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Pakistan's Wage Structure during 1990-91–2006-07

Mohammad Irfan

PAKISTAN INSTITUTE OF DEVELOPMENT ECONOMICS

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Mohammad Irfan

International Islamic University, Islamabad

**PAKISTAN INSTITUTE OF DEVELOPMENT ECONOMICS
ISLAMABAD**

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Pakistan Institute of Development Economics
Islamabad, Pakistan

E-mail: publications@pide.org.pk

Website: <http://www.pide.org.pk>

Fax: +92-51-9248065

Designed, composed, and finished at the Publications Division, PIDE.

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ABSTRACT

This paper attempts to document changes in the wage levels of different categories of workers employed in various segments of the labour market during the period 1990-91–2006-07, according to the information given in the labour force surveys. Wage structure can be analysed from different angles. Here we look at the levels and trends in the broad categories of industry. Further subdivided along the demarcation of formal/informal, and by worker characteristics such as age, sex, education, and occupational categories. Large-scale Manufacturing Industries, Banking Sector, and Civil Servants' salary structure are subjected to investigation for disuring wage trends in the formal sector. The impact of unionism and of the labour and wage policies of various regimes and upon wage outcome is also assessed.

There appears to be a consonance between money wage growth at the aggregate level of the economy and GDP growth. The former registered a positive growth, with the exception of the 1999-2002 period, when the latter had low growth. Time trend of average wage works out to 7.6 percent, which, adjusted for inflation, yields a 0.7 percent trend growth rate in real wages for the 1990-07 period. Real wage growth rate at the aggregative level is characterised by substantial diversity. One finds an inverse relationship between the level of wage rate and real wage growth. Thus workers in the informal sector and commodity producing sectors like Agriculture and Manufacturing suffered a real wage decline during the period under study.

That the real wage gains were denied to the majority of the workers (60 percent or so) lying at the lower rung of the wage distribution rendered the wage structure iniquitous wherein duality further accentuated. The character of the regime tends to have its mark. During the 1990s, the political leadership notwithstanding, low GDP growth and Pressler Amendment appeared to have sympathetic attitude towards labour, which was visible in the virulence of trade unions as well as announcement of the Minimum Wage Policy during early 1990s. However, in the context of labour supply pressure and subdued economic performance, stagnation and decline in real wage could not be avoided. In contrast, there hardly has been any sizeable positive impact on the real wages of the informal sector workers since the turnaround of the economy in 2003. The governmental attitude was reflective of the follow-up of the imperatives of globalisation, weakening of trade unions, and introduction of the changes in the procedures governing the tripartite mechanism and formulation of labour and wage policy. The need to have a fresh look at the labour and wage policy to ensure sustenance and to address inequality issues can hardly be overemphasised.

JEL classification: J3

Keywords: Wages; Wage Structure; Pakistan

INTRODUCTION

This study envisages an examination of Pakistan's wage structure as it evolved during 1990-91 to 2006-07. Wage structure refers to myriad of the wage rates paid to various categories of workers in terms of skill and other characteristics, employed by different firms and industries. These wage rates tend to bear upon different pressing problems of the economy such as poverty alleviation, income distribution, and productive allocation of the labour force. Out of various facets of the wage structure this paper documents the levels and trends of the wages at broad categories/sectors utilising essentially Labour Force Survey (LFS) data for the period 1990-91–2006-07. Availability of the data on Large Scale Manufacturing, Banking and Civil Servants salary structure for the period under review facilitates distinct analysis to be conducted on the formal sector of the labour market.

Wage differentials within a given sector or category generated as an interactive outcome of contractual arrangements and the workers characteristics are also examined. Obviously understanding and analysis of wage structure can be carried out from different angles. It is essentially a reflex of the broader forces of growth and industrialisation which influences labour deployment, hence prescribes different level of wages both at a point of time and over the period. In order to provide a proper context to the analysis of Pakistan's wage structure during 1990-2007, first section of this paper briefly describes the macro-economic developments which may have influenced demand and supply of labour. The second section details information and analysis of the wage levels and their trends overtime for different sectors and other classifications utilising the Labour Force Survey data for the period under review. Large Scale Manufacturing, Banking Sector and Government Pay Scales revisions have been examined and discussed in the third section. Institutional framework such as wage policy, labour legislation and trade unions which influenced the labour market outcome are discussed in the fourth section, whereas final section provides the major findings and offers concluding remarks.

1. MACRO-ECONOMIC CONTEXT

If one were to look at the growth profile of Pakistan over the past sixty years, the GDP growth rates for different decades and periods are characterised by fluctuations and erratic trends. In terms of the decades the 1960s, 1980s, and the sub-period of 2003 to 2007 the annual GDP growth rates were 6 percent or higher,

Acknowledgement: The author expresses his gratitude to Dr Rashid Amjad, Vice-Chancellor, PIDE, for his very productive comments on an earlier draft of this study, and also for providing the finances needed to conduct this study.

while the 1950s, 1970s and the period of 1990-2002 registered annual GDP growth rates hovering around 5 percent or so, with the overall growth rate for the entire period being 5 percent. Both the external and internal factors explain these fluctuations in the GDP growth rates. The high growth periods of Pakistan's economy are generally associated with massive inflow of funds from abroad in the sixties, eighties, and since 2002, while the absence of these inflows and the domestic upheavals and occasional adverse weather characterise the lean periods.

During the first four decades the country more or less followed a development strategy, wherein the import substitution was a major policy during the 1960s, added to this was the nationalisation of 1970s. The next decade experienced with some economic liberalisation till the late 1980s. Beginning with the 1987-88 Pakistan's economy changed its course wherein the IMF/WB Stabilisation and Structural Adjustments packages were implemented till 2003. These policy shifts and good bye to erstwhile planned development were led by the changes in the perceived wisdom and variety of factors particularly the economic conditions.

The slippage of the economy into debt trap around late 1980s and reduction in the foreign aid due to Pressler Amendment in early 1990s, in fact put a halt to the past practices wherein the entire development expenditure and occasionally the current expenditure used to be financed by internal and external borrowing. In order to rectify the internal and external imbalances through curtailing expenditure, raising revenues and better export performance under IMF/World Bank reform packages, the economy was subjected to a discipline. Pakistan agreed to implement various structural adjustment and stabilisation programmes. It is in this context that four programmes beginning with 1987-88 were signed by the Government of Pakistan, with the exception of the last one that is 1999-2003, there were implementation lapses, however.

Decline in the GDP growth during the 1990-2002 period (see Table 1) has been often attributed by analysts to low level of investment and lack of effective demand occasioned by the squeeze entailed by massive reduction in the public sector expenditure to address the problem of budget deficit under stabilisation program. Labour supply pressure could not be addressed due to low level of growth thus unemployment situation worsened and unemployment rate peaked particularly in 2001-02. Furthermore the failure of the state to bring the rich into tax net rendered the taxation structure regressive wherein the poor were subjected to a disproportionate burden. Similarly, the withdrawal of input subsidies in agriculture sector along with provision of international prices to producers benefited only those who had marketed surplus in the agriculture sector which also explains the failure of growth in agriculture during 1990s to have a positive influence on the poverty in rural areas which worsened. The inequality in the economy increased, the Gini index rose from 0.26 to 0.30 according to Federal Bureau of Statistics during 1997-98 to 2001-02.

Table 1

Macro-economic Indicators

Period/Variable	Annual Averages			
	1990-91 - 1994-95	1995-96 - 1999-00	2000-01 - 2003-04	2003-04 - 2006-07
GDP Growth Rate (Constant fc)	5.08	4.02	3.27	7.27
(a) Agriculture	4.2	4.32	0.67	4.72
(b) Manufacturing	5.8	3.82	6.9	11.6
(c) Commodity Producing Sector	5.02	4.12	2.17	7.45
(d) Services	5.12	4.2	4.37	7.12
	As a Percentage of GDP			
Total Investment	19.52	17	16.97	21.95
Public Investment	8.58	6.4	4.63	4.07
Private Investment	9.34	8.82	10.93	13.65
Domestic Savings	12.7	13.42	17.83	15.85
Total Revenue	17.82	16.5	14.13	14.3
Total Expenditure	24.98	23.16	18.07	17.87
Overall Deficit	7.18	6.46	4.1	3.57
Exports	13.16	13.18	12.7	12.7
Imports	18.1	17.12	13.6	17.22
Current Account Deficit	4.51	4.5	2.13	3.1

Source: Pakistan Economic Survey (Various Issues).

Pakistan has been successful in attaining macroeconomic stability by implementing SAP during 1999 to 2003 at the cost of subdued economic performance, and squeeze of the development expenditure. These were also compounded by the occasional erratic weather conditions adversely affecting the growth in agriculture, the major sector of the economy. The conjunctive influence of tariff rationalisation, financial sector reform and privatisation led to closure of factories and downsizing which in turn resulted into substantial job losses. The state ceased to be the employer of the last resort rather assumed the role of the auctioneer wherein a number of the public sector units were disinvested and sold to the private sector having adverse implication for employment generation. It may be added that poverty related expenditure of the government drastically reduced as a percentage of GDP during the decade of 1990s till 2003 thereby crucifying the poor at the alter of macro stabilisation.

Turnaround of the economy during the recent sub period (2003-07) was spurred by domestic demand escalation. Tremendous rather exceptional financial flows from abroad made their resort to Pakistan since 9/11. Scared overseas Pakistanis sent their savings mostly through banking system because of global anti-money laundering initiatives. These were supplemented by public capital inflows as a debt relief and concessional credit, a reward for being an ally on the war against terrorism. These inflows generated a surplus balance of payment, and upsurge in the reserves as well as domestic liquidity. Interest rate fell and credit to private sector increased sharply. The GDP rose during 2004-06, as well as investment picked up and employment situation improved. There was

little realisation however that surplus accumulation was not due to strengthening of balance of payment, an illusionary fiscal space was created. Whereas rebasing of GDP in 1999-00 further strengthened the notion that fiscal deficit was in the limits of fiscal prudence [Zaman (2008)]. Both public and private consumption experienced a massive growth which was heavily import intensive thus glossing over the unsustainability because these were to be kept alive with massive capital inflows as was briefly experienced by Pakistan.

Short run focus preempted the efforts for long term goals such as provision of infrastructure and investment in productive capacity as well as putting up efficient regulatory framework. In addition this short run affluence unfortunately was interpreted as structural shift in the economy. Because of being election year in 2007 the development budget for 2007-08 was substantially increased to Rs 536 billion, and the then regime also avoided to adjust prices of petroleum and electricity. The figment of a prosperous and growing Pakistan withered away as a by product of domestic policies and international rise in fuel and food prices. The nation currently finds itself afflicted with multifaceted economic woes, characterised by some as economic meltdown. Financial inflows are no more in sight, problems are further compounded by food and fuel inflation. Since November 2007 the CPI has risen roughly by one fifth, with the dire consequences for population, in particular the poorer sections of the society. All the macroeconomic fundamentals have by now slipped out of hand with fast depleting foreign reserves. The nation in fact is suffering because of short term and ill conceived policies of the outgoing regime. The new political regime, though currently entangled in the political and judicial crises has yet to demonstrate the departure from the past. Hardly one notices a reversal from liberalism and an effective move towards import compression, and strengthening of the regulatory framework, the need of the hour.

Short term prospects of the sustainability of the GDP growth are bleak. The high inflation rate, widening current account deficits, sluggish export performance, besides failure to increase tax to GDP ratio and national savings are the worrisome factors. Studies conducted in the Growth Diagnostic Framework of Hausseman identify the lack of governance as major constraint to future growth [Qayyum (2008)]. Studies which opted neoclassical growth accounting tend to allude to the low domestic saving as a major bottleneck to future growth [Din (2007)]. So far the economy hardly appears to have benefited much from the globalisation wherein the production of the exports using the cheap labour was an expected outcome, rather the productive structure is more geared to serve the domestic consumption and the much talked about and celebrated FDIs focused on the services sector such as banking and telecommunication, thereby injecting instability to the growth process which is manifest from the worsening BOP situation.

The structure of the GDP in terms of the industrial origin over the years underwent a drastic change. The agriculture sector which contributed to over half of the GDP in 1950s is currently accounting for around 22 percent. The manufacturing sectors share of 19 percent in GDP, in the year 2006-07 is somewhat an improvement over 14.7 percent in 1990-91. In general a shift away from the commodity producing to services sector is visible, the services sector accounted for 48.7 percent of GDP in 1990-91 in contrast to 53 percent in 2006-07. The service orientation of GDP has been rather common in the developing world with the exception of China and ASEAN 4 where the relative contribution of industrial sector to GDP is maintained. One of the reasons could be the direction of FDI flow which according to World Development Report 2004 has been much higher in services than in manufacturing as was experienced by Pakistan too.

Implications for the Labour Market

Erratic growth profile (decline in GDP during 1990-2002 and sharp departure during 2003-07) to be followed by economic meltdown, GDP drift to services and policy shifts entailed by WB/IMF reform packages influenced the labour market. Employment growth in an economy depends upon how fast the GDP grows, variations in the wage rates, and technological choices. Elasticity of employment with respect to GDP reflects the sensitivity pertaining to GDP growth. Overall the elasticity of employment has increased from 0.39 in 1980-90 to 0.70 in 2000-07 (see Table 2).

Table 2

<i>Elasticity of Employment with Respect to GDP Growth</i>				
Sector	1980-90	1990-00	2000-04	2005-2007
Agriculture	0.49	0.45	0.20	0.64
Industry	0.33	0.27	1.07	0.96
Services	0.46	0.94	1.25	0.80
Overall	0.39	0.60	0.71	0.70

Source: SAARC Report 2005 and Pakistan Economic Survey 2007-08.

Both in the industry and services sector the elasticity has increased over the years while in case of agriculture it has drastically declined during 2000-04. Overall productivity growth which reflects, quality of employment generated, has been arrested in particular in the services sector which grew in terms of employment share, as well as in the industry during the period under review. This alludes to the generation of employment opportunities during the period under review in low productivity informal sector. Application of care is needed in the interpretation of elasticity coefficients because of imprecision in the estimation of activity rates and size of the population as well as sectoral employment estimates.

On the supply side of the labour market the country experienced a decline in population growth rate from 3 percent to currently estimated 1.9 percent per year. This in turn led to the rise in working age population as a fraction of total, a phenomenon often described as demographic dividend, which generates spurts in labour supply with a corresponding decrease in dependency ratio. Pakistan's data for the period under study 1990-2007 indicate that the conjunctive influence of the supply and demand factors led to a rising unemployment rate from 4.7 percent in 1992-93 to 8.3 percent in 2001-02, for subsequent period though it declined to 6.3 in 2006-07, though much of the employment expansion occurred in the category of unpaid family helpers during this sub-period.

2. WAGE LEVELS AND TREND 1990-91–2006-07: EVIDENCE BASED ON THE LABOUR FORCE SURVEYS

The documentation of changes in the wage levels of different categories of workers are reflective of the varying allocation of the labour among different firms and industries as well as the different levels of income earned by the workers of various skill and education categories. The wage structure and its evolution overtime can be used as a tool for evaluating labour market outcomes. In developing countries where the measurement of unemployment through conventional labour force surveys has tended to be inadequate, information on wage rates has been strongly recommended for observing changes in the labour market [Godfrey (1993)]. It may be added, however, that the use of wage as labour market monitoring device entails specificity with a particular notion about the functioning of labour markets and the determinants of wages, i.e. it assumes that there is labour market clearance based on forces of supply and demand.

A number of research studies in Pakistan examined wage levels and trends to ascertain labour market outcomes and infer variations in the living standard of workers. Primarily dictated by data availability the major focus of the studies during 1950-70 was on wages in large-scale manufacturing and government employment. That the real wages of the industrial workers improved somewhat during sixties in the manufacturing sector was concluded by Guisinger and Irfan (1974) modifying the conclusion of the pioneering study by Khan (1967). Another study which examined the long term trends in income and wages concluded that in general, real wages had improved during the 1960s [Guisinger, Hicks, and Pilvin (1977)]. For the period 1970-84 real wages of all categories of workers in different sectors, with the possible exception of public sector employees, were found to be improving. During the period 1975-82 real wages rose across the board largely owing to the emigration of 2.5 million workers to the Middle East during a short span of less than a decade wherein the co-terminus inflow of worker's remittances exerted strong pressures on the

domestic labour market. This emigration of Pakistanis affected the labour market directly by reduction in the supply and indirectly through its effect on consumption and productive structure [Irfan and Ahmad (1985)]. With the onset of the decline in the level of emigration in the mid-eighties, and the emergence of the phenomenon of return migration, the labour market though tended to slacken.

Bilquees (2006) examined real wage trends embodied in salary structure of the government during 1991-2005. A key conclusion of this study was that real salaries of civil services across all the twenty-two grades were eroded, significantly to a larger extent for those in higher grades. Irfan (2007) examined the real wage trends yielded by LFS for 1997-2005 and concluded that real wages averaged over the entire country declined during 1997-98 to 2003-04 but for the year 2005-06 registered a paltry (1 percent) gain over 1997-98. The above line of enquiry is extended in the rest of this section covering 1991-2007 periods to examine the nominal and real wage trends by broad sectors, occupations, education of the workers as well as formality and informality of employing enterprise. In addition wage levels and trends of three case studies of formal sector—Large Scale Manufacturing Industries, Banking and the Salary Structure of civil servants are examined too.

Data on Wages—Contents and Limitations

Since 1990-91 FBS has been collecting data on wages through LFS, for every paid employee, the periodicity of payment (daily/weekly, etc.), weekly and monthly income from the main and secondary job, and bonus or other income received during the year is recorded. In addition to cash income, information on value of in kind payments is also solicited from the respondents. Various limitations defy efforts to depict the wage structure by different characteristics of wage employees as reported by the LFS; in particular, the small sample size does not facilitate detailed disaggregation. The LFS 2006-07 covers around 32,000 households wherein the total number of wage employees is not large enough for detailed disaggregation and makes it precarious to decompose for various sub-categories particularly in case of females. In addition, a two stage stratified sampling procedure is used by FBS in these surveys, wherein the urban area is over-sampled because of its heterogeneity. It is in this second round sampling where reportedly household income in urban areas serves as a stratification criterion, the randomness and representative-ness of wage data gets somewhat compromised. Furthermore the sample size of the LFS has varied over the years, in 1990-91 it was around 20 thousand household while in 2006-07 the coverage was extended to 32 thousand households. It may also be added that the wage data are provided by the household members hence may diverge from the employer's wage cost.

Changes in government and to some extent in the corporate sector recruitment practices have complicated the task of assessing inter-temporal trends of wage levels from these surveys. The government as well as some corporate sector employers have made important changes whereby workers are hired at contractual wages, higher than their regular employees though with no pension rights and job security. In addition, the government has also engaged individuals, mostly with strong references, as advisers and consultants on fabulous salaries than it pays to its permanent employees. The grouping of these high level salary recipients, especially in the case of government, with permanent employees in similar positions of responsibility as well as nomenclature, distort the average of those falling in the categories such as occupation etc. in the tabulations based on the survey data. Only a carefully designed wage survey seeking responses from employers as well as from workers can facilitate assessment of such a distinction, to facilitate valid conclusions regarding overtime wage levels and real wage trends. The LFS being a household survey is of limited use in this respect. Keeping the above caveats in view, the wage levels as provided by Labour Force Surveys of 1990-91 to 2006-07 are discussed below to depict changes in the wage levels and the resulting trends in nominal and real wages.

Wage Employment—The Contractual Context

Wage employment accounts for more than one thirds (37 percent) of the total employment with higher level of male presentation (40 percent) than the female (26 percent) in the year 2005-06. The Labour Force Survey classifies the employees in terms of: (a) regular employees with fixed wages; (b) casual paid employees; (c) piece rated employees; and (d) paid non-family apprentices. For instance, piece rated and casual employees account for 43.6 percent of total employees in 2005-06. This proportion varies by education and type of enterprise. Nearly 65 percent of illiterates fall in this category, compared to 22 percent of matriculates and 3.2 percent of the graduates and those with higher qualification. In terms of enterprise structure, only one-fourth (25 percent) of those in the informal sector are regular employees in contrast to 97 percent of those in the government. Casualisation of the wage employment has increased over the years; the share of the casual paid employee went up from 24 percent in 1997-98 to 26 percent in 2005-06. The proportion of daily wage earners has risen from 18 percent in 1997-98 to 21 percent in 2005-06 with a compensating decline in the share of those paid on monthly basis. In essence, one can conclude that the job structure for wage employees has shifted towards irregularity and informality. The share of informal sector has risen from 52 percent to 58 percent while that of the government declined from 26 percent to 21 percent during 1997-98 to 2006-07. It may be added that the regularity discussed above only partly alludes to the contractual practices because a contract worker getting fixed monthly wages through the contractor, rather than the employer, can be

regarded as regular worker in the LFS which does not provide information on the contract workers.

Wage Differentials

Wide wage differentials by workers and job characteristics mark the wage structure. These differentials have persisted over time but also appear to have widened. The LFS 2005-06 for instance reports an average wage of Rs 4,988 per month for all areas. The average wage in rural areas is around 83 percent of this wage, while the average for urban areas was 20 percent higher than the national average. Gender disparities reflected in the male/female wage yielded by the data are provided in the Appendix Tables 1 and 2. Female wage employees earned around 64 percent of the average wage of males in 1990-91, the relative position of females worsened during 1990-2004 but slightly improved in 2006-07 to regain somewhat. Rural/urban wage differentials narrowed somewhat during 1997-2006; still a rural female wage earner was getting only 51 percent of her counterpart in urban areas in 2005-06. These differentials are further examined below controlling for the formality of the job structure and regularity of the job using the LFS 2003-04 as a case study to highlight the complexity of investigation of the wage structure.

The Table 3 below suggests that regular employees enjoyed double the wages of non-regular employees; overall the wages of the latter were 54 percent of the former. The edge of regular employees was sharper in the case of the formal sector, where non-regular workers earn half of the wages of their regular counterparts. In case of those in government employment it is two-thirds. The table presents a comparison between wages of regular employees and the average wage of all employees, including both regular and non-regular. Gender related wage differentials between regular and all employees are wider in the informal sector than in the formal sector, particularly in the case of females in the informal sector. Moreover, the distribution of all wage employees indicates that 59 percent of them work in the informal sector (both male and female) but in case of regular employment the share of informal sector declines substantially to almost 30 percent wherein the government emerges as a major provider of regular jobs. In fact, only 28 percent of the informal sector employees are classified as regular with a preponderance (80 percent) of non-regular female workers in the informal sector, accounting for 54 percent of female wage employment. The last two columns of table show the wage ratio of all employees to that of regular employees by geographical division and by type of enterprise, which suggests that females in informal sector earn only 59 percent of their counterpart regular employees in urban areas.

It needs to be highlighted that the differentials associated with different attributes of worker, varying contractual arrangements and enterprise structure as outlined above simply are reflective of the difficulties in examining the

Table 3

*Monthly Wages of Regular and All Wage Employees, by
Type of Enterprise and Sex – 2003-04*

Type of Enterprise by Sex		Monthly Wages (Rs)		Wage Ratio	% Distribution of Employees		%	Wage Ratio All/Regular	
		All Employees	Regular Employees	Reg/All	Regular	All	Regular Employees	Rural	Urban
Both Sexes	Government	6585	6656	1.01	40.4	21.0	96.7	0.75	0.75
	Formal	4501	5596	1.24	28.92	23.8	61.1	0.51	0.52
	Informal	2875	3027	1.05	30.92	55.2	28.7	0.82	0.82
	Total	4045	5237	1.29	100	100	52.05	0.69	0.72
Male	Government	6719	6794	1.01	39.5	21.4	96.4	0.77	0.71
	Formal	4939	5868	1.18	29.3	23.4	65.3	0.55	0.51
	Informal	3055	3187	1.04	31.0	55.2	29.2	0.84	0.82
	Total	4278	5401	1.26	100	100	39.9	0.52	0.50
Female	Government	5663	5722	1.01	47.4	19.3	98.0	0.59	0.61
	Formal	2111	3022	1.43	25.4	26.6	38.0	0.49	0.54
	Informal	1737	1540	0.89	27.1	54.1	20.0	0.73	0.59
	Total	2595	3900	1.50	100	100			

Source: Tabulations based on Labour Force Survey data.

overtime evolution of the wage structure. These differentials get masked when wage levels are examined at broad sectoral/industrial level and occupation etc. Also given the limited number of observations some variable of interest can hardly be discussed at length. Still an effort is made to analyse the wage level their time trends and variation in the wage differentials between different categories as identified by broad sector, occupation, age groups and educational levels controlling for sex for 1990-91 to 2006-07 period.

Nominal and Real Wage Growth—A Broad Overview

At a highly aggregative level of the economy the LFS data suggests that money as well as real wages experienced a positive growth during 1991-98 but then declined during 1999-02, and registered a reversal of the trend during 2003-07. The data exhibit year to year wide fluctuations for instance, picking at initial and terminal years, money wage grew by 324 percent in 2006-07 over the base year 1990-91. The time trend growth rate for the entire period works out to 7.65 percent in contrast to 7.24 percent registered by CPI thereby yielding 0.7 percent trend growth rate in real wages. The real wage growth rate of 1990s was lower than the per capita GDP growth; though during 2003-07 real wages grew at a rate higher than the per capita income growth.

During the period under review the wage growth rates exhibited substantial diversity by level of wages as well as by other classificatory schemes. Table 4 below depicts the distribution of wage earners by pentiles for few selected years of the time period. The bottom three groups accounting for 57 percent of the total wage employees in 2006-07 experienced a straightforward decline in real wages, while the remaining (43 percent) suffered a decline in real wages during 2001-02 but then recovered the position in 2006-07 as compared to 1993-94 while those at the top pentile exhibited immunity from real wage decline. Overall wage distribution has worsened wherein the Gini Index increased from 0.34 in 1993-94 to 0.39 in 2006-07.

Table 4

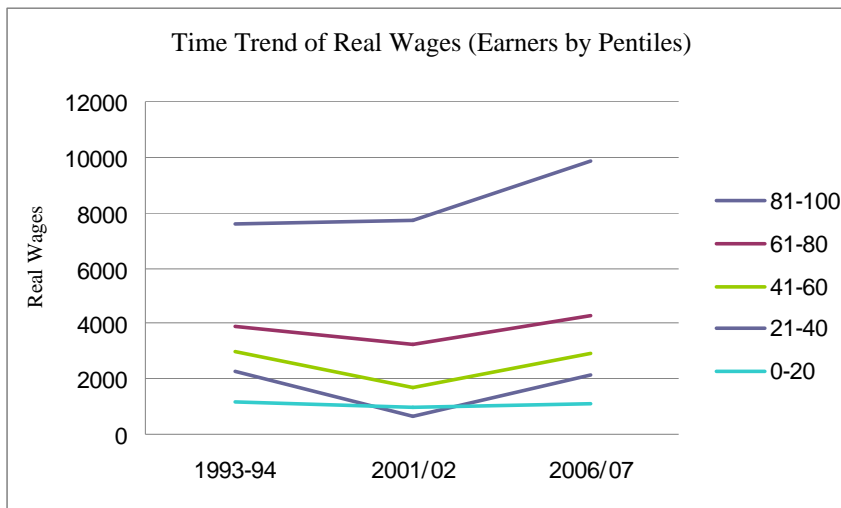
Distribution of Wage Earners (Pentiles)

Pentile	1993-94			2001-02			2006-07		
	Real Wages	Wage Share (%)	Empl. Share (%)	Real Wages	Wage Share (%)	Empl. Share (%)	Real Wages	Wage Share (%)	Empl. Share (%)
0-20	1166	6.82	20.95	992	2.09	1939	1099	5.83	21.74
21-40	2255	12.77	20.28	639	4.5	1911	2121	8.56	16.52
41-60	2987	14.13	16.95	1684	13.93	22.44	2928	13.73	19.19
61-80	3889	23.64	21.77	3267	23.21	19.28	4288	23.64	22.56
81-100	7618	42.63	20.05	7725	56.28	19.77	9875	48.24	19.99

Source: 1. Based on Labour Force Survey Data Tabulation.

2. Real wages have been arrived at using CPI with 2000-01=100.

Pakistan Economic Survey 2007-08.

Graph 1. Average Monthly Real Wage Trend (Pentiles)

As already emphasised that growth rates of the wages also differ widely by workers and job characteristics. The trend growth rate in money wages for female was 7.3 percent compared to 7.78 for male. Similarly one finds that wages in agriculture registered a lower growth rate compared to other sectors (see Table 5). In general trend growth rates were lower for those workers which were already at the lower rung of the wage hierarchy as reflected by the pentile wage distribution, such as female, illiterates and those working in agriculture, thereby exacerbating wage differentials overtime. Below we examine further the changes in the wage differentials and the nominal and real wage trends for different industries/occupations etc. for the period under review.

Table 5

*Average Monthly Nominal Wages (Percent Time Trend Growth Rate)
1990-91–2006-07*

By Sex of Employee		By Sector of Employee		By Education of Employee	
Male	7.78%	Agriculture	4.77%	No education	6.24%
Female	7.36%	Manufacturing	6.87%	Matric	7.31%
Both Sex	7.65%	Trade	6.66%	Degree	8.39%
		Finance and Real Estate	9.18%		

Source: Based on LFS Data Tabulations.

Wage Level and Trends, by Industrial Sectors

Inter-industrial wage differentials get compressed by excluding Finance and Real Estate which tops the ranking of wage ladder. However as a fraction of the average wages in Finance and Real Estate (see Table 6) nearly all the

industries suffered a relative decline. In case of agriculture for instance it dropped from 34 percent to 23 percent during 1990-91 – 2006-07. Nearly all the industrial categories had a similar experience except Services sector which remained steadfast with its relative position having average wage roughly half of that of Finance and Real Estate in 2006-07. Inter-industrial wage differential though widened but the wage ranking by industry appears to have remained stable.

Table 6

*Average Monthly Nominal Wages, by Industrial Sectors 1990-91–2006-07
(as a Percent of Finance and Real Estate Sector)*

Year	Agriculture	Manufacturing	Trade	Construction	Services
1990-91	34.01	45.88	43.24	39.78	48.50
1991-92	34.41	42.87	36.49	34.93	45.58
1993-94	23.56	39.44	37.75	34.05	43.18
1996-97	24.47	37.87	33.78	31.27	40.03
1997-98	24.31	40.85	36.03	32.85	42.74
1999-00	18.42	31.14	27.60	27.02	35.70
2001-02	6.60	20.34	20.18	6.76	27.76
2003-04	17.70	30.26	25.18	25.49	39.37
2005-06	19.01	31.30	28.55	29.73	46.14
2006-07	22.80	39.78	34.25	35.30	52.78

Source: Tabulations based on LFS data.

Finance and Real Estate as base = 100.

The manufacturing sector which accounts for 24 percent of wage employment ranks sixth in the wage hierarchy presumably because of the low education base of its employees as well as informality and primitive technological base (see Appendix Table 1). Similarly, the construction sector is associated with below average wages, while agriculture registered the lowest level of wages. In fact, the casual labour working in the sectors of agriculture or construction is often viewed as a typical example of a free labour market, the daily wage rate in construction functioning as a reference or an index of the 'reservation wage' for unskilled labour. FBS collects data on daily wage rates of construction workers which suggest that on the average both Carpenter and Mason experienced money wage time trend growth during 1990-07 by 6 percent per year which is less than that of CPI. In case of unskilled labour the growth rate gets slightly higher than CPI only if 2005-07 data are included (see Appendix Table 9).

Nominal and Real Wages (provided in the Appendix Tables 1 and 2) are suggestive of a decline in real wages mostly in commodity producing sectors. Average wages in the agriculture in real terms suffered a straight decline since 1991-92 while the manufacturing sector had a similar experience since 1997-98, a period when it experienced employment growth. In the same vein the workers

in the construction sector suffered a decline till 2005-06, with a rise in the subsequent year. Real wages experienced a growth in Finance and Real Estate, the top ranking in the wage hierarchy, during 1990-02, but since then it suffered a decline, interestingly during a period when most of the other industries had a real wage gain. This could be due to compositional changes in the banking sector, which is also discussed in this study and the depressing effect of 2005 earthquake on the real estate business.

It may be added that during 1990-07 the employment growth in manufacturing was the largest (4.37 percent per annum) to be followed by services while the trade ranks third (3.48 percent). Juxtaposition of these growth rates with wage trends is reflective of an inverse association between employment and real wage growth, in Manufacturing and Trade, thus alluding that labour market may have acted as a sponge in these sectors.

Occupational Wages

Since the small sample size does not permit detailed cross-tabulations at two digit level one can review wage differentials by broad one digit level occupational classification only. It may be noted that occupational category may be only peripherally associated with education or skills of the workers. In addition, there appears to be some changes in coding introduced since 1996-97 LFS in case of the top two categories, therefore, these two are averaged for analysis. Overall one finds a ratio of 4 to 1 for salaries of senior officials to elementary workers in 2006-07. Blue collar workers in general get a minor fraction of those of the white collar workers. The occupational wage ranking appears to have been stable during 1990-91 to 2006-07, though the differentials have increased overtime.

The overtime changes in the inter-occupational wage differentials have been reported in Table 7 below. The ratio of average wage of an occupational category to the average of top two occupational categories given in the table suggests a decline during the period under review. For instance elementary occupation experienced a decline from 41 percent in 1990-91 to 21 percent in 2006-07, a dramatic diminution in relative position. All the other occupational categories with the exception of clerical underwent a worsening position in relation to top two occupations, though the decline was not as dramatic as in the case of elementary workers. The occupational category of the clerical achieved a relative rise in its ratio during 1990-91 to 1997-98, then exhibited a stagnation or decline.

Overtime changes in the inter-occupational wage relativities discussed above in fact reflect the sharp intra-occupational differentials which are perceptible by regularity as well as gender and rural/urban location as already discussed. Graph 2 below depicts the time trend of occupational wages.

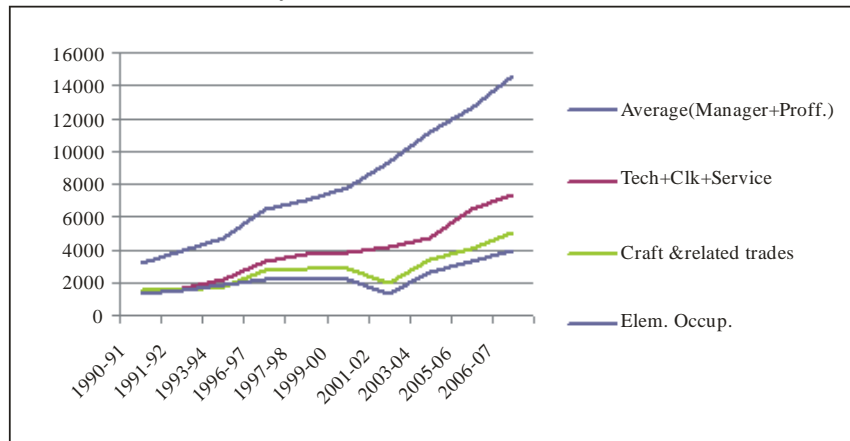
Table 7

*Average Monthly Nominal Wages by Occupation 1990-91–2006-07
(as a Ratio of Manager + Professional Wages)*

Year	Tech. and Related	Clerk	Service Workers	Craft and Related Trades	Plant and Mach. Opr.	Elem. Occup.
1990-91	53.18	45.91	37.89	47.37	46.68	40.93
1991-92	52.60	39.36	37.12	38.02	43.01	38.13
1993-94	53.58	47.10	39.34	37.90	45.32	39.21
1996-97	54.79	58.50	40.25	41.92	50.38	34.80
1997-98	55.97	62.87	43.36	40.79	55.09	33.54
1999-00	48.66	59.05	38.75	37.06	45.51	28.19
2001-02	46.58	55.45	32.47	20.58	38.29	13.68
2003-04	46.70	47.03	33.38	29.98	38.28	23.74
2005-06	51.17	65.01	38.02	32.34	38.89	26.17
2006-07	53.15	60.01	39.16	34.51	42.68	21.23

Note: Combined average of senior officials and managers plus professional wages taken as base = 100.

Graph 2. Average Monthly Nominal Wages, by Occupation and by Sex, 1990-91–2006-07



Nominal and real wage data for all occupations are reported in the Appendix Tables 3 and 4. The data reflect that with the exception of top two occupational categories which experienced a persistent gain during the period under review, there was a rise in real wages during 1990-91–1997-98, followed by a decline uptill 2001-02 and an upsurge during 2003–07. In case of elementary occupation accounting for 35 percent of the wage employees in 2006-07, however, the picture is different, real wages declined since 1992 and the real wages were 12 percent less in 2006-07 than 1991-92. In other words the real wage gain was denied to those lying at the bottom of wage hierarchy as depicted by occupational distribution.

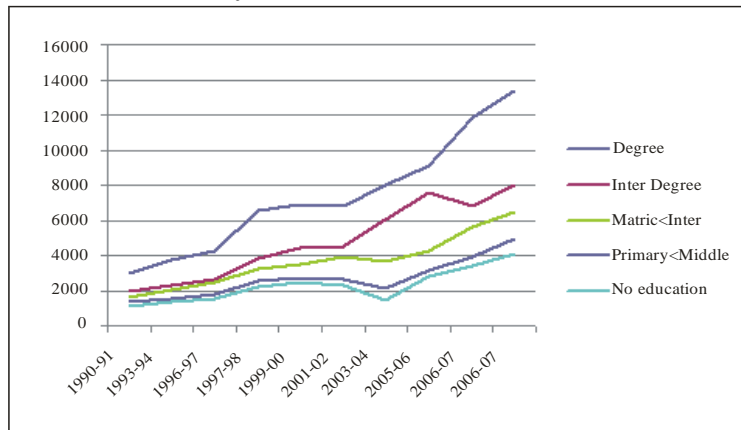
Education of Employees

Educational attainment and average wages of employees depict the familiar positive correlation between level of education and average wages. For instance, the LFS 2006-07 shows that illiterates were earning only 30 percent of that earned by graduates and above. This differential appears to have widened during the period under review with wages of illiterates being 37 percent of those of graduates in 1990-91.

The regularity of the job influenced wage levels. For instance, a closer scrutiny of LFS 2003-04 suggests that a worker equipped with a BA or higher degree and working as a casual paid employee is, on average, getting less than a regular employee who had completed primary level of schooling. There is also a linkage between the type of enterprise and the level of wages. A matriculate in the informal sector was earning only 60 percent of his counterpart in government service and 78 percent of the earnings of a matriculate employed in the formal sector. These differential emanating from the characteristics of the job is important, however, for overtime examination of real wage changes these could not be incorporated.

Nominal and real wages reported in Appendix Tables 5 and 6 are suggestive of the divergent wage growth trajectories. Most of the educational categories with the exception of graduates and above experienced a decline in nominal money wages during 1999-02. The trend growth rates in money wages were the largest for graduates and above (8.4 percent) while it was 6.2 percent per year for illiterates for 1990-07. The real wage trends indicate a decline for illiterates through out 1990-07, for other categories the 1997-02 was a lean period, though the experience of the primary educated was not much different than the illiterates.

Graph 3. Average Monthly Nominal Wages, by Education and by Sex, 1990-91–2006-07



Age of the Employees

Age earning profile reflects positive association till the age group of 60 plus, whose wages are 25 percent less than that of the adult (30-59 years). Teenagers lie at the lowest rung having 39 percent of the adult wage. Youth exhibits a better position but get 70 percent of those of the adults in the year 2006-07. Perusal of the data is suggestive of widening differentials overtime. For instance teenagers were having 57 percent of the adult wages during 1990-91, which underwent a diminution subsequently.

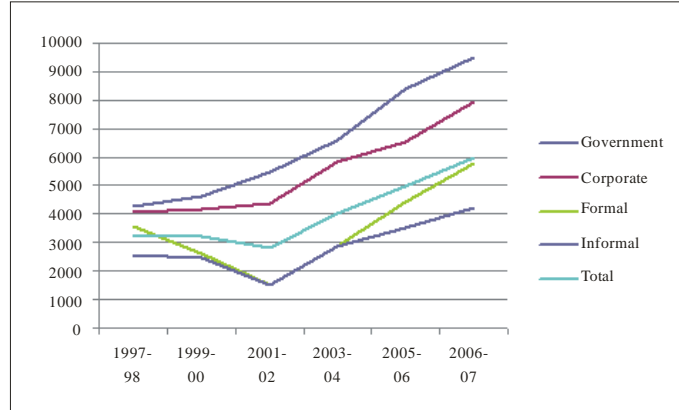
Nominal and real wages for the period 1990-91–2006-07 are provided in the Appendix Table 7. While the teenagers suffered a decline in real wages since early 1990s, the youth experienced the same fate except that real wages reflect an improvement in 2006-07. The real wages of adult experienced a cut during 1999-02 and then had an upsurge subsequently, a trend also shared by employees belonging to the age cohort of 60 years plus.

Formal/Informal Divide

The Labour Force Survey since 1997-98 provides information on the type of enterprise in which the individual is employed. In this study, government employment is distinguished from private formal employment. Thus, all those reported to be working in Federal and Provincial government. Local Bodies and Public Sector Corporations are classified as Government employees. Corporate sector is distinguished from the formal sector comprising those working in unincorporated establishments where the number of workers is 10 or more, the remaining are classified as working in the informal sector. The share of government employment in wage employment has shrunk from 26 percent to 21 percent during 1997-98 to 2006-07. The LFS data suggests a rise in the share of the informal sector from 52 to 58 percent as well as marginal growth in the share of corporate sector from 12.6 to 14.8 percent during this period. There are perceptible differentials by gender, while 57 percent of female are engaged in informal sector employment mostly in manufacturing; while in case of male the trade emerges to be the single largest absorber (37 percent) in informal sector.

Wage structure cross-classified by the type of enterprise is indicative of wide wage differentials. While the government rather public sector employment fetches the highest wages to be followed by corporate sector, both the unincorporated formal and informal sector pay wages below the overall average. Nearly all the wage employees in the three types of enterprises corporate, formal and informal sector suffered a relative decline in their relative wages as compared to public sector employees during 1997-98 to 2006-07, the worst sufferer being informal sector which displays a precipitous fall in the average wage as a fraction of government plummeting from 60 percent to 44 percent with much worsening situation for female in the informal sector (a fall from 43 percent to 26 percent). Interestingly the corporate sector also lost its relative importance as a paymaster as compared to public sector. Unincorporated formal sector appears to have been nearer to informal sector in this respect than the other sectors.

Graph 4. Average Monthly Nominal Wages, by Enterprise Type and by Sex, 1997-98–2006-07



During the period under review the largest money wage growth was registered by the public sector (9.1 percent during 1997-98–2006-07) to be followed by the corporate sector which yielded 7.5 percent growth in average wages. Non-corporate formal and informal sector average wage grew around 6 percent per annum but the latter was at a disadvantageous position. The lowest money wage growth rate is associated with the female in the informal sector (5 percent) in contrast to male with government enjoyed 9.2 percent per year.

Both nominal and real wage data are provided in the Appendix Table 8. The real wages in the government employment exhibit a stagnant trend during 1997-98 to 2001-02 with a sharp upturn during 2003-07. Real wage erosion took place in the corporate sector with a rise in 2003-04 followed by a dip in the next year. For the year 2006-07 the average real wage in corporate sector was 21 percent higher than in 1997-98 but most of the raise took place in 2006-07. Average real wage in the informal sector had a nose dive, though average real wage in 2006-07 was 1 percent larger than in 1997-98. In case of female in the informal sector there was a straight forward decline with real wages being lower in 2006-07 as compared to 1997-98.

3. WAGE LEVELS AND TRENDS IN THE FORMAL SECTOR—CASE STUDIES

Large-scale Manufacturing

The information pertaining to wages in large-scale manufacturing sector is available only for three years (1990-91, 1995-96 and 2000-01), which are used to work out the nominal and real wage trend, during the 1990's. The data based on Census of Manufacturing Industries (CMI) suffer from limitations such as under-reporting, response error and non-coverage. Since our discussion is

confined to discussion of wages, a ratio of employment cost to the number of workers it may be less influenced by variation in coverage. In addition there is absence of the information on the characteristics of the workers as separate data are available only on production and the non-production worker; the latter in particular covers wide-ranging skills such as General Manager as well as night watchman. It may be added that information on contract workers is not available as they are added to employees, mostly to production workers.

Table 8 provides aggregate level information on LSM which indicates that both number of the reporting establishments and employment declined during 1990-95 but then experienced an improvement in 2000-01, wherein both total employment and that of production workers rose but the number of non-production workers were lower in 2000-01 than in 1990-91, hence a relative rise in the ratio of production to non production workers. At this aggregative level the average annual real wages of all employees category rose during 1990-95 but then stagnated with the result that annual real wages were roughly similar in 2000-01 as compared to 1990-91. There appears to be a divergence between the real wage trends of the production and non-production worker wherein the latter which were trimmed in relative size yields a real wage gain of 8 percent in contrast to declining real wages for the former in 2001 over 1991.

Table 8

Average Daily Employment and Yearly Real Wages (Rs)— Large-scale Manufacturing—All Industrial Categories

	Large-scale Manufacturing		
	1990-91	1995-96	2000-01
No. of Reporting Establishments	4792	4474	4528
Average Daily Employment (All Employees)	622234	561821	689692
Average Daily Employment (Production Workers)	492301	440276	560905
Non Production Workers	129933	121645	128787
Average Real Wages Per Year (All Employees)	98760	102070	99190
Average Real Wages Per Year (Production Worker)	87670	91430	86920
Average Real Wages Per Year (Non-production Workers)	140770	140500	152610

Source: Census of Manufacturing Industries (Various Issues).

Detailed data at the two digit level classification of industrial category of the Manufacturing Sector suggests that for all the three years the Chemical, Non-Metallic Minerals, Basic Metal and Metal products lie at the top of the wage ranking while the textile, food, wood and handicrafts lie at the lower end (see Table 9). The wage hierarchy appears to have remained strongly stable with rank correlation co-efficient of 0.9 for the two years of 1990 and 1995. For instance the textiles accounting for over half of the LSM employment occupies 7th rank out of the total 9 industries for the years under comparison. During the period under review the share of LSM employment in the three low wage industries increased from 60 percent to 72 percent, thus the aggregate level

Table 9

Average Annual Real Wages, by Industrial Categories

		Rs (000)								
Category	Industry	1990-91			1995-96			2000-2001		
		All Employees	Production workers	Non-prod. Workers	All Employees	Production Workers	Non-prod. Workers	All Employees	Production Workers	Non-prod. Workers
3	All Industries	98.76	87.67	140.77	102.07	91.43	140.50	99.19	86.92	152.61
31	Food, Beverages and Tobacco	91.36	86.16	102.57	91.81	85.92	105.57	94.13	93.70	117.07
32	Textile, Apparel, and Leather	71.83	67.21	98.37	72.41	69.53	87.99	69.09	65.68	89.38
33	Wood, Wood Products and Furniture	59.12	52.43	90.19	51.20	43.50	81.20	58.82	52.40	84.49
34	Paper, Printing and Publishing	109.27	102.17	131.09	98.65	88.91	128.77	111.92	100.04	155.58
35	Chemical, Rubber and Plastics	160.80	134.98	220.34	163.95	135.41	229.31	217.67	167.81	326.30
36	Non Metallic Mineral products	132.51	127.06	151.37	141.11	131.47	174.70	127.66	127.83	127.03
37	Basic Metal Industries	167.34	155.81	202.45	180.23	173.23	202.64	175.37	172.55	185.50
38	Metal Products, Machinery, Equip.	110.63	90.39	189.44	129.28	108.82	191.76	142.36	121.66	228.34
39	Handicrafts, Sports, Other Mfg.	55.92	47.92	146.96	67.62	57.93	115.05	68.01	57.12	164.01

Source: CMI 1990-91, 1995-96, 2000-01.

Note: Real Wages are calculated using CPI with 2000-01 = 100.

stagnation in real wages could be partly due to this compositional change. Partly this could be generated by variation in the coverage because the 1995-96 census provides information on lesser number of firms. A closer perusal reveals that high wage industries experienced a gain in real wages or tended to stagnate while the low wage industries suffered a decline during 1990-2001. In general the real wages of the production worker declined but in the low wage industries real wage of the non-production workers also declined. The disaggregated data in terms of high and low wage bifurcation yields an inverse association between employment growth and real wage growth for the period under review.

LSM has been subjected to various changes such as tariff rationalisation and privatisation during 1990s. Impact of liberalisation on employments and wages in LSM has been examined by number of researchers. Yasmin and Khan (2005) in their study on "Trade Liberalisation and Labour Demand Elasticities: Empirical Evidence for Pakistan" utilising the LSM data for 1970-71 to 1995-96 found through econometric estimation that when trade is used as a measure of the openness it has a positive and significant effect on employment. However, the conclusion gets reversed when import duties are used as a measure of trade liberalisation. The study also finds that labour demand elasticities increase after the tariff reduction, thereby exerting pressure on employment and wages. In a recent paper Javed and Misbah (2005) examined 1970-71 to 2000-01 data on LSM to assess the effect of trade liberalisation on employment and wages. The empirical results of the study suggest that when tariff rate is used as a measure of liberalisation it influences positively the employment but with no effect on wages. When openness is used as a measure of liberalisation it has negative effect on employment and no effect on wages. These studies, therefore, could not provide firm conclusion on the likely impact of liberalisation on wages.

During the past two decades or so the economy has undergone a number of structural transformations with major emphasis on the export oriented industrialisation to let the manufacturing sector act as a catalyst for change. The export data do suggest that manufactured exports as a share of the total has risen from 57 percent in 1990-91 to 78 percent in 2005-06. However if the exports are classified according to the level of technology used then as per ADB (2004). Lall indicates that structural transformation was confined to low technology goods. In other words the performance of the export sector such as textile has been based on unskilled or semiskilled labour, which provides an explanation for the average real wage decline in LSM during 1990-2001. The real wages of both production and non-production workers in textiles, accounting for 58 percent of total employment in 2000-01, have declined during the period under review, though the textile registered an increase in the employment, while most of the remaining industrial categories suffered a loss on this count. Thus, employment expansion in textile took place by exerting downward pressure on real wages.

Banking

Pakistan pursuing globalisation experimented with financial sector reforms beginning with 1991. Bank ownership or the corporate governance underwent a change wherein state owned banks were privatised, foreign banks entered and also mergers and acquisitions took place. The Table 10 below provides some detail on the changes in the governance structure.

Table 10

Number of Banks and Branches, 1995-2000

Year	All Banks		State Owned		Private		Foreign	
	Banks	Branches	Banks	Branches	Banks	Branches	Banks	Branches
1993	37	7397	7	7058	13	284	17	55
1997	40	7828	6	5241	16	2510	18	77
2000	39	7367	6	4864	14	2425	19	78
2003	37	4946	5	1491	18	3390	14	65
2004	36	5580	4	1528	20	3975	12	77
2005	35	5867	4	1575	20	4189	11	103

Source: Abid A. Burki and Shabbir Ahmed (2008) "Corporate Governance Changes in Pakistan's Banking Sector: Is there a Performance Effect" LUMS and IIIE, International Islamic University, Islamabad, (Mimeographed).

Prior to 1990 the banking was dominated by 5 state owned banks though there were 16 foreign banks allowed to operate with restrictions upon setting up new branches. Financial reforms introduced in 1991 were characterised by liberalisation and institutional changes. Ten new private banks and three new foreign banks were allowed to enter and operate. Restrictions on the opening of branches were removed in 1994. State owned banks like, MCB, ABL, HBL and UBL were privatised. As a result the share of state owned banks in banking assets fell from 74.5 percent in 1991 to 20 percent in 2005. Because of downsizing and restructuring of state owned banks employee separation schemes were introduced and around one fifth of employees opted for golden shake hand schemes from five banks in 1997. Also 26 percent of the total branches of these banks were closed in 1996, though the closure of loss making branches continued since then also. As reflected by the table number of bank branches started declining since 1997. The decline in the share of state owned banks was associated with expansion in the private sector which was also strengthened due to acquisitions and mergers wherein foreign banks were purchased by private sector during 2000-2005.

Available data based on Annual Bank Reports provide information only on total employment hence compositional changes in terms of skill or education of the workers is simply not available. Total employment in banks according to the data increased from 23.8 thousands in 1991 to 31.7 thousands in 1997. Since then it kept on decreasing till 2002 (29.8 thousands, with an upward trend since

2003 wherein employment in 2005 was 31.9 thousand). These data suffer from variation in the coverage wherein the numbers of banks covered fluctuate by years.

The annual average wage in real terms grew by 70 percent in 2005 over 1991 (see Table 11). This growth was higher for foreign banks (78 percent) than Pakistani banks (66 percent). On the average Foreign banks were paying 25 percent higher wages than Pakistani in 1991, though this differential fluctuates over the year but is still 34 percent for 2005. Time trend exhibited by the table is suggestive of a rise in real wages till 1996 (thereafter stagnation and decline occurred particularly in Pakistani banks wherein annual wage declined from Rs 474 thousands in 2001 to 352 thousands in 2005, a decrease of almost 25 percent. The annual wages reported by foreign banks also exhibited stagnation and decline during 1998-2003 though some recovery is visible for the year 2005. The real wage trend obtained for the privatised banks tends to follow the Private Banks, real wages rose up till 2001 and then declined subsequently. The privatised banks were paying lower than the private banks till 2001 but then these banks improved their position as a better pay masters than private banks (see Table 11). Unfortunately the data are not available for recent period for 2005-07 when banking sector experienced commendable growth.

Table 11

Average Annual Real Wage, by Type of Banks, 1991-2005 – (Rs)

Year / Bank	Annual Average Wage (Real)				Ratio of Privatised to Pakistani Banks	Ratio of Foreign to Pakistani Banks
	Foreign Banks	Pakistani Banks	Total Banks	Privatised Banks		
1991	265236	212935	218242	220027	1.03	1.25
1992	324186	231094	242095	222793	0.96	1.40
1993	351384	289773	297292	275441	0.95	1.21
1994	368866	298428	307815	271171	0.91	1.24
1995	380450	343002	348411	279850	0.82	1.11
1996	395541	320497	332195	251727	0.79	1.23
1998	481178	345634	369423	300375	0.87	1.39
1999	435382	370445	381871	327265	0.88	1.18
2000	405561	399046	400307	284845	0.71	1.02
2001	434570	474724	470113	419668	0.88	0.92
2002	422220	376888	382667	376010	1.00	1.12
2003	466130	349410	365231	365083	1.04	1.33
2004	484217	339421	359708	362972	1.07	1.43
2005	473645	352902	371002	352314	1.00	1.34

Source: Annual Reports of the respective Banks.

Note: CPI used to convert nominal wages into real wages is taken from Pakistan Economic Survey with 2000-01 = 100.

Salary Structure of Civil Servants

Pay scales of the government employees prescribing monthly wage rate along with various cash and non-cash benefits constitute a key wage rate in the economy because these generally influence the pay structure not only in the state sponsored organisations but also in the corporate and other sectors of the economy. Pay scales are generally revised periodically often after five years though depending upon the fiscal position of the state. Major factors' underlying the revision has been to provide employees the recompense from the inflation bite of the period intervening between two pay scale revisions.

Plethora of cash and non-cash benefits defy efforts to evaluate the total earnings of government employees. Often these fringe benefits are equivalent to the basic salary in case of certain employees. For instance the fuel charges paid to Grade 22 officer in 2005-06 are 94 percent of his basic salary. Similarly varying practices in the provision of housing subsidy complicates calculation of its impact on total earning. Bilquees (2006) made an effort to sum up all for arriving at the totality of the earning of the government employees.

In this paper we examine only revisions in the basic pay scales to discuss whether or not the entry level salaries of different grades experienced a gain in real terms. It may be added that since 1972 government servants are being classified into 22 grades, a compression from erstwhile 650 scales. During 1990-2007 the period under study, four revisions in the basic pay scales were introduced, 1991, 1994, 2001 and 2005 (see Appendix Table 12). The first revision in June 1991 increased the basic salary of grade 1 by 39 percent; and this raise gradually declined to 27 percent for grade 12, while for the remaining scales (13-22) the addition was of the order of 26 percent. These raises led to rise in real contents of entry level salaries during that year of 1991 particularly for lower grades but the subsequent inflation experienced during 1991-93 of the order of 34 percent or so eroded the real wage content of all the employees.

The second revision was made in June 1994 which extended the wage raises in the ascending order, lower for the lower grades and higher for the upper grades. However in the context of double digit inflation during these years, salary revisions failed to lift up the real contents of the salaries of the government employees. Owing to fiscal constraint the third revision was delayed till 2001, after seven years. This revision also failed to compensate the employees for the past inflation and the real wage erosion after 1990's continued despite the fact that inflation was brought under control during 1997-2003. The final revision of pay scale made in 2005 granted 15 percent rise in the basic salaries, while freezing other allowances, to all the employees. This rise in contrast to CPI changes of the order of 27 percent in fact failed to increase the real content of the entry level basic salary of employees of selected grades (see Table 12).

Table 12

Pay Revisions for Some Selected Grades, 1991-2005

Period	CPI Growth %	Growth in Basic Salaries of Entry Level			
		Grade 1	Grade 5	Grade 17	Grade 22
1-6-91 to 1-6-94	34.1	35.3	35.2	35.1	34.9
1-6-94 to 1-7-2001	72.5	50.2	50.0	60.0	60.0
1-7-2001 to 1-7-2005	31.54	14.9	15.0	15.0	14.9

Overall it appears that during the period under study the real content of entry level basic salary has declined as depicted by the above table. Faiz (2006) in her study after reckoning with all the allowances arrives at a conclusion that real wages of civil servants suffered a decline or at best a stagnation during 1999-2005, and the government has failed to lift up the living standards of the civil servants employed by the federal government, wherein she compared the growth rate of total earnings of all the employees belonging to different grades adjusted for family sizes with per capita GNP growth and found the relative index to be declining during the period particularly at upper level of the employees. This has been mostly due to the fact that while basic salary has been revised in the pay scales the allowances were generally frozen. It may be added that since 2005 the government also provided ad-hoc relief of 15 percent at the time of budget announcement for both the years of 2006 and 2007. The possibility, that real wages of the civil servants may have risen during this very period because inflation rate did not cross the single digit, cannot be ruled out. However, the inflation experienced since September 2007 must have encroached upon the real wages of all even if one includes the 20 percent rise in salary announced in the recent budget of 2008-09. As a result the existing living standards of civil servants must be worse off than early 1990s.

4. INSTITUTIONAL FRAMEWORK

Labour and Wage Policy

Government wields widely pervasive influences on the labour market and in particular on wage levels in different segments of the economy. Both action and inaction of the various regimes bear upon labour market outcome. The paradigmatic shift entailed by imperatives of globalisation and implementation of IMF/WB reform packages during 1990s and in particular during 1999-2003 in fact resulted into change in the thrust of the governmental approach, labour was no longer regarded as social partner but was accorded the role of a factor of production to be priced by the forces of demand and supply. Exception was made in case of hiring blue eyed guzzlers at extraordinary high salaries. However, various regimes during the period understudy had to maintain a façade of being pro-labour because of political considerations and ratification of various ILO conventions.

In order to assess the impact of the governmental measures the wage fixation for its own employees is probably the most important intervention. As already discussed, various revisions in the pay scales made during 1990-2005 failed to improve the living standards as provided by real wage contents of the pay scales of the different grades of the employees. It may be added that while fiscal constraint faced by regimes can be offered as an explanation but it needs to be highlighted that during this period particularly since 1997 there has been a curtailment in the size of the government employment too. In the spheres of non-governmental or private sector employment the role of the government in addition to spill over effect of salary revisions is reflected by the legislative framework governing the employer-employee relations through facilitation of the collective bargaining, trade unions effectiveness and minimum wage legislation.

Labour Legislation

The British enacted laws during the pre-independence era constitute the edifice of the Pakistan's Labour Legislation. The legal framework that has evolved since independence over the years broadly covers the following areas:

- (a) Working conditions that prescribe working hours and leave entitlements;
- (b) Minimum wages;
- (c) Occupational health, hygiene and safety standards;
- (d) Old age pensions;
- (e) Social security and welfare relating to medical care, education for workers' children and share in the companies profits; and
- (f) Labour rights to organise, form associations and bargain collectively and dispute resolution mechanisms.

Historically, these laws have tended to be sector (private versus public, industrial and commercial) and size specific (in terms of the workforce or capital employed). By one count, there are 56 instruments that govern labour practices and sizeable number of these have been inherited from the pre-independence colonial period.

Pakistan announced five Labour Policies, 1955, 1959, 1969, 1972, and 2002. In general the labour policy documents have been confined to provision of broad directions without carrying formal legislation. Socio-economic and political environment of the time, influenced the thrust and focus of the policies. Thus for instance 1969 Labour Policy announcement was preceded by a heightened level of political and labour unrest during the late sixties. Similarly the 1972 policy was ostensibly made to achieve the PPP agenda. In general one finds a good deal of tension between words and deeds. Ambivalence and double standards define the attitude and actions of the various regimes. The intent of the

labour legislation got diluted and circumscribed by non implementation, yielding very little for the workers compared to the lofty ideals of the policies. This is manifest from less than intended coverage of the workers under various schemes, such as the social security and EOBI. The minimum wages are not implemented fully hence always had less than stipulated impact.

The recent labour legislation of the IRO 2002 which is no more applicable because of the cancellation by the current regime was formulated in a substantially changed frame of the mind of the policy-makers, wherein the removal of labour market rigidity and injection of flexibility in the working conditions as well as market driven wages were to be achieved to facilitate the private investor. The IRO 2002 was part of a package embracing consolidation and rationalisation of labour laws, in response to the recommendations of 1999 Task Force on labour. The needed labour legislation was reconstituted into five different categories, industrial relations, payment of wages, employment and working conditions, occupational health and safety, and labour welfare and safety nets.

The conventionally approved tripartite mechanism for the labour legislation appears to have been discarded by the government during 1999-07. Six drafts of the proposed legislation were circulated by the Ministry of Labour (MOL) in 2001. The President enacted IRO 2002 and the remaining five were put on hold. In 2006 the MOL made public Employment and Services Condition Act, which with some modifications were legislated as part of Finance Act 2006 excluding the tripartite mechanism. The IRO 2002 and associated legislation accentuated the restriction on the right to association as well as collective bargaining, by not explicitly granting these to the workers in the agriculture sector as well as informal sector, though applicability of the IRO is extended to all types of establishments hitherto confined to industrial and commercial establishments only. The coverage of the inspection has been curtailed with focus only at workplaces at risk. Routine inspection is to be substituted by self reporting and inspections by private firms. Flexibility has been introduced in the working hours and for a collective bargaining agent affiliation with a national labour federation was made essential. IRO, 2002 signifies a regression in the coverage of the labour market having further diluted worker protection available under the earlier repealed versions of this law. The Ordinance has augmented the discretionary powers of officials in the matter of registration of trade unions, but curtailed the powers of the National Industrial Relations Commission (NIRC). In particular, the power it had to grant interim relief has been withdrawn, thereby making it extremely difficult for workers to defend themselves against the vengeful actions of employers and their unfair labour practices. The current regime has withdrawn these legislations but has yet to introduce a new-one, though some pro-labour attitude has been displayed by re-establishing some unions such as in PIA.

Trade Unions

Trade unions in the country have never been able to act as a unified front for working class, because of the splintered nature of unionism revolving around personalities having links with different political parties. Consistent with the attitude of various regimes wishing to have a bureaucratic surveillance over trade unions, most of the trade union leaders were often co-opted by the government to serve as members on different committees, for the missions abroad and simultaneously these leaders kept on participating in the negotiations under the so called Tripartite Industrial Relation System. Thus the trade union to a large extent have been subservient to government.

Currently the trade unions are mostly concentrated in Public Sector Organisations like WAPDA, in the MNC, and in the large private sector establishments. Majority of the wage earners in the informal as well as formal sector and agriculture are not unionised. As provided in Table 13 below, the trade union membership hardly underwent a substantial change during 1990-95, and subsequently declined. Similarly the information on number of disputes and mandays lost during strikes is indicative of almost near absence of union assertiveness since 1997-98 though during the early nineties unions appears to have been engaged in dispute raising and strike activities, as yielded by the data. The possibility that unions may have been successful in getting some benefits for the members during this period can not be ruled out. Unfortunately the information on the collective bargaining which may have taken place in the unionised sector is not readily available to assess the role of unions in getting better deal for unionised workers.

Table 13

Trade Unions Membership and Industrial Disputes, 1990-2006

Years	Union Membership			Industrial Disputes		
	Total Registered Trade Unions	Total No. of Registered Trade Unions Reporting	Membership of the Reporting Unions	Number of Disputes	Number of Workers Involved	Number of Mandays Lost
1990	7080	1763	359633	99	65918	186726
1991	7027	1441	288803	94	116306	582694
1992	7185	1834	415768	40	73357	398128
1993	–	1685	374731	28	17133	404564
1994	7273	1718	325677	25	15434	341196
1995	7426	1718	337617	24	10919	63626
1996	7349	1594	293530	30	18566	203323
1997	7355	1534	296257	30	7865	283342
1988	7356	1478	305340	20	6097	122519
1999	7382	1493	301104	6	3937	182151
2000	NA	1356	301332	4	225	667
2001	NA	1260	275646	4	711	7078
2002	NA	1201	247539	4	516	12160
2003	NA	NA	NA	1	407	0
2004	NA	NA	NA	19	1164	1020
2005	NA	NA	NA	NA	NA	NA
2006	NA	NA	NA	NA	NA	NA

Source: Pakistan Statistical Year Book (Various Issues).

Minimum Wage Legislation in Pakistan

The Minimum Wage Ordinance of 1961 was the first major legislation that provided for the establishment of Provincial Minimum Wage Boards with representation of workers and employers to fix Minimum Wages for unskilled and other workers for the whole province or for a specific industry. Initially, the Ordinance covered enterprises with 20 or more workers. In 1965 its scope was extended to establishments employing 10 or more workers. In 1969, as a part of the new labour policy, the West Pakistan Minimum Wage Ordinance for unskilled workers was promulgated and made applicable to enterprises with 50 or more workers. For smaller size establishments the provincial governments had to constitute Minimum Wage Boards under the 1961 Ordinance.

The objectives of wage legislation were not explicitly mentioned in the Minimum Wage Ordinance, 1961. The 1969 West Pakistan Minimum Wage Ordinance for unskilled workers professed to achieve the objective of the 1969 Labour Policy, to provide “a fair and equitable living to the workers”, without making any effort to rigorously define what constituted a subsistence or living wage. The preamble to the 1969 Ordinance states that the purpose of fixing a minimum wage is to safeguard the basic and legitimate rights of workers and to “prevent exploitation of ignorant or less educated or less organised and under privileged members of society by their employers”. The law was extended to the whole of Pakistan, and to all factories or places of work and to all workers except Federal and provincial government employees, mine workers (who had a separate law covering them), and agricultural workers. The last exception was significant as it eliminated a very large number of workers from the protection provided by the minimum wage legislation.

With the announcement of the new labour policy in the early 1970s a number of benefits were extended to industrial workers. These included: (a) doubling of workers’ share in profits (from 2.5 to 5 percent); (b) the entire contribution for social security was to be made by the employers; and (c) employers were also required to pay a profit related bonus in addition to a customary bonus. The Cost of Living Relief Act with wider coverage than the above mentioned measures was enacted in 1973, whose ambit also included the construction industry and enterprises covered by the West Pakistan Industrial and Commercial Ordinance of 1968. During the mid 1980s the Government of Pakistan introduced a system of indexation for fixed income groups. Under this 1985-86 scheme salaries and wages were indexed to inflation, apparently as a substitute for the relief the Cost of Living Act, with employees classified on the basis of basic pay.

The West Pakistan Minimum Wages for Unskilled Workers Ordinance, 1969 was amended by the Minimum Wages for Unskilled Workers (Amendment) Act, 1993 to uniformly increase workers wages and fix the minimum wage at Rs 1,500 p.m. The only permissible authorised deductions

from this minimum wage could be for housing accommodation and transport. The Minimum Wage was revised to Rs 2, 500 in 2001 under the Minimum Wage Legislation of 2001. This law distinguishes itself by its applicability to all manufacturing and commercial establishments, irrespective of the size of establishment. The new minimum wage of Rs 2, 500 per month has, however, failed to compensate the workers for the post inflation bite, thereby failing to protect the living standard of workers, a professed objective of minimum wage legislation; the 1992 minimum wage of Rs 1,500 adjusted for inflation works out to Rs 3,165 in 2001.

Impact of Minimum Wage Legislation of 2001—An Assessment

Notwithstanding the fact that the 2001 Minima is lower than the level required to maintain living standards built into the Rs 1,500 minimum wage set in 1992, it still had potential to influence the prevailing wage levels. The assessment of the impact of wage legislation on wages is a complicated task, since such information cannot be extracted or inferred from the Labour Force Survey data, the needed information has to be collected at individual establishment level. Table 14 below shows that the increase in average wages of elementary occupations was 12.8 percent, compared with 18 percent for all wage earners during 2001-02 to 2003-04, suggesting that the wage legislation failed to raise the average wage of unskilled workers relative to the increase experienced by the remaining categories of workers, a clear failure of the implementation machinery.

Table 14

*Percentage of Wage Earners Earning below the Minimum
Wage of 2001 (Rs 2,500 per Month)*

Years	Regular Workers	Non-regular Workers	All Workers
1997-98	11.6	32.7	18.0
2001-02	14.7	43.0	29.4
2003-04	14.1	39.2	25.8

Source: L.F.S. data tabulations.

The fact that more than a quarter of all wage earners and 14 percent of regular workers were earning less than the prescribed minimum in 2003-04 highlights the poor implementation of the minimum wage legislation; 29.4 percent of the wage earners were being paid less than the minimum wage in 2001-02- the year in which the minimum wage was re-fixed. In fact, the distribution appears to have worsened during the period 1997-98 to 2003-04. The minimum wages were subsequently raised to Rs 3000 in 2003 and Rs 4000.0 in 2004 but the LFS of 2005-06 suggests that around 49 percent of the wage earners were getting less than Rs 4000, the legal minima. The government

along with the recent budget 2008-09, further rose the minimum wage to Rs 6,000= which hardly provides for the inflationary spiral experienced by wage earners particularly since September 2007. Minimum wage fixations since 1993 in essence were ineffective in protecting the living standards of the workers because the prescribed minimum failed to neutralise the impact of inflation. In addition there are tremendous implementation lapses because of mis-governance and corruption. Furthermore majority of wage earners in agriculture and informal sector do not derive any benefit from minimum wage fixation.

5. SUMMARY AND CONCLUDING REMARKS

The foregoing review of the labour market with a focus on wage levels and their trends during 1990-2007 is suggestive of the following:

- (i) Money wages in general had a positive growth with the exception of 1999-02 period when GDP growth rate was low. Ironing out the wide year to year fluctuation, the time trend of money wages at the aggregate level of the economy for the entire 1990-2007 period registers a growth rate of 7.65 percent, yielding a paltry 0.7 percent trend growth rate in real wages. The real wage growth rate during 1990s was less than the per capita GDP growth while during 2003-07 the case was reverse.
- (ii) Wage growth profile at the aggregative level of the economy masks tremendous diversity; wages grew at varying rates for workers classified by personal characteristics structure of employing enterprise formal/informal or categorised by industry and occupation. In general trend growth rates of money wages were lower for those workers who were already at the lower rungs of wage hierarchy. For instance, wage employees in Agriculture registered a trend growth rate of 4.7 percent in contrast to 9.2 percent registered by the Finance and Real Estate. Similarly, illiterates experienced a trend growth of 6.2 percent compared to 8.4 percent of Degree holders. Growth trajectories were found to be widely divergent by formal/informal divide wherein wage growth was substantially lower in the informal than the public or corporate sectors. The disaggregated picture of the wage structure therefore reveals that wage differentials across different categories of workers exacerbated hence rendering it more inequitous as well as real wage gain was denied to majority of the wage employees wherein over half of them suffered from erosion of real wages during the period under review.
- (iii) Looking at the formal/informal divide the information on Large Scale Manufacturing Industries for 1990-2000 is suggestive of real wage decline in labour intensive industries such as textiles accounting for majority of the production workers. Similarly, the banking sector, the

second case study of the formal sector, which has also undergone a massive changes in governance structure through privatisation and entry of foreign banks, is reflective of real wage gain (on the average) during early 1990s but experienced a decline during 1997-2003, with little recovery for the subsequent time period. Furthermore, the analysis of Civil Servants Pay Scale Revisions, the third case study of the formal sector, is indicative of the governmental failure to protect the living standards of its employees during the period under review. It may be added that the LFS data suggest a real wage gain for the government employees which is due to composition of this category including those from public sector corporations, as well as those hired under various contractual assignments with fabulous salaries.

- (iv) Labour market outcomes such as employment and wages are influenced by the broad factors underlying the GDP growth and its compositional changes, the labour supply and the institutional apparatus such as labour and wage policies. The period under review (1999-2006) is characterised by diversity on some of these counts. On the labour supply side the population growth rate has started declining since 1991 with current growth rate being 1.9 percent in contrast to erstwhile 3 percent for 1980s. The concomitant age structure effect of this declining fertility and population growth escalated the labour force by 19 million during 1990-2006 whereas the unemployment rose from 0.98 million to 3.13 million during the same period reflecting the failure of growth to absorb the incremental labour force.
- (v) The decade of 1990s experienced a decline in GDP growth rate primarily because of the reduction of foreign aid inflow due to Pressler amendment. Labour market was also adversely affected by the privatisation, disinvestment drives as well as squeeze of the development expenditure. During this period, however, one notices little bit of the virulency of trade unions, such as announcement of Minimum Wage legislation during early 1990s. This is attributable to the character of the regime, which were democracies under Pakistan Peoples Party and Pakistan Muslim League. Still, because of subdued economic performance in the face of mounting labour supply pressures, unemployment has risen and real wages tended to stagnate and decline.
- (vi) The turnaround of the economy since 2003 had little impact on the real wages of workers of the informal sector or those engaged in the un-incorporated formal sector, majority of wage earners. This is because of the attitude of the regime characterised by benign neglect, consistent with imperatives of globalisation, further compounded by the weak and fragmented unions hence the worker was to be disposed

by market forces characterised by excess supply. The minimum wage legislation and the raises announced by the government were neither sufficient enough to compensate for the inflation bite nor serious efforts were mounted to implement. The LFS 2005-06 indicates that more than half of the workers are getting less than, the official minima.

- (vii) The stimulus associated with windfall gain era (2003-07) added to the growth in service sector and less labour intensive segment of manufacturing sector, such as automobiles. Major beneficiary were the wage earners at the top. In fact a high wage culture under the pretext of attracting talents by hiring those having links with power structure at salaries much higher than the equally competent regular employees has been introduced by the government and emulated by corporate sector particularly in services. Notwithstanding the fact that these pockets of prosperity may be rationalised in terms of the demand and supply of talented, unemployment rate among educated is much higher than illiterates and less educated.
- (viii) The duality in wage structure may worsen under the democratic regime if constituency built up is not resisted. This emits wrong signal for investment in human capital as well constitutes a serious distortion. In the context of existing economic meltdown and hyper inflation it hardly appears to be politically palatable besides being totally unjust, wherein graduates of the same institution depending upon parental characteristics, end up entirely in different positions in labour market.
- (ix) There is a need to have a fresh look at the labour and wage policy keeping in view the sustenance, poverty and equity issues in an overall economic framework reckoning with the existing socio-economic challenges faced by the economy. Let there be an end to the commodification of labour rather the working class may be regarded as social partners, and be provided with decent work opportunities through appropriate policy framework to influence the technology and product choices along with training measures to enhance the productivity of the workers particularly in the informal sector. Extension of protection to living standards of the working poor needs to be accorded a top priority.

Appendix Table 1

Average Monthly Nominal Wages, by Industry and by Sex, 1990-91–2006-07 (All Employees)

Sex	Industry	1990-91	1991-92	1993-94	1996-97	1997-98	1999-00	2001-02	2003-04	2005-06	2006-07
Male	1 Agriculture	1161.97	1663.12	1374.74	2258.33	2190.82	2273.79	1245.16	2578.49	3157.55	3997.92
	2 Mining and Quarrying	1333.16	1605.37	1665.28	4566.30	3923.24	2772.35	5669.71	5519.01	4115.41	6338.52
	3 Manufacturing	1491.02	1840.86	2181.84	3126.83	3518.86	3297.59	2948.36	4034.04	4675.86	6025.99
	4 Electric Gas and Water	1747.59	2211.34	2672.53	4197.77	4510.40	4685.34	6032.22	6469.75	8277.90	10468.8
	5 Construction	1228.14	1416.26	1770.67	2484.10	2746.62	2771.85	902.17	3178.73	4100.57	4941.46
	6 Wholesale and Retail Trade	1335.89	1492.19	1981.11	2687.57	3002.93	2805.10	2695.59	3128.46	3933.22	4772.95
	7 Transportation	1556.67	1858.16	2326.95	3495.88	3598.97	3610.70	3496.52	4848.17	5530.44	6469.93
	8 Financial Real Estate	3096.07	4068.84	5203.04	7956.95	8404.50	10065.90	13277.06	12474.75	13825.79	13806
	9 Other	1546.43	1902.38	2307.86	3373.10	3767.88	3775.64	3882.34	5189.76	6708.66	7835.97
	Total	1462.70	1792.73	2119.57	3162.50	3387.93	3374.23	3011.13	4278.24	5246.00	6338.14
Female	1 Agriculture	593.88	647.64	711.83	1293.38	1458.56	1169.72	324.81	1619.08	1489.61	1644.41
	2 Mining and Quarrying	1283.33	782.89			8000.00	2760.00	1000.00	1774.76	2443.02	40000
	3 Manufacturing	770.78	932.20	1100.72	1758.82	1854.82	1761.05	855.14	1684.88	2068.37	2443.49
	4 Electric Gas and Water	1898.07	1889.64	1681.25	3098.18	5069.83	2477.63	7993.10	6155.68	8512.22	9511.18
	5 Construction	1101.11	1113.79	1750.48	2139.20	2466.26	1628.90	618.45	1858.96	3321.43	2867.3
	6 Wholesale and Retail Trade	1172.28	921.71	1357.18	2048.18	3693.10	3643.06	2072.63	3362.17	3756.84	4369.62
	7 Transportation	1465.33	2013.45	2597.05	2254.24	3673.12	4378.04	4773.03	5141.73	6066.83	5505.76
	8 Financial Real Estate	2646.76	3320.42	5083.76	3643.65	7122.12	14193.23	18962.01	9385.26	12454.93	17350.1
	9 Other	1199.36	1501.87	1847.08	2320.88	2609.20	2988.81	2902.75	3752.06	4983.05	5354.84
	Total	944.29	1065.90	1330.88	1885.56	2257.40	2033.18	1538.33	2595.10	3348.97	3625.74
Pakistan	1 Agriculture	1048.33	1391.75	1225.41	1940.52	2030.31	1879.53	879.59	2200.61	2616.45	3173.66
	2 Mining and Quarrying	1332.12	1575.73	1665.28	4566.30	4029.99	2771.59	5518.98	5261.53	4068.48	6629.68
	3 Manufacturing	1414.09	1733.74	2050.73	3003.47	3412.44	3178.25	2709.19	3762.21	4307.38	5537.48
	4 Electric Gas and Water	1749.07	2206.78	2665.29	4191.46	4521.92	4661.68	6064.63	6465.66	8279.11	10456.2
	5 Construction	1225.99	1412.60	1770.44	2480.09	2743.96	2757.25	900.68	3169.05	4091.12	4913.37
	6 Wholesale and Retail Trade	1332.77	1475.57	1962.95	2678.83	3009.36	2816.89	2688.56	3130.95	3929.44	4767.1
	7 Transportation	1555.34	1859.59	2331.02	3481.67	3600.40	3617.34	3507.48	4849.63	5537.80	6461.52
	8 Financial Real Estate	3082.20	4044.25	5200.15	7930.06	8352.63	10205.91	13320.38	12433.15	13761.30	13919.2
	9 Other	1494.75	1843.48	2245.23	3174.33	3569.54	3643.12	3697.93	4895.20	6350.09	7346.83
	Total	1411.87	1712.89	2038.22	3006.12	3279.56	3198.83	2810.40	4044.68	4991.61	5983.69

Note: (i) Based on Individual data tabulation—Labour Force Surveys (Various Years).

(ii) Real Wages are worked using the Consumer Price Index with 2000-01=100 as reported in Pakistan Economics Survey (PSE) 2007-08.

Appendix Table 2

Average Monthly Real Wages of All Employees, by Sex and by Industry, 1990-91–2006-07

Sex	Industry	1990-91	1991-92	1993-94	1996-97	1997-98	1999-00	2001-02	2003-04	2005-06	2006-07
Male	1 Agriculture	2689.75	3507.95	2372.70	2784.28	2505.23	2373.97	1202.59	2309.85	2398.63	2818.02
	2 Mining and Quarrying	3086.02	3386.13	2874.15	5629.76	4486.27	2894.49	5475.86	4944.02	3126.26	4467.84
	3 Manufacturing	3451.44	3882.84	3765.69	3855.05	4023.85	3442.88	2847.56	3613.76	3552.00	4247.54
	4 Electric Gas and Water	4045.35	4664.29	4612.58	5175.40	5157.69	4891.77	5825.98	5795.71	6288.29	7379.18
	5 Construction	2842.93	2987.27	3056.04	3062.63	3140.78	2893.97	871.32	2847.56	3114.99	3483.09
	6 Wholesale and Retail Trade	3092.33	3147.41	3419.25	3313.48	3433.89	2928.69	2603.43	2802.53	2987.86	3364.31
	7 Transportation	3603.40	3919.34	4016.14	4310.05	4115.47	3769.78	3376.98	4343.07	4201.18	4560.47
	8 Financial and Real Estate	7166.83	8582.24	8980.04	9810.07	9610.64	10509.40	12823.12	11175.09	10502.73	9731.42
	9 Other	3579.70	4012.61	3983.18	4158.67	4308.61	3941.99	3749.60	4649.08	5096.21	5523.34
	Total	3385.88	3781.33	3658.22	3899.03	3874.14	3522.89	2908.18	3832.52	3985.11	4467.57
Female	1 Agriculture	1374.73	1366.05	1228.56	1594.60	1667.88	1221.26	313.71	1450.39	1131.58	1159.09
	2 Mining and Quarrying	2970.68	1651.31	0.00	0.00	9148.08	2881.60	965.81	1589.86	1855.84	28194.83
	3 Manufacturing	1784.21	1966.26	1899.76	2168.44	2121.01	1838.64	825.90	1509.34	1571.24	1722.34
	4 Electric Gas and Water	4393.69	3985.74	2901.71	3819.73	5797.41	2586.79	7719.81	5514.36	6466.28	6704.15
	5 Construction	2548.87	2349.27	3021.20	2637.40	2820.19	1700.67	597.31	1665.29	2523.11	2021.08
	6 Wholesale and Retail Trade	2713.61	1944.13	2342.39	2525.19	4223.10	3803.57	2001.76	3011.89	2853.88	3080.02
	7 Transportation	3391.97	4246.90	4482.31	2779.24	4200.25	4570.93	4609.84	4606.04	4608.65	3880.85
	8 Financial Real Estate	6126.77	7003.62	8774.18	4492.24	8144.22	14818.58	18313.71	8407.47	9461.35	12229.61
	9 Other	2776.29	3167.83	3187.91	2861.40	2983.65	3120.49	2803.51	3361.16	3785.36	3774.47
	Total	2185.85	2248.25	2297.00	2324.69	2581.36	2122.76	1485.74	2324.74	2544.04	2555.68
Pakistan	1 Agriculture	2426.69	2935.57	2114.97	2392.46	2321.68	1962.34	849.52	1971.34	1987.58	2237.02
	2 Mining and Quarrying	3083.60	3323.63	2874.15	5629.76	4608.33	2893.70	5330.28	4713.37	3090.61	4673.06
	3 Manufacturing	3273.36	3656.90	3539.40	3702.96	3902.16	3318.29	2616.56	3370.25	3272.09	3903.20
	4 Electric Gas and Water	4048.78	4654.67	4600.09	5167.63	5170.87	4867.07	5857.28	5792.05	6289.21	7370.29
	5 Construction	2837.95	2979.54	3055.65	3057.69	3137.75	2878.74	869.89	2838.88	3107.81	3463.29
	6 Wholesale and Retail Trade	3085.11	3112.35	3387.90	3302.71	3441.24	2941.00	2596.64	2804.76	2984.99	3360.19
	7 Transportation	3600.33	3922.35	4023.16	4292.53	4117.10	3776.71	3387.56	4344.38	4206.78	4554.53
	8 Financial and Real Estate	7134.73	8530.38	8975.06	9776.92	9551.32	10655.58	12864.96	11137.83	10453.73	9811.23
	9 Other	3460.07	3888.38	3875.09	3913.61	4081.80	3803.63	3571.50	4385.20	4823.83	5178.56
	Total	3268.22	3612.93	3517.81	3706.23	3750.21	3339.77	2714.31	3623.30	3791.87	4217.73

Note: (i) Based on Individual data tabulation—Labour Force Surveys (Various Years).

(ii) Real Wages are worked using the Consumer Price Index with 2000-01=100 as reported in Pakistan Economics Survey (PSE) 2007-08.

Appendix Table 3

Average Monthly Nominal Wages, by Occupation and by Sex, 1990-91–2006-07

Sex	Occupation	1990-91	1991-92	1993-94	1996-97	1997-98	1999-00	2001-02	2003-04	2005-06	2006-07
Male	1 Senior Official and Manager	1820.09	2230.73	2625.65	8368.76	9197.81	9576.15	11337.94	12406.45	13293.92	15730.09
	2 Professional	4584.99	5784.91	6867.13	5014.85	5156.26	5862.44	7769.72	10531.26	11868.29	13160.30
	3 Technician and Related	1682.90	2073.76	2494.02	3672.59	4216.95	4006.38	4939.33	5714.32	7247.38	8770.48
	4 Clerks	1462.64	1570.91	2214.39	3765.74	4319.62	4616.75	5207.38	5311.60	8060.53	8803.25
	5 Services Workers	1279.51	1533.89	1920.46	2728.43	3040.75	3006.44	3102.72	3747.53	4774.02	5728.11
	6 Skilled Agri. Labour	1112.85	1683.91	1341.11	1816.02	2303.99	2250.51	2323.66	3180.11	3705.55	5384.86
	7 Craft and Related Trades	1313.27	1666.35	1993.51	2882.38	2935.15	2981.33	2070.79	3547.28	4427.70	5465.45
	8 Plant and Machine Operator	1483.23	1710.66	2136.49	3243.98	3853.67	3546.92	3584.73	4286.99	4922.05	6236.45
	9 Elementary Occupation	1297.23	1508.62	1843.68	2357.40	2463.53	2434.60	1455.16	2882.12	3586.31	4362.98
	Total	1462.70	1792.73	2119.57	3162.50	3387.93	3374.23	3011.13	4278.24	5246.00	6338.14
Female	1 Senior Official and Manager	1579.55	1801.92	2259.04	4870.20	6084.56	11505.63	7957.05	12610.13	14917.68	16579.37
	2 Professional	3579.84	4742.56	5275.25	3334.42	3808.59	6211.03	6090.15	6369.06	11872.52	14652.97
	3 Technician and Related	1535.58	2027.42	2830.67	2893.08	2686.56	3049.47	3088.96	4221.18	4800.34	5455.05
	4 Clerks	812.32	892.99	1630.82	3096.35	6589.23	3519.70	4476.80	2946.47	11247.97	6660.31
	5 Services Workers	735.83	1020.11	1281.29	1290.75	2114.09	3673.23	1383.59	2823.49	5719.15	4349.01
	6 Skilled Agri. Labour	594.85	651.89	712.06	1340.02	2565.58	1161.49	892.29	4500.00	2196.61	1775.97
	7 Craft and Related Trades	730.24	850.77	1012.04	1401.11	1404.55	1581.82	621.53	1655.95	1804.79	2130.35
	8 Plant and Machine Operator	897.05	1175.15	1485.41	1945.95	3136.35	2585.75	3109.91	2710.21	3487.62	3601.16
	9 Elementary Occupation	1066.45	1055.64	1246.56	1330.01	1395.29	1278.78	519.89	1679.62	1795.26	2001.44
	Total	944.29	1065.90	1330.88	1885.56	2257.40	2033.18	1538.33	2595.10	3348.97	3625.74
Pakistan	1 Senior Official and Manager	1768.20	2129.40	2549.20	8241.05	9043.09	9643.14	11214.89	12410.69	13369.64	15760.93
	2 Professional	4546.04	5751.59	6791.05	4600.43	4888.15	5913.16	7492.34	9921.07	11868.88	13351.23
	3 Technician and Related	1679.04	2072.61	2502.22	3517.77	3898.55	3784.70	4356.89	5214.05	6457.57	7736.34
	4 Clerks	1449.49	1551.17	2199.52	3756.04	4379.24	4592.61	5186.28	5251.74	8203.80	8735.41
	5 Services Workers	1196.37	1462.66	1837.22	2584.06	3020.46	3014.24	3037.29	3727.10	4797.91	5700.23
	6 Skilled Agri. Labour	995.97	1379.22	1181.65	1661.11	2352.69	1976.61	2224.66	3206.43	3528.13	5056.95
	7 Craft and Related Trades	1195.66	1498.08	1769.99	2691.56	2840.95	2882.60	1925.20	3347.40	4080.63	5022.69
	8 Plant and Machine Operator	1473.69	1694.90	2116.64	3234.91	3837.66	3539.75	3581.63	4274.83	4907.39	6213.25
	9 Elementary Occupation	1292.29	1502.64	1831.22	2234.18	2336.51	2192.50	1280.02	2650.68	3303.04	3990.82
	Total	1411.87	1712.89	2038.22	3006.12	3279.56	3198.83	2810.40	4044.68	4991.61	5983.69

Note: (i) Based on Individual data tabulation—Labour Force Surveys (Various Years).

(ii) Real Wages are worked using the Consumer Price Index with 2000-01=100 as reported in Pakistan Economics Survey (PSE) 2007-08.

Appendix Table 4

Average Monthly Real Wages, by Occupation and by Sex, 1990-91–2006-07

Sex	Occupation	1990-91	1991-92	1993-94	1996-97	1997-98	1999-00	2001-02	2003-04	2005-06	2006-07
Male	1 Senior Official and Manager	4313.01	4705.19	4531.68	10317.79	10517.80	9998.07	10950.30	11113.90	10098.69	11087.68
	2 Professional	10864.91	12201.88	11852.14	6182.78	5896.24	6120.74	7504.07	9434.08	9015.72	9276.31
	3 Technician and Related	3987.92	4374.10	4304.49	4527.91	4822.13	4182.90	4770.46	5118.99	5505.45	6182.06
	4 Clerks	3465.98	3313.46	3821.86	4642.76	4939.54	4820.16	5029.34	4758.22	6123.16	6205.15
	5 Services Workers	3032.01	3235.37	3314.57	3363.86	3477.13	3138.90	2996.64	3357.10	3626.57	4037.58
	6 Skilled Agri. Labour	2637.08	3551.79	2314.66	2238.96	2634.63	2349.66	2244.21	2848.79	2814.91	3795.63
	7 Craft and Related Trades	3112.01	3514.76	3440.65	3553.67	3356.38	3112.68	1999.99	3177.71	3363.49	3852.44
	8 Plant and Machine Operator	3514.76	3608.22	3687.42	3999.48	4406.72	3703.19	3462.17	3840.36	3739.03	4395.89
	9 Elementary Occupation	3074.01	3182.06	3182.05	2906.42	2817.07	2541.87	1405.41	2581.85	2724.33	3075.34
Total	3466.11	3781.33	3658.22	3899.03	3874.14	3522.89	2908.18	3832.52	3985.11	4467.57	
Female	1 Senior Official and Manager	3743.01	3800.72	3898.93	6004.44	6957.76	12012.56	7685.00	11296.36	11332.18	11686.31
	2 Professional	8483.04	10003.30	9104.68	4110.98	4355.17	6484.68	5881.93	5705.51	9018.93	10328.45
	3 Technician and Related	3638.82	4276.36	4885.52	3566.86	3072.11	3183.83	2983.35	3781.40	3646.56	3845.11
	4 Clerks	1924.94	1883.55	2814.66	3817.46	7534.86	3674.77	4323.74	2639.49	8544.49	4694.66
	5 Services Workers	1743.67	2151.67	2211.40	1591.35	2417.49	3835.07	1336.29	2529.33	4344.54	3065.49
	6 Skilled Agri. Labour	1409.60	1375.01	1228.96	1652.10	2933.77	1212.66	861.79	4031.17	1668.65	1251.83
	7 Craft and Related Trades	1730.42	1794.50	1746.70	1727.42	1606.12	1651.51	600.28	1483.42	1371.01	1501.62
	8 Plant and Machine Operator	2125.70	2478.70	2563.71	2399.15	3586.45	2699.67	3003.58	2427.85	2649.36	2538.35
	9 Elementary Occupation	2527.12	2226.63	2151.47	1639.76	1595.52	1335.13	502.11	1504.63	1363.77	1410.76
Total	2237.65	2248.25	2297.00	2324.69	2581.36	2122.76	1485.74	2324.74	2544.04	2555.68	
Pakistan	1 Senior Official and Manager	4190.04	4491.45	4399.72	10160.34	10340.87	10068.01	10831.45	11117.70	10156.21	11109.42
	2 Professional	10772.62	12131.59	11720.83	5671.84	5589.65	6173.69	7236.18	8887.46	9016.16	9410.89
	3 Technician and Related	3978.76	4371.67	4318.63	4337.04	4458.03	3951.45	4207.93	4670.83	4905.48	5453.12
	4 Clerks	3434.80	3271.81	3796.20	4630.80	5007.71	4794.95	5008.97	4704.59	6232.00	6157.33
	5 Services Workers	2835.00	3085.13	3170.90	3185.87	3453.93	3147.04	2933.45	3338.79	3644.72	4017.93
	6 Skilled Agri. Labour	2360.13	2909.14	2039.43	2047.97	2690.33	2063.70	2148.60	2872.38	2680.14	3564.49
	7 Craft and Related Trades	2833.32	3159.85	3054.87	3318.41	3248.65	3009.61	1859.37	2998.66	3099.84	3540.35
	8 Plant and Machine Operator	3492.16	3574.97	3653.16	3988.30	4388.41	3695.71	3459.17	3829.46	3727.89	4379.54
	9 Elementary Occupation	3062.29	3169.45	3160.55	2754.50	2671.82	2289.10	1236.26	2374.52	2509.15	2813.01
Total	3268.22	3612.93	3517.81	3706.23	3750.21	3339.77	2714.31	3623.30	3791.87	4217.73	

Note: (i) Based on Individual data tabulation—Labour Force Surveys (Various Years).

(ii) Real Wages are worked using the Consumer Price Index with 2000-01=100 as reported in Pakistan Economics Survey (PSE) 2007-08.

Appendix Table 5

Average Monthly Nominal Wages, by Education and by Sex, 1990-91–2006-07 (All Employees)

Sex	Education	1990-91	1991-92	1993-94	1996-97	1997-98	1999-00	2001-02	2003-04	2005-06	2006-07
Male	No Education	1189.77	1500.95	1658.06	2428.64	2636.65	2562.54	1652.07	3060.76	3740.01	4549.88
	Kg /Nursary	1352.77	1394.91	1530.09	2654.11	2309.65					5817.95
	Kg bur < Primary	1254.01	1380.93	1730.10	2387.33	2447.65	2605.28	1936.15	2916.05	3669.37	4529.33
	Primary but < Middle	1342.33	1539.78	1864.14	2568.80	2779.93	2702.14	2198.13	3205.35	4047.81	5116.64
	Middle but < Matric	1517.97	1748.25	2115.01	2917.16	3175.66	2999.38	2612.28	3798.38	4432.30	5697.62
	Matric but < Inter	1656.35	2059.84	2525.38	3308.51	3546.42	3970.88	3767.62	4364.84	5742.33	6709.18
	Inter but < Degree	1968.73	2375.62	2754.31	4008.96	4615.66	4576.63	6429.69	8082.28	7182.73	8255.94
	Degree in Engineering	3103.70	3921.67	4356.68	6825.57	7082.90	6991.51	8658.58	9747.35	12596.16	14431.08
	Total	1462.70	1792.73	2119.57	3162.50	3387.93	3374.23	3011.13	4278.24	5246.00	6338.14
Female	No Education	683.80	753.20	965.36	1292.91	1429.52	1308.23	579.86	1683.12	1812.38	2043.21
	Kg /Nursary	490.12	1899.13		1537.80	840.00					2883.86
	Kg bur < Primary	858.07	958.47	1156.35	1211.61	1999.38	1485.26	498.07	1494.67	1518.65	1889.98
	Primary but < Middle	974.78	898.19	1191.65	1842.19	1455.75	1368.24	800.53	1664.67	1679.63	2171.60
	Middle but < Matric	1146.48	1246.68	1707.55	2099.11	1984.77	2221.40	1214.34	2459.02	3363.94	2613.67
	Matric but < Inter	1308.18	1566.89	1779.12	2476.18	2937.43	3061.66	2666.42	3145.55	4212.49	4020.49
	Inter but < Degree	1368.40	1742.45	1784.67	2421.91	3105.67	3865.44	4247.48	5122.19	4713.56	6037.71
	Degree in Engineering	2337.00	2651.71	3308.55	4575.25	5235.92	5604.25	4463.36	5787.02	8665.20	8958.79
	Total	944.29	1065.90	1330.88	1885.56	2257.40	2033.18	1538.33	2595.10	3348.97	3625.74
Total	No Education	1121.97	1386.95	1557.15	2235.26	2485.41	2306.45	1452.57	2781.74	3382.44	4080.35
	Kg /Nursary	1336.34	1429.72	1530.09	2547.34	2239.88					5106.67
	Kg bur < Primary	1238.00	1359.01	1710.42	2282.05	2433.45	2554.99	1803.64	2827.92	3482.77	4307.89
	Primary but < Middle	1332.08	1512.89	1826.50	2527.25	2732.72	2660.83	2110.40	3124.81	3879.09	4903.14
	Middle but < Matric	1501.58	1727.74	2104.24	2878.35	3133.67	2971.99	2540.55	3737.64	4382.11	5573.06
	Matric but < Inter	1625.55	2019.82	2474.93	3226.68	3490.79	3880.40	3652.49	4231.82	5577.54	6457.28
	Inter but < Degree	1916.86	2294.68	2677.08	3839.92	4417.18	4498.61	6042.20	7579.02	6823.58	7969.13
	Degree Plus	3010.72	3759.35	4223.59	6540.10	6872.02	6817.53	8035.46	9129.96	11841.71	13369.44
	Total	1411.87	1712.89	2038.22	3006.12	3279.56	3198.83	2810.40	4044.68	4991.61	5983.69

Note: (i) Based on Individual data tabulation—Labour Force Surveys (Various Years).

(ii) Real Wages are worked using the Consumer Price Index with 2000-01=100 as reported in Pakistan Economics Survey (PSE) 2007-08.

Appendix Table 6

Average Monthly Real Wages of All Employees, by Education and by Sex, 1990-91–2006-07

		1990-91	1991-92	1993-94	1996-97	1997-98	1999-00	2001-02	2003-04	2005-06	2006-07
Male	No Education	2754.10	3165.89	2861.68	2994.25	3015.04	2675.45	1595.59	2741.88	2841.09	3207.07
	Kg /Nursary	3131.41	2942.23	2640.82	3272.24	2641.11					4100.90
	Kg bur < Primary	2902.80	2912.75	2986.02	2943.32	2798.92	2720.07	1869.95	2612.25	2787.43	3192.59
	Primary but < Middle	3107.25	3247.79	3217.37	3167.06	3178.87	2821.19	2122.98	2871.41	3074.91	3606.57
	Middle but < Matric	3513.81	3687.51	3650.35	3596.55	3631.40	3131.53	2522.97	3402.65	3366.99	4016.08
	Matric but < Inter	3834.14	4344.74	4358.61	4079.04	4055.37	4145.84	3638.80	3910.09	4362.15	4729.10
	Inter but < Degree	4557.24	5010.80	4753.72	4942.62	5278.06	4778.28	6209.86	7240.24	5456.34	5819.37
	Degree Plus	7184.49	8271.83	7519.29	8415.20	8099.38	7299.55	8362.55	8731.84	9568.64	10172.04
	Total	3385.88	3781.33	3658.22	3899.03	3874.14	3522.89	2908.18	3832.52	3985.11	4467.57
Female	No Education	1582.87	1588.70	1666.14	1594.02	1634.67	1365.87	560.03	1507.77	1376.77	1440.20
	Kg /Nursary	1134.55	4005.76	0.00	1895.95	960.55					2032.75
	Kg bur < Primary	1986.27	2021.65	1995.77	1493.79	2286.31	1550.70	481.04	1338.95	1153.64	1332.19
	Primary but < Middle	2256.43	1894.52	2056.70	2271.22	1664.67	1428.53	773.16	1491.24	1275.92	1530.70
	Middle but < Matric	2653.90	2629.56	2947.10	2587.98	2269.60	2319.27	1172.82	2202.83	2555.41	1842.30
	Matric but < Inter	3028.19	3304.98	3070.62	3052.87	3358.98	3196.56	2575.26	2817.84	3200.01	2833.92
	Inter but < Degree	3167.59	3675.27	3080.20	2985.96	3551.37	4035.75	4102.26	4588.54	3580.65	4255.81
	Degree Plus	5409.73	5593.15	5710.31	5640.80	5987.33	5851.17	4310.76	5184.11	6582.50	6314.79
	Total	2185.85	2248.25	2297.00	2324.69	2581.36	2122.76	1485.74	2324.74	2544.04	2555.68
Total	No Education	2597.15	2925.44	2687.52	2755.83	2842.09	2408.08	1402.90	2491.92	2569.46	2876.12
	Kg /Nursary	3093.39	3015.65	2640.82	3140.60	2561.33					3599.54
	Kg bur < Primary	2865.74	2866.50	2952.05	2813.52	2782.67	2667.57	1741.97	2533.30	2645.68	3036.51
	Primary but < Middle	3083.51	3191.08	3152.41	3115.83	3124.89	2778.06	2038.24	2799.26	2946.74	3456.08
	Middle but < Matric	3475.89	3644.25	3631.75	3548.70	3583.39	3102.94	2453.69	3348.24	3328.86	3928.29
	Matric but < Inter	3762.86	4260.33	4271.54	3978.15	3991.76	4051.37	3527.62	3790.94	4236.97	4551.55
	Inter but < Degree	4437.18	4840.08	4620.43	4734.22	5051.09	4696.81	5835.62	6789.41	5183.51	5617.21
	Degree Plus	6969.25	7929.45	7289.58	8063.24	7858.23	7117.91	7760.73	8178.77	8995.53	9423.72
	Total	3268.22	3612.93	3517.81	3706.23	3750.21	3339.77	2714.31	3623.30	3791.87	4217.73

Note: (i) Based on Individual data tabulation—Labour Force Surveys (Various Years).

(ii) Real Wages are worked using the Consumer Price Index with 2000-01=100 as reported in Pakistan Economics Survey (PSE) 2007-08.

Appendix Table 7

Average Monthly Real Wages, by Age Group (All Employees)

			1990-91	1991-92	1993-94	1996-97	1997-98	1999-00	2001-02	2003-04	2005-06	2006-07
Male	1	10-14	2063.69	4994.55	1792.49	1430.17	1389.81	1289.18	733.58	1544.46	1472.49	1806.29
	2	15-19	2435.14	2542.83	2623.72	2552.84	2373.50	2231.51	1361.00	2071.68	2370.31	2685.71
	3	20-24	3062.58	3247.15	3056.47	3260.02	3201.49	2962.62	1969.23	2902.76	2978.36	3465.90
	4	25-29	3327.35	3606.83	3700.84	3859.02	3657.32	3597.34	2772.66	3383.46	3882.87	4128.44
	5	30-59	3864.91	4195.51	4201.53	4560.55	4562.51	4595.43	3793.31	4897.72	5283.64	5489.41
	6	60+	2993.66	3132.76	3124.40	3343.14	3729.56	3394.81	1915.41	3324.68	4104.24	4182.99
		Total	3385.88	3781.17	3658.22	3899.03	3883.65	3827.23	2910.16	3847.86	4221.16	4467.57
Female	1	10-14	1554.75	1272.49	1086.72	1320.52	1059.47	923.55	387.67	1046.41	1056.44	1131.80
	2	15-19	1936.41	1852.70	1760.14	1682.10	1562.29	1479.35	629.10	1531.28	1443.60	1337.51
	3	20-24	2364.92	2128.54	2485.73	2507.71	2375.88	2217.41	1268.80	1757.10	2339.89	2478.39
	4	25-29	2685.53	2938.63	2601.29	2796.61	3462.38	3071.54	1832.64	2245.92	3361.84	2612.82
	5	30-59	2282.21	2425.82	2638.94	2632.93	3031.93	3006.17	1965.08	3062.39	3658.49	3232.03
	6	60+	1439.86	2046.36	1590.57	1360.68	1239.49	1064.34	987.42	1457.24	2813.43	1062.92
		Total	2185.85	2248.16	2297.00	2324.69	2582.87	2659.68	1496.08	2345.57	2938.20	2555.68
Pakistan	1	10-14	1929.75	4183.48	1630.29	1397.62	1314.46	1251.32	631.45	1422.22	1380.43	1594.76
	2	15-19	2389.36	2443.22	2497.95	2426.26	2277.11	2162.40	1249.59	1977.68	2254.73	2488.96
	3	20-24	2997.88	3122.63	2983.36	3162.67	3112.56	2863.45	1871.42	2759.28	2887.06	3333.48
	4	25-29	3279.04	3538.81	3605.20	3736.38	3638.77	3532.63	2642.24	3229.88	3813.38	3935.09
	5	30-59	3724.02	4025.34	4070.71	4358.58	4435.87	4409.35	3576.31	4662.13	5098.62	5222.44
	6	60+	2902.48	3033.71	3010.61	3153.59	3548.56	3171.02	1791.58	3142.50	3997.03	3899.68
		Total	3268.22	3612.78	3517.81	3706.23	3758.99	3691.26	2718.72	3640.73	4060.77	4217.73

Note: (i) Based on Individual data tabulation—Labour Force Surveys (Various Years).

(ii) Real Wages are worked using the Consumer Price Index with 2000-01=100 as reported in Pakistan Economics Survey (PSE) 2007-08.

Appendix Table 8

Average Monthly Nominal and Real Wages, by Type of Enterprise and by Sex, 1997-98–2006-07

Sex	Firm type	1997-98		1999-00		2001-02		2003-04		2005-06		2006-07	
		Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real
Male	1 Government	4348.09	4972.09	4670.90	4876.70	5645.72	5452.69	6721.07	6020.85	8556.17	6499.67	9710.74	6844.81
	2 Corporate	4073.87	4658.52	4164.13	4347.60	4408.81	4258.08	5957.94	5337.22	6524.16	4956.06	8088.59	5701.41
	3 Formal	3816.11	4363.76	3025.16	3158.45	2272.46	2194.77	3309.63	2964.82	4455.87	3384.89	5977.14	4213.11
	4 Informal	2670.23	3053.44	2653.94	2770.87	1618.70	1563.36	3055.16	2736.86	3802.89	2888.85	4605.86	3246.53
	Total	3387.93	3874.14	3374.23	3522.89	3011.13	2908.18	4278.24	3832.52	5243.47	3983.19	6338.14	4467.57
Female	1 Government	3540.59	4048.70	4344.00	4535.39	4394.86	4244.60	5663.70	5073.64	7375.60	5602.86	8028.15	5658.81
	2 Corporate	3346.70	3826.99	4694.71	4901.56	3675.78	3550.10	3622.47	3245.07	6762.42	5137.05	5703.70	4020.37
	3 Formal	2117.04	2420.86	1353.09	1412.71	513.76	496.19	1741.77	1560.31	3939.21	2992.41	4413.00	3110.60
	4 Informal	1509.97	1726.67	1390.10	1451.35	707.30	683.11	1737.78	1556.73	1873.33	1423.07	2085.15	1469.76
	Total	2257.40	2581.36	2033.18	2122.76	1538.33	1485.74	2595.10	2324.74	3336.01	2534.19	3625.74	2555.68
Total	1 Government	4264.20	4876.16	4636.71	4841.00	5493.38	5305.57	6586.81	5900.57	8403.65	6383.82	9506.02	6700.52
	2 Corporate	4049.47	4630.62	4178.15	4362.24	4378.80	4229.09	5828.36	5221.14	6536.09	4965.12	7947.26	5601.79
	3 Formal	3548.11	4057.30	2620.89	2736.36	1497.78	1446.58	2873.78	2574.38	4403.17	3344.85	5789.14	4080.60
	4 Informal	2557.30	2924.29	2475.14	2584.19	1498.58	1447.34	2875.89	2576.27	3500.05	2658.80	4219.42	2974.15
	Total	3279.56	3750.21	3198.83	3339.77	2810.40	2714.31	4044.68	3623.30	4988.93	3789.83	5983.69	4217.73

- Notes: (i) Based on Individual data tabulation—Labour Force Surveys (Various Years).
(ii) Real Wages are worked out using the Consumer Price Index with 2001-02=100 as reported in Pakistan Economics Survey (PSE) 2006-07.
(iii) Corporate includes Public and private limited Companies.
(iv) Formal includes non corporate private sector where size of the employment is 10 or more.
(v) Informal sector establishment with less than 10 employment size.

Appendix Table 9

Daily Real Wages of Construction Workers in Different Cities

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Carpenter																
Islamabad	305.8	288.1	258.9	267.2	261.9	246.6	228.7	243.3	228.4	225.0	217.3	234.2	291.1	327.9	341.8	370.1
Karachi	326.9	316.5	308.8	313.1	302.7	285.0	285.9	308.8	305.2	291.3	287.9	282.8	301.9	299.2	305.4	317.2
Lahore	272.7	288.1	261.3	282.5	269.8	268.2	258.9	283.9	274.1	262.5	253.5	245.9	248.1	277.1	274.2	273.5
Peshawar	210.9	220.9	233.0	206.2	206.8	215.8	228.7	216.3	208.8	225.0	217.3	210.8	224.0	225.4	227.9	264.4
Quetta	358.6	326.5	310.7	305.4	296.4	283.6	285.9	270.4	261.0	250.0	241.5	234.2	246.3	225.4	303.9	352.5
Mason (Raj)	295.0	288.0	274.6	274.9	267.5	259.8	257.6	264.6	255.5	250.8	243.5	241.6	262.3	271.0	290.6	315.5
Islamabad	305.8	288.1	258.9	267.2	261.9	246.6	228.7	243.3	228.4	225.0	217.3	234.2	291.1	327.9	341.8	370.1
Karachi	316.4	310.8	306.8	313.1	323.4	302.3	285.9	308.8	305.2	291.3	287.9	282.8	301.9	299.2	305.4	317.2
Lahore	271.2	288.1	261.3	282.5	271.7	268.2	258.9	283.9	274.1	262.5	253.5	245.9	284.9	311.5	350.2	346.1
Peshawar	210.9	220.9	233.0	206.2	206.8	215.8	228.7	216.3	208.8	225.0	217.3	210.8	246.3	266.4	246.9	311.6
Quetta	311.1	312.1	302.0	288.2	289.5	277.4	285.9	270.4	261.0	250.0	241.5	234.2	246.3	225.4	303.9	317.2
Labourer (Unskilled)	283.1	284.0	272.4	271.4	270.6	262.0	257.6	264.6	255.5	250.8	243.5	241.6	274.1	286.1	309.6	332.5
Islamabad	137.1	134.4	133.8	137.4	130.9	123.3	125.8	129.8	125.3	120.0	115.9	121.8	143.3	164.0	189.9	193.9
Karachi	137.1	141.0	139.6	155.5	183.6	193.0	183.0	186.1	181.7	176.3	175.9	171.7	134.4	188.6	208.9	211.5
Lahore	149.9	164.6	147.9	160.3	149.2	144.4	140.1	156.8	151.4	145.0	140.0	135.8	149.6	164.0	186.9	176.2
Peshawar	105.5	96.0	103.6	99.3	96.5	92.5	91.5	86.5	83.5	90.0	86.9	84.3	120.0	123.0	132.9	141.0
Quetta	123.9	144.0	133.8	118.4	130.9	117.1	125.8	119.0	104.4	100.0	108.7	104.6	134.4	139.4	189.9	211.5
	130.7	136.0	131.7	134.2	138.2	134.1	133.2	135.6	129.3	126.3	125.5	123.6	136.3	155.8	181.7	186.8

Note: (i) Based on Individual data tabulation—Labour Force Surveys (Various Years).

(ii) Real Wages are worked using the Consumer Price Index with 2000-01=100 as reported in Pakistan Economics Survey (PSE) 2007-08.

Appendix Table 10

Employment in Banks—1991–2005

Year	Foreign Banks	Pak Banks	Total Employment	Foreign/Pak Banks
1991	1035	101684	102719	0.010
1992	1072	102455	103527	0.010
1993	1217	103634	104851	0.012
1994	1344	104511	105855	0.013
1995	1415	107499	108914	0.013
1996	1554	110848	112402	0.014
1997	1489	90302	91791	0.016
1998	1449	86911	88360	0.017
1999	1298	84615	85913	0.015
2000	1369	95833	97202	0.014
2001	816	75522	76338	0.011
2002	757	73162	73919	0.010
2003	721	76384	77105	0.009
2004	748	69800	70548	0.011
2005	833	57241	58074	0.015

Note: (i) Based on Individual data tabulation—Labour Force Surveys (Various Years).

(ii) Real Wages are worked using the Consumer Price Index with 2000-01=100 as reported in Pakistan Economics Survey (PSE) 2007-08.

Appendix Table 11

Average Daily Employment (Inc. Contract Labour) in Large-scale Manufacturing

Industry Code	Industry Major Group and Industries	All Employees			Production Workers			Non-Production Workers		
		1990-91	1995-96	2001-01	1990-91	1995-96	2001-01	1990-91	1995-96	2001-01
3	All Industries	622234	561821	689692	492301	440276	560905	129933	121645	128787
31	Food, Beverages and tobacco	95360	88584	85466	65110	62024	61538	30250	26560	23928
32	Textile, Apparel, and leather	282721	262098	397536	240792	221318	340324	41929	40780	57212
33	Wood, Wood products and Furniture	5469	4799	3241	4500	3819	2593	969	980	648
34	Paper, printing and publishing	16013	17823	14174	12080	13469	11142	3933	4354	3032
35	Chemical, Rubber and Plastics	62129	65795	62608	43334	45798	42912	18795	19997	19696
36	Non Metallic Mineral products	28302	22037	19526	21952	17126	15294	6350	4911	4232
37	Basic Metal Industries	44606	33612	24914	33579	25609	19496	11027	8003	5418
38	Metal Products, Machinery, Equip.	77706	60555	67783	61828	45618	54633	15878	14937	13150
39	Handicrafts, Sports, Other Mfg.	9928	6618	14444	9126	5495	12973	802	1123	1471

Source: Census of Manufacturing Industries.

Note: (i) Based on Individual data tabulation—Labour Force Surveys (Various Years).

(ii) Real Wages are worked using the Consumer Price Index with 2000-01=100 as reported in Pakistan Economics Survey (PSE) 2007-08.

Appendix Table 12
Revised Basic Pay Scales

Basic Pay Scales	(Rs Per month)			
	Pay Scales 1-6-1991	Pay Scales 1-6-1994	Pay Scales 1-7-2001	Pay Scales 1-7-2005
22	8075-450-12575	10900-610-17000	17440-1250-34940	20055-1440-40215
21	7535-405-11585	10190-545-15640	16305-1070-31285	18750-1230-35970
20	6810-325-10060	9195-440-13595	14710-950-28010	16915-1095-32245
19	5740-285-8590	7750-385-11600	12400-615-24700	14260-705-28360
18	3765-271-6475	5085-366-8745	8135-585-19835	9355-675-22855
17	2870-215-5450	3880-290-7360	6210-465-15510	7140-535-17840
16	1875-146-4065	2535-197-5490	3805-295-12655	4375-340-14575
15	1620-131-3585	2190-177-4845	3285-265-11235	3780-305-12930
14	1530-119-3315	2065-161-4480	3100-240-10300	3565-275-11815
13	1440-107-3045	1950-144-4110	2925-215-9375	3365-245-10715
12	1355-96-2795	1830-130-3780	2745-195-8595	3155-225-9905
11	1275-86-2565	1725-116-3465	2590-175-7840	2980-200-8980
10	1230-79-2415	1660-107-3265	2490-160-7290	2865-185-8415
9	1185-72-2265	1605-97-3060	2410-145-6760	2770-165-7720
8	1140-65-2115	1540-88-2860	2310-130-6210	2655-150-7155
7	1095-60-1995	1480-81-2695	2220-120-5820	2555-140-6755
6	1065-54-1875	1440-73-2535	2160-110-5460	2485-125-6235
5	1035-49-1770	1400-66-2390	2100-100-5100	2415-115-5865
4	1005-43-1650	1360-58-2230	2040-85-4590	2345-100-5345
3	975-37-1530	1320-50-2070	1980-75-4230	2275-85-4825
2	945-32-1425	1275-44-1935	1915-65-3865	2200-75-4450
1	920-26-1310	1245-35-1770	1870-55-3520	2150-65-4100
	1:9	1:9	1:9	1:9

Source: Bilquees (2006).

Note: (i) Based on Individual data tabulation—Labour Force Surveys (Various Years).

(ii) Real Wages are worked using the Consumer Price Index with 2000-01=100 as reported in Pakistan Economics Survey (PSE) 2007-08.

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