and locations, and the growth in adoption rates has started to taper off. Most business processes are found at an earlier stage of offshoring maturity, experiencing fast growth as more and more companies are still exploring the opportunities that offshoring can offer. Among these functions, customer contact services are the most mature, and knowledge services the least. The third stage comprises functions that are only just emerging as candidates for offshoring, including, for example, procurement and legal process services.

Within the worldwide spending on technology products and related services, IT services represent the largest segment. Market analysts estimate global spending on IT services in 2008 to be worth about \$557 billion, and spending on business processes outsourcing some \$115 billion (IDC, 2008). While only a small share of these expenditures involves international sourcing (offshoring), that part is growing. Dur-

OFFSHORING AND OUTSOURCING		
Location	Internalized production	Externalized production (outsourcing)
Domestic	Production kept in-house at home	Production outsourced to third party service provider at home
Foreign (offshoring)	Production by own foreign affiliate „captive offshoring“	Offshore outsourcing to third party provider abroad

CATEGORIES OF SERVICES AFFECTED BY OFFSHORING	
Service Category	Example of service activities
IT Services	Programming, systems integration, application testing, IT infrastructure management and maintenance, IT consulting, software development and implementation services, data warehousing, and content management and development
ICT-enabled services Front office services Back office services KPO	<ul style="list-style-type: none"> <li>• Call centres and customer contact centres (inbound and outbound)</li> <li>• Data entry, human resources, payroll, finance and accounting, procurement, transcription</li> <li>• Financial analysis, data mining, engineering, research and development, insurance claims processing, architectural design, remote education and publishing, medical diagnostics, journalism</li> </ul>

OFFSHORING MATURITY LEVELS OF DIFFERENT SERVICE ACTIVITIES, selected examples		
Level of maturity	Examples of services	Level of maturity
Already reaching maturity	IT services, such as programming and application development and maintenance	<ul style="list-style-type: none"> <li>• Decelerating adoption rates but continued growth in scope</li> <li>• Clearly established players and locations</li> <li>• Accepted business models and standards</li> </ul>
Emerging rapid growth	<ul style="list-style-type: none"> <li>• Customer contacts</li> <li>• Infrastructure management</li> <li>• Finance and accounting</li> <li>• Human resources</li> <li>• Remote infrastructure monitoring</li> <li>• Knowledge services</li> </ul>	<ul style="list-style-type: none"> <li>• Accelerating adoption rates and increased scope and scale penetration</li> <li>• Suppliers becoming established</li> <li>• Market consolidation</li> <li>• Location options with varying characteristics increasing</li> <li>• Fewer, better established models leading to lower risk in choosing the appropriate design</li> </ul>
Pioneer Stage	<ul style="list-style-type: none"> <li>• Procurement</li> <li>• Legal process offshoring</li> </ul>	<ul style="list-style-type: none"> <li>• Untapped value proposition, early but few adopters</li> <li>• Limited number of suppliers in few locations</li> <li>• Multiple business models and unclear standards</li> </ul>

Source: UNCTAD, based on information from Everest Research Institute, April 2009.

ing the period 2004–2008, for example, the value of IT and ICT-enabled services sourced in a foreign location grew more than three times faster than the overall growth in outlays related to such services (ibid.). Global exports resulting from the offshoring of IT services and business processes have been estimated at \$89 billion to \$93 billion in 2008, up from 30 billion to 35 billion five years

earlier (table IV). However, as these numbers do not include cross-border sourcing, occurring among the high-income countries, they underestimate the total value of offshoring. In 2008, the market share of IT services was estimated to be about 60 per cent. The preferred method of offshoring depends on the type of activity. While reliable data are lacking in this area,

“captive solutions” (i.e. services undertaken in-house in a foreign location) tend to be more important in the case of ICT-enabled services than in IT services (Boston Consulting Group, 2007). In India, for example, local service providers account for an estimated 70–75 per cent of the sales of IT services, foreign “captives” for 10–15 per cent and foreign third party providers also for >

**WORLD TRADE IN SERVICES AND IN IT AND ICT-ENABLED SERVICES, 1990, 1995, 2000–2007**  
(billions of dollars and per cent)

Item	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007
Total Services	826.7	1234.9	1524.0	1529.0	1640.5	1891.5	2288.2	2557.2	2878.1	3410.4
IT and ICT-enabled services	269.0	441.7	648.8	665.7	723.1	856.1	1033.4	1163.3	1354.3	1635.1
IT and ICT-enabled services as % of total services	32.5	35.8	42.6	43.5	44.1	45.3	45.5	45.5	47.1	47.9

Source: UNCTAD, based on data from IMF. Note: IT and ICT-enabled services include the following categories of services: communication; insurance; financial; computer and information; royalties and license fees; other business services; and personal, cultural and recreational services.

a 10–15 per cent share. In the case of ICT-enabled services, the share of local Indian providers was estimated to be about 45–50 per cent, that of foreign captives 30–35 per cent and that of foreign third party providers 20–25 per cent (Nasscom, 2009).

In countries with less developed local supplier capabilities than India, the relative importance of foreign affiliates (captive or third party providers) is often considerably higher. For example, even in a mature location such as the Philippines, foreign companies account for the bulk of ICT-enabled services exports. It is estimated that in 2008, around 90 per cent of such exports reported to the Board of Investment was accounted for by foreign companies.<sup>25</sup> In South Africa, more than half of all employees working with exports of business process services for the financial sector worked for foreign-owned companies (Everest Research Institute, 2008c). Similarly, in many locations in Latin America and the Caribbean, foreign companies dominate. For example, a 2009 survey found their share of jobs related to the offshoring of business services to be 59 per cent in Honduras, 63 per cent in Saint Lucia, 82 per cent in Saint Vincent and the Grenadines and 90 per cent in El Salvador (ECLAC, 2009).

The use of offshoring varies also by industry. Financial services companies have been the leaders in this area, accounting for an estimated 40–45 per cent of the global offshoring market (Everest Research Institute, 2008c: 20). Among the next most important indus-

tries are high technology/telecommunications, manufacturing and retail.<sup>26</sup> The high proportion of offshoring related to financial services makes it particularly relevant to consider the implications of the global economic crisis.

**BALANCE OF PAYMENT DATA**

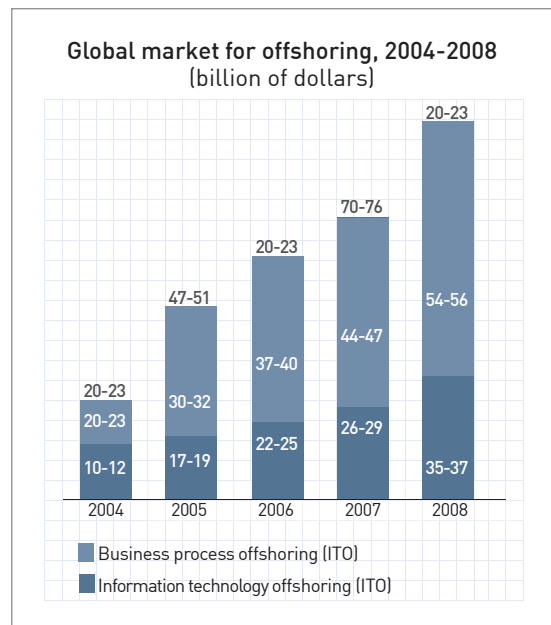
Official statistics on trade in services are compiled by the International Monetary Fund (IMF) balance-of-payments data. Using such information to examine the offshoring of services has both benefits and limitations. An advantage is that data are available for a large group of countries. A limitation is that balance-of-payments data do not distinguish between the different modes of services supply, making it difficult to isolate trade flows that are related to cross-border supply facilitated by ICTs.<sup>28</sup> Another disadvantage is that they do not specifically identify “IT services” or “ICT-enabled services”. Balance-of-payments data can be seen as an upper limit for any estimated value of offshored services (WTO, 2005).

In this report, the same definition of trade in IT and ICT-enabled services is used as in previous Information Economy Reports (see UNCTAD, 2002a and 2006b). Accordingly, the following categories of services are included: communication services; insurance services; financial services; computer and information services; royalties and license fees; other business services; and personal, cultural and recreational services. One reason for such a broad definition is technology convergence. It has become increasingly difficult to distin-

guish between, for example, computer-related services, business services, value added telecommunications services and software services. Using the broad definition, world trade in IT and ICT-enabled services amounted to \$1.635 trillion in 2007 (table V). Between 2000 and 2007, such services grew in importance as a share of total services trade – from 42.6 to 47.9 per cent. The United States was by far the largest exporter of such services in 2007; its exports amounted to \$270 billion (table VI). The United Kingdom was a clear second. While most of the top 15 exporters

are developed countries, India had the fifth largest, China the tenth largest and Hong Kong, China the thirteenth largest exports in the world.

For countries seeking to promote exports of IT and ICT-enabled services, the quality of the ICT infrastructure is important. Whereas in the early days of offshoring, relatively few locations could offer acceptable connectivity, the spread of ICTs has allowed many more countries to be seen as potential destinations. Today, good ICT infrastructure is regarded as a necessary but not sufficient condition to attract export-ori-



Source: UNCTAD, based on information from the Everest Research Institute.



ented services projects. When assessing the ICT infrastructure, the quality and costs of international telecommunication connectivity are particularly important, although requirements vary for different services.

With regard to international telecom connectivity, companies look for redundancy in bandwidth, i.e. multiple providers or cables supporting international connectivity. Rather than a country-level minimum threshold, requirements centre on whether there is redundancy and if there are multiple providers supporting bandwidth delivery. For example, Costa Rica was already supporting offshore services when it had only one fibre optic bandwidth pipe into the country. This has since developed and there are now multiple pipes into the country.

When considering the quality of international telecom connectivity, companies typically look at various reliability metrics (such as extent of down time) to assess the stability and quality of the infrastructure available. For example, in the United States, quality of connectivity is often required to be high enough to ensure that the service can be delivered up to 99.999 per cent of the time;

in an offshore location, the equivalent threshold is typically 99.9 per cent. Requirements are particularly strict for certain types of services. For remote IT infrastructure management, extremely high standards are required, and only

locations with very reliable infrastructure can be considered. For voice-based services, reliability is also important but less critical than in the case of remote IT infrastructure management. In the case of voice-based customer contact centres, it is difficult to rely on satellite technology, as latency becomes an issue, which in turn means that fibre optic links are usually required.<sup>38</sup> Given the importance of fibre optic connectivity for voice-based services, the spread of submarine cables in Africa should make more countries potentially interesting as locations for contact centres. For data traffic, there can be more flexibility, making it possible in certain situ-

ations to rely on satellite connections. Finally, the cost aspect is important. The two main cost items are wages and connectivity costs. When connectivity costs are kept relatively high by local telecom operators, it can slow the growth

of services exports and/or reduce the scope for paying higher compensation to employees.

#### IMPLICATIONS OF THE CRISIS

Exporters of IT and ICT-enabled services appear to have weathered the global economic crisis considerably better than ICT goods exporters. One reason for this is that companies see offshoring of services as one way to reduce their production costs and enhance their competitiveness. In the short term, the volume of offshoring of services is influenced by two opposing forces. On the one hand, services exports may decline due to a general slowdown in economic

activity. This applies especially to services offshored by the financial industry, in which some companies may disappear altogether. On the other hand, as the recession adds pressure on companies across industries to reduce production costs, some will choose to source more services, and new services, from lower cost locations. In the longer term, and as the global economy recovers, both the volume and the scope of offshoring are likely to grow significantly.

The analysis in this section draws on field research, media reports and information presented by leading companies in the industry. It examines the immediate impact as well as the medium- and longer-term growth prospects to expand the scale and scope of offshoring to new business segments and geographies. Special attention is given to developments in India as it is the largest developing country exporter of IT and ICT-enabled services. When this report was prepared, there was still considerable uncertainty with regard to the depth and longevity of the global economic down-turn. Moreover, the availability of official data for recent months is generally limited, which means that the analysis has to rely on private sector >

market estimates and forecasts. Thus, predictions of future outcomes should be regarded as tentative.

#### SHORT-TERM AND LONG TERM EFFECTS DIFFER

The prospects for the modalities of continued export-oriented growth in IT and ICT-enabled services are being re-examined in the light of the global economic downturn. Most firms are facing a deceleration of growth in demand, but optimism appears to prevail regarding the long-term prospects for the IT and ICT-enabled services industry.

As the impact of the global economic slowdown has slowly started to become clearer, projections for spending on IT and ICT-enabled services have gradually been revised downwards. IT organizations worldwide are trimming their budgets and cutting back on discretionary spending.

The speed and severity of the response by businesses and consumers alike to these economic circumstances should result in a market slowdown in 2009 that will be worse than the 2.1 per cent decline in IT spending in 2001 when the "dot com" bubble ended. In the short term, reduced spending on ICT should have a chilling effect on the demand for offshoring. In India, for example, prior to September 2008, exports of IT and ICT-enabled services were projected to grow by 21–24 per cent in 2008/09 in dollar terms; by February 2009 this estimate had been reduced to a 16–17 per cent growth rate reflecting substantially lower growth in export earnings from October 2008 to March 2009 (Nasscom, 2009). Other analysts agree that growth in IT offshoring will remain moderate in 2009 and 2010, and that economic uncertainty, increased competition, price cuts in smaller projects and recession will continue through the first half of 2009, with revenues starting to improve in the second half of 2009 and in 2010 (Forrester, 2009).

The effects of the crisis on corporate behaviour will evolve over time. In India, the eruption of the crisis was fol-

lowed in October–December 2008 by a slowdown in revenue growth, but both revenue and employment continued to grow. This first phase was characterized by increased caution among buyers. The issuing of new major services contracts was basically frozen and some contracts were cancelled altogether. Buyers of IT and ICT-enabled services held back on discretionary spending but less so on services related to maintenance. A November 2008 survey of 100 companies based in the United States found that the crisis made labour cost savings an even more important objective for offshoring. Otherwise, companies in the survey did not predict significant changes to their offshoring plans and strategies (Lewin et al., 2009).

By early 2009, companies had started to take action to limit the effects of the crisis, mainly with a view to reducing costs. According to the survey of United States companies, actions considered in

the short term included benchmarking offshoring contracts, closer scrutiny of service provider invoices, assessments of service provider performance and evaluations of current offshore sourcing locations to determine whether other centres might be more advantageous (Lewin et al., 2009). In India, there have been examples of buyers cancelling or postponing new offshoring contracts due to budget cuts, and some have sought to renegotiate existing agreements. In fact, some of the slower revenue growth among vendors in India reflects increased pressure by buyers to cut billing rates. Billing rates have declined by 5–30 per cent as a result of renegotiations of old contracts or the issuing of new ones (Gartner, 2009).

Several market analysts forecast that the export revenue growth of IT and ICT-enabled services will rebound relatively quickly. At the time this report was prepared, the rebound was expected

to occur in the second half of 2009 or early 2010. Many buyers who delayed contracts as an immediate reaction to the global economic crisis will find it increasingly difficult to postpone decisions any further, resulting in new contracts (Mitra, forthcoming). Moreover, greater pressure to cut costs and the maturing of existing as well as new applications may imply that many firms will consider expanding the scale and scope of their offshoring activities.

Given the current focus on cutting costs, more firms in the developed countries may be expected to expand their offshore operations in the medium and long term. For companies in industries with limited experience with offshoring, the crisis may act as a trigger for them to explore the opportunities provided by sourcing services from abroad. According to some studies, the greatest potential for more offshoring is likely to be in health care, retail, retail banking,



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ICT and insurance industries (ECLAC, 2009). Existing users of offshoring as well as new ones are also likely to show increased interest in sourcing a wider range of business functions in order to reduce costs. In the medium to long run, this should translate into larger volumes of offshoring activity. When the economic cycle eventually improves, a surge in IT and ICT-enabled services exports can be expected. By then, more companies will have been exposed to offshoring.

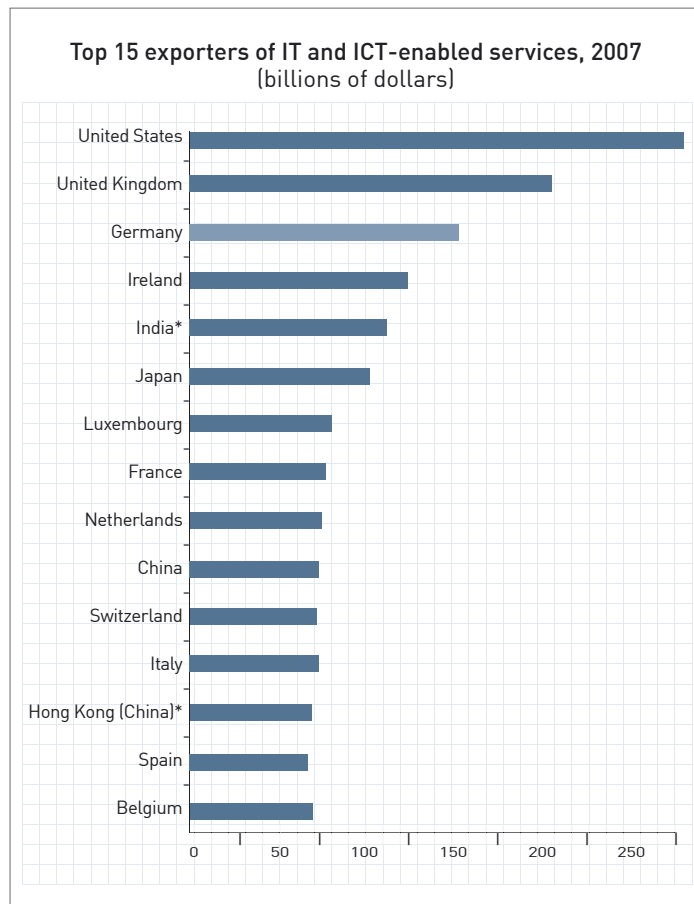
**EFFECTS VARY BY SEGMENT**

Some segments of the offshoring industry in India appear to have been more affected than others. In the case of IT services, non-discretionary services such as mandatory operations and maintenance have been less affected than discretionary services such as consulting. Similarly, application development work has been more affected than application management. While companies have been reluctant to upgrade or attempt to develop new applications, application management and maintenance are essential services that are more difficult to scale down. In the case of ICT-enabled services, a mixed picture emerges. Some vendors have been severely hit and others less so. Again, discretionary spending has been the most affected. This may imply more negative effects for front office (customer care/marketing) services than for back office services (e.g. accounting, human resources, and payroll), although data to confirm this have yet to emerge. Knowledge process offshoring, including research, product development and engineering, appears to have been badly affected as companies have cancelled or delayed related work both at home and offshore. Many firms will eventually commit to offshore more work in this area as such investments are essential to ensure their future competitiveness. The effects of the crisis also vary between industries. As noted above, the financial services industry accounts for the largest share of services sourced

offshore (section III.B.1). Consequently, the strategic responses by banks, insurance companies and other financial services significantly influence the overall impact. In 2008, the total value of outsourcing deals involving financial serv-

nificantly affected by the slowdown include travel, retail, telecommunication, manufacturing and engineering services. Less affected industries include IT and ICT-enabled services for the health sector and public administration.

ment of a strategy to get out of the current crisis. Some predict that, while the more established companies are well supplied with liquidity and may see the current crisis as an opportunity to reappraise their operations, smaller companies may be more affected. SMEs typically have fewer clients and often depend more on service niches characterized by a relatively high degree of discretionary IT spending, i.e. expenditures that have been cut back the most during recent months. Moreover, smaller suppliers are often more exposed to the volatility of demand, exchange rates and the credit crunch. But it is difficult to generalize with regard to the impact on large versus smaller firms. In summary, long-term growth prospects for the offshoring of IT and ICT-enabled services are promising for early starters (such as India) as well as many other emerging locations. As the global offshoring business is poised to grow, there should be room for more countries to develop a sizeable export-oriented services industry if they can meet companies' needs for complementary assets in terms of skills and time zones. The scope of industries and business functions that become subject to offshoring is also expected to expand in the longer term. A recent assessment of the long-term prospects of the offshoring industry suggest that as much as 80 per cent of its incremental revenue until 2020 is expected to come from new industries (such as the public sector, health care, media and utilities), customers (especially SMEs) and countries (Nasscom and McKinsey, 2009). <



Source: UNCTAD, based on data from the IMF.  
 Note: \* The 2007 export values for India and Hong Kong, China are estimates. The values were derived based on the growth rate for "other services" between 2006 and 2007.

ices dropped by 28 per cent to its lowest level since 2001 (TPI, 2009). Some observers believe that financial institutions in Europe and the United States reduced their volume of newly awarded outsourcing contracts by nearly 30 per cent in 2008 compared with 2007. In India, banking, financial services and insurance have remained the largest industry segment for IT and ICT-enabled services exports, accounting for 41 per cent of all such exports in 2008/09 (Nasscom, 2009). Other industries sig-

All of these business segments, including banking, financial services and insurance, are, however, expected to resume growth as the global economy recovers. Some indications, especially for the medium or long term, paint quite a positive picture. Some forecast that offshoring of business processes by financial services companies will increase an impressive 25 times its current market size over the next five years. Moreover, for some major financial groups, offshoring may form one ele-

**INFO**

This article contains excerpts from the „Information Economy Report 2009“, which is published by the United Nations Conference on Trade and Development (UNCTAD).

The report can be fully downloaded at: [www.unctad.org/en/docs/ier2009\\_en.pdf](http://www.unctad.org/en/docs/ier2009_en.pdf)