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A Review of Resource Mobilization Efforts of Federal Board of Revenue



FEDERAL BOARD OF REVENUE

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Abbreviations

AoPs	Association of Persons
ATT	Air Travel Tax
BPR	Business Process Reengineering
CD	Customs Duties
CFY	Current Fiscal Year
CoD	Collection on Demand
DT	Direct Taxes
FBR	Federal Board of Revenue
FED	Federal Excise Duties
FTA	Free Trade Agreement
FY	Fiscal Year
GST	General Sales Tax
LTU	Large Tax Payers' Unit
MCC	Model Customs Collectorate
MTS	Multi Trading System
NAFTA	North American Free Trade Agreement
NFS	Non-Fund Services
NTN	National Tax Number
PCT	Pakistan Customs Tariff
PFY	Previous Fiscal Year
Q3CFY	Quarter 1 Current Fiscal Year
Q3PFY	Quarter 1 Previous Fiscal Year
RTA	Regional Trade Agreement
RTO	Regional Tax Office
SAFTA	South Asian Free Trade Agreement
ST(D)	Sales Tax Domestic
ST(M)	Sales Tax Import
STARR	Sales Tax Automated Refund Repository
TARP	Tax Administration Reform Project
ТоТ	Terms of Trade
USAS	Universal Self-Assessment Scheme
VP	Voluntary Payments
WHT	Withholding Taxes

Foreword

The current issue of the FBR Quarterly Review provides an update on FBR revenue generating efforts and various taxation aspects. The in-depth analysis of revenue data presents an insight into various components of federal taxes.

This issue is unique as it includes four articles on hard to tax areas, like Textile Sector, Taxation of Services and Carbon Tax in Pakistan. The issue also includes an article on Pak-China Free Trade Agreement, analyzing in details the economic implications and its likely impact on tax revenues. The articles prepared by the FRS research team, focus on various dimensions of the tax policy and explore the possibilities to enhance the tax base and revenues.

I must appreciate the highly commendable and dedicated efforts of my team in bringing out this publication and hope that the contents of the Review will be useful for the policymakers and general readers. I look forward for valuable comments and suggestions from esteemed readers for further improvement.

Ahmad Waqar Secretary Revenue Division/ Chairman, FBR

FBR Tax Collection:

An Analysis of the Q3: 08-09 Outturn

The Economy

The prevailing global financial meltdown has affected the livelihood of almost everyone in this increasingly inter-connected world. The impacts may be different for the developed and developing worlds. For the developing world, the rise in food prices, knock-on effects from the financial instability and the uncertainty in industrialized nations are having a compounding effect. High fuel costs, soaring commodity prices together with fears of global recession are worrying many developing country analysts.

Dealing with recession

Most of the economic regions are now facing recession. This includes the US, the Euro zone, and Asia, with varying nature and intensity. At such times governments attempt to stimulate the economy. Standard macroeconomic policy measures include:

- Increase borrowing,
- Reduce interest rates,
- Reduce taxes, and
- Spend on public works such as infrastructure.

Borrowing at a time of recession seems risky, but the idea is that this should be complimented with paying back during times of growth. Likewise, reducing interest rates sounds like there would be less incentive for people to save money, when banks need to build up their capital reserves. However, as the real economy starts to feel the pinch, reduced interest rates are an attempt to encourage people to take part in the economy. Tax reduction is something that most people favor, and yet during times of economic downturn it would seem that a reduction in tax would result in reduced government revenues just when they need it and then spending on health, education, etc, would be at risk. However, because higher taxes during downturns mean more hardship for more people, increased borrowing is supposed to offset the reduction in taxes, hopefully affording people a better chance to weather the economic storm. The expansionary fiscal policy at the time of crisis would

enable the macroeconomic indicators to move in the positive direction.

Finally it is at this time that *public infrastructure work*, which can potentially employ many, many people, is palatable. Often, under free market ideals, government involvement in such activities is supposed to be minimal. Even the other forms of "interference" are usually frowned upon. However, most states realize that markets are not always able to function on their own (the current financial crisis, starting in the US, being the prime example); pragmatic and sensible adoption of market systems means governments can guide development and progress as required.

Nonetheless, many governments have started to contemplate these kinds of measures. For example, South Korea reduced its interest rates, as has Japan, China, England, various European countries, and many others. Some have looked to borrow billions or in some way come up with stimulus packages to try and kick-start ailing economies. While these might be reasonably standard things to do, it requires that during economic good times, a reversal of some of these policies are required; interest rates may need to increase (one reason for the housing booms in the US, UK and elsewhere was that interest rates were too low during good times), borrowing should be reduced and debts should start to be repaid, infrastructure investments may not need to be as direct from government and private enterprise may be able to contribute, and most politically sensitive of all, taxes should increase again to offset the reduction in borrowing. On the other hand some may argue against the government-based stimulus packages, and support the policy of tax cuts which would alone do the job as presumably; individuals make better choices on consumption than governments.

FBR Revenue Collection Vis-à-vis Target

Despite economic slowdown and crisis during the FY: 08-09, FBR has been able to collect 95.3% of July-March revenue target. In gross and net terms Rs.871.0 billion and Rs.815.1 billion have been collected. The gross and net collections grew by 19% and 20% during July-March 2008-09 as compared to the corresponding period last year (Table 1). The revenue performance during 3rd quarter has not been satisfactory. The net collection grew by only 6.7% in quarter 3 as compared to 27.8% and 27.3% in first and

second quarters respectively. If the same pace of growth would have maintained in the 3rd quarter the FBR would have surpassed the nine months target comfortably.

Table 1: Overall Gross and Net Revenue Receipts: A Monthly Comparison

(Rs. Billion)

	FY 08-09		FY (FY 07-08		Growth (%)	
	Gross	Net	Gross	Net	Gross	Net	
July	79.3	72.5	55.9	50.9	42	42	
August	84.3	78.8	63.0	60.1	34	31	
September	115.8	110.8	100.7	94.1	15	18	
October	95.8	92.2	69.8	66.4	37	39	
November	82.2	74.8	73.4	68.5	12	9	
December	131.7	124.8	106.6	95	24	31	
January	86.1	76.6	85.2	77.5	1	-1	
February	83.9	77.5	75.9	72.8	11	6	
March	111.9	107.1	99.9	94.5	10	13	
July-March	871.0	815.1	730.4	679.9	19	20	

The month-wise collection indicates volatility in growth. It has varied between 42% in July 08 and -1% in January 09. The growth in net collection in first four months and December has been excellent, however, collection dipped in November, January, February and March and resultantly overall nine months growth stood at 20% only. The underperformance during July-March of CFY, political uncertainty and law & order situation has posed great threat to revenue collection as well. The remaining balance amounts to Rs. 485 billion, to be collected in 4th quarter of CFY.

Undoubtedly, the collection of remaining huge balance would be a challenge for FBR, nonetheless, extraordinary efforts, well-planned and coordinated desk audits and enforcement can ease the task. It is worth mentioning that FBR field formations performed exceedingly well in the 4th quarter and around 33% of total revenue was realized in the last quarter (2007-08). More specifically it is added that in the months of May and June the collected revenue was 24.2% of total revenue receipts in FY: 07-08. In respect of income tax it is also worth mentioning that departmental efforts in May and June last year were commendable and around 31% of total collection out of demand (CoD) was collected in last two months (Table 2). Again it is the time to show same enthusiasm and efforts by the field formations to help out the government to enhance the direly needed tax revenues.

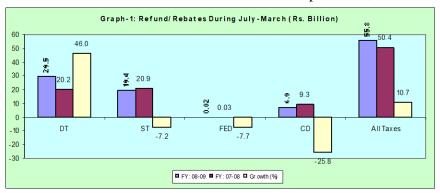
Table-2: Income Tax Departmental Efforts in May and June 2008

(Rs. Million)

Period	Heads	Collection	Share(%)
	Arrears	250	4.1
May-08	Current	4,736	12.9
	Total	4,986	11.7
	Arrears	354	5.8
June-08	Current	7,735	21.1
	Total	8,090	18.9
	Arrears	604	9.8
May-June 08	Current	12,472	34.0
	Total	13,075	30.6
	Arrears	6,147	
Full Year 07-08	Current	36,632	
	Total	42,779	

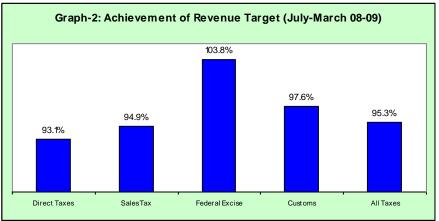
Refund/ Rebate Payments: During July-March

The tax-wise payment of refunds and rebates are depicted in Graph-1. There has been an overall increase of Rs. 5.3 billion in refund payments. Major increase has been noticed in refund payments of direct taxes. Details have been shown in the Graph below;



Detailed Analysis of Individual Taxes

The tax-wise details reveal that major shortfall has occurred in direct taxes, followed by sales tax and customs duties (Graph-2). Only FED has surpassed the first nine months revenue target by 3.8%. The overall revenue target fell short by 4.7% in first nine months of CFY. The direct taxes would need more attention to compensate the revenue loss in final quarter of FY: 08-09.



Direct Taxes: Till the end of the Q2, the direct taxes remained in line with respect to its achievement of revised budgetary targets at Rs. 210 billion. But could not continue the same stream in the current quarter and fell short of about Rs. 23 billion, by collecting Rs. 307.6 billion against the target of Rs. 330.5 billion. By viewing the collection in the context of previous year, the gross and net collection at the end of 3rd quarter of CFY has been at Rs. 337 billion and Rs. 307.5 billion, as against Rs. 277.9 billion and Rs. 257.6 billion respectively in the comparable period of PFY (Table 3).

Table 3: Gross and Net Receipts of Direct Taxes: A Comparison

(Rs. Billion)

	FY 08-09		FY 0	7-08	Growth (%)	
	Gross	Net	Gross	Net	Gross	Net
Quarter-I	94.1	88.2	81.7	77.5	15.2	13.9
Quarter-II	132.5	122.1	96.3	87.1	37.6	40.2
H1:Jul-Dec.	226.6	210.3	178	164.6	27.3	27.8
Quarter III	110.4	97.2	99.8	93	10.6	4.5
						40.4
July-March	337.0	307.5	277.9	257.6	21.3	19.4

Note: (1) Figures are rounded to one decimal place

A number of reasons may be attributed to the prevailing slowdown in revenue realization during this period. It includes deteriorating law and order situation, strikes and power shortages, thus repelling the investors to stop and windup their investment plans in Pakistan. Despite the mentioned factors, the major set back has been due to significant reduction in voluntary compliance and withholding taxes. The overall growth by the end of Q3 was 21.3% and 19.4% in gross and net terms respectively, which is also well short of the envisaged overall growth of 35%.

The monthly figures in comparison with comparable period of last four years are presented in Table 4 to understand fluctuations in tax receipts. It indicates that only the months of August, October, and December of CFY were relatively encouraging when compared with previous year's collections. For rest of the months, the comparative analysis of growth trends with previous year depicts a poor situation, and rather deplorable in the months of September, January and February showing negative growths. The poor growth trends in the months of September and December clearly shows the passive trends and decline in the voluntary compliance.

Table 4: Analysis of Direct Taxes (Net)

(Rs. in Million)

					Growth (%)		6)
Months	2008-09	2007-08	2006-07	2005-06	08-09	07-08	06-07
July	18,469	14,110	10,086	7,620	30.9	39.9	32.4
August	22,154	15,007	11,110	9,015	47.6	35.1	23.2
September	47,612	48,415	45,280	31,551	-1.7	6.9	43.5
October	25,573	17,161	16,066	11,105	49.0	6.8	44.7
November	22,920	18,720	13,925	10,163	22.4	34.4	37.0
December	73,608	51,182	76,232	34,860	43.8	-32.9	118.7
January	24,999	27,071	12,457	10,070	-7.7	117.3	23.7
February	23,649	25,018	13,780	10,519	-5.5	81.6	31.0
March	48,596	40,955	38,865	27,793	18.7	5.4	39.8
Total	307,580	257,638	237,801	152,696	19.4	8.3	55.7

Major apprehension behind this unprecedented decline coupled with significant growth in demand is that the taxpayers may have preferred delinquency in anticipation of weak audit system, but this has been thwarted through departmental efforts.

Analysis of Components of Direct Taxes

The components of direct taxes are individual income tax, corporate tax and other direct taxes. But as such the distribution with regard to the collection consists of Collection on Demand (COD), Voluntary Payments (VP) in the shape of tax with returns, advance tax and withholding taxes (WHT). The other direct taxes include CVT and WWF/ WPPF which accounts for less than one percent of gross collection. Table 5 highlights the performance of these heads during CFY.

Table 5: Direct Taxes Collection July-March

(Rs. Million)

Revenue Heads	2008-09	2007-08	2006-07	09 to 08	09 to 07
Coll. On Demand	49,314	25,378	5,526	94	792
Arrear	11,879	5,370	2,378	121	400
Current	37,435	20,008	3,148	87	1,089
Voluntary payment	106,415	97,653	132,164	9	-19
With Returns	14,061	8,504	47,925	65	71
Advance Tax	92,354	89,149	84,238	4	10
Withholding Tax	169,167	141,629	116,011	19	46
Misc	242	99	120	145	102
Total I. Tax (Gross)	325,139	264,760	253,820	23	28
Refund	29,477	20,230	25,296	46	17
Income Tax (Net)	295,662	244,530	228,524	21	29
Other Direct Taxes	11,918	12,108	9,276	-2	28
Total D.Taxes (Net)	307,580	257,638	237,800	19	29

Voluntary Payments (VP)

The objectives behind introduction of USAS were primarily to minimize interface between the taxpayer and tax administration, repose confidence in the system and inculcate self realization among the taxpayers. The initial years witnessed a success in this system with regard to the voluntary compliance, but during the last couple of years, there has been a poor compliance of taxpayers in this head. The two major factors behind the decline in VP are poor tax facilitation and weak audit system. The poor or inappropriate tax facilitation has been the major cause to inculcate self realization among the tax payers. Then as a result of weak audit and enforcement, there is little deterrence and check on the taxpayers of the tax authorities.

The overall growth in the VP has been only 9% for the CFY as compared to PFY. Further, the comparative analysis of the payments with returns has registered a growth of 65% as compared to the previous year. But, surprisingly by comparing the VP collections of CFY with 2006-07 reveals a different picture, which is quite appalling as it depicts an overall negative growth of 19% in VP collection even after two years. The perusal of collection with return when compared with 2006-07 reveals that even in the CFY we are still 71% deficient of what was collected two years back. In figures the payment with returns was at Rs. 47.9 billion during July-March 06-07 to only Rs. 14.06 billion during CFY, thus yielding a decline of Rs. 33.84 billion. While analyzing the growth in the number of

returns submitted over the last three years, also does not give us an encouraging figure, thus further pointing towards the weaknesses in the USAS mainly owing to the voluntary payment scheme. The analysis when comparing the returns filed in 2008-09 to 2006-07 reveals an increase of 5.3% and 34,079 returns in absolute terms (Table 6).

Table 6: Analysis of Income Tax Returns over the last three years

	No. of Returns Received			Growth (%)		Growth (Absolute)	
Taxpayers	08-09	07-08	06-07	09-08 to 08-07	09-08 to 07-06	09-08 to 08-07	09-08 to 07-06
Corporate Cases	17,430	16,063	11,521	8.51	51.29	1,367	5,909
AOPs Salaried	25,103	24,876	21,702	0.91	15.67	227	3,401
Individuals Non Salaried	126,453	94,078	64,174	34.41	97.05	32,375	62,279
Individuals	508,456	589,651	545,966	- 13.77	-6.87	-81,195	-37510
Total	677,442	724,668	643,363	-6.52	5.30	-47,226	4,079

The point to ponder is despite the increase in number of returns for the last three years, why there has been a decrease in the payments at 71% over three years? One apparent reason is the major decline in the payments received from the corporate sector and secondly the poor check and deterrence through audits, particularly of the corporate entities. The second component of Voluntary Payments i.e. advance tax has not shown any encouraging growth. As compared to the PFY, the growth has been nominal i.e. only 4%.

Collection on Demand (COD)

It was natural to presume that with the introduction of USAS in the income tax, voluntary compliance will surge and on the contrary the collection on demand will come down. This presumption held true for the initial few years, but in the later years, the situation started changing and now there are reverse trends in this regard. It is reiterated that if USAS is not backed with an effective audit mechanism it may not yield the desired results. However, the ongoing slack in voluntary payments reinforced the efforts of tax authorities to concentrate on this important component of COD. These efforts are well depicted in the last two years collection figures under this head. This positive trend would also improve the voluntary payments as a result of extensive audits.

Now viewing at the figures under COD reveals a healthy growth of 94% during the CYF as compared to the PFY. During July-March 2008-09 an amount of Rs. 49.3 billion under COD has been

collected, of which Rs. 37.0 billion was collected under current demand whereas last year the collection was Rs. 20.0 billion. Likewise the other sub-component of COD, the arrear collections has also shown a healthy trend by registering growth of 121% in the CFY. In absolute terms Rs. 11.9 billion was collected under arrear demand during CFY till Q3, against Rs. 5.4 billion in the corresponding period of PFY.

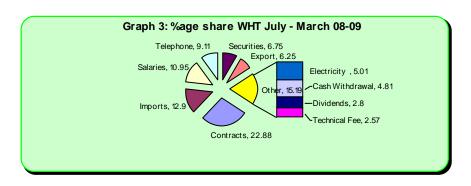
Withholding Taxes (WHT)

WHT has always remained an important component of the direct tax receipts owing to a large proportion of an undocumented sector in our economy. The WHT collection during July-March 2008-09 has been Rs. 169.2 billion against Rs.141.6 billion during PFY, indicating a growth of 19.4%, which was lower than the previous year's comparative growth of 22.1%. The top ten major withholding taxes constituting 92% of total WHT collection is almost the same as in the previous year. These are: contracts, imports, salary, telephone, export, bank interest & securities, electricity, dividends and cash withdrawal (Table 7). The share of these major withholding heads in the total WHT has been given in Graph 3. Except for imports and cash withdrawals, the share of other taxes has almost remained the same. In this regard, the imports have fell from 14.2% to 12.9%, whereas the share of cash withdrawals has increased from 2.9% to 4.8%. While analyzing the growth of WHT, it has been observed that the highest growth in WHT collection has been from Cash Withdrawals (93%) followed by Electricity (92%), Exports (34.5%) and Salary (27.9%) [Table 7]. The prevalent growth trend depicts a different scenario as the major contributors like contracts and imports have not shown healthy growth. Apart from the above mentioned ten WHT contributors, the relatively minor components like transport and CNG stations have also recorded sizeable growths of 65% and 205% respectively.

The %age share of WHT in the gross income tax collection has reduced from 54% in the previous year to 52% in the current year. Owing to the predominant informal sector of Pakistan's economy, the WHT enjoys a pivotal position in the overall collection of direct taxes. It can be further improved through streamlining and focused strategy with respect to the monitoring of withholding taxes. It may involve establishment of withholding directorates in the major cities and devolution of monitoring function to the tax facilitation centers.

Table 7: Leading WHT Heads: A Comparison of FY 08-09 & FY 07-08 Collection (Rs. in Million)

			(Rs. in Million)				
Collection Head	2008-09	2007-08	Differe	ence			
Collection Head	2008-09	2007-08	Absolute	Percent			
Contracts							
Q1	17,159	13,921	3,238	23.3			
Q2	21,504	17,454	4,050	23.2			
Q3	18,669	18,437	232	1.3			
July-March	57,332	49,812	7,520	15.1			
Imports	07,002	15,012	7,020	10.1			
Q1	7,961	6,449	1,512	23.4			
Q2	7,086	6.193	893	14.4			
03	6,780	7,431	-651	-8.8			
July-March	21,827	20,073	1,754	8.7			
Salary	21,027	20,073	1,751	0.7			
Q1	5,379	4,268	1,111	26			
Q2	6,663	4,762	1,901	39.9			
03	6,486	5,458	1,028	18.8			
July-March	18,528	14,488	4,040	27.9			
Electricity	10,326	14,400	4,040	21.9			
Q1	1,594	1,266	328	25.9			
Q1 Q2	4,003	1,743	2,260	129.7			
03			,	105.4			
_	2,882	1,403	1,479				
July-March	8,479	4,412	4,067	92.2			
Telephone	4.040	1 200	5.00	10.0			
Q1	4,948	4,386	562	12.8			
Q2	5,408	4,294	1,114	25.9			
Q3	5,047	4,236	811	19.1			
July-March	15,403	12,916	2,487	19.3			
Export	2 50 5	2 222	4.000				
Q1	3,606	2,333	1,273	54.6			
Q2	3,604	2,690	914	34			
Q3	3,358	2,829	529	18.7			
July-March	10,568	7,859	2,709	34.5			
Dividends							
Q1	1,566	1,073	493	45.9			
Q2	2,630	2,032	598	29.4			
Q3	547	1,165	-618	-53			
July-March	4,743	4,270	473	11.1			
Cash Withdrawal							
Q1	2,226	1,302	924	71			
Q2	2,960	1,488	1,472	98.9			
Q3	2,943	1,415	1,528	108			
July-March	8,129	4,205	3,924	93.3			
Bank Interest /							
Securities							
Q1	3,216	3,251	-35	-1.1			
Q2	3,497	4,988	-1,491	-29.9			
Q3	4,709	2,966	1,743	58.8			
July-March	11,422	11,205	217	1.9			
a. Sub Total	156,430	129,240	27,190	21			
% Share in total WHT	92	91	1	1.6			
b. Other WHT	12,737	12,389	348	2.8			
c. Total WHT	169,167	141,629	27,538	19.4			
Share (%) in Gross I.							
Tax	52	54	-2	-3.6			



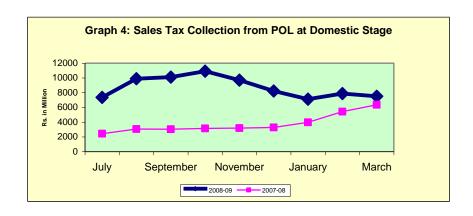
Sales Tax: GST is one of the leading sources of federal tax receipts. It has contributed 39.4% of the total net revenue collection during the first nine months of FY: 08-09. The gross and net collection has been Rs. 340.5 billion and Rs. 321.1 billion, respectively showing growth of 21.8% and 24.2% over the corresponding period of PFY. The refund payments have declined by 7.2% during this period, mainly due to reduction in claims after zero-rating. It is evident from Table 8 that the gross and net collection of sales tax has improved significantly during the first and second quarter. However, slow growth has been observed in the third quarter which has to be compensated in the last quarter of CFY.

Table 8: Sales Tax Collection: A Comparison of FY 08-09 & FY 07-08

(Rs .Billion)

Description	FY: 08-09		FY: 07-08		Growth (%)	
Description	Gross	Net	Gross	Net	Gross	Net
Q1	118.3	110.2	90.4	82.8	30.9	33.2
Q2	112.6	106.9	94.0	86.6	19.8	23.5
Q3	109.6	104.0	95.1	89.3	15.2	16.4
July-March	340.5	321.1	279.5	258.6	21.8	24.2

However, the target has been missed by about 5% during the period under review implying that a shortfall of about Rs. 17.4 billion has been recorded till the end of March 2009. The reason of short fall is mainly due to import compression which account for 46% of the total sales tax revenue. Within imports, POL products accounts for more than 33% of the sales tax collection at import stage. A decline has been witnessed in the tax collection from POL at import stage since November 2008. On the other hand POL product at domestic stage has also exhibited less than expected growth since November 2009. Figure 1 indicates monthly revenue trend both at import and domestic stages.



Sales Tax Domestic Collection and Major Revenue Spinners: The commodity-wise details of domestic sales tax collection during July-March 2009 confirms that 84.8% of gross collection (Rs. 176.3 billion out of Rs. 193.2 billion) has been generated by ten major revenue spinners that include: POL products, telecom services, natural gas, sugar, cigarettes, electrical energy, services, cement, beverages and Tea. However, with the exception of three sectors (sugar, services and beverages), the rest of the commodity groups have recorded fairly high growth. The most important being the petroleum sector. The collection from POL products has increased by 156% over last year's collection. This increase is attributed to (i) gradual de-capping of price effects of international prices increase; and (ii) zero-rating of crude oil for sales tax at import stage which has left positive impact on output tax as input adjustment has decreased substantially.

The crude oil imported by refineries was subject to sales tax at import stage which was later subjected to refund/ adjustment claim at the time of domestic sales of its refined products. Since last year, the import of crude oil has been zero-rated for the purpose of sales tax. This measure has not only improved the liquidity strength of the oil sector, it has also improved the tax collection procedure. The tax is now being charged at sales stage. The far reaching impact of telecom services in social and economic sectors has transformed this sector into a leading industry and a major source of sales tax collection. The collection has observed a growth of 23.5% over the comparable period of last year.

A negative growth has been recorded in GST receipts from other services, sugar and beverages. The reasons of decline in the services

sector is mainly due to change in return submission procedures, it is now mandatory for those taxpayers having multiple registrations to file ST return under one registration number and National Tax Number. The tax is still reported under that registrations number which is outside the services activities. However, FBR is perusing the cases and expected that the system will be in place in the coming months. Likewise, reflection of negative growth in beverages is due to procedural lapses, over one billion tax receipts of the sector has been reported under such registration which fall outside the beverage specification. Had the amount included in the beverages collection the growth would be positive.

The negative growth in collection from sugar is partly due to reduction in the production of sugarcane and early closure of crushing season in November instead of December, However, despite this, the overall contribution remains discouraging. Special audits are needed to determine the real cause of this outcome in the light of current supply and demand position of the commodity in the country. The significant growth of 16.5% in collection from cigarettes is better performance.

Table 9: Sales Tax (domestic) Collection Ten Major Items

(Rs. Million)

			(2	vs. million)
		Collection	Collection	Growth
S. No.	Commodity Groups	Up to March	Up to March	
		2009	2008	(%)
1	POL Products	86825	33,922	156.0
2	Services (including telephone/Fax etc)	40629	32,885	23.5
3	Natural Gas	15,517	11,227	35.0
4	Sugar (Including Baggase and Molasses)	8,420	8,552	-1.5
5	Cigarettes	6,348	5,447	16.5
6	Electrical Energy	5,714	4,948	15.5
7	Services (other than telecom)	4,475	4,297	4.1
8	Cement	3,229	2,365	36.5
9	Beverages/ Aerated water	2,590	2,630	-1.5
10	Tea	2,554	2,061	23.9
	Sub Total	176,301	108,605	62.3
	Others	16912	29,160	-42.0
	Gross Total	193,213	137,765	40.2
	Refunds	19,352	20,859	-7.2
	Net GST Collection	173,861	116,906	48.7

Sales Tax at Import Stage:

The contribution of Sales Tax at Import stage [ST (M)] in gross terms has been around 46% in total sales tax collection during the period July-March 2008-09.

Out of fifteen major commodity groups, a double-digit growth has been recorded in GST collection from Tea & Coffee, edible oil, Iron & Steel, paper & paper board, Plastic & resins, and organic chemicals etc. The internal structure of sales tax imports reveals that around 39% of collection originates from POL products. Each of the remaining commodity groups has a share of less than 9%. The share from POL products has exhibited a modest growth of 4.8% as compared to last year mainly because of the import compression and declining trend in POL since November 2009 as explained earlier. Moreover, the two major POL contributors are crude oil and HSD, the zero-rating of crude has reduced the overall growth in ST [M] collection (Table 10).

Table 10: Major Revenue Spinners of Sales Tax at Import Stage

(Rs Million)

PCT		Growth in	ST	(M) Collection	on
Chapter	Tariff Description	Imports (%)	JM: 08-09	JM: 07-08	Growth (%)
27	POL Products	26.7	57,300	54,662	4.8
15	Edible oil and Waxes	18.9	12,792	10,448	22.4
39	Plastic Resins etc	10.3	12,273	10,503	16.8
72	Iron and Steel	13.3	9,494	8,043	17.7
87	Vehicles	-18.2	8,035	9,682	-17.0
84	Mechanical Machinery	37.3	4,958	5,113	-3.0
85	Electrical Machinery	7.5	4,320	5,025	-14.0
29	Organic chemicals	5.5	4,104	3,623	13.3
48	Paper and Paperboard	9.9	4,058	3,464	17.1
9	Tea and Coffee.	43.9	2,797	1,771	57.9
38	Misc. Chemical products	32.9	2,211	2,313	-4.4
12	Oil Seeds etc.	-45.0	1809	3,071	-41.1
76	Aluminum and Articles	7.6	1,796	1,601	12.2
40	Rubber Products	4.8	1,712	1,879	-8.9
26	Orses Slags, Ash	85.1	1,573	801	96.5
	Sub-total	20.4	129,232	121,999	5.9
	Others	10.7	18,046	19,779	-8.8
	Grand Total	17.7	147,278	141,778	3.9

The positive growth of 22.4% in edible oils is basically related to the specific nature of duty at import stage, therefore, the import compression has a negligible impact on the this commodity, where as other item like vehicles, oils and seeds and machinery has been badly affected and recorded negative growth during the period under review, and this is because of continuous decline of demand for the commodity.

Customs Duties: In the first four months of the current fiscal year, the value of imports picked up enormously due to soaring international prices of petroleum and depreciation of Pakistani rupees vis a vis dollar. This surprising surge in the value of imports has vastly increased the customs duties at a faster pace in the same period despite reduction in the collection of customs receipts from automobile sector due to decreased imports.

The persistent slide in the import value of petroleum products due to falling prices of petroleum products in the next 5 months, the collection of customs affected drastically. Similarly, the automobile sector has also yielded robust decline in all the months except September, 2008 has vastly affected overall collection of customs duties.

A target of Rs. 108 billion of customs duties was missed by 2.4% during July-March, 2008-09. The targets of customs duties were exceeded in the first quarter by 0.4% while it was missed by 0.2% and 6.8% in the Q2 and Q3 respectively in CFY. The gross and net collection stood at Rs.112.3 and Rs. 105.4 billion depicting low growths of 1% and 3.4% respectively against corresponding period last year. A handsome amount of Rs.2.4 billion was saved on account of payments of refunds/rebates. The other factors hindered in the growth of customs duties have been 52% duty free imports grew significantly faster than dutiable imports and above all, a loss of Rs.3 billion in CD due to exemption of import of wheat from customs duty in CFY.

The customs receipts have been highly concentrated in few items which reflect vulnerability of its revenues. This phenomenon warrants further diversification as fifteen major revenue spinners constitute 74% of import value, 85% of the dutiable imports and 78% of the customs duties. Only four items petroleum, automobile, edible oils and machinery contributes 55% of total CD and 70% of the 15 major spinners of CD. Top fifteen revenue generating groups of items (PCT Chapters) have been presented in Table 11.

Table 11: Growth in value of imports and Customs Duties During July-March, 08-09(Growth and Effective Rates in percent)

PCT		Growth (%)		Effective Rates with Dutiable Imports(%)		
Chapter	Tariff Description	Value of Imports	Dutiable Imports	Customs	Up to March 09	Up to March 08
27	POL	26.7	38.0	10.4	8.2	10.2
87	Vehicles	-18.2	-21.7	-27.8	32.1	34.8
15	Edible oil and Waxes	18.9	12.2	-6.1	14.2	17.0
85	Electrical Machinery	7.5	15.0	11.3	8.0	8.3
84	Mechanical Machinery	37.3	28.9	23.4	6.9	7.3
39	Plastic Resins, etc.	10.3	10.4	9.4	8.0	8.0
72	Iron and Steel	13.3	4.8	13.4	12.5	11.6
48	Paper and Paperboard	9.9	11.5	11.9	20.8	20.7
29	Organic Chemicals	5.5	22.2	3.5	6.5	7.7
73	Articles of Iron & Steel	70.2	69.0	30.9	8.5	11.0
9	Coffee and Tea etc.	43.9	43.3	39.8	10.8	11.1
33	Cosmetic & Perfumery	21.9	20.7	71.1	39.6	28.0
32	Dyes, Paints etc.	19.5	15.0	15.5	12.7	12.6
34	Soap, Artificial Waxes	30.1	30.2	36.0	17.7	17.0
38	Misc. Chemical Prod.	32.9	31.2	23.7	8.8	9.3
	Sub-Total		20.2	3.1	10.5	12.3
	Others		-12.6	-5.8	16.8	15.6
	Grand Total	17.7	13.8	1.0	11.5	12.9

Due to vibrant performance of petroleum products in the first 4 months of CFY, it has emerged as the leading source of customs duties constituting 13.8% of the total collection of customs duties. High Speed Diesel oil is the major revenue generating source of the petroleum products as most of the major energy petroleum products are exempt from customs duty like crude oil, furnace oil, motor spirit, kerosene etc. The growth of 10.4% in the petroleum products (CH:27) is significant as the customs duty rate of 10% on HSD was reduced to 7.5% w.e.f. 04.09.2008.

Like previous year, the dutiable import of automobile has dropped substantially by 21.7% during July-March, 2008-09. This has largely affected the collection of customs duty from vehicles and parts (CH:87). Major chunk of customs duty also emanates from the import of motor cars/jeeps (PCT 87.03). The dutiable import of motorcars/jeeps (CKD & SKD) has declined by 28.1% which has affected the collection of customs duties by 32% or Rs.4.2 billion.

Similarly, the collection of customs duties from vehicles used for transportation of goods has also decreased by 30% or by Rs. 680 million due to lesser dutiable value of import by 30.6%. The overall decline in import of SKD and CKD motor vehicles reflects the lower demand due to restriction on car financing due to bad debt and slowdown in the business activities.

There has been a strong increase of 18.9% in the value of import of edible oils (CH:15) but the collection of customs duties has dropped by 6.1% which is understandable. Since edible oils are mainly subject to specific rates, therefore, the advantage of growth in the value of import could not reflect in the customs duties revenues. The collection of customs duties has been mainly fetched from the import of palm oils i.e. palm olien, R.B.D palm oil and crude oil. Actually, the quantity imported in case of palm olien, being the major items, has fallen drastically by 66.2% during first 3 quarters of CFY as compared to previous year. On the other hand, imported quantity of R.B.D palm oil has been remarkably higher by 45301% during July-March, 2008-09. The gains from the higher import of R.B.D palm oil could not compensate for huge loss from lower imports of palm olien. There has been marginal increase in the imported quantity of crude oil during July-March 2008-09; therefore, no significant growth of customs duty has been realized.

The collection of customs duty from electrical machinery has improved by 11.3% against 15% growth in the dutiable imports. The collection has been consistent with its base. The growth in import value of electrical machinery has been half of the dutiable imports. This is because the import of mobiles was brought into the fold of customs duty in the Budget 2008-09. Thus, the demand for import of mobiles was extremely affected by 71% and an additional customs duty of Rs.971 million was also collected during July-March, 2008-09. As far as mechanical machinery is concerned, the value of import and dutiable imports has improved by 37.3% and 28.9% respectively leading to 23.4% growth in the collection of customs duties respectively. This performance is attributable to increased collection of mechanical appliances, laboratory equipment, centrifuges, valves, pumps, engines etc due to their enhanced imports. Higher growth in the import of iron and steel articles by 70.2% (CH:73) and only 13.3% in the iron and steel (CH:72) imply that steel industry has not performed its best. All the remaining items exhibited growths in the collection in CD due to their increased imports and dutiable imports.

Federal Excise: During July-March 2008-09 Rs.81 billion have been collected against Rs. 61.8 billion in the corresponding period of last year, thus depicting a growth of around 31%. The overall performance of FED during CFY has been satisfactory. The revised annual target of FED has been surpassed by 3.8% during first three quarters of CFY. Around 68% of the annual target has been achieved so far. The remaining 32% of the annual target would be possible to achieve if last year's trend of 4th quarter is maintained.

The Month-wise performance is presented in Table-12. The growth in July is abnormal due to procedural change adopted in FY: 07-08, however, in the remaining eight months around 21% growths has been witnessed. A double digit growth was recorded in all months except the month of November.

Table 12: Overall FED: Month-wise Collection

(Rs. Million)

	Collection		Achievement		Share (%)	
Months	FY: 08-09	FY: 07-08	Absolute	Percent	FY: 08- 09	FY: 07- 08
July	8,187	1,859	6,328	340.4	10.0	3.0
August	8,940	6,555	2,385	36.4	11.0	10.6
September	8,334	7,462	872	11.7	10.3	12.1
Quarter-1	25,461	15,876	9,585	60.4	31.4	25.7
October	10,604	7,548	3,056	40.5	13.1	12.2
November	8,549	8,304	245	3.0	10.6	13.4
December	8,944	7,793	1,151	14.8	11.0	12.6
Quarter-2	28,097	23,645	4,452	18.8	34.7	38.3
January	8,095	6,785	1,310	19.3	10.0	11.0
February	9,009	7,711	1,298	16.8	11.1	12.5
March	10,338	7,782	2,556	32.8	12.8	12.6
Quarter-3	27,442	22,278	5,164	23.2	33.9	36.0
Overall	81,000	61,799	19,201	31.1		

Major Revenue Spinners: The six major revenue spinners of FED contributed about 79% in FED domestic collection during July-March 2008-09. These major heads are cigarettes, cement, beverages, natural gas, POL Products and services.

The combined share of these six items has been around 79% in the current and corresponding period of last year. The highest growth of around 59% has been witnessed in beverages, followed by services

(48.4%), cigarettes (29.7%), POL (27.1%), and Cement (20.8%) [Table 13]. On the other hand the collection from natural gas declined by 0.9% during July-March 08-09.

Table 13: FED Collection from Major Commodities

(Rs. Million)

	July-March		Difference		Share (%)	
Commodities	FY: 08- 09	FY: 07- 08	Absolute	Percent	FY: 08- 9	FY: 07- 08
Cigarettes	24,588	18,951	5,637	29.7	30.4	30.7
Cement	12,712	10,522	2,190	20.8	15.7	17.0
Natural Gas	4,506	4,545	-39	-0.9	5.6	7.4
POL Products	2,824	2,222	602	27.1	3.5	3.6
Beverages	6,866	4,327	2,539	58.7	8.5	7.0
Services	12,527	8,441	4,086	48.4	15.5	13.7
Sub Total	64,023	49,008	15,015	30.6	79.0	79.3
Others	7,360	2,542	4,818	147.8	7.8	4.1
Domestic Total	70,321	51,550	18771	36.4	86.8	83.4
Imports Total	10,679	10,249	430	4.2	13.2	16.6
Grand Total	81,000	61,799	19,201	31.1		

Collection from FED Services: The levy of FED on services like Air Travel, Non-fund Services, Franchise and Insurance has been helpful in enhancing revenues substantially. The share of services has increased from 13.7% during July-March 07-08 to 15.5% in the CFY. Within services major contributor is Air Travel with about 64% share, followed by Insurance (18.2%), NFS (16.8%) and Franchise (1.3%) [Table 14]. During July-March 08-09, collection services has grown by 48.4%. Except Franchise a positive growth has been noticed in other items. Non-fund services grew by 116.2%, insurance by 72.3% and air travel by 33%. The negative growth of 10.2% in collection from franchise should be the point of concern for the concerned quarters.

Table 14: FED Collection from Services

(Rs. Million)

	July-March		Difference		Share (%)	
Services	FY: 08- 09	FY: 07- 08	Absolute	Percent	FY: 08- 09	FY: 07-08
Air Travel	7,946	5,975	1,971	33.0	63.7	70.8
Insurance	2,272	1,319	953	72.3	18.2	15.6
Non-Fund Services	2,099	971	1,128	116.2	16.8	11.5
Franchise	158	176	-18	-10.2	1.3	2.1
Total	12,527*	8,441	4,086	48.4		

*includes Rs.52 million related to services by property developers

Collection from Special Excise Duty: The 1% special FED levied in the budget 2007-08 has also been helpful in enhancing the FED revenues. During July-March 2008-09 Rs. 9.9 billion have been collected against Rs. 6.9 billion in the corresponding period last year (Table 15). The collection from 1% SED grew by 41.7%.

Table 15: 1% SED Collection

(Rs. Million)

	July-March		Difference		Share (%)	
Heads	FY: 08- 09	FY: 07- 08	Absolute	Percent	FY: 08-09	FY: 07- 08
1% SED Domestic	4,059	2,139	1,920	89.8	41.2	30.7
1% SED Imports	5,802	4,821	981	20.3	58.8	69.3
Total SED	9,861	6,960	2,901	41.7		

Unlike last year there has been a change in the collection trend when collection at domestic and import stages is compared. The share of collection from SED domestic has increased from 30.7% in July-March 07-08 to 41.2% in CFY, which indicates a better monitoring and enforcement by the department. Further vigilance can improve the collection from SED domestic. As compared to SED domestic the collection at import stage is performing better and shared around 59% of total SED collection during CFY.

FED on Vehicles: This is a newly introduced levy, announced in the federal budget FY: 2008-09. It is being collected @5% FED on the import and locally manufactured motorcars with engine capacity exceeding 850cc. The projected revenue for current fiscal year from this head was Rs. 3000 million. During nine months of CFY Rs. 1,853.3 million has been collected. The realized amount is 62% of yearly projected revenue and 2.3% of total FED collection. The details indicate that a major chunk of revenue 83% or Rs. 1539

million has been collected at domestic level, whereas Rs. 314.3 million were collected at the import stage. The demand of cars, being the luxury item, has been battered by the overall economic slowdown in the economy and consequently the FED revenues. With the improved economic situation, it is expected that this head would become lucrative part of FED revenues. However, better enforcement and monitoring can be helpful to fetch more revenues.

Concluding Observations

Despite slowdown and recession in local and global economy FBR tax collections has not been much disappointing. The net revenue grew by around 20% and about 63% of the revenue target has been achieved during first three quarters of CFY. However, in last quarter FBR field formations would need to put in extraordinary efforts to collect the remaining balance. In this regard day to day monitoring, desk audit and proper enforcement are the tools to ease the uphill task. The detailed analysis presented in the preceding paragraphs highlights some of the weaknesses that need to be addressed immediately. It has been noted that a major shortfall occurred in direct taxes mainly due to lesser growth in voluntary payments and withholding taxes. A careful, detailed analysis and monitoring of withholding agents should be envisaged on priority basis. Similarly, it appears that the USAS has been misused by the taxpayers, needs attention through strict audit.

TREADING THROUGH THE PATH OF CARBON TAXES: A CASE FOR PAKISTAN

By Mumtaz Haider Rizvi¹ and Waseem Bajwa²

1. Introduction:

- 1.1. In the past decade, it has been called everything from the "Greatest hoax ever perpetrated on mankind" to the "greatest challenge to face man." The issue is "Global Warming" which may be defined as an increase in average surface temperature of the planet earth due to natural and anthropogenic climate change. As this warming is closely linked to the enhanced greenhouse effect (concentration of greenhouse gases (GHG) increasing infrared or thermal radiation near the surface), one of the proposed remedies is to control these emissions (primarily Carbon dioxide from burning fossil fuels and wood as well as methane, nitrous oxide, and chlorofluorocarbons).
- 1.2. The major break through in this regard, came by the Kyoto Protocol of 1997 which recognized for the first time that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere. Accordingly, the Protocol placed a heavier burden on the 37 developed nations (being signatory to this protocol) under the principle of "common but differentiated responsibilities"³. Since the Carbon dioxide holds 76% share of the GHG in the earth's atmosphere, controlling the carbon emissions became the agenda for reducing GHG. The Kyoto protocol, introduced the idea of emission trading also known as 'Carbon Market', to meet the emission targets in a cost effective manner. A price has, thus been attached to the emission of GHG which would be ascertained through international trading of emission units⁴. To cope with the international price of emissions, majority of the developed countries are using the vehicle of carbon tax.
- **1.3.** The developing countries like Pakistan, may argue the other way as to why should they burden their taxpayers (with Carbon Tax) for the GHG outbreak in the developed countries by reducing and

² Second Secretary FR&S

¹ Member FR&S

³ Kyoto Protocol, 1997.

⁴ Cullen & Hodgson, 2005

use of fossil fuels which are their primary energy sources. However, the main argument i.e. "Save the Planet Earth" remains relevant for them with the same and equal force. This is a global issue and everyone is, and would be, affected by the climate change, so a concerted effort is required from all.

1.4. This paper is written to overview the literature pertaining to carbon tax and its levy and enforcement in various possible modes. Implementation of carbon tax by various developed countries has been briefly discussed to ascertain its viability in the context of revenue generation. Some options with regard to carbon tax as a "Revenue Neutral Tax" such as replacement of Petroleum Development Levy (PDL) in the case of Pakistan have also been explored.

2. An Overview:

- 2.1. Nature of Carbon Tax: The Carbon Tax is basically a form of an "environment" and "anti-pollution" tax on the production, distribution and use of fossil fuels causing carbon emissions through combustion. Normally, the government set a price per ton on carbon, which is further translated into a tax or duty on oil, electricity or natural gas. Similar to the taxes on alcohol and cigarettes, the carbon tax would be a Pigovian tax which is meant to discourage what is termed a negative externality- a tax on something "bad". Negative externalities are those costs which are normally not paid for. Consumption of fossil fuels is incurring such a societal cost in the form of pollution.
- **2.2. Rationale for Carbon Tax**: There is clearly a need to mitigate climate change risks. Tax on industrial carbon emissions is a two-fold approach to reduce the carbon emissions and facilitate implementation of climate-change-adaptation measures. The levy would force the firms and companies to have a permanent economic incentive to reduce their emissions and also consume energy more efficiently. It would further lead to technological and procedural changes to find ways and methods leading to reduced carbon emissions. It would also be immune to externalities and strategic behavior by firms or non-governmental organizations (NGOs), which may undermine the environmental integrity of the emission-trading market. The tax is in line with the "Polluter-Pays" principle⁵. The revenue generated from it can be recycled back into the

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⁵ Donaldson Tan, 2006

economy and also help in reducing taxes on income, labour and capital investment which would shift the tax burden from "goods" like labour or employment to "bads" like pollution. According to Harvard economist Richard Cooper, such a tax treatment would bring profound employment, distributional and political benefits.

- Sources of Carbon & Scope of tax: Carbon atoms are 2.3. present in every fossil fuel, coal, oil and gas, but the carbon content varies. The major sources of carbon with respect to their carbon content in a decreasing order are anthracite, lignite, sub-bituminous coal, bituminous coal, residual fuel oil, crude oil, gasoline and natural gas. In this regard the basic output is in the form of carbon dioxide, because all the carbon items when burned are converted into carbon dioxide. The carbon comprises 27% mass of the CO2 i.e. 27 tones in 100 tones of CO2 emitted. The carbon tax can be levied at different points of production and consumption. It may target the top of the supply chain – transaction between producers like coal mines and oil wellheads and suppliers like coal shippers and oil refineries. On one hand this tax may affect the distributors of oil companies and utilities and also the consumers through electric bill and hike in oil prices.
- **Design of Carbon Taxes:** The design of carbon tax involves four essential elements: the definition of tax base, the identification of persons to tax, the specification of tax rates and the use of revenues generated from the levy⁶.
- **2.4.1.** Tax Base: Fro selection of Carbon Tax-base, the broad guidelines are as under:
 - All emissions from the combustion of fossil fuels
 - The tax can be levied at
 - Various points of consumption and production;
 - ♦ Industrial process emissions & fugitive energy emissions (leaks or vents e.g. flaring at oil and gas production sites) CO2; and,
 - ♦ POL products leading to carbon related emissions.
- **2.4.2.** Tax Rate: Some studies suggest a Pigouvian rate should be between US \$ 4 and \$25 per tonne, or between US\$3 and \$95 per tonne⁷. The 'Stern Review' suggested a social cost of carbon at \$85 per tonne, and William Nordhaus suggested \$16 per tonne. The

⁶ Milne Janet, 2008

⁷ Tol 2005, Hansen, Parry, Lindon, Canziani 2007

effective tax rate from the EU trading system has fluctuated between €1 and €30.

<i>Box-1:</i>	Case of British Columbia (Canada)
By levying @ \$1	0 /ton as an initial rate would result in the
inc	rease of fuel prices as under:

Category	Rise in prices per liter
Gasoline	2.41 cents
Diesel	2.76 cents
Propane	1.53 cents
Aviation fuel	2.45 cents

Further, it is also possible to link a carbon tax with the degree of AGW, as suggested by Canadian economist Ross McKitrick. The 'McKitrick Tax' would link the size of the tax to the warming in tropical troposphere. According to the International Panel on Climate Change (IPCC), warming in the tropical troposphere should be an early and strong signal of AGW. McKitrick suggested a tax at twenty cents for every hundredth of a degree Celsius of warming in the tropical troposphere (0.25 C over the 1979-98 average) which would require a \$5 per tonne CO2e tax. If greater warming became apparent, the tax rate would increase.

2.4.3. Identification of persons to tax:

- Firms mining petroleum products except crude oil that is sold in raw state:
- Oil refineries in regard to production of emissions;
- Firms mining coal;
- o Firms using geothermal energies for processing electricity generation;
- o Consumers through electricity bill and fuel tax; and
- Importers of coal, coal products, gas, refined petroleum products (except crude oil by refineries), carbon anodes, carbon pitch and carbon black

2.4.4. Use of Revenue Generated through Carbon Tax: There is a general conception that demands can create a motive and an opportunity to tax (Stefan Peck, 2008). In a broader context, the revenue from this tax can help to devise an appropriate scheme that will reduce tax regressivity issue and also aid to have significant political and policy implications. The major portion of revenue generated from the carbon is normally recycled into the economy (Figure 1 British Columbia, Canada). Further a sizeable portion of

this revenue is also transferred to the environment sector so as to fund the projects and efforts made to reduce carbon emissions.

<u>Figure 2.1 – Example of British Columbia,</u> <u>Canada</u>

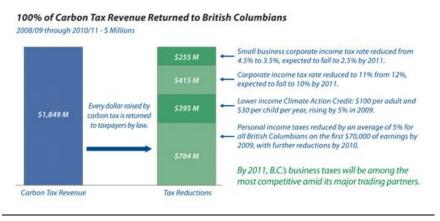
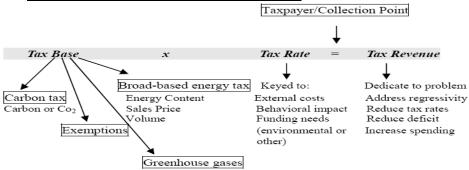


Figure 2.2 - Basic design of Carbon Tax



2.5. Taxing Carbon Emissions and Price impact: If the carbon tax on the emissions particularly related to the petroleum products and utilities are not adjusted and recycled with other sources of revenues, then it would result in an increase of price which would not only burden the general public but create political issues for the democratic governments.

According to EIA standards the per liter emission of CO2 on various grades along with a levy 100\$ / ton tax incidence is as under:

Table 2.1: Carbon emissions and impact of tax per liter

Two to the control of the purity and								
Petroleum	Per litre CO2	Tax per liter	Per liter impact in					
Grade	emission	in dollars	Rs. Terms @ 80					
Gasoline	2.34 kg	0.258	20.6					
Diesel	2.68 kg	0.296	23.7					
Jet Fuel	2.53 kg	0.279	22.3					

2.6. Carbon Trading Vs Carbon Tax:

2.6.1. To combat man-caused climate change, it is necessary to address emissions of greenhouse taxes including carbon dioxide. The goal is not to reduce energy use, but instead to increase the relative appeal of alternative energy (nuclear solar, wind, "clear" coal and so only) so as to speed the transition away from carbon incentive energy.

Both "Carbon Trading" and "Carbon Taxation" involve controlling the price and quantity of carbon released into the atmosphere from human activity. Carbon trading involves fixing a quantity of emanation available to be made and then allowing the price of carbon to fluctuate, so that the market works out the prices. In contrast, the carbon tax involves setting fixed price of carbon and allowing the quantity emitted to fluctuate i.e. the market to work out the quantity.

- **2.6.2** The difference between the two approaches reveals that as the price increases the amount of emission decreases. In reality, the "price" and "quantity" relationship will not stay constant and would invariably depend on the demand for fossil fuel energy. Under the trading system, the changes in demand would lead to fluctuation in the price. On the other hand, under a tax system the changes would lead to a fluctuation in the quantity of emissions. As such, both systems create a price for carbon, which will artificially increase the price of fossil-fuel-intensive activities. Both approaches will have a negative effect on producers of fossil fuel (less demand) and energy consumers (higher prices).
- **2.6.3** Some economists⁸, advocate the use of carbon trading which guarantees a fixed level of carbon emissions, subsidy to recipients of carbon credits and the entrenched special interest groups which may oppose removal of carbon trading. Ironically, all of these factors could also be taken to be equally valid arguments against a carbon

⁸ Warwick McKibbin, Peter Wilcoxen, John Quiggin and Joshua Gans

trading system. As with any fixed quota, fixed carbon emissions are less efficient than a tax, because quotas do not allow production decisions to adjust to changing circumstances, and fluctuating carbon prices would create uncertainty. This is directly analogous to the situation in trade theory where tariffs are preferred to quotas because they are more efficient.

- **2.6.4** On the contrary, a carbon tax is taken to be an ideal instrument for addressing climate change being more efficient given the uncertainties of global warming. As environmental economist Jack Pezzey notes, a tax is still a highly cost-effective measure, better in most economists' view than emissions trading because it keeps the carbon price stable. With a carbon tax, money flows from polluters to the government. In carbon trading system, money flows from polluters to organizations who receive carbon credits. The allocation of carbon credits amounts to a subsidy for some products, and while this would be popular among the recipients of the subsidy, it is likely to promote inefficiencies by picking winners and creating perverse incentives. Perhaps the strongest argument for a carbon tax over a carbon trading scheme is that the revenue raised from a carbon tax can be used to reduce or remove other taxes, and, therefore, offset the economic costs of carbon tax. With a modest carbon tax and appropriate offsets it is possible that a carbon tax might have no net negative economic effect. This is impossible under the carbon trading system where the payments of polluters are used as subsidies.
- **2.6.5** Other problems with the carbon trading system include significant compliance costs, including search cases, negotiating costs, approval costs, and insurance cases. There is also the possibility of state governments charging stamp duty on carbon credit trading, further reducing the efficiency of the trading system. Quiggin and Gans also note that while a trading schemes can put a price on carbon, compared with tax it does so in a less transparent measure. Further, the Carbon trading would also have higher administration costs, as a trading system is new and, necessarily, highly technical. Besides, the carbon trading system, similar to the quotas and tax licenses has to have a costly, bureaucratic and inflexible approach.
- **2.6.6** In contrast, a carbon tax is a relatively efficient and flexible alternative that allows market participants the maximum freedom to do business. Kennneth Green, Steven Hayward and Kevin Hassett of

the American Enterprises Institute echo these arguments, saying that a revenue- neutral carbon tax is preferable to carbon trading because it is more effective and efficient, includes less corruption and rent seeking, provide price stability, allows for other tax cuts and has greater adjustability and lower administration costs.

3. Countries' experiences regarding implementation of carbon taxes:

- 3.1 The amount of revenue raised from carbon tax depends a lot on the tax rate and base. In this perspective, the imposition and plans to introduce carbon tax by various developed countries have been analyzed which provides, a brief overview regarding its levy and enforcement.
- **3.2 Sweden:** Sweden, by taking the lead, introduced carbon tax in 1991. The rate was, quite high i.e. \$ 100 per ton on the use of oil, coal, natural gas liquefied petroleum gas, petrol and aviation fuel used within the domestic territory. The industrial users were given a relief with half rate, which was further reduced to \$ 25 per ton from 1993 to 1997. However, sectors such as commercial horticulture, mining, pulp and paper industries were charged comparatively higher rates.
- 3.3 United Kingdom: The United Kingdom Treasury imposed the carbon tax in the form of Fuel Price Escalator, an incrementally-increasing pollution tax, on retail petroleum products from 1993. In the beginning, the tax represented about 75% of the total pump price. It was later reduced after 1999 due to escalation in fuel prices and political protests. Tax now represents about 90 pence per liter of the pump price. The latest increase to 0.562 pound per liter came into force in 2009. Diesel for use by farmers and construction vehicles is colored red and has a reduced tax.
- **3.4 Other European Countries:** Finland, the Netherlands, and Norway also introduced carbon taxes in the 1990s. In Italy carbon tax was introduced in December, 1998.
- **3.5 New Zealand:** In 2005, New Zealand proposed carbon tax, setting an emission price of NZ \$ 15 per tonne of CO2 equivalent. It could not, however, be implemented on the planned date (April, 2007) due to political reasons. It was designed to encompass most economic sectors with exemption on methane emissions from farming and provisions for special exemptions from carbon intensive businesses. If adopted, it would be world's-best-practice standards of emissions.

3.6 Australia: Total amount of greenhouse gases (GHG) emitted in Australia is estimated to be 603 million tonnes of CO2e in 2008. The large proportion of this came from agriculture, industry, and households, in such a way that it was administratively and politically difficult to tax. If a carbon tax was to be limited to the energy sector, then there would be 430 million tonnes of CO2e. So, by applying a moderate rate of \$15 per tonne would raise about \$6.5 billion and a tax of \$30 per tonne would raise about \$13 billion.

Box 2: Options of Carbon Tax in Australia

- 1. Replacing the Fuel Tax: One approach to think of a Carbon Tax in Australia is as an extension of the existing fuel and diesel taxes. The Transport sector currently emits 94 million tonnes of CO2e per year, and pays a high tax rate (petrol tax is 38.143 cents per liter, excluding GST), while the stationary energy sector emits 306 million tonnes of CO2e and pays no environmental tax. A carbon tax can be seen as a replacement of the fuel tax, effectively reforming the environment tax to have a lower rate on a broader base. The total fuel taxes are just over \$14 billion. One option of replacing the fuel taxes with a \$30 per tonne carbon tax being applicable both on transport and stationary energy. This would result in effective reduction of 75% in the fuel levy, which would lead to a reduction in petrol prices by about 30 cents per liter.
- 2. <u>Reducing Income Tax</u>: The simple and equitable way of doing so is by increasing the tax free threshold. A \$15 carbon tax would raise about \$6.5 billion, which would allow the government to increase the tax-free threshold (TFT) to \$10,000. Alternatively the government could abolish the 45% and 40% tax brackets so that the top marginal rate remained at 30%.
- **3.7 U.S.A:** In 1993, President Clinton proposed a BTU tax that was never adopted. His Vice President, Al Gore, had also strongly backed a carbon tax in his book, "Earth in the Balance", but this became a political liability after the Republicans attacked him as a "dangerous fanatic". In April 2005, Paul Anderson, CEO and Chairman of Duke Energy, called for the introduction of a carbon tax.

In January 2007, economist Charles Komanoff and attorney Dan Rosenblum launched a Carbon Tax Center to give voice to Americans who believe that taxing carbon emissions is imperative to reduce global warning. Recent developments in this regard are that Boulder (Colorado) implemented the first tax on carbon emissions from electricity, on April 1, 2007. The tax is approximately equivalent to \$7 per ton of carbon and will cost the average household about \$1.33 per month.

3.8 Canada On 19 February 2008, the Canadian province of British Columbia announced its intention to implement a \$10/tonne carbon tax beginning 1 July 2008, making BC the first North

American Jurisdiction to implement such a tax. The tax will rise by \$5 a year until it reaches \$30 in 2012. Unlike previous proposals, legislations will keep the pending carbon tax revenue neutral by reducing corporate and income taxes at equivalent rates.

Table 3.1: Country Experiences

Country	Tax Rate / tonne	Mode / Type	Tax Base	Exemptions & Relief
Finland	\$ 90	Surtax	POL, Electricity, Natural gas, Coal	Bio fuel, hobby aviation, pleasure yachting
Sweden	\$ 100	Surtax	1 '	Industrial users with half rate
UK	0.56 pound / liter	Fuel Tax	On all POL products	Farmers & construction vehicles using diesel have reduced rate
USA (Colorado)	\$ 7	Municipal Tax	End users of Electricity	Utility providers not charged and half rate for industries
New Zealand	\$15	Carbon Tax on all	Covering majority of economic sectors	Farming & carbon intensive businesses with best practices exempted
Canada (BC)	\$ 10	Carbon Tax	Transport, Industries	Relief given in rates of corporate & income tax

3.9 **Denmark:** The Danish energy/carbon tax regime consists of three individual taxes: the energy tax, the CO2 tax, and the sulphur tax. The energy tax, which is based on the energy content of the fuel, is levied on fossil fuels, oil products, and coal. Natural gas is the exception because the energy content is not taken into account. The carbon dioxide tax was introduced in 1992 at a rate of approximately thirteen Euros per ton of CO2. In 2005, the CO2 tax rate was slightly reduced to twelve Euros per ton of CO2. This reduction corresponded with an energy tax increase so that the overall tax burden remained constant.

Table 3.2: Denmark – Varying tax rates on different grades of fuel

	Household and service sector	Industry– space heating	Industry— light process	Industry– heavy process
Light fuel oil	€/1,000L	€/1,000L	€/1,000L	€/1,000L
1996	239.2	239.2	18.3	1.1
2000	268.3	268.3	24.6	1.1
2007	286.5	286.5	24.6	1.1
Heavy fuel oil	€/ton	€/ton	€/ton	€/ton
1996	269.0	269.0	21.7	1.3
2000	304.5	304.5	29.2	1.3
2007	324.8	324.8	29.2	1.3
Natural gas	€/1,000m ³	€/1,000m ³	€/1,000m ³	€/1,000m ³
1996	31.3	31.3	14.9	0.9
2000	244.2	244.2	20.1	0.9
2007	305.8	305.8	20.1	0.9

4. Implementation of carbon tax in Pakistan

- 4.1 In most of the developed countries Carbon, tax has been enforced as a "revenue neutral tax." In the developing countries like Pakistan where environmental issues have been overshadowed by other grave issues of economy, the carbon tax as an additional tax may not be treated as an important taxation measure. Further our infrastructure and legislation is naïve enough to tackle the intricacies pertaining to this tax. However, by remaining in line with the basic module of carbon tax and by addressing the following issues Pakistan may become the first developing country to follow this important campaign of combating environmental issues by a levy of carbon tax:
 - Are we ready to impose a revenue neutral tax;
 - Do we have enough cushions to recycle the revenue with other taxes;
 - Can we develop the data base for CO2 emissions from various fossil fuels;
 - How much time would we need for an appropriate legislation?
 - Are we ready to shift the major part of revenues to environment sector or the affected taxpayers?

- 4.2 Answers to all the above queries are in the firm "affirmative". Yes, Pakistan can resolve these issues. In this regard relevant lessons from the experiences of developed countries can be drawn, where carbon tax has been used in place of fuel tax. Rather, Pakistan already has a kind of head-start with an available option to levy Carbon Tax in place of Petroleum Development Levy (PDL). It will not only be revenue-neutral but would also provide the available cushion to recycle the revenue. The other major issue; that of legislation, can be handled by amending/modifying the existing Petroleum Products (Development Surcharge) Ordinance, 1961 to accommodate Carbon Tax in lieu of PDL. The major part of the revenue can be shifted to the environment sector through Public Sector Development Program (PSDP). The idea seems more than plausible as it is the right time to enforce the Carbon Tax because of the falling petroleum prices, because the expected price increase in future may wipe out the existing cushion of PDL By replacing PDL with carbon tax following benefits and advantages could be earned:
 - It would enhance the tax to GDP ratio.
 - Its implementation would help to seek international investment and funding regarding environmental issues.
 - Unlike PDL, it will become a part of NFC. This will help allocate reasonable amount for tackling the environmental issues at local levels.
 - It may, in future, be extended to other producers and importers of fossil fuels emitting GHGs, to make it equitable and also to discourage the polluters.

5. An Overview of Petroleum Development Levy (PDL)

5.1 History:

The petroleum development levy was introduced in the form of a surcharge vide Petroleum Products (Development Surcharge) Ordinance, 1961 & PDL Rules 1961. The same were subsequently amended through Petroleum Products (Development Surcharge) Ordinance & Rules 1967. The words 'Development Surcharge' were substituted with the words 'Petroleum Development Levy' vide SRO 482(1) 2001 dated 29-06-2001.

5.2 Definition:

The Petroleum Development Levy (PDL) it is "the differential margin" i.e. the amount by which the 'fixed sale price' exceeds the 'prescribed price' to be paid in respect of the quantities of petroleum products sold. (Section 3 of the PDL Ordinance, 1961).

- The PDL is payable in like manner as any duty of excise or the duty of customs is paid & deposited. (Rule 8 of PDL rules)
- Where the 'prescribed price' of any petroleum product exceeds its 'fixed sale price' Govt. may permit an oil company to deduct the amount of such excess form the differential margin of the other petroleum products and it is called the price differential charge or subsidy.

5.3 Nature of PDL

PDL is basically a residue tax / duty. It implies that it is levied in the end as a balance amount depending on the available cushion. PDL decreases when International Oil prices increase or vise versa. If crude oil increase by 1 US\$/BBL this will reduce PDL by 1 to 1.5 Rs/ liter. Similarly, decrease in domestic prices will decrease PDL with a ratio of 80 paisas per Rupee.

5.4 Options in PDL to identify the cushion for tax

To identify the available cushion to replace PDL with carbon tax, certain options have been explored by taking various assumptions pertaining to the price hike in the international price of crude oil and fluctuations in the dollar/rupee parity. Available cushion of PDL has also been worked out at different levels of retail prices of POL Products.

- **5.5 Determining Ex-refinery prices of crude oil**: Before exploring various options, it is better to have a basic knowledge regarding reaching at the ex-refinery prices from international price of crude oil. The ex-refinery are determined by adding various charges to the international oil prices at \$ / BBL, these charges are:
 - Premium including freight @ \$2.53 / BBL
 - Marine Insurance @ 0.108%
 - LC Commercial @ 0.15%
 - Bank Charges @ 0.10%
 - Ocean Charges Incl. handling @0.65%
 - Wharfage Tariff @ 0.3%
 - (Customs Duty for HSD only @ 7.5% ad-val)

5.6 Available Cushion of PDL / Carbon Tax:

In the following tables, available cushion of PDL / Carbon tax has been explored to identify various price margins of fuel at different scenarios.

Table 5.1: Available Cushion of PDL at different rates of Intl. crude oil price in respect of High Speed Diesel (HSD) with a fixed Retail Sales Price.

Intl. price \$/BBL	Intl price Rs./ltr	Ex-Refinery Price	Present Sale Price		PDL/ltr (Residual)*
60	30.4	34.9	57.1	9.1	8.9
65	33.0	37.5	57.1	9.1	6.0
70	35.5	40.0	57.1	9.1	3.2
75	38	42.5	57.1	9.1	0.3
75.6	38.3	42.8	57.1	9.1	0.0
80	40.6	45.1	57.1	9.1	-2.5
85	43.1	47.6	57.1	9.1	-5.3
90	45.6	50.1	57.1	9.1	-8.2
95	48.2	52.7	57.1	9.1	-11.0
100	50.7	55.2	57.1	9.1	-13.9

Assumptions:

Exchange rate: 1\$ = Rs 80.63
Other charges @4.5 Rs. / liter added to arrive at ex-refinery price
Sales Price fixed at Rs.57.14/liter as on April 01, 2009

5.6.1 With the above assumptions where by the retail price is fixed as on April 01, 2009, the available cushion of PDL will cease to exist at an international crude oil price of \$75.6/bbl. Beyond that point if the retail price is not changed then subsidy has to be given to the oil companies, which the government of Pakistan may not afford at this very juncture of prevailing economic crisis.

Table 5.2: Available Cushion of PDL at different rates of Intl. crude oil price by changing the parity rate of dollar to rupee

Intl. price \$/BBL	Intl price Rs./ltr	Ex-Refinery Price	Present Sale Price		PDL/ltr (Residual)*
60	32.1	36.6	57.1	9.1	7.0
65	34.8	39.3	57.1	9.1	4.0
70	37.4	41.9	57.1	9.1	1.0
71.7	38.3	42.8	57.1	9.1	0.0
75	40.1	44.6	57.1	9.1	-2.0
80	42.8	47.3	57.1	9.1	-5.0
85	45.4	49.9	57.1	9.1	-8.0
90	48.1	52.6	57.1	9.1	-11.0
95	50.8	55.3	57.1	9.1	-14.0

Assumptions:

Exchange rate: 1\$ = Rs 85
Other charges @4.5 Rs. / liter added to arrive at ex-refinery price
Sales Price fixed at Rs.57.14/liter as on April 01, 2009

- **5.6.2** With the above assumptions, the working clearly reveals that every \$5/bbl increase in the international crude oil price will decrease PDL by Rs.3/liter if the retail price is kept constant. Further the available cushion of PDL will not be available anymore when the international crude oil price reaches at \$71.7/bbl.
- **5.6.3** The above statistical analysis clearly reveals that, the cushion for Carbon Tax (by replacing PDL) is available only upto the price of \$72 to \$75 per barrel at varying exchange rates, if the retail price is kept constant.
- **5.6.4** Now at varying retail prices of HSD we identify the maximum available cushion of PDL or Carbon Tax with respect to the international crude oil prices at which if the retail price is not increased the PDL or Carbon Tax will be zero.

Table 5.3: Max. Cushion at varying retail prices

Varying Sale Prices Rs./liter	Intl. price \$/BBL, where PDL is Zero	Intl price Rs./ltr	Ex-Refinery Price Rs. /liter	PDL/ltr (Residual)*
55	72.5	36.8	41.3	0.0
56	73.9	37.5	42.0	0.0
60	79.8	40.5	45.0	0.0
62	82.8	42.0	46.5	0.0
65	87.2	44.2	48.7	0.0

Assumptions

Exchange rate: 1\$ = Rs 80.63
Other charges @4.5 Rs. / liter added to arrive at ex-refinery price
Sales Price varying

5.7 Transferring the impact of international hike in crude oil to the retail price and available cushion of PDL / carbon tax:

5.7.1 Now, it has to be ascertained by the government that in case of escalation of international oil prices beyond the above identified benchmark points how much could be transferred to the consumers?

Table 5.4: (HSD) – Transferring the impact of International oil prices

Intl. price \$/BBL	Intl.price Rs/bbl	Intl Price Rs./ ltr	Sale Price (Rs./ltr)	Sales tax (16%)	PDL/ltr (Residual)*
60	4837.8	30.4	55.7	8.9	7.7
65	5240.95	33.0	60.4	9.7	8.7
70	5644.1	35.5	65.0	10.4	9.8
75	6047.25	38.0	69.6	11.1	10.8
80	6450.4	40.6	74.3	11.9	11.9
85	6853.55	43.1	78.9	12.6	12.9
90	7256.7	45.6	83.6	13.4	14.0
95	7659.85	48.2	88.2	14.1	15.1
100	8063	50.7	92.9	14.9	16.1

Assumptions:

Exchange rate: 1\$ = Rs 80.63

Other charges @4.5 Rs. / liter added to arrive at ex-refinery price

Sales Price varying

Table 5.5: (HSD) – Transferring the impact of International oil prices

Intl. price \$/BBL	Intl. Price Rs./ liter	Ex-Refinery Price Rs./liter	Sale Price Rs./liter	Sales tax (16%)	PDL/ltr (Residual)*
60	32.1	36.6	55.7	8.9	5.8
66	35.3	39.8	61.3	9.8	6.9
70	37.4	41.9	65	10.4	7.6
75	40.1	44.6	69.6	11.1	8.5
80	42.8	47.3	74.3	11.9	9.4

Assumptions

Exchange rate : 1\$ = Rs 85

Other charges @4.5 Rs. / liter added to arrive at ex-refinery price

5.7.2 The above tables' show that the price impact of rising international oil prices when transferred to the retail would escalate the prices to an unaffordable limit for the poor households, because of expected inflationary hike as a result of this transfer impact.

5.8 Revenue forecast for the next financial year

5.8.1 The projected revenue has been worked out from the levy of carbon tax in FED mode @ Rs. 10 /liter for the next financial year on the basis of projected consumption of various petroleum products used as fuel:

Table 5.6: Revenue Forecasts @ rate of Rs.5/liter

Category	Projected	Revenue Projected
	Consumption (Billion	(Billion Rs.)
	Liters)	
HOBC	0.18	1.80
Petroleum (PMG/Motor		
Spirit)	1.82	18.20
High Speed Diesel oil	10.0	100.00
Light diesel oil	0.016	0.16
Total	12.016	120.16

5.8.2 It would, however, be more appropriate to levy the Carbon Tax at different rates on POL Products as is the case of PDL. To make it revenue neutral, the rates of POL as would be available on June 01, 2009 can be formed the basis of Carbon Tax.

6. Compressed Natural Gas (CNG): A case for Carbon Tax?

6.1 In Pakistan CNG is an important source of fuel for the vehicles mainly plying for the personal and light commercial use. The emissions of CO2 from use of CNG are the lowest when compared to other POL products used in transportation.

Table 6.1 – Carbon dioxide emissions from various energy resources

Fuel name	CO ₂ emitted (lbs/million Btu)	Fuel name	CO ₂ emitted (lbs/million Btu)
Natural gas	117	Tires/tire derived fuel	189
Liquefied petroleum gas	139	Wood and wood waste	195
<u>Propane</u>	139	Coal (bituminous)	205
Aviation gasoline	153	Coal (subbituminous)	213
Automobile gasoline	156	Coal (lignite)	215
Kerosene	159	Petroleum coke	225
Fuel oil	161	Coal (anthracite)	227

6.2. Though lower CO2 emissions from natural gas may render CNG a less-likelier candidate for levy of carbon tax, yet to rationalize the impact of "Carbon Tax" on POL Products, a strong case can still be made for the levy of carbon tax on CNG at a very nominal rate (to begin with). Firstly, the rationale for levy of carbon tax holds as good for CNG as for any other fuel because consumption of CNG also causes CO2 emissions. The other reason is the existing variance between pump price of Motor Spirit (MS RON) and CNG (the current ratio is 61 of CNG to100 MSRON). This huge gap provides quite an adequate margin to cap by levying

carbon tax at nominal rate. This will also prevent consumers using petrol to shift to CNG.

6.3. A nominal levy ranging from Rs.2 to 4 per kg of the CNG would not lead to a greater inflationary impact as the majority users are owners of private cars and jeeps in falling in the higher income strata. The common man would remain unaffected as motorcycles as well as big transport means including buses and trucks are not using CNG. Imposition of Carbon Tax on CNG would definitely affect the CNG operators with reduction in its consumption. This outcome may, however, be desirable otherwise too as the natural Gas is too precious a commodity to be so cheaply utilized in a comparatively less productive mode.

Table 6.2 Compressed Natural Gas (CNG) Consumption Estimates

(in Billion)

F. Years	Cubic Feet	Cubic Meter (2/35.49)	KGs (3/1.3)
2007-08	72.0	2.029	1.560
(Actual)			
2008-09	79.2	2.232	1.717
(10% growth)			
2009-10	87.1	2.455	1.888
(10% growth)			

(Source: Director General, Hydrocarbon Development Institute, Islamabad.)

Table 6.3: Cost Comparison of CNG/Motor Spirit

Options	CNG Price	CNG as %age	Margin
	(Rs per KG)	of	(Rs per kg)
		Motor Spirit	
Current	48.53	61%	Nil
Option(1)	51.00	65%	2.47
Option(2)	55.00	70%	6.47
Option(3)	59.00	75%	10.47
Option(4)	63.00	80%	14.47

Table 6.4 Revenue Potential

Options	Margin	CNG QTY	Revenue
	(Rs per kg)	(in Billion kg)	(Rs in
			Billions)
Option(1)	2.47	1.888	4.66
(65%)			
Option(2)	6.47	1.888	12.22
(70%)			
, , ,			

7 Conclusion:

- 7.1 It has been recognized through the Kyoto Protocol that the developed countries are the major polluters, so the major responsibility also rests on them to control the GHGs particularly the major emitter in the form of carbon dioxide. But, only 10 to 12 of the 37 developed countries that are signatory to the Kyoto Protocol have been able to implement the carbon tax. Even in USA and Canada it has been implemented only partially, in the form of a local tax.
- **7.2.** The proposals to implement carbon tax by Oceana region (Australia & New Zealand) is still pending due to political constraints. The main motives behind this poor "will-to-introduce" the carbon tax can be traced back to the vested interests of countries like USA, which, being highly energy "inefficient", expect far more benefits in Carbon-Trading than in Carbon-Taxation.
- **7.3.** In the case of European countries, which are energy efficient, the trend is more towards carbon taxation. Majority of the examples pertaining to the introduction of carbon tax are therefore drawn from Europe. Some European and other countries have replaced fuel tax with carbon tax by shifting the tax incidence without going for any additional revenues from this source.
- **7.4** For the developing countries, carbon tax is more viable than carbon emission trading because presently they do not have any binding emissions reduction targets. So, levying it in a revenue neutral form would help to combat the emissions of GHGs for their own future concern and also in the case of extension of environment protocol to developing countries.
- **7.5** Pakistan is in a position to take the lead, among the developing countries, by introducing carbon tax. In the present circumstances, the best available option would be to replace the

Petroleum Development Levy (PDL) with Carbon Tax. By implementing it in the Federal Excise mode minimum changes regarding collection, administration and legislation would be required. The important aspect to be considered in this regard is ascertaining the cushion of carbon tax in case of rising international oil prices. Thus, a levy of 9 to 10 rupees per liter (on average) would be in line with the international prevalent carbon tax rates and would also not burden the consumers. As far the levy of carbon tax on CNG is concerned, the case would be very weak if taken in the form of pollution tax. But a nominal levy may be considered so as to bring it at par with other fuels emitting carbon dioxide.

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II.

Industry Profile: Textile Industry in Pakistan

By Umar Wahid9

Introduction

Textile and clothing continue to represent the most important manufacturing sector of Pakistan. The availability of local cotton has led to a well-established textile sector. A large proportion of its cotton products are exported. Global environment of textiles and clothing trade has undergone radical changes from a highly restrictive quota regime to a trade under regular GATT 1994 disciplines. The purpose of this article is to evaluate the significance of the Textile sector in transforming national economy. Using historical evidence, the paper explores how the sector has grown; the way it has contributed to the national economy with respect to exports and investment. The taxation structure and revenue realization which is changing in a peculiar way is major part of this study. The study also highlights the major issues that require attention.

Historical Background

Pakistan inherited a small industrial base in 1947. The total cotton production was 0.947 million bales and the local industrial consumption was around 77000 bales. There was a huge gap in local consumption and production. With the passage of time Pakistan became major cotton exporting country with 90% of its production finding markets abroad (MINTEX 2008). The situation started improving both in cotton production and local consumption, the Government as a step forward initiated various policy options for the textile sector by providing incentives of soft loans, relaxation in taxation, and availability of cheaper cotton by levying export duties on raw cotton etc. for establishing spinning units to increase cotton consumption and producing cloth and other value added textiles and clothing products. Resultantly, the spinning capacity increased over the years. Today the textile industry of Pakistan ranks amongst the top in the world.

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⁹. The author is Secretary (Fiscal Research and Statistics) FBR and the views expressed in this article are those of the author and do not necessarily represent FBR or FBR view/policy. The author is grateful to Member (FRS) and FRS team for their valuable inputs.

Textile Sector and the economy¹⁰

Textile sector is the backbone of Pakistan economy; exports of the country mainly depend on textile industry. Pakistan is fourth biggest grower of cotton in the world and is the 8th largest exporter of textile products is Asia. The contribution of this industry to the total GDP is 8.5 percent (Table 1). The industry is dominantly export based and its growth totally dependent on exports outlets. Cotton based textiles contribute more than 60 percent to the country's total exports (around 6.6 billion US dollars), accounts for 46 percent of the total manufacturing sector of the country. This important sector provides employment to 39 percent labor force which is around 15 million). The availability of cheap labor force¹¹ and raw material for textile industry has played the principal role in the growth of the cotton textile industry of the country. With the advent of the quota free World, it is essential for developing country like Pakistan to further explore potential new markets.

Table 1 Contribution of Textile Industry in Pakistan economy

	2006-07	2007-08
		(July-February)
Share in Total Exports	61.1%	53.8%
Share in Manufacturing	46%	46%
Share in Employment	38%	39%
Share in GDP	8.5%	8.5%
Total Textile Exports	US\$ 6.6 billion	US\$ 6.3 billion
Investment in Textile	US\$ 6.4 billion	US\$ 7.0 billion

Source Pakistan Economic Survey 2007-08

Contribution in Exports

According to WTO statistics Pakistan has been able to increase its share in global trade from 1.94% to 2.15% in textiles and clothing trade in volumes. Pakistan has also improved its ranking from 14th to10th in the world ranking (Table 2). On the other hand China, is the largest exporter of textiles and clothing, in spite of the quotas imposed by the European Union and the United States between 2002 and 2006, has gained an additional 10 percentage point between 2002 and 2007 and now accounts for 27 percent of the world textiles and clothing exports.

¹⁰ Figures quoted in this section are obtained from the Economic Survey of Pakistan 2007-08

¹¹ Labour cost per hour in US \$ is 0.43 in Pakistan, 0.48 in China, 0.67 in India and Turkey has 2.88\$ cost per hours. Source: Key Energy Statistics 2006- International Agency.

Table: 2 Textile and Clothing Exports (Figures in Million US\$)

Table: 2 Textile and Clothing Exports (Figures in Willion US\$)							
	2002	2003	2004	2005	2006	Total Growth	Rank in 2006
World	362,011	408,699	456,110	483,106	530,004	64.4%	
China	61,864	78,961	95,284	115,213	144,071	132.8%	1
Share in World Exports	17%	19%	21%	24%	27%		
India	12,065	13,471	13,641	17,674	19,552	61.8%	4
Share in World Exports	20%	17%	14%	15%	14%		
Pakistan	7,018	8,521	9,151	10,691	11,376	62.1%	10
Share in World Exports	1.94%	2.08%	2.01%	2.21%	2.15%		
Bangladesh	4,580	5,480	6,893	8,447	9,850	115.1%	13
Share in World Exports	1.27%	1.34%	1.51%	1.75%	1.86%		

Source: WTO

In regional comparison, Bangladesh's performance has been impressive. In the 2006-07 fiscal year, it accounted for 76% of the country's total exports and provided jobs for 4.5 million people, accounted for 10.5% of the country's GDP and contributed 40% of its manufacturing output. Exports have been growing at rate of 18.2% in recent years. ¹² In contrast the growth rate of Indian Textile sector which was 8.1% in the year 2005-06 improved slightly and touched 10.9% in the next year (2006-07). Thereafter, it started declining and in 2007-08 the growth was half the rate of growth in the previous year. The growth rate then declined drastically in the year 2008-09(April–August) & stood at 0.8% ¹³. The India's ranking went up from 8th to 4th while Turkey which ranked 6th in 2002, improved its standing to 5th. Like wise Bangladesh has also improved its share in the global market from 1.27% in 2002 to 1.86% in 2006.

As far diversification by country is concerned, more than 71% of our textiles and clothing exports are limited to 10 destinations only. United States is the largest export market and during last five years, exports to United States have increased at the compound rate of 14%.

Investment in Textile Sector

The industry made an investment of approx. \$6.4 billion during the period 1999-2007. This investment includes both investment

¹² www.freelibrary,com/CTRL+click to follow link

¹³Source FICCI Study on slowdown in Indian's Textile Industry. Reviving Investment and Sustaining Employment-November 2008

through Banks as well own resources. The industry made profits and re-invested in new machinery for balancing, modernizing and restructuring (BMR) and expansion. The major investment has been made in spinning, weaving, and textile processing. Approx. 454,000 new direct jobs have been created and industry has been able to make incremental production and exports. Import of textile machinery, which is the single largest item in the machinery group, picked up to \$928.6 millions in 2004-05, \$771.5 million in 2005-06, \$503.0 million in 2006-07 and 318.2 million up to July-Feb, 2007-08 (Table 3). This shows that investment for modernization of textile industry, which started few years ago, still continues. The industry, however, needs to be facilitated to exploit its full potentials.

Table 3: Import of Textile Machinery

Year	Million \$	%Change
1999-00	210.9	-
2000-01	370.2	75.5
2001-02	406.2	9.9
2002-03	531.9	30.7
2003-04	597.9	12.4
2004-05	928.6	55.3
2005-06	771.5	-17.0
2006-07	503.0	-36.7
2007-08 (July-Mar)	318.2	
Total:-	4,638.3	

Source Pakistan Economic Survey 2007-08

One important concern about the Textile Industry in Pakistan is that the industry has not been able to reap all benefits of post quota scenario as compared to its regional competitors. China, India and Bangladesh are posing tough competition by virtue of their competitiveness in term of price and quality. Some sub-sectors of Textile Industry have been affected from the new trade development, vis-à-vis cotton yearns and cloth, bed ware, garment and knitwear sector remained under pressure and declined.

Taxations Structure:

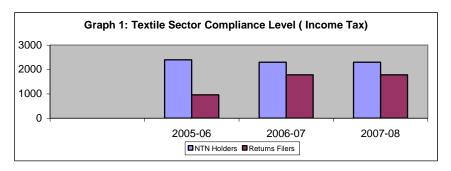
The textile sector has been one of the major export oriented sectors and also refund claimant. Therefore in order to boost exports, control refunds and improve cash flow of taxpayers, as a first step, the ginned cotton was made zero-rated from sales tax during FY: 04-05, followed by zero-rating the entire chain of textile sector during Fy:2005-06. Apart from provision of Zero rating facilities under the GST, Customs duty rates have also been reduced on textile items i.e. PTA and STA, from 15% and 6.5% to 7.5% and 4.5% respectively in July 2008. Similarly, concessionary Customs Duty on chips,

fibers, yarns, fabrics of man-made yarns, blended yarns etc are applicable. Moreover, there is no FED levied on the textile sector. Similarly, there is no export duty on textiles exports¹⁴.

Regional comparison of tax/tariff structure for textile sector is tabulated in Annexure-A, which indicates that in Pakistan textile sector is almost at par with the regional countries, where incentives are concerned.

Tax Compliance

The level of compliance by the taxpayers is directly linked with effective tax administration. Taxpayers will have better compliance if they believe that failure to do so will mean assuming a substantial risk of being penalized in a relatively severe fashion. Graph 1 indicates that the level of compliance is quite low. In 2004-05 only 961 taxpayers have filed their returns as against 2399 NTN holders of the sector. However, the situation has improved in the next two years but again one third of the taxpayers have remained outside the tax net for the past few years.



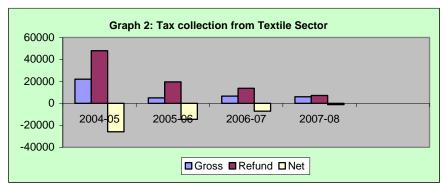
Tax Contribution by Textile Sector

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¹⁴ 1 percent WHT on raw cotton export is levied which is adjustable. Similarly, there are certain WHTs on cash withdrawal, electricity bill, telephones etc, but these levies are general in nature and not export specific. The industry claims that FED on certain services harms export, whereas, the levies are general in nature and not export specific. For example, FED is levied @10% of gross premium paid on the insurance of goods. The levy is general type and not export specific. Similarly, the levy of FED@10% on non financial services provided by banking companies and non banking financial companies has negligible impact on export ,as it is levied on services provided by the banking companies. Lastly, FED on telecommunication @21% of thee charges. The levy is adjustable as it is collected as if it was sales tax payable under the sales tax Act 1990. It does not add to the cost of business for exports.

This is an area of major concern for stakeholders like government and tax administration amid growing resource constraints and poverty. The textile sector is partially exempted from taxes and partially subjected to taxes. Like in the case of income tax, the sector is treated according to normal tax law. In contrast, the entire chain of the textile sector is zero-rated from GST and concessionary customs tariff rates are subjected to various types of inputs both raw material and machinery imported for the sector. Similarly, this sector is entirely exempted from the FED. To ascertain the actual position of revenue profiles, the revenue data is analyzed first at macro level, followed by tax wise analysis.

At aggregate level the picture is quite interesting, instead of getting tax revenue from the sector, the FBR is paying much more higher in the shape of refund/rebate to the sector. Table 4 indicates that the extent of negative collection was Rs 25.9 billion in 2004-05, which has now reduced to Rs (-) 1.1 billion in 2007-08 (Graph 2). However, the provisional figures up to March 2008-09 indicate that the negative collection has again jumped to Rs (-) 5.5 billion. Table 4 presents the tax wise revenue collection from the textile sector during the last five years. The net revenue loss will be much higher if the refunds claimed under the head of income tax are included.



Theoretically, when there is negative growth in GDP for consecutive two quarters, the situation highlights the signs of recessions. Similarly, when a firm declares losses for two years in series, it means bankruptcy is approaching. If the textile sector is running in losses for last so many years, how it survives. How the FBR watch the situation, when a sector is paying nothing instead getting back billion of rupees every year in the shape of refund/rebate, whereas the government is facing revenue shortages, that leads to budget deficit and low tax GDP ratio.

International experience highlights that such type of situation is treated specially in different countries. In the United State the solution for taxpayers who are reporting losses on a year-to-year basis over a multi-year period is to meet with the taxpayers and tell them they need to begin reporting positive income¹⁵. The taxpayer is provided "correct" range of expected taxable (operating) income by benchmarking the activities of a taxpayer against similar companies for which financial data is obtained.

Table 4: Tax profile of Textile Sector

Rs. in million

Revenue Heads	04-05	05-06	06-07	07-08
Income Tax	843	666	1,232	1,542
Sales Tax (a+b)	-22,466	-15,049	-9,868	-5125
a) Imports	4,531	403	461	537
b) Domestic	-27,289	-15,452	-10,329	-5,663
FED (a+b)	3	0	0	14
a) FED (Import	3	0	0	4
b) FED Domestic)	0	0	0	0
Customs	-3,994	-208	1,589	2,434
Total:	-25,906	-14,591	-7,047	-1,136

The details concerning individual taxes are presented in the following paragraphs.

Income Tax: The income tax collection as depicted in Table-5 present diverse picture of revenue realization from the sector. It is pertinent to mention that the figures have been obtained from the income tax returns filed by the sector during recent years. It includes withholding tax, advance payments, fixed tax as per presumptive tax regime and payment with returns. The refund claims are much more higher than the gross collection, since the returns seems to be un clean, therefore, net declaration as per returns have been taken as net income tax collection.

Table 5 Income tax collection from the textile sector

Rs

	in Million		
Ī	Years	Collection (Net)	Change (%)

¹⁵ Mr Brad Moor is an Economist of the IRS USA. He was s kind enough to provide the information, when asked how the situation is handled in the USA. The author is grateful for his valuable input on the subject.

2004-05	843	-
2005-06	666	-21.0
2006-07	1232	84.9
2007-08	1542	1.3

The contribution of textile sector in the economy is fairly high, whereas, the share of income tax paid by the sector is negligible over the years. The income tax collection has been just over Rs1.5 billion during 2007-08 and less than a billion in early years. Two basic problems are attached with the low contribution by the sector. One is the lack of audit; such cases where revenue level reaches at this stage should be subjected to intensive audit, as done in the developed nations. In Pakistan unfortunately, the concept of effective audit is non- existent, therefore, the taxpayer takes liberty to declare income of his/her choice.. Secondly, there is a problem in income tax reporting system as well, the Monthly Performance Reports (MPRs) generated by the income tax offices containing the macro picture of withholding taxes, collection of demand and voluntary payment. Sector wise collection is not regularly generated and reported, therefore, the true picture of sectoral contribution is missing. On the contrary the income tax returns data is still unclean and un-reliable to great extent. Apparently, there is no procedure/ mechanism to match the data with master index and third party information. More seriously, this basic source data is neither verified at the field level nor at the entry level. Thus the situation opens a gate for under reporting and concealment. Therefore, lack of audit and punitive action leads to gross misuse of the USAS facilities provided to the taxpayers under the tax reform program, where substantial expenditure is being incurred.

Sales Tax: Textile sector is zero-rated both at import and supply stages. The primary factor behind the zero rating of textiles, and other major export oriented sector like carpets, leather goods and sports and surgical equipment was the large refund claims associated with these activities that were difficult for the FBR to substantiate. Zero rating of these activities and mostly the inputs used by these activities was a way of removing some troublesome taxpayers from the sales tax net. The very purpose of zero-rating the textile sector has not been achieved; the refund generation is still at large. In FY: 04-05, the gross collection was Rs 13.8 billion, as against refund to the tune of Rs 41.1 billion was paid back to the textile sector. Thus the net revenue loss to the government was Rs 27.3 billion (Table 6). Undoubtedly, the loss of revenue has scaled

down to Rs 6.5 billion during 2008-09 (up to March), still very high to absorb.

Table 6: Sales Tax Domestic collection from the Textile Sector Rs in Million

	(Collection			Change (%)		
Years	Gross	Refund	Net	Gross	Refund	Net	
2004-05	13,846	41,135	-27,289	-	-	-	
2005-06	1,053	16,505	-15,452	-92.4	-59.9	-43.4	
2006-07	970	11,299	-10,329	-7.9	-31.5	-33.2	
2007-08	734	6,396	-5,662	-24.3	-43.4	-45.2	
July-March							
2008-09	269	6,755	-6,486	-48.6	43.6	35.4	
2007-08	541	4,704	-4,163	-	-	-	

More importantly, Zero-rating was a stop gap arrangement till the System STARR/STREAM was overhauled ensure transparency in refund claims and disposal. It is apprehended that if zero-rating is done away with, the system will revert back to the position of FY: 2004-05 and 2005-06 when gin cotton and textile sector were zero rated respectively, on the plea that the FBR was unable to check fake invoicing, over invoicing and delayed disposal of refunds etc.

Customs: A sizable amount of custom duty has been collected from the textile related imports during 2007-08. The visible improvement is there as the negative net revenue collection of about Rs. 4 billon in 2004-05 has gradually changed into positive during FY: 2006-07 and onward, resultantly, the effective rate which was negative during 2004-05 and 2005-06 both with total and dutiable imports as well, has started improving to 1.7% in and 4.6% 2007-08 (Table 7).

Table 7: Customs Duty collection from Textile Sector

Rs is Million

Year	Total	Dutiable	Customs	Effective Rates (%)	
	Import	Imports	Duty	Total Imports	Dutiable Imports
04-05	65,116	23,339	-3,994	-6.1	-17.1
05-06	84,431	43,574	-208	-0.2	-0.5
06-07	96,666	45,130	1,589	1.6	3.5
07-08	143,671	53,464	2,434	1.7	4.6

Issues and Concerns

Low tax revenue: The contribution of textile sector in GDP is 8.5 percent, highest contributor in the manufacturing sector, whereas its share in tax revenue is negative for the last many years. It is hard to believe that the industry with huge investment contributes negatively. According to Dr. Sally Wallace¹⁶, the international practice in such cases is mixed. There are industries in some countries that are shielded from taxation virtually their entire corporate lives. Other companies manage to adjust their input costs via transfer pricing such that they can report higher input costs (for VAT as well as company income tax), which attract higher taxes that are ultimately refunded. There is really no way around to tackle this issue except an intensive and transparent auditing like OECD countries.

Zero rating/exemption: The purpose of Zero-rating the entire chain of textile sector was to address the issue of delay in refunds payments of sales tax and also to resolve the rampant use of fake and flying invoices by unscrupulous agents to claim illegitimate refunds. The situation as claimed had become a source of anxiety both for the taxpayers and tax administration. This initiative has broken the VAT chain and eroded the tax base, but was accepted that streamlining the STARR/STREAMs during the period will start operating as per best international practices. Unfortunately the decision of Zero- rating has seems to be ineffective.

Deficient Returns Filing

The returns of the textile sector have been investigated with respect to those tax filers who have declared business income or losses or those lodged nil claims. Interestingly only 268 (15%) of the return filers of this sector have declared business income in their returns, while 359 (20%) have shown business losses and 1155 (65%) have submitted nil statement. Thus, it is safe to assert that out of 1782 return filers only 268 or 15% of them have paid income tax and the rest 85% taxpayers have either declared business losses or there is nil income to declare. More ironically, the 65% taxpayers who declared nil income during Tax Year 2008 have claimed refund to the extent of Rs 430 million. Out of 1782 returns filed during tax year 2008, the returns of top 20 taxpayer's have been further examined and found that 13 (65%) filers have not declared their gross tax and all of them have left the column "net tax payable" as blank.

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¹⁶ Dr. Sally Wallace is Professor of Economics in the Georgia State University Atlanta and had done number of international Studies on Tax policy and administration including Pakistan.

Lack of Audit: In order to promote voluntary-compliance, self-documentation, self-assessment, and self-policing, the Government of Pakistan has initiated tax policy and tax administration reforms program in FBR. Resultantly the tax system in Pakistan has started functioning on self assessment basis. Physical control has been minimized on the taxpayers (including industrial concerns) registered under different taxes, except under special circumstances. Therefore, to monitor compliance of the taxpayers, Audit is the only instrument of control the level of compliance of registered persons. Regrettably, this crucial area is lagging behind. Had the effective audit functions would have been in place, such cases of under reporting and concealments would have not arisen.

Conclusion

The Textile Industry has remained to be the core source of our foreign exchange earning. From the traditional exporter basic raw materials, yarn and fabrics, to the European and North American markets the sector steadily graduated to higher value added textiles and clothing. The recent paradigm shift in the developed countries is due to the closure of their textile and clothing industries which has moved the production to developing countries. Pakistani exports of raw material have also therefore, followed this shift and are now finding markets in developing countries. Keeping in view the growing size of the sector with huge investment, the tax revenue collection is negligible. Notwithstanding, positive collection (though meager amount) on account of income tax and customs duty, the overall collection turned into negative, mainly because of huge refund payments. This situation is alarming as the government is facing revenue shortages which lead to budget deficit and low Tax GDP ratio.

However, there are other non tax issues confronted by the industry which need attention, that includes the increasing interest rates as compare to the regional countries, non-guaranteed energy supplies, lack of R&D and reduction in cotton production have had a negative impact on the industry's competitiveness internationally. In order to sustain the Textile Industry, there is a need to implement a suitable long-term strategy that provides a level-playing field against their regional competitors.

Recommendations

• Zero rating or exemptions should be for a shorter and specified period of time, longer the period of zero-rating

creates greater inequalities in treatment of different taxpayers. To block the revenue losses the emergency measure would be to exempt the sector from the entire indirect taxes so that no refund claims are generated. The suggestion may be administratively viable but economically more dangerous for the economy as whole. The best way is to done away with the exemption-zero-rating and to develop a mechanized refund settlement system.

- In order to ensure voluntary compliance, strict punitive action needs to be introduced together with incentives to the compliant taxpayers.
- A Textiles Industry Group should be created. Such a group would include taxpayers and representatives of government. The group would identify the main problems (noncompliance from the standpoint of government, but also burdens of compliance from the standpoint of taxpayer) and solutions that aim at prevention of tax evasion, etc. They would also have to look at end markets, and determine what the impact on demand would be with changes to tax administration. The arrangement may also help in creating business friendly environment and harmony between Industry and tax administration.

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Annexure-A: TEXTILE SECTOR - MANAGING COMPETITIVENESS IN THE REGION

	India	Bangladesh	China	Pakistan
Zero	•Zero rating of all	• Duty	• Export	• The entire chain of textile sector has
rating of taxes	ofinnovative taxes, surcharges like education cess, under the duty drawback scheme. • The incidence of duty on HSD/furnace oil has also been factored in the	drawback on services used by textile export industries rates, Water: 60% Electricity: 80% Telephone:	duties taxes on machinery parts and raw material varying from 5 to 17%.	• Initial Depreciation Allowance (IDA)
	drawback calculation. • Duty drawback rates 3% to 7.5% on Silk, cotton yarn readymade and made ups.	60% C&F Agents:100% insurance: 100%	17% VTA.	@50% of machinery and equipments.Further tax concession if 50% of the total production is exported.
export income	• Profit on export income was exempted as: 80% for year 2001-02 70% for year 2002-03 50% for year 2003-04 33% on export profit	ion of tax at source @ 0.25 percent on total export proceeds of knit-wear.	rate for export oriented enterprises 12% on export profits.	 1 % WHT on export of raw cotton 0.25% EDS (non FBR) 2%-3% stamp duty(non FBR)
Duty free imports of machine ry	• The import of specified textiles and garment machinery items has been allowed at a concessional rate of customs duty	capital machinery for	subjective to 15-10% CD & 17% VAT. • Textile machinery subject to 03% CD & 17% VAT	•Import of raw material and textile machinery are exempted from sales tax. Customs duty rate has been reduced on PTA and STA, from 15% and 6.5% to 7.5% and 4.5% respectively, effective July 2008. Similarly, concessionary Customs Duty on chips, fibers, yarns, fabrics of man-made yarns, blended yarns etc are applicable WHT @1% on raw material and 2% on machinery.
Customs Duty Rebates	-	-	intermediate goods and 25%	 Concessional rate of DDB is allowed from 0.04%-1.15% of FOB value for product made of 100% cotton Product made of polyester fibre is allowed DDB ranging from Rs.0.15 per Kg. – Rs.3.09 per kg and from 0.16% - 1.13% of FOB value. Goods made of viscose fibre and cotton fibre is allowed DDB from Rs.0.87 per kg. – Rs.4.95 per kg. Similarly concessional rates of DDB is allowed for other categories of textile products

Source: data obtained from the respective websites of the China, Bangladesh and India 2006.

Vying for raising Tax-GDP Ratio: Taxation of Services in Pakistan¹⁷

By Mir Ahmad Khan

Introduction

Services sector is the most significant sector of economy of Pakistan by contributing more than half of the GDP. Pakistan is not an exception, the share of services sector is 75 percent in developed countries¹⁸; 65 percent in Singapore, 54 percent in Sri Lanka and 52 percent in India. The service sector in Pakistan is growing at a much faster rate than commodity producing sector of the economy and has been instrumental in robust growth of the economy in the recent years.

Low tax-GDP has been one of the major challenges facing the taxation system of Pakistan. It is currently hovering around 10%. Despite ongoing restructuring, and tax policy and administration reforms, the tax to GDP has not been improved rather remained stagnant. The major reasons for low tax-GDP ratio are that some of the major sectors are out of tax net or under taxed. Agriculture sector contributes only 0.2% of taxes in GDP against its share of more than 1/5th of the GDP. On the other hand, despite stellar performance by the services sector, its tax receipts have not increased accordingly. Services sector constitutes more than half of the value added of the economy, but it is fetching only 34% of the federal tax receipts. Similarly, most of taxation burden has been saddled on the manufacturing sector. This conspicuous mismatch is a hindrance in raising tax-GDP ratio of the country to the international standard. Adequate revenue generation is the essential responsibility of the government of Pakistan to meet the pressing development needs. Sustained growth in GDP driven by a higher rate of growth in services sector reflects immense potential of tax generation. The ideal situation would be to generate additional revenues from service sector thus, alleviating the degree of intensity of taxation on manufacturing and trade.

¹⁷ Author is Second Secretary, FR&S, FBR and the views expressed in this article are those of the author and do not necessarily represent FBR or FBR view/policy.

¹⁸ see "Medium Term Development Framework 2005-10,(2005), Planning Commission, Government of Pakistan.

The prime purpose of this article is to revisit and evaluate the existing taxation of services in indirect taxation and to augment its base, and raise further revenues to match with its contribution to the economy. An effort has also been made to draw some lessons from Indian experience of accomplishments of service tax. Although some of the discussion will be related to the direct taxes but actually article will explore indirect taxation on services.

Taxation of services is a hard to tax area as many services are rendered at the distribution process or at the stage of production¹⁹. Services²⁰ is a difficult to tax in Pakistan as well but a well defined mechanism has to be developed to tax economic activities taking place in this sector.

Rationale for Services Taxation and Choice of Tax for Service Sector

Keeping in view the contribution of service sector in the economy, service sector should pay its due share in the tax revenues. Only a few services have been brought into the indirect tax net while the burden of taxation has been saddled on the manufacturing sector. Bringing all or most services into the regular GST net would not only increase revenues but it would also increase the fairness of the tax system and eliminate prevailing distortions Martinez (2006).

Moreover, services are relatively more income elastic²¹, the tax system is rendered less progressive when these are not taxed. Expansion of tax base²² of services provide an option to raise tax revenues in short term, leading to better resource allocation, reducing tax volatility and bringing fairness. The expansion of services in the fold of sales tax enhances the "horizontal equity²³". Michael Mazerov (2003) has pointed out that failure to tax services force the governments to raise tax rates which is also great source of distortion in the country. The evidence from Pakistan confirms these views. In the face of heavy reliance on sales tax in Pakistan, the Government has used the option for raising revenues by revising sales tax rates upward from 15 percent in 2006-07 to 16-21 percent

¹⁹ see for more details, Parathasarathi Shome (1995)," Tax Policy Handbook", Fiscal Affairs Department.

²⁰See Dr. Ather Maqsood and Robina (2006) "Sectoral Contribution in GDP and Taxes: Seeking further insight" published in CBR Quarterly Review Volume 6, No.3, January-March, 2007,pp 54

²¹ See Govinda Rao and Kavita Rao (2006), "Trends and Issues in Tax Policy and Reform in India"

see for more elaboration and details Michael Mazerov (2003), "Expanding Sales Taxation of Services and Issues".
 Horizontal equity means people with equal positions should be treated equally while vertical equity means distribution of tax burden fairly across people with greater ability should pay greater taxes

in the Budget 2008-09. All the services under sales tax are subject to rate of 16 percent except 21% on telecommunication. The tax receipts from telecommunication have grown at average compound rate of 28 percent from 2001-02 to 2007-08. In fact, there were some other factors related to taxes as demand was created and spurred by investment friendly policy including customs duty free imports of mobile phone in addition to its exemption from sales tax on imports. In response, massive increase in the imported mobiles and competition among the telecom service providers have created boom in the sector. The similar lesson of demand creation can be used in services. Now jump in the sales tax telecommunication will cast bad influence if it continued. This is confirmed by the current outcome that the growth in the collection of sales tax from telecom sector has decelerated to 10% during 2008-09 from 36% growth in 2006-07 and 23% in 2007-08. A higher rate for services will not provide desired results. In the light of international experience, a lower tax rate for services will spur demand and ultimately improve the collection.

Constitutional Impediments in Taxation of Services

There has been the incapability of the taxation system in Pakistan to transform itself to the changes in economic structure. This is true exactly in case of services sector. In fact, the service sector has continued to maintain the trajectory of its relative importance in the economy yet major part of services is not covered by GST. The major reason for this state of affairs is rooted in 1973 constitution of Islamic Republic of Pakistan. Services fall in the ambit of provinces while federal government is empowered only to levy sales tax on good. The detail list of revenue assignments in the domains of federal government and provincial governments is depicted in Annex – A.

Due to constitutional impediment, there was only expedient to levy sales tax on services in agreement to the provincial governments to treat them as excise goods and provide them with treatment in VAT mode²⁴. In case of eleven services, Provincial Ordinances (2000) and Islamabad Federal Territory Ordinance (2001) have been promulgated authorizing the Federal Government to collect tax on services under the Sales Tax Act, 1990. Apart from these provincial

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²⁴ Martinez Vazquez (2006), "Pakistan: An overview of Tax System in Pakistan", Andrew Young School of Policy Studies, Georgia State University, USA.

services, some more services as federal services were also brought to the sales tax net by the federal government i.e. telecommunication services, carriage of good by air and shipping agents.

Now the question arises why the provincial governments are willing to allow the federal government to collect GST on provincial services? The simple answer for this is the lack of capacity of provincial governments in the collection of due taxes despite their respective set up in the provinces. This view is confirmed by the fact that combined collection of taxes by all the provinces constitutes only 0.4% of the national GDP. Similarly, the provinces contributed around 4% of the consolidated tax revenues of federal government and provinces. There is gross imbalance between the expenditure of the provincial governments which constitutes around 30% of the total expenditure of the country against only 4% of the contribution in national exchequer in the form of revenues. This gap reflects the of the provincial governments. The provincial weakness governments have been prone to see the federal government for filling most of the gap. There are some issues which require to be considered.

There is a lack of proper ownership as there are no incentives other than only 2% collection charges for federal government. The head offices of service providers have been located in different cities. If payment of sales tax is made by the head office and tax liability in the other province, the issue of right payment at the right place will emerge.

There are several solutions to these types of problems. The authority of the levy and collection may be shifted to the federal government and sales tax on services may equally be treated like sales tax on goods through constitutional amendments. Then the collection from services will be a part of NFC and would be distributed according to its formula. The second option is that if for some reasons, constitutional amendments are not possible, and then the base of sales tax through mutual consensus of the provinces can be expanded. In this case, upward revision of service charges may also be considered. Box 1 presents some further details on the matter.

Now the question is how far this will be succeeded to accelerate collection from services? The answer is very simple. These arrangements might improve the collection from services but will not bring the desired results because services are a hard to tax area.

The core issues are the enforcement, audit and documentation. The combined impact of enhanced base and system of audit and effective enforcement will yield the desired results.

Box 1: Who Should Administer the Sales Tax on Services

Provincial governments have some comparative advantage in administering the sales tax on services. The identification of liable tax payers and the maintenance of the tax roll are comparative advantages of the province because of its greater familiarity with the local economy. Since the sales tax on services is a provincial revenue source, there should be more incentive to assess and collect the tax than is the case under the present centrally administered system. Finally, there might be some significant advantage to a coordinated collection of the sales tax on services, the professions tax and the urban property tax. A centrally administered system also has some advantages. Staff is familiar with sales tax because the provincial government would find it difficult to enforce the tax where powerful local interests are involved. In the long run, given the objectives of a fiscal federalism, the best options are either (a to move the administration of provincial taxes to the Federal government, on a "readiness" basis, or (b) to have provincial rate setting under a shared sales tax on services. Source: Roy Bahl, Sally Wallace and Musharraf Cyan, "Pakistan: Provincial Government Taxation, GSUy USA.

Taxation of Services in Pakistan—Evolution and Rate Analysis

Taxation of services has been in the FED net significantly in the past but their current base in FED has been significantly narrow. On the other hand, FED on services can be traced back to 1971-72 mainly on hotels. Later on the tax base of the services had been augmented and some more services were brought into the FED net like advertisements and advertising agents, accountants, architects & planners, bank loans, beauty parlours and slimming, courier services, customs agents, doctors, domestic travels, telephone & fax services, marriage halls and caterers, inland carriage of good by air, insurance, service of supply of natural gas etc. FED on most of the services were either abolished or shifted to sales tax in the late 90s. Some of the prolific among services under the FED in the past were bank loans, telephone services, domestic travel and hotel and restaurants etc. Currently, the following services are purely in the FED net (Table 1).

Table 1: Excisable Services and Duty Rates

Services	Existing FED Rates
1.Advertisement on TV/Cable	16% (It was 15% in 2007-08)
2.Insurance	10% (It was 5% in 2007-08)
3.Non Fund Services	10% (It was 5% in 2007-08
5.Franchise Services	10% (It was 5% in 2007-08)
6.Air Travel Tax (ATT)	
i) SAARC, UAE, S.Arabia, Africa &	Rs.3,240 per square for economy & Economy
Afghanistan	Plus Rs.4,240 for club, business and first class
ii) Europe, Far East, China, USA, Canada,	Rs.4,240 per square for economy & Economy
Australia, South America & others	Plus Rs.5,740 for club, business and first class
7. Property Developers	
i) Development of Plot	Rs.100 per square yard
ii) Constructions	Rs. 50 per square ft of the covered area

In Budget 1998-99, GST had been extended to retailers. In 1999-2000, GST was further levied on services like telephone. Sales tax was imposed on 14 services initially including 11 services for which Provincial Ordinances (2000) including Islamabad Capital Territory Ordinance (2001) were promulgated authorizing the federal government to collect sales tax on services as if it were sales tax under the sales Tax Act, 1990. Services subject to Sales tax both federal and provincial along with current tax rates are spotlighted in Table 2.

Table 2: Sales Taxable Services (FED VAT Mode) and Duty Rates

Services	Sales Tax Rates
Federal	
Telecommunication Services	21%
Facilities for Travel	16%+Rs.20 per ticket
In Land Carriage of Goods by Air	16%
Shipping Agents	16%
Provincial	
Hotels, Marriage Halls and Lawns/Clubs/Caterers	16%
Advertisement on Radio/TV ²⁵	16%
Customs Agents/Ship Chandlers/Stevedores/Shipping Agents	16%
Courier Services	16%
Beauty Parlors/Beauty Clinics/Slimming Clinics	16%
Laundries and Dry Cleaners	16%
Caterers	16%
Travel Agents	16%
Shipping Agents	16%
Ship Chandlers	16%

Source: Federal Excise Act, 2005,

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²⁵ Excluding: if sponsored by i) a Government agency for health education; ii) Population Welfare Division to Sathi Educational promotional campaign funded by USAID: and iii) public service messages if telecast on television by Wildlife Funds for Nature or UNICEF.

Revenue Productivity from Services and Tax Contribution of Service Sector

Revenue productivity is measured as the ratio of effective to statutory tax rates in Pakistan. The revenue productivity is extremely low from services and agriculture as compared to other leading sectors in term of contribution (Table 3).

Table 3: Sector-Wise Revenue Productivity 2004-05

Sectors	Direct Taxes	Indirect Taxes	Total
Agriculture	0.02	0.00	0.01
Mining & Quarrying	0.99	0.03	0.57
Manufacturing	0.91	0.30	0.64
Services	0.11	0.15	0.13
Total	0.25	0.14	0.2

Source: CBR Quarterly Review, July-March 2007²⁶

Box 2 : Direct Taxes on Services

There is a uniform rate of 35% on the income of all the normal companies except petroleum while (20%, 25%, 35%) for small and medium companies. Moreover, a 10% capital gain tax has also been imposed on income from banking. Withholding tax is also levied on the services, technical fee, transport, cash withdrawals, rent on property, commissions, transportation, retailers etc. Rates of withholding taxes on services can be seen from First Schedule to Income Tax Ordinance, 2001.

More than half of the return filers of service sector declared nil income and significant size of them declared losses. Out of 8,037 taxpayers of services, only 2,139 declared income.

Moreover, loss declared is exceedingly higher by 174% to the income declared by the service sector. Interestingly, loss declared by telecom sector was enormously higher by more than 4000% as compared to income declared. Prima facie, it is a phenomenon which should attract the large scale audit operations.

Service Sector Corporate Returns, 2008

501 1100 500001 001 501400 110041115, 2000				
Description	Number			
Total Corporate Filers	17,430			
Service Sector	8,037			
Income Declared	2,139			
Loss Declared	1,033			
Nil Income Declared	4,865			

Total tax paid by the corporate service sector was Rs. 62 billion in tax returns for Tax Year 2008 which constitutes 34% of the total corporate tax declared in the income tax returns 2008. The main contributor in service sector has been banking sector which contributed 66% of the total corporate service sector contribution. Telecom sector contributed only 8% of the total tax paid.

²⁶ See FBR Quarterly Review, Vol.6.No.2, Oct-Dec,pp.31-45.

Contribution from Federal Excise

With the emergence of sales tax as the leading source of revenues, the reliance on other indirect taxes especially federal excise has decreased. The base of FED has shrunk with the passage of time including services. Only significant excisable service was insurance which constituted 94% of the total collection of FED from services. In the face of meager contribution of less than a billion rupees by services in 2005-06, FED was extended to international travel, banking services, franchise services and advertisement services in 2006-07. Although the contribution of services in 2006-07 has not been according to the expectations but still there was a clamour of hope that it will improve in the coming years. Some additional measures were undertaken in the Budget 2007-08 by increasing the rates of insurance from 3% to 5%, expanding the scope of banking services and transformation of international travel tax into Air Travel Tax (ATT) ²⁷(Table 4).

Table 4: No of Taxpayers of Excisable Services and Collection during 2007-08

Collection in Rs. Million

Heads	No of Taxpayers 2007-08	Collection 2007-08	Collection 2006-07	Growth (%)
Air Travel Tax(ATT)	44	9,131	1,816	402.8%
Banking Services	57	1,334	605	120.5%
Franchise Services ²⁸ ,	51	281	625	-55.0%
Insurance Services	41	1,670	1305	28.0%
Advertisement		Negligible	Negligible	-
Total		12,417	4,413	181.4%

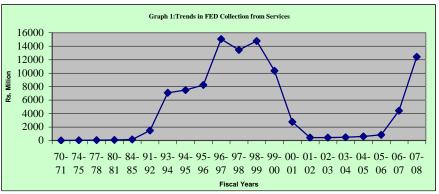
Source: Federal Board of Revenue

Graph 1 depicts an interesting phenomenon of historical tax revenues from FED on Services. Until 1991-92, the collection had

²⁷FED was chargeable on international air travel through destination specific fixed rates with exemption for passengers coming from abroad to Pakistan. However, exemption was enjoyed by the incoming passenger into the country. This one sided levy was a discrimination. Besides, there were levies on international travel like foreign travel tax and government airport tax. During the Budget 2007-08, it was decided to club all the taxes on international travel into a single federal excise duty called Air Travel Tax (ATT) for all incoming and outgoing passengers. It was projected that this measure will realize an additional robust amount of Rs.6 billion during 2007-08. This target had been exceeded by Rs.3.1 billion as far as FBR tax collection is concerned. If we take into account collection realized by other departments in the previous year, then only Rs. 2.6 billion has been an additional collection during 2007-08. By comparing FBR collection from international travel of Rs. 1.8 billion previous years, the collection of Rs. 9.1 billion from ATT during 2007-08 had been exceptionally higher by Rs. 7.3 billion.

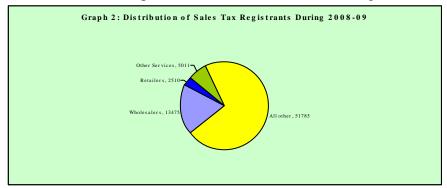
²⁸ Despite big names, the collection from franchise services seems quite low. This state of affairs warrants full-fledged audit of franchise services.

been static and it had started improving at a faster pace and peaked in 1998-99 but started to decline after 1999-2000 substantially due to emergence of sales tax on services. From 2001-02 to 2005-06, it has been almost static with insufficient contribution while spurred by additional measures; the collection has started to jump within a span of only two years.



Contribution from Sales Tax

Currently, there are 72,781 registrants enrolled for e-filing of sales tax. Services (including wholesalers and retailers) constitute only 29% of the total registrants which also confirms narrow tax base. Graph 2 reflects actual number of registrants enrolled in Services. Only 3% of the retailers in overall registrants of GST is understandable as a higher threshold of Rs. 5 million was announced in the budget 2004-05 which led to a big chunk of retailers out of the sales tax net with the plea that their contribution was insignificant.



Structure of Tax Contribution in Service Sector

Currently, the contribution of provincial services which were made part of sales tax has been low i.e. 10% in 2007-08. On the other hand, the share of federal services has improved substantially due to boom in the collection of telecommunication sector. Graph 3 elucidates that telecommunication has dominated the overall collection of sales tax on services.

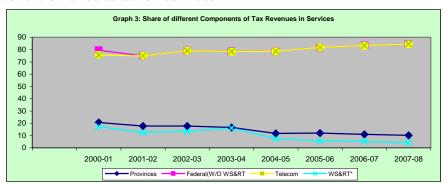


Table 5 reflects that although the collection of GST from provincial services grew by an average compound growth rate of 16% from 2001-02 to 2007-08 yet there is a lack of diversification of generation of revenue from provincial services. Only 4 services constitute around 94% of the receipts related to provincial services. A number of services like beauty parlours/slimming clinics/travel agents, clubs, marriage halls, laundry, caterers etc have contributed insignificantly over the years. On the other hand, federal services have exhibited a robust average compound growth rate of 26% in GST during last 8 years mainly due to vibrant performance by the telecommunication.

Table 5: Collection of GST from Services

(Rs Million)

							(210 1,200	,	
Services	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	ACG R %)
Provincial									
Hotels(Restaurant									
s/Fast Foods etc)	625	772	743	855	1073	1858	2135	1919	15
Advertisement	222	328	381	336	537	603	822	1156	23
Courier	262	338	417	493	379	636	722	950	17
Customs Agents	175	216	242	313	471	636	625	740	20
Stevedores	175	175	173	168	140	180	177	301	7
Sub Total	1,459	1,829	1,956	2,165	2,600	3,913	4,481	5,066	17
Other	206	262	252	384	428	23	241	396	9
Provincial									
Services	1,665	2,091	2,208	2,549	3,028	3,936	4,722	5,462	16
Federal	, i	,		ĺ	,	,		ĺ	
Services provided									
by Telecom	6,140	8,810	9,876	12,119	20,397	26,873	36,868	45,484	28
Travel by Air	308	836	208	715	520	151	5	657	10
Sub Total	6,448	9,646	10,084	12,834	20,917	27,024	36,873	46,141	28
Other	0	29	197	71	49	41	240	1	
Federal Services	6,448	9,675	10,281	12,905	20,966	27,065	37,113	46,142	28
Total	8,113	11,766	12,489	15,454	23,994	31,001	41,835	51,604	26

Source: Federal Board of Revenue

Service Tax in India and Some Lessons for Pakistan

The service tax was levied for the first time in 1994 in India initially on only three services²⁹, i.e. insurance, stock brokerage and telecom. With the passage of time, the net of service tax was extended to all the services keeping in view the robust contribution of service sector in GDP in India. Initially, a rate of 5% was applicable to all the services, currently, it is 12%. Apart from this rate, education cess of 3% (2% higher education cess and 1% secondary & high education cess) has also been applicable to the taxable services. The service tax has been overhauled with a number of initiative overtime. Followings are the some of the measure taken in recent years, *inter alia*:

- a) A threshold of only 8 Lacs Indian rupees annually has been allowed as exemption from service tax for small business while one million Indian rupees for normal business.
- b) Credit of service tax and excise duty has been extended to goods and services.

The evidence from Table 6 confirms that with the increase of number of services in service tax net, number of assesses have increased accordingly. Once a significant level of assesses of service tax achieved, tax rate has been doubled from 5% in 1994-2003 to 10% in 2004-05 eventually reaching 12% in 2007-08. In the process, the collection of service tax has recorded massive growth over the period.

Table 6: Indicators of Service Tax in India

FY	Number of services	Number of assesses	Tax Rates %)	Revenue (IRs. In Crore)	Growth
94-95	3	3,943	5	410	Base Year
95-96	3	4,866	5	846	19.0
96-97	6	13,982	5	1,022	187.0
97-98	18	45,991	5	1,515	238.0
98-99	30	107,479	5	1,787	133.0
99-00	27	115,495	5	2,072	7.5
00-01	26	122,236	5	2613	22.8
01-02	41	187,577	5	3302	26.4
02-03	52	232,048	5	4122	24.8
03-04	60	403,856	5	7891	91.4
04-05	75	740,267	10	14200	80.0
05-06	84	806,585	10	23055	62.4
06-07	99	918,746	12	37484	62.6
07-08	100	NA	12	50200	33.9

Source: Economic Survey 2007-08, Government of India and Annual Performance Report 2005-06

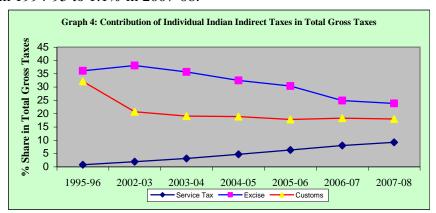
Directorate General of Service Tax, Mumbai.

Service, tax as a buoyant tax, has not only improved overall collection of indirect taxes and total taxes but also provided impetus

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²⁹ Annual Report 2007-08, Ministry of Finance, India pp.69

to improved tax–GDP Ratio in India. Service tax in India has been the only tax in indirect taxes which enhanced its contribution gradually in overall gross taxes evident from Graph 4. Similarly, the contribution of service tax in Indian GDP has improved from 0.1% in 1994-95 to 1.1% in 2007-08.



India has improved its collection remarkably from service tax which has become an example for countries like Pakistan to follow it. Table 7 reflects that around 63% of service tax collection emanated from 10 services and remaining 40% has been spread on remaining services. Like Pakistan, telephone services contributed the top collection. Surprisingly, while comparing Indian service tax top ten revenue generating services, only two categories telephone, banking and insurance services have been taxed in Pakistan.

Table 7: Major Revenue Spinners of Service Tax India 2005-06

(IRs in Crore

SNO	Services	Collection	%Share
1	Telephone	4093	17.8
2	Banking & Other Financial Services	1954	8.5
3	Business Auxiliary Service	1470	6.4
4	Goods Transport Agency (by road)	1396	6.1
5	General insurance	1254	5.4
6	Insurance Auxiliary Service	1216	5.3
7	Maintenance or Repair Service	863	3.7
8	Stock Broker	824	3.6
9	Consulting Engineers	725	3.
10	Commercial or Industrial Construction.	663	2.9
	Sub Total	14,458	62.7
	Other	8,593	37.3
	Total	23051	100.0

Source: Website of Service Tax, India

Lessons drawn from Indian Service Tax for Pakistan

In line with the Indian service tax, Pakistan should endeavor to improve the contribution of indirect taxes from the services sector. It

means during 2007-08, there was a potential to realize Rs. 100 billion but only Rs.66 billion was actually collected. It implies that roughly, there is a further potential of Rs.34 billion in Pakistan which could be generated additionally. A comparison of level of contribution by India and Pakistan is highlighted in Table 8:

Table 8: India VS Pakistan: Contribution of Services in Total Tax Receipts

Fiscal Years	Pakistan*	India*
1994-95	3.3	0.8
2002-03	2.8	1.9
2003-04	3.1	3.1
2004-05	4.2	4.7
2005-06	4.7	6.3
2006-07	5.7	8
2007-08	6.6	9.2

Source: FBR and Economic Survey 2007-08, Government of India and Website of Service Tax, India. * Taxes on Services in Pakistan include only FED and sales tax while in India, service tax is included.

Interestingly, the contribution of telecommunication has been 70% of total collection of services in indirect taxes in Pakistan against only 17% in India. Prima facie, this is a case of limited tax base³⁰ of services as well as enforcement issue. Interestingly, tax compliance by the taxpayers from 2001-02 has been up to the mark in services as tax returns have been regularly filed. Actual issue is the low contribution of service sector in tax revenues.

The tax base of services is extremely narrow. There is an immediate need to augment the scope of services in tax net of FED in VAT mode. The most prolific services in Indian service tax which are out of tax net in Pakistan are suggested to be brought in the fold of FED VAT mode like business auxiliary service, goods transport agency, insurance auxiliary service, maintenance or repair services, stock broker, consulting engineers and commercial or repair service. With the passage of time, gradual extension of base would be a great source of revenue generation among the service untaxed.

For greater simplicity and distortion free system of service taxation, uniformity of tax rate is essential. The services taxed under indirect taxation are subject to varying rates. In Indian service tax, uniform rate for all the services applied. A uniform rate of 15% would be more reasonable all services under FED or sales tax.

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³⁰ A detailed list of all the services can be seen from Chapter 98 of Pakistan Customs Tariff 2008-09(Vol 1), 24th Edition pp756-759 Federal Board of Revenue, Islamabad. This list can be utilized for further expansion of tax base for services.

Box 3:Taxes on Services in Malaysia

A service tax of 5 percent applies to the value of certain goods or services sold or provided by prescribed establishments throughout Malaysia (except on the islands of Labuan, Langkawi, and Tioman and in free zones). Prescribed businesses include the following:

- hotels with more than 25 rooms;
- restaurants, bars, snack bars, coffee houses and food courts;
- cabarets, dance halls, night-clubs, health centers, massage parlors, golf clubs, and public beer houses;
- insurance companies, forwarding agents, and telecommunications services firms (except Internet);
- motor-vehicle service/repair centers with annual turnover of M \$150,000 (currently US \$29,206) or more;
- car-park operators, security guards or courier-service firms with annual turnover of M \$150,000 or more;
- employment or private agencies with annual sales turnover of M \$150,000 or more;
- private hospitals, dental clinics, and veterinary clinics with annual turnover of M \$150,000 or more;
- professional, consultancy, and management services, including project management coordination services with annual sales turnover of M \$150,000 or more;
- advertising firms with annual turnover of M \$300,000 or more;
- private clubs with annual turnover of M \$300,000 or more; and
- car-hire services with annual sales turnover of M \$300,000 or more.

Source: International Tax Notes (various issues).

In order to improve collection and enforcement, separate set up of services tax administration can be helpful. Since services generate inadequate revenues except telecommunication, attention is paid to manufacturing sector on priority basis as bulk of revenues is generated by manufacturing sector. All the services in the net of FED and sales tax may be combined together into a new tax "Service Tax" like India. It would a serious step toward focusing on revenue generation through better enforcement and extension of base of services.

Tax Competitiveness in Service Sector-Cross Country Comparison

Pakistan is competitive in attracting investment in taxation of services. It is evident from Table 9 that Pakistan Marginal Effective Tax Rate (METR) on capital for service sector is considerably low. It implies that Pakistan is competitive in attracting investment in the service sector as far as taxation is concerned. For instance, in Argentina, 45% of the profit from marginal investment goes to taxation as compared to only 28.4% in Pakistan. This evidence confirms that there is still ample scope for revenue generation from service sector in Pakistan.

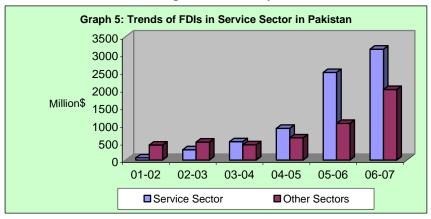
Table 9: Marginal Effective Tax Rates on Capital for Services, 2008

Countries	METR(%)
Argentina	45.0
China	44.9
Brazil	39.4
India	39.4
Korea	36.4
Russia	36.0
France	35.5
Japan	34.9
Australia	29.1
Canada	35.5
UK	28.8
Italy	28.6
Pakistan	28.4
Malaysia	17.3
Thailand	17.1
Turkey	8.7

Source: School of Policy Studies, University of Calgary, Canada

Moreover, METR on capital for manufacturing sectors are higher than services in Pakistan also confirms that investor will prefer to invest in services rather than manufacturing. It is also debatable that manufacturing sector absorbs a major chunk of labor force, therefore, increased taxation of service sector will not only generate more revenues but also divert some investment to manufacturing sector.

The above evidence confirms that Pakistan is competitive in attracting investment in the service sector. Graph 5 reconfirms that service sector FDIs have improved robustly in the current decade.



Other Relevant Issues

Reduction of bases—Fact and Fantasies

One of the most striking aspects of taxation of services is its limited base. Only a portion of the services is in the tax net and the remaining is a heaven for the booming business in services sector. The issue of this higher sale tax threshold (for retailers and manufacturers) is of compelling significance for retailers and manufacturers coupled with zero rating of five major export oriented industries. The argument that this is a flawed policy that some one is contributing less due to any reason or becoming burden on the revenue organization may be set aside due to inability of the department either due to weak enforcement or corruption in the system. This is against the canon of taxation and generates distortion in the system. The message from these types of measures is always negative. The result of said zero rating has not been successful when viewed in the wider context including rebates payments. The low contribution by a robust segment of business should not be a criteria for tax zero rating. In these cases, extensive audits are required rather to keep them out of the net.

Like provincial governments, local governments have also been deficient in resources and mainly dependant on the finances from provincial governments. In order to manage the retailers and manufacturers below the sales tax threshold, their taxation may be transferred to the local governments. This will not only generate robust tax revenues for local government but also will exhibit better enforcement.

Administrative Shortcomings

Documentation of the service sector is fundamental for enforcement of taxation of services. Unfortunately, the generation of revenues from service sector except few areas has been dismal. Effective audit plays an important role in safeguarding revenues. Unfortunately, audit has not functioned properly in the recent years but self-assessment requires well established system of audit.

Import of Services

Section 3 of Federal Excise Act, 2005 reflected levy of FED on good and services provided or rendered in Pakistan. In the Budget 2008-09, amendment has been made in Federal Excise Act, 2005 to charge duty on the services coming from abroad and terminating in Pakistan, an enabling provision has been made to charge duty from the recipients of services. The main aim of the amendments was to

bring the import of services into the ambit of Federal Excise Duty. Keeping in view the large size of trade of services in the country it was important to extend scope of FED to the import of services. Now the question arises how these measures will be fruitful? Since services are hard to tax area(seeBox 4), therefore, some feasible mechanism will have to be adopted to generate additional revenues. This area requires to be focused.³¹

Huge Informal Economy

Pakistan has a huge informal sector of the economy. Due to this, a large portion of business activities have been out of tax net. This informal economy also includes significant portion of services. With the broad based tax extension to the services, most of the services rendered in the informal sector would automatically contribute to the tax revenues invisibly. For example, persons engaged in the informal sectors use telephones which are subject to sales tax. Since sales tax on services is consumption type of tax in nature, therefore, people spend their money for services. Now the question is how to get maximum benefit from income of the informal sector in term of taxation of service sector?

Box 4: Taxation of Foreign Remittances?

Like many countries, Pakistan realizes a large inflow of foreign remittances to individuals in Pakistan, estimated to be as much as US\$4 billion. These remittances may take several forms: intra-family transfers (e.g., monies sent by diasporeans to their families in Pakistan), personal investment transfers (e.g., monies sent by diasporeans for their own private investments in Pakistan), and monies sent by associations, usually for community projects.

Taxing these foreign remittances may seem an attractive revenue source. However, there are several major issues that must be considered. An obvious first issue is how would taxation actually work: what institutions would be responsible for implementing and monitoring the taxation, how effective would government enforcement policies be, and the like? Even aside from the administration of any system of taxing foreign remittances, such taxation is likely to be "bad" policy, for several reasons:

- Taxing remittances will redirect them from formal to informal channels, thereby hurting the balance of payments.
- Taxing remittances could amount to double taxation, since the senders may already have been taxed on income used for remittances.
- Remittances may ease foreign exchange constraints.
- Remittances may be a source of personal saving.
- Remittances increase national income.

• Remittances improve the living standards of recipients, and may lessen poverty.

For these and other reasons, the standard international practice is to ignore foreign remittances in the individual income tax.

Source: Alm and Martinez (2006), "Short- and Medium-term Tax Policy Options for the 2007-2008 Pakistan Budget" Georgia State University, USA.

³¹ Pakistan has actively been involved in negotiations under GATS. It will help liberalization of services sector and boosting further investment.

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Conclusion and Recommendations

Service sector is the top sector in term of its contribution in the economy of Pakistan. There is a mismatch in term of its contribution in economy viz a viz tax revenues. This is visible in case of agriculture and services sectors. Moreover, revenue productivity from services is quite low mainly due to lake of documentation, weak enforcement and audit. The tax base of services is quite narrow. In a couple of years, an effort has been made to augment the tax base of services to some extent. For instance, FED on services was extended to number of services with partial success. Actually, there is a need to expand the tax base of services in sales tax. The tax revenues from services in indirect taxes crucially depend on telecommunication. There is a need to diversify tax collection from services.

Due to constitutional issues, the implementation of broad based sales tax on all services could not be accomplished. The inability of provinces to generate ample revenues for fulfilling their budgetary requirements has also been issue. Due this problem, some of the services relating to provinces are being administered by the FBR with nominal collection charges. Until the provinces build their capacity best choice is that federal government may continue the collection of sales tax on services. Now it is imperative to bring more services into the fold of sales tax with improved audit and enforcement. The collection of provincial services can be improved by augmenting its base under the prevailing arrangements subject to better enforcement.

Small retailers below Rs.5 million thresholds are currently out of sales tax net but can be good source of revenues for the local bodies if the power of collection of sales tax is devolved to them. Generally, this threshold is exceedingly higher and no way conform to the international standards. This type of measures leads towards inefficiency and provide incentives to other sector to get out of the tax net.

Pakistan has provided a congenial environment to the investors of service sector by providing them with competitive tax treatment better than many countries. Thus, there is marked improvement in the level of investment in service sector in recent years.

The discussion on taxation of services concludes that GST in Pakistan is an appropriate tax for services but there may a uniform rate of goods and services. On the other hand, although base of FED on services is extremely limited but still there is a variation in the FED rates. The uniformity of tax rates between sales tax on goods and services, and FED on services will help in reducing distortions and bring equity. Pakistan can also improve its tax revenues from services by expanding the scope of taxes to the untaxed services. There is also an option to combine all the services into a service tax in indirect taxes but again there might be a number of constitutional and administrative issues. One thing will be certain that it will be focused appropriately if combined.

There is a considerable volume of international trade in services which should contribute to the exchequer in the form of taxes which is paying nothing significant at present. Recent amendments in Federal Excise Act, 2005 has rightly paved the way for taxation of import of services.

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Annex- A: Revenue Assignments (Federal and Provincial)

	Amiex- A: Revenue Assignments (Federal and Frovincial)								
S.	Fede	ral		Provincial					
N o	Revenue Assignment	Legal Provision	Revenue Assignment	Legal Provision					
1	Personal income tax (except agri. income)	Federal List (Subject 47)	Excise duty on alcohol, liquor, narcotics	Assigned to province by bar on the federation in the Federal list (subject 44)					
2	Corporate	Federal List (subject 48)	Sales tax on services	Residuary assignment					
3	Customs	Federal List (subject 43)	Tax on professions	Article 163 of the constitution					
4	Sales tax on goods	Federal List (subject 48)	Motor vehicle tax	Residuary assignment					
5	Excise duty (except on alcohol, narcotics)	Federal List (subject 44)	Property tax	Residuary but there is bar in the Federal List (subject 51)					
6	Capital value tax	Federal List (subject 50)	Capital gains	Assigned through bar on the federation in the Federal List (subject 50)					
7	Estate duty	Federal List (subject 45,46)	Agriculture income tax	Through bar on the federation in the Federal List (subject 47)					
8	Mineral oil, minerals, N. gas	Federal List (subject 51)	Stamp duty	Residuary assignment					
9	Tax on production capacity	Federal List (subject 52)	Registration fee	Residuary assignment					
10	Terminal taxes on goods transport and passengers	Federal List (subject 53)	Mutation fee	Residuary assignment					
11	User charges on federal subjects	Federal List (subject 54)	Natural gas excise duty	Article 161 of the constitution					
12			Net hydro profits	Article 161 of the constitution					
13			Electricity duty	Article 157(2) (b) of the constitution					
14			User charges	Residuary assignment					

Source: Roy Bahl, Sally Wallace and Musharraf Cyan, "Pakistan: Provincial Government Taxation, Georgia State University USA.

Pak-China Free Trade Agreement: A Path towards Economic Growth, Development and Regional Stability

By Naeem Ahmed 32

Introduction

1. In the era of globalization and integration the economic ties have been enhanced and strengthened in the shape of trade agreements among various countries and regions. Rapidly growing free trade among nations is one of the aspects of globalization. The Free Trade Agreements (FTAs) have gained more popularity as the trading partners compromise for the rates even lower than the World Trade Organization. Along with bilateral trade agreements the Regional Trade Agreements (RTAs) have also become a prominent feature of the Multilateral Trading System (MTS). The surge in RTAs has continued unabated since the early 1990s. ³³

Various studies have shown the free trade has benefitted the trading partners and volume of international trade has increased, which created further economic opportunities. According to Urata (2003), importance of intra-East Asian trade in world trade increased significantly from 8% in 1990 to 12% in 2001. The share for the European Union was significantly higher in world trade i.e. 22% in 2001. Trefler (2001) in the case of Canada – U.S FTA, found larger labor productivity gains which rose by 14% in export-oriented group of industries at plant level and rose by 15% in import competing group of industries. According to Linda (2004), the Canada's trade with Mexico was doubled and investment from US to Canada increased substantially. More than one million jobs were created in Canada. The trade between four Mercosur countries increased more than 400% from 1990 and 1997 (ibid).

1.1. Pakistan and Free Trade:

Faced with the changing world economic scenario in shape of globalization and economic integration, Pakistan like other developing countries is also motivated to promote further bilateral and multilateral free trade relations.

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³² The Author is Second Secretary(FRS), FBR and the views expressed in this article are those of the author and do not necessarily represent FBR or FBR view policy.

³³ For details see WTO website

Regional and Plurilateral Arrangements: Pakistan has joined several bilateral and regional trade agreements in recent years, like South Asia Free Trade Agreement (SAFTA), the Framework Agreement on the Trade Preferential System among OIC Member States, Developing-8 group of countries (D-8) and Economic Cooperation Organization (ECO) or ECO Trade Agreement (ECOTA).

Bilateral arrangements: Along with regional trade agreements, Pakistan also attached priority on expanding bilateral free trade. Currently bilateral free-trade agreements (FTAs) are in operation with China, Sri Lanka, Malaysia, and Iran. Similarly FTA with Mauritius has also been signed in July 2007. Pakistan expects to conclude FTA negotiations with Singapore and the Gulf Cooperation Council (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates).³⁴ It has also signed a Framework Agreement for negotiating a PTA with Turkey in 2004 and also expected with MERCOSUR (Brazil, Argentina, Venezuela, Paraguay, and Uruguay). Pakistan has also initiated discussions and in some cases begun negotiations on preferential trade arrangements with Afghanistan, Bosnia, Bangladesh, Canada, EFTA (Switzerland, Norway, Iceland, and Liechtenstein), Egypt, Jordan, Kenya, Mexico, Morocco, Myanmar, Russian Federation, Serbia, Syria, Switzerland, Laos, Thailand, Indonesia.

Pakistan and China had agreed for a Free Trade Agreement (FTA) in April 2005. Pakistan's FTA with China has greater significance in many respects. The strategic direction through which the economic ties between Pakistan and China can be strengthened in the coming decades lie in intensified trade, investment and transfer of technology, this route is feasible as it creates win-win situation for both countries. Pakistan-China FTA would facilitate trade and would further consolidate bilateral trade relations (Xu Changwen) ³⁵.

1.2 The purpose of this study is to highlight various aspects of Pak-China FTA. The study includes literature review; containing discussion on the concept of free trade and its merits and demerits. The study includes the analysis in respect of terms of trade between two countries, impact on volume of trade, trade creation and trade

³⁵ A trade researcher at the Chinese Academy of International Trade and Economic Co-operation, a think-tank under the Chinese Ministry of Commerce

³⁴ WTO/Government of Pakistan (2006g), pp. 9-10.

diversion. Study highlights the impact on the international trade related taxes and duties. The study also analyses the political economy of the said FTA and expected economic and other gains in the region.

2. Literature Review:

- **History of Free trade:** 2.1 The trade between nations is as old a practice as the nations' history. The well known and prosperous civilizations throughout history have engaged in bilateral trade. Before the appearance of Free Trade doctrine the policy of mercantilism had developed in Europe in the 1500. The economists David Ricardo and Adam Smith opposed the mercantilism and advocated free trade and believed trade was the reason why certain civilizations prospered economically. Adam Smith advocated free trade in his book "The Wealth of Nations" in 1776 and made the case for free trade by arguing that specialization through division of labor would yield greater gains in trade than otherwise permitted. The classical economist David Ricardo firmly established the case for free trade and he developed a model. Ricardo's model demonstrated the benefits of trading via specialization-states could acquire more than their labor alone would permit them to produce. This basic model ultimately led to the formation of one of Economics' fundamental laws: the Law of Comparative Advantage. According to the Law of Comparative Advantage each member in a group of trading partners should specialize in and produce the goods in which they possess lowest opportunity costs relative to other trading partners. This specialization permits trading partners to then exchange their goods produced as a function of specialization. Under a policy of free trade, trade via specialization maximizes labor, wealth and quantity of goods produce, exceeding what an equal number of autarkic states could produce.
- **2.2 Free Trade Defined**: Free trade is trade without restrictions, meaning that countries having free trade agreements can sell their products without the restrictions like tariffs and quotas. The free trade aims to lower tariffs to zero level, sometime with few exceptions for certain products or sectors. Free trade allows traders of two nations to act and transact without interference from government. The free trade policy permits the trading partners mutual gains from trade, with goods and services produced. The

prices, under a free trade policy are the sole determinant of resource allocation.

Free trade differs from other forms of trade where the allocation of goods and services amongst trading countries are determined by artificial prices that do not reflect the true nature of supply and demand. These artificial prices are the result of protectionist trade policies, whereby governments intervene in the market through price adjustments and supply restrictions. Such government interventions generally increase the cost of goods and services to both consumers and producers. The tariffs and quotas have been used to protect the domestic industry. Three immediate effects of tariffs that come into view are: the local buyers lose due to higher prices, sellers gain by supplying at higher prices and government earns tariffs revenue (Ray: 1998, p.661).

Important features of free trade:

- trade of goods without taxes and barriers like import quotas or subsidies for producers
- trade in services without taxes or other trade barriers
- The absence of trade-distorting policies regulations or laws
- Free access to markets and market information
- Inability of firms to distort markets through governmentimposed monopoly or oligopoly power
- The free movement of labor and capital among trading partners

2.3 Significance of Free Trade:

Why do nations trade? How does it benefit the trading nations? Usually it is believed that the free trade agreements bring prosperity and welfare, but it may not be true in all cases and there may be some negative impacts. In the literature we find different views on the riddle of free trade. In the early fifties and sixties it was believed that the policy of Import substituting Industrialization (ISI) or protectionism is best for developing countries, however this view changed to reliance on more exports for growth (Krugman and Obstfeld: 2000, p.266). Ray (1998, p.621), while giving argument in favour of free trade, quotes the example of export led growth by the Newly Industrialized Economies (NIEs) Hong Kong, Korea, Singapore and Taiwan. Other Asian countries like Malaysia, Indonesia, Philippines, Thailand and China have also adopted the export oriented policies of NIEs and attained an impressive growth level. According to Giersch (1986, p.204) the removal of barriers to

foreign trade expands the feasible set of consumption possibilities of an economy by providing in effect an indirect technology for transforming local resources into goods and services benefiting the consumers. Free trade would cause world resources to be utilized most efficiently and would maximize world welfare (Salvatore, 1995).

According to Todaro (2000, p.468), "diverse preferences as well as varied physical and financial endowments open up the possibility of profitable trade". Resultantly countries try to specialize in the production of goods in which they find comparative advantage. The globalists believe that the free trade is beneficial for the world, while on the other hand some leading economists are skeptical about the benefits of free trade. Dollar and Kraay (2000) favor the free trade and say that "the openness to foreign trade benefits the poor to the same extent that it benefits the whole economy". Whereas, according to Ravallion (2004), the increased openness can lead to a rise in the demand for relatively skilled labor, which can harm a vast majority of poor population. Sachs and Warner (1995), asserts that the countries that were more open grew faster compared to the countries which were less open.

Even though free trade may have more positive aspects, but at the same time there can be negative impacts on employment and production as well. According to Bhagwati (1996, p/10), "in case of free trade between poor and rich countries, if the poor countries have more unskilled labor, lower standards of labor and environment then the free trade can be harmful to them". Although there will be trade gains but income distribution will be adversely affected (ibid). This is an indication for developing countries like Pakistan that before joining the free trade blocs the pre-conditions like literacy rates, poor labor and infrastructure conditions must be properly addressed. Pomfret (1991, p.140), says that

"the most common argument in favor of trade barriers is the pauper labor argument. In its crudest form, the argument is that if country A's wages are lower than country B's in all activities then the latter's products will be undersold and trade will bring unemployment".³⁶

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³⁶ The view that a country loses by importing from another country that has low wages, presumably by lowering wages at home. This view ignores the fact that low wages are due to low productivity, and that the high-wage home country, with high productivity, will have comparative advantage in some products and will gain from trade

Nonetheless, despite some demerits of free trade the importance of free trade is increasing rapidly. Data confirms that the volume of international trade has increased significantly; particularly in the free trade zones in the recent times. With the passage of time not only trade volumes have enormously increased but also the patterns have changed and the trade has become a complicated and also a political phenomenon. The competition for economic gains among nations is becoming tough day by day, resultantly developing and advanced countries are opting for more free trade agreements in the shapes of FTAs and RTAs.

2.4 Trade Creation and Trade Diversion

The term trade creation means establishing a free trade area, to promote trade that would not have been possible otherwise. Resultantly, the supply occurs from a more efficient producer of the product and in all cases trade creation will raise a country's national welfare (Suranovic: 1997-2004)³⁷. While on the other hand the trade diversion means that a free trade area diverts trade, away from a more efficient supplier outside the FTA, towards a less efficient supplier within the FTA. In some cases, trade diversion will reduce a country's national welfare but in some cases national welfare could improve despite the trade diversion (ibid).

The FTAs create the possibilities of trade creation and trade diversion but the overall benefits depend on the size of trade creation and trade diversion. It is common for economists to make the following statement, "If the positive effects from trade creation are larger than the negative effects from trade diversion, then the FTA will improve national welfare"(ibid). In other words if FTA creates more trade diversion than the trade creation then it may reduce the country's welfare. The increase in the likelihood of welfare gains from free trade depends on the conditions; "that the trade creation "dominates" trade diversion and that import prices do not rise" (Panagarya, 2000; Krishna, 2003). The trading countries lowering tariffs would produce gains not only on the demand side but also on the supply side by reallocation of resources in the economy³⁸. Therefore, for maximization of welfare, the trading country like Pakistan should try to explore the possibilities of the trade creation through the FTA. The argument that by merely

38 http://en.wikipedia.org/wiki/free_trade#Economic_arguments_for_free_trade,

³⁷ for further explanations and details please see http://internationalecon.com/v1.0/ch110/110c030.html,

exporting raw material to the advanced countries could not help to grow and develop is very important. Pakistan has to make strategies carefully for trade liberalization. Furthermore, the export of raw material like cotton yarn will be beneficial but not as beneficial as the export of finished goods.

2.5 Preferential Trade Agreements and Multilateral Trade Agreements

The PTAs are the agreements among a set of countries involving preferential treatment of bilateral trade (Srinivasan). The regional PTAs are called the Regional Trade agreements (RTAs) and the most common form of RTAs is the FTAs (ibid). PTAs foster competition, affect market size and level of trade and create more trade and thus contribute to welfare and growth (ADB)³⁹.

2.6 Terms of Trade: In international trade, **terms of trade** (TOT)⁴⁰ is the relative prices of a country's export to import. In a simple case of two countries, terms of trade is defined as the ratio of the price a country receives for its export commodity to the price it pays for its import commodity.

2.7. Political Economy of Pak-China FTA

The FTA with any country is important, nevertheless, keeping in view the historical background of Sino-Pakistani all weather strategic partnership and the regional and global political situation, the Pak-China FTA has greater significance in all respects. Along with economic benefits, the promotion of overall cooperative partnership between Pakistan and China will exert significant influence on maintaining the stability and regional safety and boosting the traditional friendly relations between other Muslim countries and China⁴¹.

³⁹ http://www.adb.org/documents/books/ADO/2002/pta0401.asp,

⁴⁰ For example, if a country exports 100 dollars worth of product in exchange for 200 dollars worth of imported product, that country's terms of trade are 100/200 = 0.5. The terms of trade for the other country must be the reciprocal (200/100 = 2). When this number is falling, the country is said to have "deteriorating terms of trade". If multiplied by 100, these calculations can be expressed as a percentage (50% and 200% respectively). If a country's terms of trade fall from say 100% to 70% (from 1.0 to 0.7), it has experienced a 30% deterioration in its terms of trade. Terms of trade is the ratio of a country's export price index to its import price index, multiplied by 100 (Source: http://en.wikipedia.org/wiki/international_trade)

 $^{^{41}}$ Further details on the pros and cons and the interests of China behind this FTA can be seen form $\underline{\text{http://english.people.com.cn/200504/05/eng20050405}} \underline{\text{179598.html.}}.$

The trade among nations not only brings economic benefits and welfare, but in most cases it also boosts bilateral and regional political stability and peace. It is a fact that small and weaker countries endeavor to take shelter of stronger nations through trade and defense pacts. According to Spero (1990) the start of cold war at the end of 1940s led to more economic cooperation for the rebuilding of western economies and also to provide political and military security. The integration among European states had not only brought economic welfare in the region but also established political stability and peace among the hostile and warring nations. The European Union (EU) with the passage of time is becoming stronger and stronger and now it has taken the shape of monetary union (MU) by adopting euro as common currency and it is expected that one day it will be developed into a political union (PU) as well. Qualitative analyses divulged that free trade enhances economic interdependence among the nations and leads them to peace⁴². This has been proved in the case of EU and extended ties have minimized the chances of war among the member states.

Similarly, there are other trade blocs in the world, which played an important role not only for the promotion of trade but also to promote political stability in the region. The ASEAN, which started its journey in 1967 for regional security, turned to preferential trade arrangement and in 1993 with a timetable to shape ASEAN free trade area (AFTA) (Low: 2004). The process of evolution that how small trade agreements and PTAs develop to economic union (EU), monetary union (MU) and political union (PU) is explained in the table 1.

Table-1: Stages of Economic Integration Leading to Political Union

Stages	PTA	FTA	CU	CM	EU	PU
1-Item-by-item preferential tariff reduction	X	X	X	X	X	X
2-Removal of all tariffs among members		X	X	X	X	X
3-Common external tariff			X	X	X	X
4-Free factor movement (Labor & Capital)				X	X	X
5-Harmonise econ policies					X	X
(fiscal/monetary)						
6-Political Unification						X

Source: Low, Linda (2004, p.5) "The Political Economy of Trade Liberalization"

PTA= preferential trading area, FTA= free trade area, CU= customs union, CM= common market, EU= economic union, PU= political union

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⁴² http://en.wikipedia.org/wiki/free_trade#Economic_arguments_for_free_trade

Pakistan like other developing nations had inclined to bilateral trade agreements with several countries and Pak-China FTA is the desirable and appropriate step in the right direction bearing great economic and political impact in the coming decades. It is a reality that Pakistan is one of the largest Muslim countries, a nuclear power and, moreover, its key geographical location magnifies its importance on the world map. China is showing keen interest to promote its economic relations with Gulf and African countries. The reasons for this keen interest are ample oil resources i.e. 45% of total oil reserves in Gulf countries (GCC), a place of 20 million consumers and a lucrative region for foreign investors⁴³. Therefore, the strengthened economic ties with Gulf countries will open the new venues for the Chinese economy. However, the promotion of Sino-GCC trade relations will largely depend on Pakistan due to its ideal geographical location, which will facilitate China to en-route its shipments through sea of Pakistan, particularly the newly built Gawadar Port, to GCC/Arab countries and other parts of the world as well.

Similarly, Pakistan needs China's technical, economic and political support. In addition to this China's unprecedented economic growth, a role model for developing countries can lead Pakistan to economic development and welfare through trade, investment and transfer of technology. The Sino-Pakistan close political relations will also promote regional security and peace, which is quite essential for the economic development in the region. There is a positive relationship between peace and economic development; therefore, it would not be wrong to say that peace is a necessary condition for development. The regions and countries engrossed in political crisis and conflict find it difficult to exploit their resources for growth and development. Contrary to this the countries and regions with stable and strong political culture are able to grow faster like European Union, ASEAN etc.

It is therefore, asserted that the efforts should be made to reap fully. the benefits of Pak-China FTA. After the successful enforcement of FTA between two nations the possibility of expansion of this cooperation in the region would always be there. A regional block comprised of countries; Pakistan, China, India, Bangladesh, Iran, Afghanistan, Indonesia, Central Asian States can become a hub of

⁴³ Asia Pulse, www.asiapulse.com

world economic resources and activities. It will pave the way for regional peace, stability and economic development benefiting directly to more than 2 and ½ billion people living in the region.

3. Evolution of Pak-China FTA

It started in April 2005 when both countries agreed for FTA and on 6th August 2005 they finalized two separate lists of 52 items on which import tariff would be brought to zero level under Early Harvest Program (EHP) as part of Free Trade Agreement. The Early Harvest Programme between the two countries which was put into operation on 1st January 2006 has been merged into the bilateral FTA. In the overall package Pakistan will get market access at zero duty on industrial alcohol, cotton fabrics, bed-linen and other home textiles, marble and other tiles, leather articles, sports goods, mangoes, citrus fruit and other fruits and vegetables; iron and steel products and engineering goods. China will also reduce its tariff on fish, dairy sectors; frozen orange juice; plastic products; rubber products; leather products; knitwear; woven garments etc. Similarly, Pakistan has given market access to China mainly on machinery; organic; and inorganic chemicals, fruits & vegetables, medicaments and other raw materials for various industries including engineering sector, intermediary goods for engineering sectors, etc.

Box-1: Objectives of Pak-China Free Trade Agreement

According to Article 2 of the agreement objectives are;

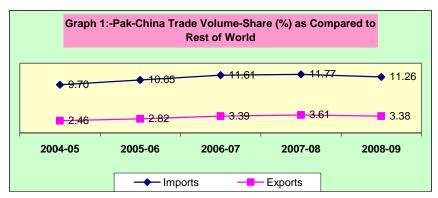
- a) strengthen the mutual friendship between two countries
- b) encourage expansion and diversification of trade
- c) eliminate barriers to trade in, and facilitate the crossborder movement of goods
- d) provide fair conditions of competition for trade
- e) establish a framework for further bilateral economic cooperation to expand and enhance the benefits of this agreement

Source: Ministry of commerce website (website)

Pak-China FTA has been operation from 1st July 2007. The objectives of FTA are shown in Box-1. Further details indicate that under Phase I (Annex-I) there will be reduction or removal of selected tariffs progressively over five years. Pakistan's initial tariff reductions commenced from July 2007 and are to be phased in over five years, commencing January 1 of each year (SRO No.659(I)/2007).

4. Analysis: Trade Patterns of Pakistan:

4.1 Imports: After the enforcement of EHP/FTA the trade volume between two countries has risen. Regarding imports, China is the second largest trade partner of Pakistan. During last four years 151% jump (i.e. Rs.116 billion to Rs. 295 billion) has been witnessed in imports from China. The share in total imports has risen from 9.7% in 2004-05 to 11.7% in 2007-08 (graph 1).



A gradual increase both in imports and exports is evident from graph-1. However, as compared to imports the exports to china have not risen with same pace.

4.2 Item-wise details: The chapter-wise details indicate further insight in respect of imports. There are some items where the imports have increased, whereas, on some items the import volume has decreased during FY: 04-05 and FY: 07-08 (Table 2). The red (colored) rows in the table show the areas where imports have enhanced significantly. It includes electrical machinery, fertilizers, iron and steel & articles of iron and steel, man-made filaments & staple fibres, vegetables and paper & paperboard.

It is encouraging that the aforementioned items which have great importance both for industrial and agriculture production have been the outcome of Pak-China FTA. There seems a Trade Diversion of these key items. Hopefully, with the passage of time our importers will be able to get full benefits of FTA in the shape of reduced rates and cheap raw materials from China. In case of import of cheap raw materials Pakistani export oriented sectors would be able to make their products competitive in world market.

Table 2: Chapter-wise Imports from China (Rs. Million)

Table 2: Chapter-wise Imports from China (Rs. Million) Share in									
		07	7-08	0.4	-05	9/. (Growth	total	
		07	-00	04	-03	/0 (GIOWHI		imp. lue
Description	CH	IMP	Dutiable	IMP	Dutiable	IMP	Dutiable	07-	04-
		Value	Imports	Value	Imports	Value	Imports	08	05
Electrical machinery	85	80,651	58,187	21,211	19,807	280	194	27.4	18.2
Mechanical		,	,	,					
appliances	84	46,164	30,000	28,748	25,544	61	17	15.7	24.7
Fertilizers	31	15,104	2	611	611	2,373	-100	5.1	0.5
Iron and steel.	72	12,824	9,441	2,210	2,048	480	361	4.4	1.9
Organic chemicals	29	12,253	8,904	6,412	4,886	91	82	4.2	5.5
Man-made filaments	54	11,036	10,230	2,874	2,179	284	370	3.7	2.5
Articles of iron or									
steel	73	8,741	7,962	2,042	1,832	328	335	3.0	1.8
Mineral fuels, oils etc	27	7,564	193	3,919	3,914	93	-95	2.6	3.4
Plastics	39	6,784	4,888	2,883	2,710	135	80	2.3	2.5
Man-made staple		c 000	4.612	402	211	1 120	1.202	2.1	0.4
fibers vegetables, certain	55	6,090	4,613	492	311	1,138	1,382	2.1	0.4
roots etc	7	5,925	28	1.997	936	197	-97	2.0	1.7
Inorganic chemicals	28	5,706	4,526	2,631	2,465	117	84	1.9	2.3
Rubber	40	5,084	4,635	3,675	3,655	38	27	1.7	3.2
Vehicles	87	4,782	4,498	3,336	3,247	43	39	1.6	2.9
Miscell.chemical				,					
products	38	4,741	2,647	4,785	4,778	-1	-45	1.6	4.1
Clocks and watches	90	4,580	2,377	1,850	1,474	148	61	1.6	1.6
Tanning/ dyeing									
extracts etc	32	4,259	3,173	2,176	2,015	96	57	1.4	1.9
Ceramic products.	69	3,665	3,648	3,051	3,009	20	21	1.2	2.6
Paper and paperboard;	48	2,596	2,383	804	760	223	214	0.9	0.7
Special classification	99	2,396	2,363	2,563	0	-15	214	0.9	2.2
Silk.	50	2,180	1,337	405	348	-13 414	284	0.7	0.3
Aluminum	76	1,945	1,637	779	756	150	117	0.7	0.3
	64	1,945			1.266	49	50	0.7	1.1
Footwear, gaiters etc	70	,	1,902	1,276	,	-3	-1	0.6	1.1
Glass and glassware. Coffee, tea,	70	1,894	1,873	1,944	1,889	-3	-1	0.6	1./
mate, spices.	9	1,786	1,716	1,391	1,391	28	23	0.6	1.2
Miscellaneous		1,700	1,710	1,371	1,571	20	23	0.0	1.2
manufactured articles	96	1,665	1,285	904	766	84	68	0.6	0.8
Pharmac. Products	30	1,644	1,204	853	853	93	41	0.6	0.7
Furniture; bedding,		,	,						
etc	94	1,478	1,453	693	671	113	117	0.5	0.6
textile fabrics, textile									
articles	59	1,410	1,092	461	355	206	208	0.5	0.4
Soap, washing	34	1 400	760	425	402	231	89	0.5	0.4
preparations Miscellaneous	34	1,408	760	425	402	231	89	0.5	0.4
articles of base metal.	83	1,328	1,228	720	714	84	72	0.5	0.6
Toys, games, etc	95	1,301	1,235	748	736	74	68	0.4	0.6
Other made up textile	75	1,501	1,233	740	730	/	00	0.4	0.0
articles	63	1,115	1,067	142	131	685	718	0.4	0.1
Articles of apparel		,	,						
and clothing									
accessories	61	1,044	1,009	152	134	586	652	0.4	0.1
Articles of apparel &			,						
clothing accessories	62	1,007	1,000	296	250	240	-	0.3	0.3
Sub-total		273,748	182,133	109,460	96,842	150	88	92.9	94.1
Total		294,684	190,926	116,270	102,255	153	87	100	100

Source: Pakistan Economic Survey and PRAL (FBR)

4.3 Exports: Export data indicates that our major export destination is USA with more than 17% share, followed by UAE (9.5%), Afghanistan (5.2%), UK (4.8%), Germany (3.8%) and

China (3.3%) in 2007-08 (Table 3). Currently the China is at number seven, nonetheless, the exports have increased significantly i.e. by 110% during last four years between 04-05 and 07-08.

Table 3: Country-wise Exports of Pakistan (Rs. Million)

				Growth	Share	e (%)	
Countries	07-08	06-07	05-06	04-05	% (07- 08/04- 05)	07-08	04- 05
USA	234,040	253,180	240,481	205,719	14	17.4	25.6
UAE	127,805	83,695	78,519	65,307	96	9.5	8.1
Afghanistan	70,420	28,609	60	713	-	5.2	0.1
UK	64,635	57,120	50,675	53,785	20	4.8	6.7
Germany	51,246	42,235	41,027	41,563	23	3.8	5.2
Italy	45,583	38,535	35,635	34,574	32	3.4	4.3
China	44,192	35,374	26,958	21,063	110	3.3	2.6
Spain	34,173	28,202	24,635	-	-	2.5	-
Netherlands	32,326	30,562	22,540	20,073	61	2.4	2.5
Belgium	25,804	22,689	18,536	18,397	40	1.9	2.3
S. Arabia	24,081	17,942	17,471	19,651	23	1.8	2.4
Oman	14,475	3,943	3,683	2,934	393	1.1	0.4
Iran	14,051	9,236	9,354	5,252	168	1.0	0.7
Others	560,816	376,883	296,520	315,105	78	41.7	39.2
TOTAL	1,196,638	1,029,312	984,841	854,088	67	100.0	100.0

Source: Pakistan Economic Survey and PRAL (FBR)

Being the neighboring country and with FTA enforced, it would not be wrong to expect more exports to China as compared to faraway located countries. During last four years a gradual but slow growth in exports to China has been witnessed (Table 4).

4.4 Terms of Trade between two Countries:

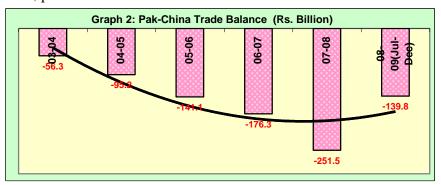
In international trade, **terms of trade** (TOT) has great significance. Last five years Pak-China trade data reveals that terms of trade with china have been deteriorating continuously (Table 4). One of the possible objectives of the said FTA from Pakistan's point of view should have been to improve the TOT with China. There is a positive relationship between exports and economic development. Undoubtedly, the economy of Pakistan largely depends on its exports. Amid fast globalization and stiff competition in international market where, Pakistani exporters are struggling for sustainable export markets, the Pak-China FTA is a great opportunity for Pakistani exporters. The so far data reveals that still there is much scope for maximizing the benefits of Pak-China FTA.

Table 4: Pak-China Terms of Trade

Years	Pakistan	China
03-04	0.24	4.17
04-05	0.18	5.52
05-06	0.16	6.26
06-07	0.17	5.97
07-08	0.15	6.60
08-09(Jul-Dec)	0.15	6.62

During the period under review Pakistan's terms of trade with China have hovered around hardly 0.2%, whereas contrary to this China's Terms of Trade with Pakistan have improved from 5.5% to 6.6%.

Pakistan's exports have increased by 110% against 151% increase in imports during 2004-05 and 2007-08. The trade balance, during the same, period has worsened from Rs. -95 billion to Rs. -248 billion.



Source: Graph made on the basis of data received from PRAL

Is it the issue of limited capacity or policy issue or the preferences of exporters? The concerned quarters need to find out the answers.

4.5 Volume of Free trade:

The volume of free trade which was only 12% in 2004-05 gas gradually reached to 31% in 2008-09. Consequently the dutiable imports have declined during the same period.

Table 5: Imports from China – Volume of Free Trade

Period	Duty Free (Rs. Million)	Duty Free as % of total Imports
2004-05	14,015	12
2005-06	33,433	20
2006-07	52,565	25
2007-08	100,762	35
July-Dec-08	50,504	31

Source: PRAL (FBR)

The increasing volume of free trade is the natural outcome of FTA and it should not be the matter to be worried, as duty free applies only to customs and not other taxes and secondly the overall higher

growth in imports would offset the customs revenue loss and the same has been proved from the import data of last few years, which is being discussed in detail in the following section.

Trade Creation/Diversion:

The trade creation and diversion is the natural and desired outcome of the FTAs. In case of Pak-China FTA a mixed response has been witnessed in respect of trade creation and diversion. The overall trade volume has been enhanced significantly. It has been noted that during last four years the share of 17 commodities (80% of total exports) has declined by around 5% in case of Rest of World (RoW), whereas in case of China this share has gone up from 15% to 39%, or 23% higher (Table 6). A 23% increase in share of exports to China indicates that roughly there is a 5% trade diversion (from RoW to China) and 18% trade creation. The chapters 26, 16, 72, 74 are the major areas where trade has been created and diverted from RoW to China.

Table 6: Pak-China FTA: Trade Creation/Diversion

			Chapter-wise Exports Share(%)						
C H	PCT Headings		RoW			China			
**		04-05	07-08	Diff.	04-05	07-08	Diff.		
12	Oil seeds, oleaginous fruit, grains, etc.	0.29	0.25	-0.04	0.43	1.19	0.77		
13	Lac; gums, resins and other vegetable saps and extracts.	0.20	0.19	-0.01	0.41	1.07	0.66		
14	Vegetable plaiting materials; vegetable products etc	0.01	0.02	0.01	0.02	0.31	0.29		
16	Preparations of meat, of fish or of crustaceans etc	0.35	0.34	-0.01	0.48	2.63	2.15		
23	Residues and waste from the food industries; prepared animal fodder.	0.04	0.05	0.01	0.00	0.23	0.23		
26	Ores, slag and ash.	0.23	0.82	0.59	7.49	21.57	14.08		
41	Raw hides and skins (other than fur skins) and leather.	2.18	1.97	-0.21	5.29	5.88	0.60		
51	Wool, horsehair yarn and woven fabrics.	0.05	0.04	-0.01	0.02	0.10	0.08		
58	Special woven fabrics; tufted textile fabrics; lace; tapestries, trimmings; embroidery.	1.82	0.14	-1.67	0.02	0.04	0.02		
63	Other made up textile articles; sets; worn clothing and worn textile articles; rags.	16.45	14.55	-1.90	1.37	1.60	0.23		
72	Iron and steel.	0.07	0.27	0.20	0.08	2.77	2.69		
74	Copper and articles thereof.	0.05	0.26	0.20	0.05	1.20	1.15		
78	Lead and articles thereof.	0.01	0.00	-0.01	0.00	0.01	0.01		
84	Nuclear reactors, boilers, machinery and mechanical appliances	0.60	0.31	-0.29	0.01	0.39	0.38		
85	Electrical machinery and equipment and parts thereof	0.61	0.00	-0.61	0.01	0.07	0.06		
90	Optical, photographic, cinematographic, medical or surgical	0.39	0.00	-0.39	0.15	0.23	0.08		
95	Toys, games and sports requisites	0.64	0.03	-0.61	0.05	0.13	0.08		
	Impact of Major Chapters	23.98	19.23	-4.75	15.88	39.42	23.54		

Source: PRAL(FBR)

Similarly, there are some areas where trade had not existed before FTA, however after the enforcement of FTA the exports has been started to China. These commodities are shown in Table 7. If this trend continues hopefully FTA shall produce the desired outcome in the shape of increased demand of Pakistani products in China.

Table 7: Items where Exports to China were Nil before 2004-05

СН.	PCT Headings	2007-08 (Rs. Million)
6	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage. Animal or vegetable fats and oils and their cleavage products;	1.7
15	prepared edible fats; animal or vegetable waxes.	4.6
17	Sugars and sugar confectionery.	54.6
21	Miscellaneous edible preparations.	0.2
23	Residues and waste from the food industries; animal fodder.	103.3
33	Essential oils; perfumery, cosmetic or toilet preparations.	8.9
43	Furskins and artificial fur; manufactures thereof.	1.7
65	Headgear and parts thereof.	0.5
78	Lead and articles thereof.	3.3
92	Musical instruments; parts and accessories of such articles.	0.2
	Total	179.0

Source: PRAL(FBR)

4.6 Impact on Trade Tax Revenues:

The loss or gain of revenue depends on the factors like level of reduction in rates, number of items and trade volume of imported items. The nominal loss in revenue, if any, is not the real loss as normally it is compensated by expansion in local economic activities. Particularly, trade creation generates the demand of local goods in partner country, which leads to increase in employment; demand for raw materials, thus benefiting downstream and upstream local industries and creating the opportunities of more domestic tax revenues. Under FTA, normally the custom duty rates are reduced and other taxes like sales tax, WHT, excise duties remain intact. Same arrangement has been made in respect of Pak-China FTA. With the passage of time over the period of last five years the volume of imports from China have increased significantly i.e. from Rs.74 billion in 2003-04 to Rs.292 billion in 2007-08, reflecting a growth of 294%. The analysis of tax revenue has been categorized into two parts; the period under Early Harvest Program (05-06 and 06-07) and enforcement of FTA (1st July 2007 to onwards).

EHP Period: If pre-EHP custom revenues are compared with EHP period (05-06 and 06-07) revenues, the customs duties increased by around 19% in first year and 10% in second year. It indicates that the reduction in rates of selected items had not only compensated the expected loss but also generated more revenues due to higher volume of trade. The share of customs duties collected from Chinese imports was 12.6% and 14.4% at the time of EHP in 2005-06 and 2006-07 respectively.

FTA Implementation Period: After the enforcement of FTA, the expected loss due to reduction in rates of customs duties has largely been compensated by the increase in the volume of trade. It is evident from the table 8, Rs. 17.5 billion were collected under the head of customs duties in 2006-07, whereas this collection grew to Rs. 20.7 billion in 2007-08 or 18.3% higher (within first year of enforcement of FTA). During CFY: 08-09 (July-December) the customs revenue has increased further and its share has gone to nearly 17%. Similarly, other taxes like sales tax and withholding have also risen during the same period. The collection of sales tax has increased from Rs.12.8 billion in 2004-05 to and Rs. 19 billion in 2007-08. During the same period the withholding taxes rose from merely Rs. 97 million to Rs. 5 billion. The 1% SED has also gained a significant share with Rs. 1.6 billion collection in 2007-08.

Table 8: International taxes from Chinese Imports

(Rs. Million)

		S Tax			Reg.		
Period	Customs	(M)	WHT	FED	Duty	SED	Total
03-04	10,058	10,075	0	24	0	0	20,158
04-05	13,450	12,818	97	22	0	0	26,387
05-06	15,947	14,497	1,470	55	9	0	31,979
06-07	17,536	15,596	4,660	66	48	39	37,945
07-08	20,735	18,896	4,956	45	26	1,584	46,242
Jul-Dec 08	11,434	9,504	2,154	18	347	903	24,361
Growth %							
03-04							
04-05	33.7	27.2	-	-7.8	-	-	30.9
05-06	18.6	13.1	1,421.0	146.3	-	-	21.2
06-07	10.0	7.6	217.0	19.6	-	-	18.7
07-08	18.2	21.2	6.4	-32.1	-	-	21.9
Jul-Dec 08							
As % of total tax collection at Import Stage							
03-04	13.1	11.0		2.0	1.0		11.9
04-05	12.9	10.5	51.4	0.3	0.0		11.3
05-06	12.6	10.1	37.5	0.7	21.3		11.3
06-07	14.4	9.8	18.9	0.6	24.1	29.6	11.9
07-08	14.3	10.7	18.4	0.2	12.6	21.2	12.3
Jul-Dec 08	16.6	10.1	14.3	0.2	22.4	23.5	12.5

Source: PRAL(FBR)

So far free trade revenue impact, due to trade creation or trade diversion is positive, which is off course encouraging sign. Therefore, it is projected if this trend of higher trade volume continues; there will be no revenue loss in future. Nonetheless, if there is any loss on revenue front it will be compensated through other gains in shape of more exports, cheaper imports, investment, job creation in local labor market etc.

5. Issues/Concluding Remarks:

The preliminary assessment indicates an overall positive impact of Pak-China FTA so far. As the FTA is in its initial stages so detailed impact evaluation would be possible at least after completion of five years. Nevertheless, generally speaking two pre-conditions that trade creation "dominates" trade diversion and that import prices do not rise, must be fulfilled for the welfare gains and hopefully same principle will hold true in case of Pak-China FTA. Similarly it is expected that with the passage of time free trade and competition will bring efficiency in Pakistan's export oriented sectors and there would be more trade creation in future.

- Declining exports and deteriorating terms of trade: One 5.1 of the major challenges is the lower growth in exports to China as compared to imports and deteriorating terms of trade and trade balance during last few years. The possible reasons could be the lower potential of our export oriented sectors, low quality (not meeting the international standards) and high cost of production. Pakistan economy largely depends on exports and particularly textile related exports, which is more than 60% of total exports. The Pak-China FTA is a good opportunity for Pakistani exporters. It is a fact that competition for exports is very tough in global market and Pakistani exporters face difficulties in finding sustainable markets particularly in Europe. Moreover, it is costly to trade with countries located faraway. In this scenario Pakistani export oriented sectors and specifically textile sector need to concentrate China as the potential future market for textile related finished products, for import of cheap machinery and other raw materials.
- **5.2 Economic integration, regional political stability/ welfare:** It has been discussed in detail that usually the bilateral and multilateral free trade among nations leads to economic integration, welfare, peace and stability in the region. Unfortunately, political instability in the Asian sub-continent has prevailed for long

time and resultantly political harmony has been lacking in the region which has marred the process of economic development. It is established fact that the peace and political harmony are necessary conditions for economic development. The creation of European Union after World War II and its unprecedented economic growth and development in the recent decades is the role model. It is therefore, would not be wrong to expect that Pak-China FTA can be a foundation stone for regional political harmony, peace and economic cooperation among major players like China, Pakistan, India, Bangladesh, Afghanistan etc. The extended cooperation among these nations can convert the region to a powerful economic block, leading towards welfare and prosperity of billions of people living in the region.

For the maximization of benefits of Pak-China FTA following measures would be helpful.

- i. Import of cheaper machinery and further investment from China should be priority areas.
- ii. In the agriculture sector along with the import of cheaper pesticides and fertilizers, Pakistan should focus to take in modern techniques for better quality and higher yields.
- iii. The items goods like fruits, vegetables or seafood, which are difficult and costly to store for long time can reach Chinese markets with lesser time and lesser cost, needs more attention.
- iv. Explore the possibilities of trade creation in agriculture sector of Pakistan as its agriculture sector has the potential to expand particularly in the dairy farming sector.
- v. Ensure quality, efficiency and cost minimization particularly in textile sector.
- vi. Construction of Rail track from China to Gawadar Port would be beneficial in all respects.

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Annexure-I

Phase-I. Tariff Reduction Modality of **China** within five years after entry into force of this agreement:

agreement.	agreement.					
Click to Download	Category No.	Track	No. of Tariff Lines	% of Tariff lines at 8 digit		
	I	Elimination of tariff (Three years)	2681	35.5%		
	II	<u>0-5% (five years)</u>	2604	34.5%		
	III	Reduction on Margin of Preference of 50%(five years)	604	8%		
	IV	Reduction on Margin of Preference from 20% (five years)	529	7%		
	V	No Concession	1132	15%		

Phase-I Tariff Reduction Modality of **Pakistan** within five years after entry into force of this agreement

Click to Download	Category No.	Track	No. of Tariff Lines	% of Tariff lines at 8 digit
	I	Elimination of tariff (Three years)	2423	35.6%
	П	<u>0-5% (five years)</u>	1338	19.9%
	Ш	Reduction on Margin of Preference from 50%(five years)	157	2.0%
	IV	Reduction on Margin of Preference from 20%(five years)	1768	26.1%
	V	No Concession	1025	15.0%
=	VI	Exclusion	92	1.4%

http://www.commerce.gov.pk/PCFTA.asp