

Survey on Computer Software & Information Technology Services Exports: 2009-10*

This article provides the analysis of the information collected through annual comprehensive survey on software and IT services exports for 2009-10 conducted by the Reserve Bank of India. The total software and IT services exports of India was estimated at ₹1,83,692 crore (US\$ 38.7 billion), of which computer services exports, as defined in BPM6, was at ₹1,26,658 crore (US\$ 26.7 billion). United States of America remained the major destination for software services exports, accounting for 61 per cent of total software services exports. The data on software services trade were also collected according to Mode of Supply, as per the Manual on Statistics of International Trade in Services (MSITS) (2002) of GATS. The international trade in software services exports covering all modes of supply as per MSITS (2002) was estimated at ₹2,22,915 crore (US\$ 47 billion).

The annual survey on Software and Information Technology Services Exports is conducted by the Reserve Bank of India (RBI) for compiling data on various aspects of computer services exports as well as exports of Information Technology Enabled Services (ITES)/Business Process Outsourcing (BPO). The survey collects information on software services exports as per the activity, type of services (onsite/offsite) and country of destination along with the mode of supply, introduced by General Agreement on Trade in Services (GATS). The annual survey for 2009-10 covered 890 major companies which together accounted for nearly 83 per cent of the total software exports. In addition, a quarterly sample survey for the reference quarters April-June (Q1), July-September (Q2) and October-December (Q3) of 2009-10 was conducted in order to assess the features of quarterly software services exports.

Highlights

- Total software services exports (computer services and ITES/BPO services exports) of India during

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2009-10 was estimated at ₹1,83,692 crore (US\$ 38.7 billion), of which computer services exports accounted for nearly 69 per cent.

- Within ITES/BPO services exports, engineering services exports at ₹13,898 crore almost doubled over the previous year whereas BPO services exports increased by 12.5 per cent.
- The share of software services exports from India remained around 23-24 per cent of total global software services exports in first three quarters of 2009-10 and increased to 30 per cent in the last quarter.
- Public limited companies, which were nearly 7 per cent of the respondent companies for the annual survey, accounted for around 58 per cent of software services exports of India.
- Delivery of software services exports through off-site mode increased by 19 per cent on an annual basis and accounted for around 78 per cent of the total software exports. On the other hand, on-site mode delivery declined by 14 per cent and its share in total software exports reduced to 22 per cent.
- With 61 per cent share in India's total software exports in 2009-10, USA remained the major destination for software exports. The European countries had 26.5 per cent share, of which UK accounted for 12.4 per cent.
- US Dollar was the major currency for invoicing software exports with 76 per cent share. Pound Sterling and Euro accounted for 10 and 7 per cent, respectively. Invoicing in terms of Pound Sterling in 2009-10 declined by 2.4 per cent as compared with 2008-09.

Introduction

The Reserve Bank has been conducting comprehensive annual surveys and quarterly sample surveys on Software and ITES/BPO Services Exports

since 2002-03 as per the recommendations of the National Statistical Commission (2001) and the guidance given by the Technical Group on Computer Services Exports (TGCSE) (2008). The previous annual software export survey was conducted with reference period 2008-09. The surveys collect information on computer services exports, as defined in Balance of Payments Manual – Fifth Edition [BPM5 (1993)] and Manual on Statistics of International Trade in Services [MSITS (2002)] of the International Monetary Fund (IMF) as well as on ITES/BPO services exports. The survey also collects exports data as per the modes of supply, *i.e.*, cross-border supply, consumption abroad, commercial presence and presence of natural persons, as defined in MSITS which are followed for the current round too. The sixth edition of the Balance of Payments and International Investment Position Manual (BPM6), released in 2009 made several improvements and the distinctive features of the computer services as defined in BPM5, MSITS and BPM6 are indicated in Annex-I. Survey schedules for the annual and quarterly sample surveys are given in Annex-II (A) and II (B) while the Annex-III presents the concepts, definitions and coverage. Annex-IV details the procedure for estimating the software exports of non-responding companies. The Reserve Bank also collects information on non-physical software (off-site) exports from Indian companies, in Softex forms. Reconciliation of survey estimates with the estimates of National Association of Software and Services Companies (NASSCOM) and Softex data is given in the Box item.

Survey Results

For the comprehensive annual survey for 2009-10, the survey schedule was canvassed to 6,400 companies of which 890 companies, including most of the large companies, responded. The responding companies together accounted for nearly 83 per cent of the total software exports. Estimates of export of the non-responding companies were obtained using the median exports (see Annex IV for methodology).

For the quarterly survey, the sample frame consisted of 233 companies of which 102 were large companies (software export size of ₹100 crore and above) which covered almost 77 per cent of total

software export business in 2008-09 and the remaining 131 were representative sample of small companies (export size of less than ₹100 crore) selected using simple random sampling from the frame of small companies, while ensuring coverage of all the four major groups of activities, *viz.*, IT services, BPO services, engineering services and software product development services. Of these 233 companies, the responding 213 companies included all the 102 large companies.

For estimating the quarterly software services exports, the responding companies were divided into the aforesaid four major activities. For each major activity, quarterly software exports growth was calculated based on the common companies responding in both April–December 2008 and April–December 2009 quarterly surveys. These activity-wise growths were then applied to the software exports reported under respective activity in April–December 2009 quarterly survey to get the estimate of overall quarterly software exports for April–December 2009.

Software Services Exports from India During 2009-10

Software services were categorised under two major heads: (i) computer services and (ii) ITES/BPO services. Total software services exports from India in 2009-10 estimated at ₹1,83,692 crore was 9.8 per cent higher than in the previous year (₹1,67,240 crore) (Table 1). Computer services export increased by 3.9 per cent over the previous year to ₹1,26,659 crore, whereas ITES/BPO services exports recorded a much higher increase of 25.9 per cent to ₹57,033 crore in 2009-10. In accordance, the share of ITES/BPO services in total software services exports increased to 31 per cent in 2009-10 (27 per cent in 2008-09) and the share of computer services exports declined to 69 per cent in 2009-10 (73 per cent in 2008-09). IT services remained the major component within computer services exports and accounted for 61 per cent of total software exports (64 per cent in 2008-09) whereas the share of BPO services and engineering services stood at 23 per cent and 8 per cent, respectively, in 2009-10.

Table 1: Software Services Exports from India – 2009-10

Activity/Period	(₹ crore)						
	2008-09	2009-10					Annual Growth(%)
		Q1	Q2	Q3	Q4	Total	
	1	2	3	4	5	6	7
Computer Services	1,21,956	31,669	32,306	33,274	29,409	1,26,659	3.9
<i>Of which:</i> i) IT services	1,07,043	28,611	29,043	29,861	24,063	1,11,578	4.2
ii) Software Product Development	14,913	3,058	3,263	3,413	5,346	15,080	1.1
ITES/BPO Services	45,284	9,973	10,367	10,899	25,794	57,033	25.9
<i>Of which:</i> i) BPO Services	38,344	7,688	7,775	8,305	19,367	43,135	12.5
ii) Engineering Services	6,940	2,285	2,592	2,594	6,427	13,898	100.3
Total	1,67,240	41,642	42,673	44,173	55,203	1,83,692	9.8

Quarterly Survey Estimates with BoP Statistics: A Comparison

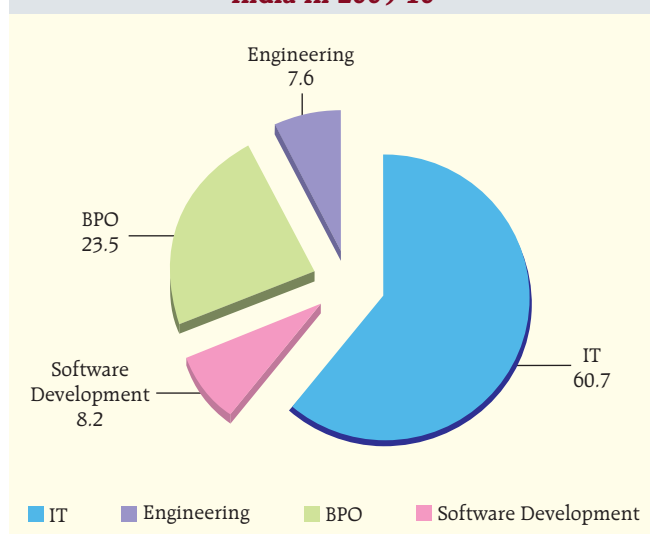
The Reserve Bank presently uses the software exports data published by the NASSCOM as controlling total in the compilation of BoP statistics. The NASSCOM data is based on the global software business of Indian software companies, *i.e.*, including the software business done by their subsidiaries abroad. As such, for making the survey estimates comparable with the BoP statistics, the software business done by the overseas subsidiaries of Indian companies, as collected through the survey, was added to the estimated software services exports of India in 2009-10 and distributed over the four quarters as per the proportions given by the quarterly sample survey. Software exports based on survey estimates were lower in the first three quarters of 2009-10 as compared to

the published data under the BoP statistics; however, the estimate for the fourth quarter survey was higher. Survey estimates were comparable with the BoP statistics in terms of share for the first two quarters, whereas the shares in third and fourth quarter estimates differed by around 2 per cent (Table 2).

Activity-wise Distribution of ITES/BPO Services Exports

The 2003 classification given by the Department of Information Technology (DIT-2003), Government of India, was used for compilation of data on export of ITES/BPO services. Export of Engineering services recorded 100.3 per cent annual growth in 2009-10 while BPO services exports recorded 12.5 per cent growth (Table 3). Among the Engineering services, Embedded solutions and Product design engineering services, which accounted for 4.1 and 8.2 per cent of the total ITES/BPO services exports, increased by 85 per cent each in 2009-10 while Architecture and other technical services recorded more than 100 per cent growth.

Under the BPO services, HR administration related services and Finance and accounting related services

**Chart 1: Activity-wise Software Exports of
India in 2009-10****Table 2: Quarterly Software Exports 2009-10:
Survey Vs BoP Statistics**

2009-10	Global software exports based on survey		Software exports as per BoP Statistics	
	₹ crore	Share (%)	₹ crore	Share (%)
	1	2	3	4
Apr-Jun: Q1	51,615	22.7	53,687	22.8
Jul-Sep: Q2	52,751	23.2	54,261	23.1
Oct- Dec: Q3	54,570	24.0	61,550	26.2
Jan-Mar: Q4	68,440	30.1	65,663	27.9
Total	2,27,376	100.0	2,35,161	100.0

Table 3: Activity-wise Distribution of ITES/BPO Services Exports

Activity/Period	2008-09			2009-10			Annual growth in ₹(%)
	₹ crore	US\$ billion*	Share (%)	₹ crore	US\$ billion*	Share (%)	
	1	2	3	4	5	6	
I. BPO Services	38,344	8.4	84.7	43,135	9.1	77.3	12.5
Customer interaction services	4,828	1.1	10.7	5,058	1.1	9.1	4.8
Finance and Accounting, auditing, book keeping and tax consulting services	3,754	0.8	8.3	5,580	1.2	10.0	48.6
HR Administration	1,074	0.2	2.4	2,288	0.5	4.1	113.0
Legal services (including IP management services)	537	0.1	1.2	502	0.1	0.9	-6.5
Business and corporate research	1,610	0.4	3.6	1,786	0.4	3.2	10.9
Medical transcription	5,364	1.2	11.8	5,580	1.2	10.0	4.0
Content development and management and publishing	2,949	0.6	6.5	2,288	0.5	4.1	-22.4
Any other services	18,228	4.0	40.2	20,032	4.1	35.9	9.9
II. Engineering Services	6,940	1.5	15.3	13,898	2.9	22.7	100.3
Embedded Solutions	1,354	0.3	3.0	2,511	0.5	4.1	85.5
Product Design Engineering (mechanical, electronics excluding software)	2,708	0.6	6.0	5,020	1.1	8.2	85.4
Architectural and other technical services	508	0.1	1.1	1,102	0.2	1.8	116.9
Any other services	2,370	0.5	5.2	5,265	1.1	8.6	122.2
Total ITES/BPO Services	45,284	9.9	100.0	57,033	12.0	100.0	25.9

* Using annual average Rupee/Dollar exchange rate (Handbook of Statistics on Indian Economy, RBI).

increased by 113 per cent and 48.6 per cent, respectively, in 2009-10 even as export of Customer interaction and Medical transcription services were relatively lower at 4.8 and 4.0 per cent, respectively. On the other hand, Legal services and Content development, management and publishing services exports declined. Other BPO services including Procurement and Logistics services, Animation, Gaming, Document management services *etc.*, which accounted for 36 per cent share in total BPO services exports, increased by 10 per cent.

Type of Organisation-wise Software Exports

Public limited companies that responded to the 2009-10 survey, were small in terms of number (7.4 per cent of the 890 respondent companies) but

accounted for 58 per cent of the total software services exports in 2009-10 (62 per cent share in 2008-09) and their export of software services increased marginally. On the other hand, software exports by private limited companies (86.4 per cent in terms of number) increased by 24 per cent to ₹72,225 crore in 2009-10. Other companies which had around 2.6 per cent share in software exports recorded 10.7 per cent decline in their exports (Table 4).

Country-wise Distribution of Software Services Exports

United States remained the major destination for software services exports. United States and Canada together accounted for 62 per cent of total software services exports in 2009-10 and European

Table 4: Organisation-wise Distribution of Software Services Exports

Type of Organisation	2008-09				2009-10				Annual Growth (%)
	No. of Companies (%)	₹ crore	US\$ billion*	Share (%)	No. of Companies (%)	₹ crore	US\$ billion*	Share (%)	
	1	2	3	4	5	6	7	8	
Private Ltd companies	81.8	58,228	12.7	34.8	86.4	72,225	15.2	39.3	24.0
Public Ltd companies	9.2	1,03,642	22.5	62.0	7.4	1,06,672	22.5	58.1	2.9
Others	9.0	5,370	1.2	3.2	6.2	4,795	1.0	2.6	-10.7
Total	100.0	1,67,240	36.4	100.0	100.0	1,83,692	38.7	100.0	9.8

* For footnote please refer to Table 3.

Table 5: Destination of Software Services Exports

Country	2008-09			2009-10			Annual growth (%)
	₹ crore	US\$ billion*	Share (%)	₹ crore	US\$ billion*	Share (%)	
	1	2	3	4	5	6	
USA & Canada	1,02,700	22.3	61.5	1,13,783	24.0	61.9	10.8
Europe	45,131	9.8	27.0	48,709	10.3	26.5	7.9
of which UK	23,211	5.0	13.9	22,862	4.8	12.4	-1.5
Asia	8,241	1.9	5.0	8,968	1.9	4.9	8.8
of which East Asia	6,857	1.5	4.1	7,002	1.5	3.8	2.1
West Asia	1,261	0.2	0.8	1,461	0.3	0.8	15.9
South Asia	123	0.02	0.1	505	0.1	0.3	310.6
Australia & New Zealand	2,290	0.5	1.4	4,215	0.9	2.3	84.1
Other countries	8,879	1.9	5.3	8,017	1.7	4.4	-9.7
Total	1,67,240	36.4	100.0	1,83,692	38.7	100.0	9.8

* For footnote please refer to Table 3.

countries accounted for another 26.5 per cent. There was a decline in software exports to the United Kingdom. The share of software exports to Asian countries declined marginally but recorded 9 per cent rise in value terms. Also, software exports to Australia and New Zealand together registered 84 per cent

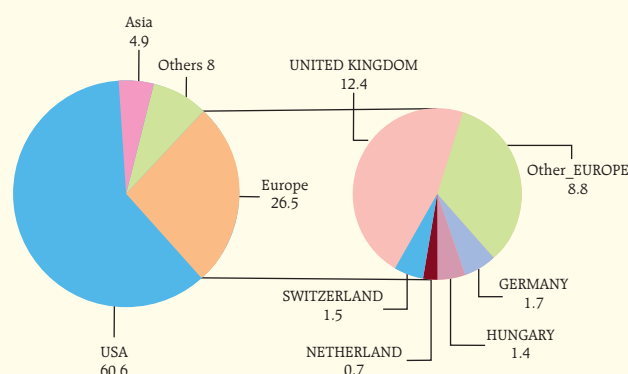
growth in 2009-10 due to low base and its share increased to 2.3 per cent from 1.4 per cent in 2008-09 (Table 5).

Invoicing Pattern of Software Services Exports

Software exports invoicing in US Dollar (US\$) terms and Euro terms increased by 12 per cent and 24 per cent, respectively, in 2009-10 whereas it declined by 11 per cent in Pound Sterling (GBP) terms (Table 6). With 76 per cent share, the US\$ remained the major currency of invoicing the software exports and the Euro accounted for another 7 per cent. The invoicing share of GBP declined to 10 per cent in 2009-10 from 13 per cent in 2008-09. The invoicing share of Indian Rupee (INR) and Australian Dollar (AUD) remained low and unchanged over the previous year.

Software Services Exports – Type of Service

Software services exports are delivered either through on-site or through off-site services. Exports of off-site services recorded a growth of 19 per cent in

Chart 2: Country-wise Distribution of Software Exports 2009-10 (%)**Table 6: Currency Composition of Invoice – Software Services Exports**

Country	2008-09			2009-10			Annual growth (%)
	₹ crore	US\$ billion*	Share (%)	₹ crore	US\$ billion*	Share (%)	
	1	2	3	4	5	6	
US\$	1,25,056	27.2	74.8	1,39,887	29.5	76.2	11.9
Euro	10,182	2.2	6.1	12,642	2.7	6.9	24.2
GBP	21,480	4.7	12.8	19,085	4.0	10.4	-11.1
AUD	2,642	0.6	1.6	3,469	0.7	1.9	31.3
INR	1,831	0.4	1.1	2,033	0.4	1.1	11.0
Others	6,049	1.3	3.6	6,576	1.4	3.6	8.7
Total	1,67,240	36.4	100.0	1,83,692	38.7	100.0	9.8

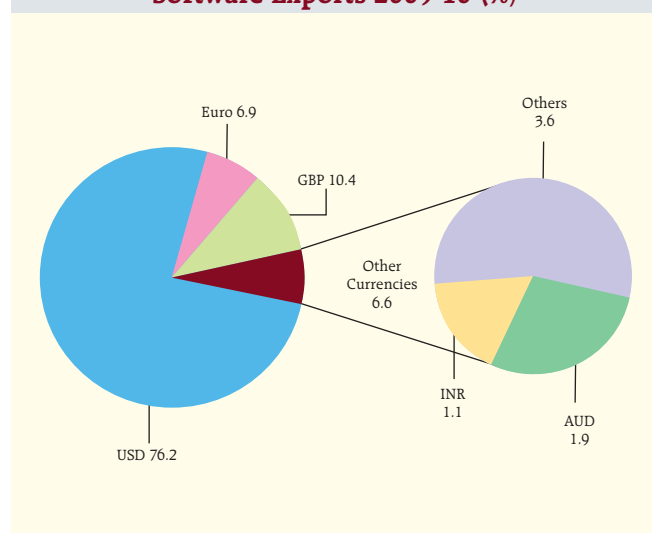
* For footnote please refer to Table 3.

Table 7: Software Services Exports: Type of Services-wise

Type of Service	2008-09			2009-10			Annual growth (%)
	₹ crore	US\$ billion*	Share (%)	₹ crore	US\$ billion*	Share (%)	
	1	2	3	4	5	6	7
On-site	46,237	10.1	27.6	39,618	8.4	21.6	-14.3
Off-site	1,21,003	26.3	72.4	1,44,074	30.4	78.4	19.1
Total	1,67,240	36.4	100.0	1,83,692	38.7	100.0	9.8

* For footnote please refer to Table 3.

Chart 3: Currency of Invoice-wise Software Exports 2009-10 (%)



2009-10 even as it declined for on-site services by 14 per cent (Table 7). Accordingly, the share of on-site software services exports declined to 22 per cent in 2009-10 (28 per cent in 2008-09) and the share of off-site software services exports increased to 78 per cent in 2009-10 (72 per cent in 2008-09).

Size-wise Classification of Software Services Exports

Small companies with exports size less than ₹100 crore constituted 86 per cent of the respondent companies in terms of numbers but had just 6 per

cent share in the value of software services exports in 2009-10 whereas large companies having exports size ₹100 crore and above (14 per cent of the total respondents) accounted for the remaining 94 per cent (Table 8). Of the total software exports of small companies (exports size less than ₹100 crore), 96 to 98 per cent were provided through the off-site mode, while off-site services delivered by the large companies accounted for 72 per cent of their total software exports. As per the destination of exports, small companies had greater access (68 to 71 per cent) in United States and Canada together, as compared to large companies which had 62 per cent exports to the region. Large companies had more exposure than small companies in European countries.

Software Business as per Modes of Supply

As per MSITS (2002) guidelines, international trade in services can be conducted through four different modes, *viz.*, (i) transactions between resident and non-resident covering Mode-1 (cross-border supply), Mode-2 (consumption abroad) and Mode-4 (presence of natural person), and (ii) services provided locally by the affiliates established abroad, *i.e.*, Mode-3 (commercial presence). However, as per the BoP Manual, foreign affiliates established abroad are treated as the domestic units in the host

Table 8: Software Services Exports in 2009-10: Export Size & Other Characteristics

Exports Size (₹ crore)	Number of companies (%)	Share in Exports (%)	Destination of Exports (%)			Type of Exports (%)	
			USA & Canada	European countries	Other countries	Onsite	Offsite
	1	2	3	4	5	6	7
<1	23.4	0.1	70.6	12.6	16.8	1.8	98.2
1 – 10	37.0	1.0	69.5	18.7	11.8	2.9	97.1
10 – 100	25.8	5.3	68.0	19.9	12.1	4.1	95.9
>=100	13.8	93.6	61.5	27.0	11.5	27.8	72.2
Total	100.0	100.0	61.9	26.5	11.5	21.6	78.4

Table 9: International Trade in Software Services: 2009-10

Exports Size (₹ crore)	No. of Companies (%)	Amount (₹ crore)					Share in Total (per cent)			
		Mode 1	Mode 2	Mode 3	Mode 4	Total	Mode 1	Mode 2	Mode 3	Mode 4
		1	2	3	4	5	6	7	8	9
< 1	23.4	183	0	32	2	217	84.3	0	14.7	0.9
1 - 10	37.0	1,912	0	295	51	2,258	84.7	0	13.1	2.3
10 - 100	25.8	9,793	0	657	392	10,842	90.3	0	6.1	3.6
>= 100	13.8	1,32,186	0	38,239	39,173	2,09,598	63.1	0	18.2	18.7
All Companies	100.0	1,44,074	0	39,223	39,618	2,22,915	64.6	0	17.6	17.8

Mode 1: Cross-Border Supply. Mode 2: Consumption Abroad. Mode 3: Commercial Presence. Mode 4: Presence of Natural Persons.

economy and, hence, the services delivered by them are not considered as the exports of the home country. To this extent, data on services exports in BoP will differ from those in the Foreign Affiliates Trade Statistics. In the present survey, the software services trade data are collected on all the four modes of supply.

The total international trade in software services by India stood at ₹2,22,915 crore in 2009-10. Mode-1 (cross-border supply) accounted for the 65 per cent of total international trade in software services by India, while Mode-4 (presence of natural person) and Mode-3 (commercial presence) had 18 per cent share each, respectively, and Mode-2 (consumption abroad) accounted for negligible share in total international trade in software services (Table 9). Small companies delivered 84 to 90 per cent of their software services exports through Mode-1. For large companies, Mode-1 accounted for 63 per cent while Mode-4 accounted for 19 per cent share.

Table 10: Software Business by Foreign Affiliates of Indian Companies in 2009-10 – Activity-wise Distribution

Activity	Number of Foreign Affiliates (%)	Software business done by foreign affiliates		
		Locally	To India	Other Countries
		1	2	3
IT Services	14.0	635	3	36
Software Product Development	3.7	18	3	493
BPO Services	12.6	1,507	44	1,722
Engineering Services	1.1	61	12	0
Others	68.6	37,012	711	2,234
Total	100.0	39,233	773	4,485

Software Business of Subsidiaries/Associates Abroad

The survey also collected the information on the software business of foreign subsidiaries/associates of Indian companies (foreign affiliates), under the heads of software business done in host country, *i.e.*, locally, to India and to other countries, for the purpose of Foreign Affiliates Trade in Services (FATS). The total software business of the Indian-owned foreign affiliates (excluding the services made available to India) was valued at ₹43,718 crore during 2009-10 (Table 10).

Based on the activity, Indian companies were classified into four major categories, *viz.*, IT services, Software product development, BPO services and Engineering services. Companies providing the combination of these services were classified under 'Others'. Software services provided by the Indian-owned foreign affiliates were mainly in the respective host country. The companies under 'Others' category had 69 per cent of the affiliates located abroad and were the major source for generating the software business outside India. The foreign affiliates of Indian software companies engaged in purely 'Engineering Services' had negligible share in the total software business provided by the foreign affiliates.

The USA had the largest share of Indian-owned affiliates (29 per cent) which contributed about 55 per cent of business done by the foreign affiliates (Table 11). Though the Indian software companies had bigger presence in Singapore, Malaysia and Germany in terms of number of affiliates, their share in total software business of foreign affiliates was lower. United Kingdom and Canada accounted for 6 per cent

Table 11: Software Business by Foreign Affiliates

(₹ crore)				
Country	Number of Foreign Affiliates (%)	Software business of Foreign Affiliates		
		Locally	To India	Other Countries
	1	2	3	4
United States	28.6	23,734	427	162
United Kingdom	9.6	2,541	153	35
Canada	2.7	514	0	1,247
Germany	4.8	1,268	0	92
Singapore	7.6	923	53	362
Malaysia	5.9	1,118	3	76
Japan	3.0	327	19	0
Australia	1.8	1,222	0	0
Others	35.9	7,586	118	2,511
Total	100.0	39,233	773	4,485

and 4 per cent share in total business of the foreign affiliates.

IV. Reference:

1. International Monetary Fund (1993): *Balance of Payments Manual – 5th edition* (BPM5), Washington, D.C.
2. International Monetary Fund (2009): *Balance of Payments and International Investment Position Manual – 6th edition* (BPM6), Washington, D.C.
3. Government of India (2003): *IT-Enabled Services*, Ministry of Information Technology.
4. Government of India (2001): *Report of the National Statistical Commission* (NSC), New Delhi, August 2001.
5. Reserve Bank of India (2003): *Report of the Technical Group on Re-examination of Data Reporting System on Software Exports*, Mumbai
6. Reserve Bank of India (2010): 'Survey on Computer Software & Information Technology Services Exports: 2008-09', Reserve Bank of India Bulletin, August issue.
7. United Nations (2002): *GATS Manual on Statistics of International Trade in Services* (MSITS), Geneva.

Box: Comparison of Survey Results with NASSCOM and Softex Data

The Reserve Bank of India (RBI) collects the information about the non-physical offsite software exports data through SOFTEX forms filed by the software companies. As per the SOFTEX forms filed by Indian companies to the Reserve Bank, non-physical (off-site) software exports stood at ₹1,29,286 crore in 2009-10 which does not include on-site software exports. Adding the on-site software exports of ₹39,618 crore, as reported in the survey, the total software services exports in 2009-10 worked out to ₹1,68,904 crore, which was lower than the estimated software exports as per survey result.

The Reserve Bank publishes the software exports data in BoP using Software exports data released by the NASSCOM as a controlling total. NASSCOM data is based on the global software business of Indian software companies, *i.e.*, software exports of Indian companies together with the software exports of their overseas subsidiaries. Accordingly, in order to make the data generated through the Reserve Bank's survey on Software & ITES/BPO Services Exports comparable with NASSCOM data, the software business of overseas subsidiaries of Indian companies have been added to the estimated software services exports of India, based on the survey.

Reconciliation of Software Exports of India during 2009-10

(₹ crore)

Software exports as per NASSCOM (Global business)	Software Exports based on annual survey			Software Exports based on annual survey and Softex data		
	Indian companies	Subsidiaries abroad	Global business	Offsite Non-physical software exports based on Softex	Onsite software exports based on survey	Total Software Exports of India
(1)	(2)	(3)	(4) = (2) + (3)	(5)	(6)	(7) = (5) + (6)
2,35,162	1,83,692	43,718	2,27,410	1,29,286	39,618	1,68,904

Based on the survey, export of software services from India in 2009-10 was estimated at ₹1,83,692 crore (US\$ 38.7 billion) and the software business done by the Indian subsidiaries abroad in 2009-10 was estimated at ₹43,718 crore (US\$ 9.2 billion). Thus, the global software export of India based on the survey was ₹2,27,410 crore (US\$ 47.9 billion) as against ₹2,35,162 crore (US\$ 49.7 billion) published by the NASSCOM. The software business done by the overseas subsidiaries of Indian companies accounted for 19 per cent of the global software business, estimated through the survey.

The survey results are quite comparable with the software exports data released by NASSCOM and also with the software exports data collected through Softex forms by the RBI, with a marginal variation of (-) 3.3 per cent and 8.7 per cent respectively.

Annex- I	
Computer Services as Per BPM5 [1993], BPM6 [2009] vis-s-vis MSITS [2002]	
As per BPM5 [1993] of IMF	As per BPM6 [2009] and MSITS [2002]
<p>The Computer services includes the followings:</p> <ol style="list-style-type: none"> 1. Data bases, such as development, storage and online time series; 2. Data processing – including tabulation, provision of processing services on time-sharing or specific (hourly) basis and Management of facilities of others on a continuing basis; 3. Hardware consultancy; 4. Software implementation- including design, development and programming of customized systems; 5. Maintenance and repair of computer peripheral equipment. 	<p>Computer services include hardware and software related services and data-processing services, as mentioned below:</p> <ol style="list-style-type: none"> 1. Hardware and software consultancy and implementation services; 2. Maintenance and repair of computer peripheral equipment; 3. Disaster recovery services, provision of advice, and assistance on matter related to the management of computer resources; 4. Analysis, design and programming of systems ready to use (including web page development and design), and technical consultancy related to software; 5. Development, production, supply and documentation of customized software, including the operating systems made on order for specific users; 6. System maintenance and other support services such as training provided as a part of consultancy; 7. Data processing services such as data entry, tabulation and processing on a timesharing basis; 8. Web page hosting services (<i>i.e.</i>, the provision of server space on the internet to host the clients' web pages; 9. Computer facilities management.

Annex-II(A)

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RESERVE BANK OF INDIA

Department of Statistics and Information Management
(Balance of Payments Statistics Division)Software and Information Technology (IT) Services Exports: Survey Schedule
Reference Period : April 2009 to March 2010 (Annual)

PART-A: Profile of the Company

1. Name and address of the Company Name of the Company Registered Address City State Pin Code		
2. Contact Details (i) Name in Full (ii) Designation (iii) Tel. No. (iv) Fax. No. (v) Email:		
3. Business Activity (According to the principal source of operating revenue) Please provide approximate percentage share of various business activities, describing your company, in total business (A+B+C+D)		
Business Activity	% Share	
A. IT Services		
(i) Hardware and software consultancy and implementation services		
(ii) Maintenance and repair of computers and peripheral equipment		
(iii) Data recovery services, provision of advice, and assistance on matters related to the management of computer resources		
(iv) Analysis, design and programming of systems ready to use (including web page development and design), and technical consultancy related to software		
(v) Development, production, supply and documentation of customised software, including operating systems made on order for specific users		
(vi) Systems maintenance and other support services such as training provided as part of consultancy;		
(vii) Data processing services such as data entry, tabulation, and processing on a timesharing basis;		
(viii) Web page hosting services (<i>i.e.</i> , the provision of server space on the internet to host clients' web pages)		
(ix) Computer facilities management		
(x) Non-physical exports of packaged software		
(xi) Any other IT service (please specify)		
Total (IT Services)	0.0	

Article

*Survey on Computer Software & Information
Technology Services Exports: 2009-10*

Annex-II(A) (Contd.)	
B. ITES/BPO	
(i) Customer interaction services	
(ii) Finance and Accounting, auditing, book keeping and tax consulting services	
(iii) HR Administration	
(iv) Procurements and logistics	
(v) Legal services (including IP management services)	
(vi) Business and corporate research	
(vii) Animation	
(viii) Gaming	
(ix) Medical transcription	
(x) Document Management	
(xi) Content development and management and publishing	
(xii) Pharmaceuticals and biotechnology	
(xiii) Any other ITES/BPO service (please specify)	
Total (ITES/BPO)	0.0
C. Engineering Services	
(i) Embedded Solutions	
(ii) Product Design Engineering (mechanical, electronics excluding software)	
(iii) Industrial automation and enterprise asset management	
(iv) Architectural and other technical services	
(v) Any other Engineering service (please specify)	
Total (Engineering Services)	0.0
D. Software Products	
(i) Software products	
(ii) Own software products license revenues	
(iii) Resale of software	
(iv) Offshore Product Development	
(v) Any other Software Product related service (please specify)	
Total (Software Products)	0.0
E. Total (A+B+C+D)	0.0 Total (E) Should be = 100
4. Form of Organisation (Please select the organisation type)	
Organisation type	Please Select Organisation Type
PART -B: Software and IT Exports	
5. Information on Software and IT Services Exports	
(a) Exports - Major Activities: Total Invoice value in Rupees [including billing to subsidiary(s)/ associate(s) abroad] during the reference period according to major activities	
Exports - Major Activity Group	Invoice Value (Rupees)
(i) IT Services	
(ii) ITES/BPO	
(iii) Engineering Services	
(iv) Software Products	
Total (i + ii + iii + iv)	0
Of which, Billing to subsidiary(s)/ associate(s) abroad	

Annex-II(A) (Contd.)

Annex-II(A) (Contd.)		
(b) Exports- Major Currencies: Invoice value in terms of actual currency of invoice and in Rupees [including billing to subsidiary(s)/ associate(s) abroad] during the reference period according to major currencies		
Exports - Major Currencies	Invoice Value	
	Amount in Actual Currency	Amount in Rupees
(i) US\$		
(ii) Euro		
(iii) Pound Sterling		
(iv) Japanese Yen		
(v) Canadian Dollar		
(vi) Australian Dollar		
(vii) Indian Rupee		
(viii) Others (converted in Indian rupees)		
Total		0
(c) Exports- Type of Service: Total Invoice value in Rupees [including billing to subsidiary(s)/ associate(s) abroad] during the reference period as per type export service		
Exports - Type of Service	Amount (Rupees)	
(i) On-site services		
(ii) Off-shore services in non-physical form (<i>i.e.</i> , exports through data communication links <i>etc.</i>)		
(iii) Off-shore services in physical form		
Total (i + ii + iii)		0
(d) Exports - Major Areas: Total Invoice value in Rupees [including billing to subsidiary(s)/ associate(s) abroad] during the reference period to major countries/ regional groups		
Exports - Regional Groups	Amount (Rupees)	
(i) USA		
(ii) Canada		
(iii-a) Germany		
(iii-b) Hungary		
(iii-c) Netherlands		
(iii-d) Switzerland		
(iii-e) United Kingdom		
(iii-z) Other European Countries		
(iv-a) Hong Kong		
(iv-b) Japan		
(iv-c) Singapore		
(iv-z) Other East Asian Countries		
(v) West Asia		
(vi) South Asia		
(vii) Australia		
(viii) New Zealand		
(ix) Latin America		
(x) Other Countries		
Total (i + ii + + ix + x)		0

Article

*Survey on Computer Software & Information
Technology Services Exports: 2009-10*

Annex-II(A) (Concl.)

6. Exports - Modes of Supply

Total invoice on software and IT services exports as per the Modes of Supply during the reference period

Exports - Modes of Supply	Amount (₹)
(i) Services provided/ rendered to foreign entities/persons from Indian office (Cross border supply)	
(ii) Services provided/ rendered to foreign entities/persons while they are on visit to India	
(iii) Onsite services provided by deputing employees abroad	
Total	0

7. Exports Proceeds- Receipt, Expenditure and Held Abroad

Information on amount received, spent and held abroad [including billing to subsidiary(s)/ associate(s) abroad] on account of software and IT exports during the reference period

Exports Proceeds - Receipt, Expenditure and Held Abroad	Amount (₹)
(i) Amount received from abroad during the reference period	
(ii) Total amount paid to employees abroad by the Indian company	
(iii) Total amount spent on office expenses <i>etc.</i> abroad (excluding amount paid to employees abroad) by the Indian company	
(iv) Total amount held abroad at the beginning of the reference period by the Indian company	
(v) Change in amount held abroad during the reference period (Increase +, Decrease -)	

PART -C: Employment Details

8. Information on Number of Employees

Employment	Indian Citizen	Foreigner (Citizens of other countries)	Total
	(1)	(2)	(1+2)
a) Indian Company			0
b) Subsidiary(s)/Associate(s) abroad			0
Total (a+b)	0	0	0

PART -D: Subsidiary/ Associate Abroad

9. Information on subsidiary(s)/ associate(s) abroad

If your company owns any subsidiary/associate abroad, please give number of subsidiaries/ associates abroad and provide the following information for each subsidiary(s)/ associate(s) separately.

Number of Subsidiaries/ Associates Abroad	0
--	----------

Subsidiary(s)/ Associate(s)'s		Holding by your company (in %)	Period of operation of Subsidiary/ Associate		Total software/IT services rendered by the Subsidiary(s)/ Associate(s) during the reference period (in Rupees)			
Name	Country Name		Years	Months	locally	to India	to other countries	Total
	COUNTRY							0
	COUNTRY							0
	COUNTRY							0
	COUNTRY							0

10. Declaration

I hereby declare that the information given in this return is complete and correct to the best of my knowledge and belief.

- (i) Name in Full
- (ii) Designation
- (iii) Date:

Annex-II(B)

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RESERVE BANK OF INDIA

Department of Statistics and Information Management
(Balance of Payments Statistics Division)Software and Information Technology (IT) Services Exports: Survey Schedule
Reference Period : April-June, July-September and October-December 2009 (Quarterly)

PART-A: Profile of the Company

1. Name and address of the Company Name of the Company Registered Address City State Pin Code	
2. Contact Details (i) Name in Full (ii) Designation (iii) Tel. No. (iv) Fax. No. (v) Email:	

PART -B: Software and IT Exports

3. Information on Software and IT Services Exports

(a) Exports - Major Activities: Total Invoice value in Rupees [**including** billing to subsidiary(s)/ associate(s) abroad] during the reference period according to major activities

Exports - Major Activity Group	April-June 2009 Invoice Value (Rupees)	July-Sep 2009 Invoice Value (Rupees)	Oct-Dec 2009 Invoice Value (Rupees)
(i) IT Services			
(ii) ITES/BPO			
(iii) Engineering Services			
(iv) Software Products			
Total (I + ii + iii + iv)	0	0	0

(b) Exports- Major Currencies: Invoice value in Rupees [**including** billing to subsidiary(s)/ associate(s) abroad] during the reference period according to major currencies

Exports - Major Currencies	April-June 2009 Invoice Value (Rupees)	July-Sep 2009 Invoice Value (Rupees)	Oct-Dec 2009 Invoice Value (Rupees)
(i) US \$			
(ii) Euro			
(iii) Pound Sterling			
(iv) Japanese Yen			
(v) Canadian Dollar			
(vi) Australian Dollar			
(vii) Indian Rupee			
(viii) Others (converted in Indian rupees)			
Total	0	0	0

Article

*Survey on Computer Software & Information
Technology Services Exports: 2009-10*

Annex-II(B) (Contd.)

(c) Exports- Type of Service: Total Invoice value in Rupees [including billing to subsidiary(s)/ associate(s) abroad] during the reference period as per type export service			
Exports - Type of Service	April-June 2009 Invoice Value (Rupees)	July-Sep 2009 Invoice Value (Rupees)	Oct-Dec 2009 Invoice Value (Rupees)
(i) On-site services			
(ii) Off-shore services in non-physical form (i.e., exports through data communication links etc.)			
(iii) Off-shore services in physical form			
Total (i + ii + iii)	0	0	0
(d) Exports - Major Areas: Total Invoice value in Rupees [including billing to subsidiary(s)/ associate(s) abroad] during the reference period to major countries/ regional groups			
Exports - Regional Groups	April-June 2009 Invoice Value (Rupees)	July-Sep 2009 Invoice Value (Rupees)	Oct-Dec 2009 Invoice Value (Rupees)
(i) USA			
(ii) Canada			
(iii -a) Germany			
(iii - b) Hungary			
(iii - c) Netherlands			
(iii - d) Switzerland			
(iii -e) United Kingdom			
(iii -z) Other European Countries			
(iv -a) Hong Kong			
(iv -b) Japan			
(iv -c) Singapore			
(iv -z) Other East Asian Countries			
(v) West Asia			
(vi) South Asia			
(vii) Australia			
(viii) New Zealand			
(ix) Latin America			
(x) Other Countries			
Total (i + ii ++ ix + x)	0	0	0
4. Exports - Modes of Supply			
Total invoice on software and IT services exports as per the Modes of Supply during the reference period			
Exports - Modes of Supply	April-June 2009 Invoice Value (Rupees)	July-Sep 2009 Invoice Value (Rupees)	Oct-Dec 2009 Invoice Value (Rupees)
(i) Services provided/ rendered to foreign entities/ persons from Indian office (Cross border supply)			
(ii) Services provided/ rendered to foreign entities/ persons while they are on visit to India			
(iii) Onsite services provided by deputing employees abroad			
Total	0	0	0

Annex-II(B) (Contd.)**5. Exports Proceeds- Receipt, Expenditure and Held Abroad**

Information on amount received, spent and held abroad [including billing to subsidiary(s)/ associate(s) abroad] on account of software and IT exports during the reference period

Exports Proceeds - Receipt, Expenditure and Held Abroad	April-June 2009 Invoice Value (Rupees)	July-Sep 2009 Invoice Value (Rupees)	Oct-Dec 2009 Invoice Value (Rupees)
(i) Amount received from abroad during the reference period			
(ii) Total amount paid to employees abroad by the Indian company			
(iii) Total amount spent on office expenses <i>etc.</i> abroad (excluding amount paid to employees abroad) by the Indian company			
(iv) Total amount held abroad at the beginning of the reference period by the Indian company			
(v) Change in amount held abroad during the reference period (Increase +, Decrease -)			

PART -C: Employment Details**6. Information on Number of Employees**

	As on end- June 2009		As on end- September 2009		As on end- December 2009	
	Indian Citizen (1)	Foreigner (Citizens of other countries) (2)	Indian Citizen (1)	Foreigner (Citizens of other countries) (2)	Indian Citizen (1)	Foreigner (Citizens of other countries) (2)
Employment						
a) Indian Company						
b) Subsidiary(s)/ Associate(s) abroad						
Total (a+b)	0	0	0	0	0	0

Annex-III Concepts and Definition:

Concepts and Definition:

A. Definitional Boundary of Computer Services Exports

In the BPM5, software & IT services are classified under 'Computer and information services' that covers computer data and news related service transactions. The 'Computer services' component of this services class includes data bases, such as development, storage, and on-line time series; data processing—including tabulation, provision of processing services on a time-share or specific (hourly) basis, and management of facilities of others on a continuing basis; hardware consultancy; software implementation—including design, development, and programming of customized systems: maintenance and repair of computers and peripheral equipment. However, BPM6 classifies Computer Services separately from Information Services which is in line with Manual on Statistics of International Trade in Services [MSITS(2002)]. The disaggregated information to be provided under the component 'Computer services' is mentioned in Annex-I. In the present survey, the information on Computer services exports are collected under head of IT services and software development services exports.

B. Activity-wise Classification of IT Enabled Services

As per the information available in the website of the Department of Information Technology of the Government of India [DIT, GoI(2003)], spectrum of I.T. Enabled Services (ITES) in India covers Call Centers, Medical Transcription, Back Office Operations, Revenue Accounting and other ancillary operation, Insurance Claims Processing, Legal databases, Content Development/ Animation, Payroll Logistics Management, etc. However, BPM5 as well as BPM6 and the MSITS(2002) do not provide for any activity classified under the name of 'IT enabled' business services or BPO. As per BPM5, other business services cover, among others, miscellaneous business, professional, and technical services. It is generally agreed that underlying product (commodity), and not the mode of delivery, should be the criterion of classification. To illustrate, the provision of business services, such as accounting services, should be included under appropriate heading under the other business services even though these services are entirely delivered through computer or internet. In the present survey, exports through ITES/BPO services has been compiled based on the classification given by Department of Information Technology of the GoI [DIT(GoI(2003))].

C. Modes of Supply under General Agreement on Trade in Services (GATS) and Software Exports

Recognizing certain intrinsic differences in the way services are produced and consumed as compared to the way goods are produced and consumed, the General Agreement on Trade in Services (GATS) introduced the concept of modes of supply. It may be stated that while under BPM5, transactors in the international trade are classified into two types, viz., resident and non-resident, the MSITS [2002] defined the four modes of supply in the following manner:

- (a) Mode 1 - cross-border supply: from the territory of one country into the territory of any other country;
- (b) Mode 2 - consumption abroad: in the territory of one country to the service consumer of other country;
- (c) Mode 3 - commercial presence: by a service supplier of one country, through commercial presence in the territory of any other country;
- (d) Mode 4 - presence of natural persons: by a service supplier of one country, through presence of natural persons in the territory of any other country.

Software & IT Services Exports Survey – 2009-10:

A. Survey Methodology:

The survey, conducted through mailed (electronic mail) questionnaire canvassing around 6,400 companies, engaged in Software and Information Technology Enabled Services/ Business Process Outsourcing (ITES/BPO) services. The survey frame was prepared using the member companies of NASSCOM and companies registered with STPI. Thus, the comprehensive survey was census in nature.

B. Response:

The survey results presented in the article are based on the response received from 890 companies. Out of these companies, 182 companies were only engaged in BPO services, 50 companies in Engineering services, 228 in IT services, 81 companies in Software Product Development while the remaining 349 companies reported combination of above activities as their business activity.

C. Information Collected through the Survey:

Information collected through the survey was on various characteristics, viz.: business activity, type of organization, exports as per major activities, country and currency-wise exports, type of exports (onsite and offsite), modes of supply (as defined by GATS), information on employment, business done by the subsidiaries/ associates abroad.

Annex-IV

Methodology for Estimation of Software Exports of Non-responding companies

In total, 890 companies responded to the annual comprehensive survey covering all major companies. So, the non-responded companies were the smaller companies. Further, it was observed from data received from the responded companies that onsite export was mainly reported by the major companies. So while estimating the exports done by the non-responded companies, only offsite export was considered. As no information was available about the business activity of the non-responded companies, these were classified into 4 groups, *viz.*: IT, BPO, Engineering and Software Product Development based on the observed proportion. Also, the distribution of export in all the four groups, *i.e.*, IT, BPO, Engineering and Software Product Development was highly positively skewed. So median exports done by each of these groups was used for estimating the exports done by respective group of business. The detailed methodology for estimation of exports is given below. Using the methodology, the software services exports of non-respondent companies was estimated to the tune of ₹32,729 crore (around 18.0 per cent of total software services exports). To estimate other distributional patterns of exports, observed proportions were used.

Annual survey on Software and IT Services Exports for the period 2009-10 was launched canvassing around 6,400 Software and IT/BPO companies. Of these, 942 companies responded to the survey which includes 52 NIL and closed companies. All the major software and IT/BPO companies responded to the survey. Using the observed proportion, number of NIL and closed companies have been estimated from 5,458 non-responded companies and

software exports have been estimated for the remaining 5,160 non-responded companies, using the following method:

- I. Based on the reported activity, companies have been classified in four groups, *viz.*: IT Services, BPO Services, Engineering Services and Software Product Services (having 100 per cent business under respective group).
- II. For classifying the other companies having combination of these as their business activity, reported proportions of their exports done in IT, BPO, Engineering and Software Product services have been used.
- III. Based on the reported data, it was observed that 'On-site' software export was primarily reported by the major companies. Therefore, only offshore software exports component was used for estimating software export of non-responded companies.
- IV. As the observed distribution of exports was highly positively skewed in each of these groups, median was used for estimating software exports in each group. Estimated software exports for i^{th} group

$$= \text{median of } i^{\text{th}} \text{ group} * \left[\frac{\# \text{ reported companies in } i^{\text{th}} \text{ group}}{\text{total no. of reported companies}} \right] * \# \text{ non-responding companies}$$

Then, the total software exports of India has been compiled as the sum of reported software exports and the estimated software export for non-responded companies in each of the four groups.