

Pakistan's IT Revenue May be Grossly Understated

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This is the first in a series of articles on how to achieve fast track IT industry growth in Pakistan.

Key Thought: Pakistan's IT Industry size including global export receipts – including earnings retained outside the country – domestic IT services and hardware are probably considerably understated. Economic and social benefits are manifold.

A recent BearingPoint study¹ places Pakistan's Global IT² Export Revenues in FY04³ at around USD 400 million. The basis of the figure was State Bank of Pakistan IT export revenue figures of just under USD 50 million. BP multiplied this figure by two to account for IT export revenue brought into the country but not registered as such with the State Bank. BP further estimated that for each dollar brought into the country three dollars is retained by Pakistani IT companies overseas. Therefore global IT revenue of Pakistani companies added up last year to USD 400 million. Therefore for official IT export figures of just under USD 75 million reported by the SBP for FY 05, actual global receipts of Pakistani IT firms should be around USD 600 million.^{4 5}

¹ "Strategy for increasing exports of BPO", BearingPoint, October 2005

² IT revenue includes revenue accruing from sale of IT Software and Services, IT enabled services, and hardware.

³ Fiscal Year 2004-2005

⁴ The SBP is not reporting Call Center Revenue under IT exports, and the PSEB is working with the SBP to correct this anomaly.

State Bank Reporting Earnings	Estimated Total Domestic Export Earnings	Estimated Global Export Earnings
USD 75	USD 150	USD 600

Table 1 Pakistan IT Export earnings FY05

Should global IT export revenue – rather than export earnings – be used as the key measure for exports? It should – if that is the international norm. The World Trade Organization (WTO) lists Mode 3, revenue generated by commercial offices overseas, and Mode 4, compensation received by temporary workers who have traveled abroad, as export revenue streams which must be included in trade revenue calculation.⁶ Further there is strong evidence, discussed latter, to suggest that other countries such as India in fact employ global services export figures when reporting or estimating revenue.

The following table describes the four WTO modes for export in services recognition. The need for the four mode model arises because trade in services are much harder to monitor than trade in physical goods. Physical goods pass through air, sea or land ports, and are accompanied by detailed financial and other documentation. On the other hand services trade can be transacted over the Internet, through post or through travel of personnel with revenue flowing into company or personal accounts which can exist anywhere in the world.

⁵ One Pakistani company, TRG, alone owns companies with USD 180 million in annual revenue in the USA.

⁶ “Trade in Services Brief,” International Trade Center (ITC), Geneva, 2004.

Mode	Description	IT Exports
1 Cross Border	Represents services that are sold by the exporting country to the importing country, with only the service crossing the border e.g. architectural drawings sent by courier, consultant report sent by email, call center support provided over the Internet, or software programs sent over the Internet	USD 150 million
2 Consumption Abroad	Represents services sold in the exporting country to foreigners or foreign owned entities in the exporting country itself e.g. IT services sold to the World Bank, the USA Embassy or to one of the 700 multi-nationals operating in Pakistan	USD 200 million (Average USD 250,000 expenditure by over 800 entities)
3 Commercial Presence Abroad	Represents revenue of national firms established abroad selling services in a foreign market.	USD 450 million
4 Temporary Movement	Represents services that are sold or delivered through the presence of the service provider temporarily in the foreign market e.g. the annual salaries of all H-1, L-1 and B-1 Pakistani IT workers in the USA.	USD 250 million (At least 5000 workers earning at least USD 50,000 per year on average)

Table 2: Pakistan IT Exports in FY 05 by WTO Mode

Therefore total IT services exports from Pakistan in FY 05 amounted to USD 1.050 billion or conservatively **USD 1 billion dollars**.

Expert opinion that in FY 05 about a million new and used PC, servers and laptops were sold in the country annually together with peripherals like printers and scanners. International vendors⁷ like Microsoft and Oracle do not report Pakistan sales figures however it is estimated that their combined annual sales are now in excess of USD 150 million. Domestic IT Software and Services, and IT enabled services, provided to sectors like Government, Telecom, Banking, Oil and Gas and Manufacturing are in excess of USD 400 million. Total domestic IT revenue can therefore be conservatively estimated at USD 1.35 billion.

Area	Revenue
PC/Laptop/Servers 1,000,000 new and used CPU @ USD 600 per CPU	USD 600 million
Peripherals 1/3 of computer sales	USD 200 million
International Software Vendors	USD 150 million
IT Services Software and services, IT enabled services, ISP	USD 400 million
Total Domestic IT Revenue	USD 1,350 million

Table 3 Estimated Domestic IT revenue, FY05

However in combining the export and domestic numbers, care must be exercised as the Mode 2 numbers have already been included in the domestic revenue. If mode 2 is subtracted from total export earnings, then the total IT industry size amounts to USD 2.2 billion (USD 850 million + USD 1,350 million). As most of

⁷ Oracle, Microsoft, Cisco, SAP, IBM, NCR

the component revenue streams area based on expert opinion and indirect data, let us reduce this conservative estimate further by about 10%.

Finally Pakistan’s Global IT Revenue for FY05 can be conservatively estimated at around two billion dollars – **USD 2 billion**.

There are two methods to validate this number: Comparison of IT personnel and comparison of Internet bandwidth usage with other countries for which similar data is available. One such country is India and the comparison is shown in Table 4.

Country	Estimated Global IT Revenue	IT Personnel	Internet Bandwidth Usage
Pakistan	USD 2 billion	75,000 ⁸	600 MBS ⁹
India	USD 36 billion ¹⁰	965,250 ¹¹	6.21 GBS ¹²
Ratio	1: 18	1: 12.87	1: 10.35

Table 4 Comparison of IT Revenue, personnel and bandwidth – Pakistan, India

⁸ PSEB conducted an internal study entitled “Assessment of IT Professionals in Pakistan” in 2005 which reported the figure at 75,000. An “IT HR Needs Assessment Study” conducted by BCCI FAST and sponsored by PSEB in 2005, that excluded large Government Research and Defense Organizations, reported the figure at approximately 54,000.

⁹ PSEB, Domestic Business Department, 2005

¹⁰ “Indian IT-ITES Sector to Exceed USD Billion in FY 2006,” February 2006. (www.nasscom.org)

¹¹ “Indian IT-ITES Sector to Exceed USD Billion in FY 2006,” February 2006. (www.nasscom.org)
FY 06 estimate of 1,287,000 for FY 06 was reduced by growth rate of 30% to arrive on figure for FY 05.

¹² NASSCOM Strategic Review, 2004, p 207

The comparison shows that Internet bandwidth usage in Pakistan – which is the lifeblood of IT exports as software, documents, and services are provided over the Internet – is one tenth of India. This would indicate that the IT revenue figures for Pakistan – at around one twentieth of India’s – if anything may be understated.

Country	Population	IT Global Export Revenue	IT Domestic Revenue
Pakistan	160 million	USD 0.6 billion	USD 1.35 billion
India	1.1 billion	USD 23 billion	USD 13 billion
Ratio	1:7	1:38	1:9.63

Table 5 Ratios of Population, IT Global Exports and IT Domestic Revenue

This preliminary investigation has the following implications:

- Service revenue is difficult to monitor and measure. A **detailed study** is required to accurately estimate Pakistan’s IT revenue and provide a basis for planning. PSEB plans to retain an international IT research firm to conduct such a study.
- Expert opinion and anecdotal and empirical evidence suggest that Pakistan’s revenue figures are grossly underreported. The more realistic figure of **USD 2 billion** or more is indicative of IT penetration and skills in the country, opportunities for investment and business, and employment potential. There is however considerable potential and need to expand particularly in exports.
- With global IT revenue well in excess of one billion dollars, Pakistan should legitimately be considered a tier two IT country. Owing to *one of the highest*

*number of ISO/CMM certifications in the world, ease of doing business, and low cost call center offerings*¹³ Pakistan should be considered a **leading Tier Two IT country**.

- The **benefit to the country** is accruing on a number of fronts which are not captured by pure State Bank foreign exchange reportings:
 - At USD 1.55 billion in domestic revenue and direct exports, IT revenue is over 1% of GNP.
 - Direct employment is provided to 75,000 people and indirect employment (training, real estate, security, food services) to another 75,000 people for total employment creation of 150,000 people in FY 04-05. FY 05-06, this number grew to 180,000.
 - IT projects a soft image of Pakistan abroad. An innovative, technologically savvy image continuously reinforced by new project signings, product releases, IT Parks, new investments and company expansions is perhaps the most powerful instrument for global perception change.
 - USD 150 million approximately is earned in foreign exchange directly annually. In addition, of the four hundred and fifty million dollars retained by Pakistani companies offshore some seventy five million dollars may be repatriated annually. Also of the two hundred and fifty million dollars annually earned by temporary Pakistani IT workers abroad another seventy five million dollars may be repatriated annually. Finally, IT also attracts significant FDI as many entrepreneurs are overseas companies or expatriates.
 - With a potential growth rate of sixty six percent in global export sales and thirty three percent in domestic sales, IT has become one

¹³ BearingPoint Report

of the engines of national GNP growth. It will form an increasing share of GNP, GNP growth, FDI, and repatriated earnings. No other sector of the economy has a greater potential for realizing the goal of transforming Pakistan into a developed nation.

- IT is a key driver in the creation of a knowledge-based society. IT is environmentally friendly, places a low demand on energy and physical infrastructure, and provides significant employment opportunities to females.