European Journal of Scientific Research
ISSN 1450-216X Vol.65 No.3 (2011), pp. 329-341

http://www.europeanjournalofscientificresearch.com

Services Sector Reforms in Pakistan-Impacts & Implications

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Abstract

This study analyzes the factors behind the growth of the services sector in Pakistan. The study shows that growth acceleration of the services in the period 1990-2005 was mostly due to faster growth in communication services, financial services, business services (IT) and community services. While factors such as a high income elasticity of demand for services, increased input usage of services by other sectors, and rising exports were important in boosting services growth in the period 1990-2005, supply side factors including reforms and technological advances also played a significant role. The large growth potential of Pakistani services exports is well known, but the study finds that there is also considerable scope for future rapid growth in the Pakistani services economy provided that deregulation of the services sector continues. The study shows that employment growth in the Pakistani services sector has been quite modest, thus underscoring the importance of the industry and the agriculture which are also growing rapidly.

Keywords: Services, growth.

1. Introduction

The economic and trade performance of an economy is dependent on the efficiency of its service sector. A well-functioning services sector is the key to the overall economic performance of a country and to the welfare of its citizens. Reform of services sector policies provides an important opportunity for policy makers to strengthen employment, productivity and innovation. It will also help in strengthening the capacity of developing economies like Pakistan to adjust to economic globalization in services and to the growing importance of services for the future growth of economies for poverty reduction and economic development. Services are the driving force in both developed and developing economies, accounting for at as high as 70% of GNP in many countries. However, their potential contribution is hampered by the government policies that were designed to support manufacturing industries. The policies can be adapted to stimulate innovation and boost productivity in the services sector, with economy-wide benefits for employment and growth. According to WTO, services represent the fastest growing sector of the global economy and account for two thirds of global output, one third of global employment and nearly 20% of global trade.

Before examining services in the Pakistan economy, the important definitional issues raised regarding the "services sector" should be mentioned. Fundamentally, the services sector is construed to comprise all enterprises, agencies, organizations, and employers whose final output is not a material good but rather an intangible product (in both formal and informal economies). As has been noted recently, "the characterization of services as `immaterial goods', however, is open to criticism. After all, some services have elements of tangibility ..., visibility ..., (or) storability ... and may not require face-to-face contact between producers and consumers ..." The services sector is hard to define because all definitional conventions fail to capture the diversity represented by the term *services*. In order to grasp the contribution that the services sector makes to the nation, an appreciation of the wide range of activities encompassed by services is helpful. One approach is to divide services into two categories: first one is Intermediate services, which occupy a portion of a larger value chain and contribute to the delivery of some other goods or services and the second one Personal or final services, which are functions to the direct benefit of consumers or customers Another way to categorize service activities is by the customer served. There are business-to-business (B2B), business-to-consumer (B2C), and business-to-government (B2G) services. Demographic shifts, changes in consumer preferences, technological advances, and increases in competitive pressures have resulted in growing demand for wide array of services. Technical innovation, downsizing, and selective outsourcing have all contributed to productivity improvements in the services sector. Not only do economies derive the bulk of their employment and income from the services sector, but also many services like Finance and Insurance, telecommunications and transport are vital intermediate inputs for other sectors. The Share of services sector has grown at a tremendous pace in the last decade of the past millennium. It is a barometer of level of development in an economy. The services sector plays a vital role in sustaining the growth of Pakistan's economy, with a share of 53.3 percent in GDP, and 44 percent (which includes construction sector) in employed labour force in fiscal year 2004-05. The private sector is now also perceived as an important partner in provision of even those services which were the traditional preserve of government. Public private partnerships, when forged properly, can supplement government activities and programs.

The core objective of the study is to check the impact of the growth in Commodity Producing Sector, growth rate of External Trade Volume of Goods, Growth rate of Exports in Services and the impact of Deregulation and Liberalization on Growth of Sub-Services and Services sector as a whole by using the data from 1990 to 2008. The next section provides a brief literature review, Section three elaborates the methodology and the fourth Section provides the results. The final Section concludes the study and puts forward recommendations for future enhancements.

2. Previous Research

The role of the services sector in economic development has been the subject of numerous studies, and the focus of many debates. One incisive observation is that the structure of an economy is a function of the level of its development. This views was originated by S. Kuznets, in his Quantitative aspects of the economic growth of nations, Industrial Distribution of National Product and Labour Force, and Economic Development and Cultural Change, supplement to Vol. V, No. 4, (July 1957). This view is shared by C. Clark, The Conditions of Economic Progress, (London, 1957), J.I. Gershuny, and I.D. Miles, The New Service Economy: The Transformation Of Employment In Industrial Societies, (New York, Praeger Publishers, 1983); J. Singlemann, The Sectoral Transformation of The Labour Force In Seven Industrialized Countries, 1920-1970, American Journal of Sociology, Vol. 83, No. 3, (1978), p. 1224; J. Singlemann, From Agriculture to Services, (Beverly Hills, Sage, 1979). The argument of this school of thought is that higher income levels produce structural changes in the economy. Indeed, the "level of development" and the structure of an economy are functionally correlated, rendering the structure itself to be a criterion of development.

Kongsamut, Rebelo and Xie (2001) analyzed a sample of 123 countries for 1970–89 and showed that rising per-capita GDP is associated with an increase in services and a decline in agriculture both in terms of share in GDP and employment. In other words, the sectoral share given up by agriculture as the economy matures goes more to the services sector and less to industry than the Kuznets - Chenery work had suggested.

The positive association between economic growth and the share of services in the industrial distribution of the labor force has been noted and documented by a number of Investigators, including Fisher (1935), Clark (1941), Kuznets (1957), Chancey (1979), and Fuchs (1980).Clark traced the observation of this relationship back to Sir William Petty and proposed that the shift of the working population from agriculture to manufactures and from manufactures to services in the course of economic growth be called Petty's Law. Kuznets, Fuchs, and others have suggested that the relative expansion of service employment could be due either to high income elasticity's of demand for final product services or to slower growth in productivity in the service industries.

Kuznets(1957) pointed to a number of structural changes that would shift employment to service industries. These included the effect of economies of plant scale in concentrating production in a limited number of localities and thus increasing the need for distributive services, the increase in financial services with growing personal wealth, the expansion of government services (police, sanitation, education) necessitated by the shift away from family and rural production to production by units employing wage earners concentrated in urban areas, and the increase in military expenditures (Kuznets 1966, p. 150.)

Irving B. Kravis,Alan W. Heston and Robert Summers suggests that the driving force behind the expansion of service employment associated with higher per-capita incomes in both cross-national and inter-temporal data is the evolution of technology rather than the change in wants associated with rising income. Across countries, productivity is, of course, lower in poor countries relative to rich countries in both services and commodity-producing sectors, but it is lower by a larger margin in commodities. It seems plausible that, in the creation of new ways of satisfying wants, technological changes are as important in service sectors (such as health care) as in commodity sectors, but that when it comes to cost reduction for existing products or services technological change is more frequent and more powerful in its effects in the commodity sector.

James Gordon and Poonam Gupta say that in common with the experience of many other countries, the services sector in India has grown faster than agriculture and industry. As a result, the share of services in GDP has increased over time. In the 1990s, services growth was particularly strong, and this has led to the services share in output being relatively large in India compared with other countries at similar levels of development.

A spate of empirical cross-country studies by Dollar (1992), Sachs and Warner (1995), Ben-David (1993), Edwards (1998) and Coe et. al. (1997) suggests that the impact of liberalization of trade in goods on the long run rate of economic growth is positive, although a recent paper (Rodriguez and Rodrik (1999)) questions the robustness of the results. While the state of the debate seems to be in ferment, it is surprising that comparable analysis depicting the impact of services trade liberalization on economic growth is sparser. The modern view is that as an economy matures, the share of services (in output, consumption, and employment) grows. Using pooled cross-section and time-series data, Chenery and Taylor (1968) found the industry share in GDP to be positively associated with income and population, and negatively associated with primary exports. This implied a tendency for industry to gain as income rose, but that the gain would be less pronounced in small countries with substantial natural resource endowments along with a decline in agriculture. By contrast, the share of industry first increases modestly, and then stabilizes or declines.

Growth and Sectoral Shares, Cross Country Evidence and Pakistani Experience

The evolution of sectoral shares in output, consumption and employment as Economies grow has been studied by economists for well over fifty years. During the 1950s and 1960s, research by Kuznets and

Chenery suggested that development would be associated with a sharp decline in the proportion of GDP generated by the primary sector, counterbalanced by a significant increase in industry, and by a more modest increase in the service sector. Sectoral shares in employment were predicted to follow a similar pattern. With the benefit of more data on development than was available to Kuznets and Chenery, recent literature has tended to emphasize the growing importance of serviceSector activity (Inman 1985, Kongsamut, Rebelo and Xie, 2001). For example,Kongsamut, *et al*, (2001) analyze a sample of 123 countries for 1970-1989 and show that rising per-capita GDP is associated with an increase in services and a decline in agriculture both in terms of share in GDP and employment. In other words, the sectoral share given up by agriculture as the economy matures goes more to the services sector and less to industry than the Kuznets-Chenery work had suggested. The modern view is that as an economy matures, the share of services (in output, consumption, and employment) grows along with a decline in agriculture. By contrast, the share of industry first increases modestly, and then stabilizes or declines.

A. Share of Services in GDP

Such a pattern of growth is visible in the cross-country data on shares in GDP presented in Table 1. These data suggest two stages of development. In the first, both industry and services shares increase as countries move from low income to lower middle income status, while in the second, the share of industry declines and that of services increases as the economy moves to upper middle and higher income levels.

Table 1: Sectoral Shares in GDP in 2005 (Global Averages) *(Percent of GDP)*

	Agriculture	Industry	Services
Low income	23	25	52
Lower middle income	12	37	51
Upper middle income	7	30	64
High income	2	29	70

Source: World Bank's WDI Table:

Definition: Low income:-Per Capita GDP<$745; Lower middle:-$746-2,975; Upper middle:- $2,976-$9,205;and High:->$9205

How does the Pakistani experience fit in with this pattern? Chart 1 show that in the four decade period, 1950-1990, agriculture's share in GDP declined by about 27 percentage points, while industry and services gained equally. The share of industry has stabilized since 1990, and the entire subsequent decline in the share of agriculture has been picked up by the services sector. Thus, while over the four decades, 1950-1990, the services sector gained an 11.7 percent share, the gain in the 1990s till now alone is 4.4 percentage points.

Chart 1: Pakistan, Sectoral Shares in GDP, 1950-2005

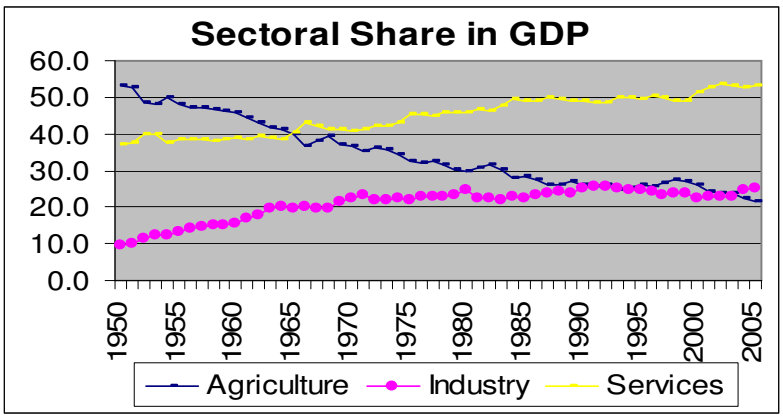
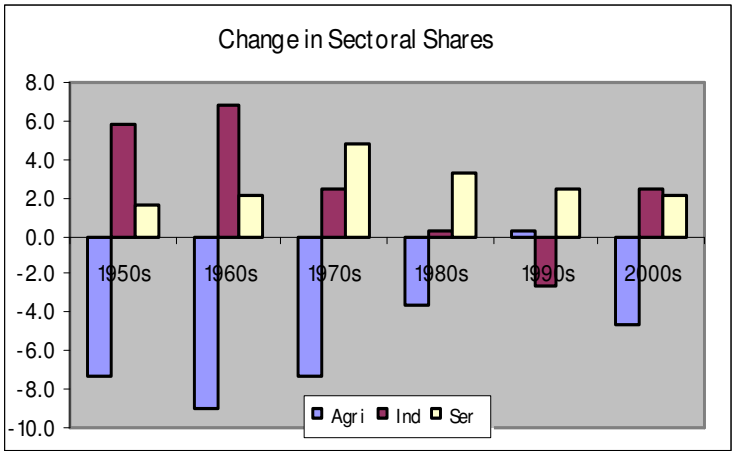


Chart 1: Pakistan, Sectoral Shares in GDP, 1950-2005 - continued



Consequently, at current levels, Pakistan's services share of GDP is higher than the average for other low income countries. A comparison of Table 2 with Table 1 shows that the size of Pakistan's services sector, relative to GDP, is closer to the average of lower middle income countries and low income countries.

Table 2: Pakistan:Sectoral Shares in GDP,1950-2005 *(Percent of GDP)*

	Agriculture	Industry	Services
1950	53.2	9.6	37.2
1980	29.6	24.8	45.6
1990	26.0	25.2	48.8
2000	26.2	22.6	51.2
2005	22.6	24.5	52.4

Source: Own Calculations

B. Share of Services in Employment

Even though Pakistan has experienced profound changes in output shares, the same is true for employment shares (Table 3). A striking feature of Pakistan's development is that in contrast to the substantial decline in the share of agriculture in GDP, there has been rather little change in the share of employment in agriculture. Similarly, although services rose from 49 percent to 53 percent of GDP during the 1990-2005, the employment share of services actually increased by about two percentage points during 1990-2005.

Pakistan's service sector growth is like the experience of other countries, where the service sector has also tended to gain a larger share of employment over time. An interesting feature of Chart 2 is that the slope of the fitted line is 0.92.The normal pattern is thus for the services share of employment to rise faster than its share of output. In sharp contrast, since the labor share in services employment has been flat, labor productivity in Pakistani services has been increasing over time.

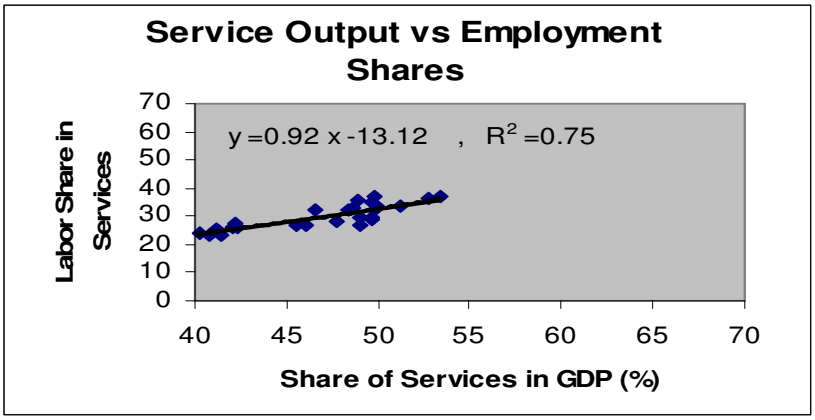
Table 3: PAKISTAN: Share of Services Sector in Employment and Capital Formation*(In Percent of Total)*

	Employment	Gross Capital Formation
1965-66	23.77	34.95
1970-71	23.32	34.15
1980-81	32.17	37.26
1990-91	18.48	29.48
1999-2000	18.53	37.07
2000-2005	20.53	40.74

Source: Economic survey of Pakistan (Different Volumes)

Table 3 shows that the increase in labor productivity in Pakistani services has been due to an increase in the relative capital intensity as well as other factors have been at work in raising labor productivity, which could include the growth of services being concentrated in sub-sectors which are more dependent on skilled labor than on unskilled labor or capital. This trend has no doubt been reinforced by technological improvements, as well as by efficiency gains resulting from liberalization.

Chart 2:



Which Services Have Grown Rapidly?

In this section we identify the drivers of growth acceleration in the services. The acceleration in services growth in the 1980s and 1990s was not uniform across different activities (Table 4). Some segments grew at a rate much faster than their past average growth rates, while for other sub-sectors, growth rates were similar to the past trend. To identify the growth-drivers within the services sector, we compare the growth rates of various activities in the 1990s with their previous trend growth rates (Chart 3).

With reference to table 4, average growth rate of Wholesale and Retail Trade increased from 50s-70s to 80s while decreased in 90s. Share of wholesale and Retail Trade in GDP, till 1990 increased and then decreased in 2000. Average growth rate of Transport, Storage and Communication decreased in different periods while share of TSC in GDP increased. Average growth rate of Finance and Insurance (FI) decreased from 11.5 to 4.9 and its share in GDP remained almost same in mentioned periods. Avg. growth of Community, Social and Personal Services increased while share in GDP decreased in 1990 and increased in 2000.

Table 4: Growth Rate and Sectoral Shares

Sector	**Average Growth in 50s-70s**	**Average Growth in 80s**	**Average Growth in 90s**
	(Share in GDP in1980)	***(Share in GDP in1990)***	***(Share in GDP in2000)***
Retail Trade	5.6 (16.0)	7.17 (16.5)	3.36 (14.9)
Transport, Storage and Communication	6.2 (7.4)	6.19 (9.5)	5.18 (10.1)
Finance and insurance	11.5 (2.5)	5.18 (2.2)	4.9 (2.5)
Community, social and personal services	4.6 (8.5)	6.42 (7.7)	6.5 (9.3)

Here Y represents The Each activity of sub-services and X represents the Time “t”. Here in these graphs growth rates of shares of sub-services in services sector are being explained. It has been shown the time trend of all sub-services. **A**ctual growth rate of Ownership of Dwellings (OD) increased in 1980s but decreased after 1980s till now. Trend growth rate is in increasing position till

2005. Actual growth rate of Public Administration and Defense (PAD) increased in 1960s and decreased at end of1960s.In the mid of 1970s it was at the top but after 1970s there is no as such increase or decrease. Trend growth rate is decreasing overall till 2005. In the case of Community Services (CS), actual growth rate increased but it decreased after 2000 till 2005. Trend growth rate in this case is increasing till 2005.

Chart 3: Fast and Trend Growing Services Segments in Pakistan: (Three Year Moving Averages)

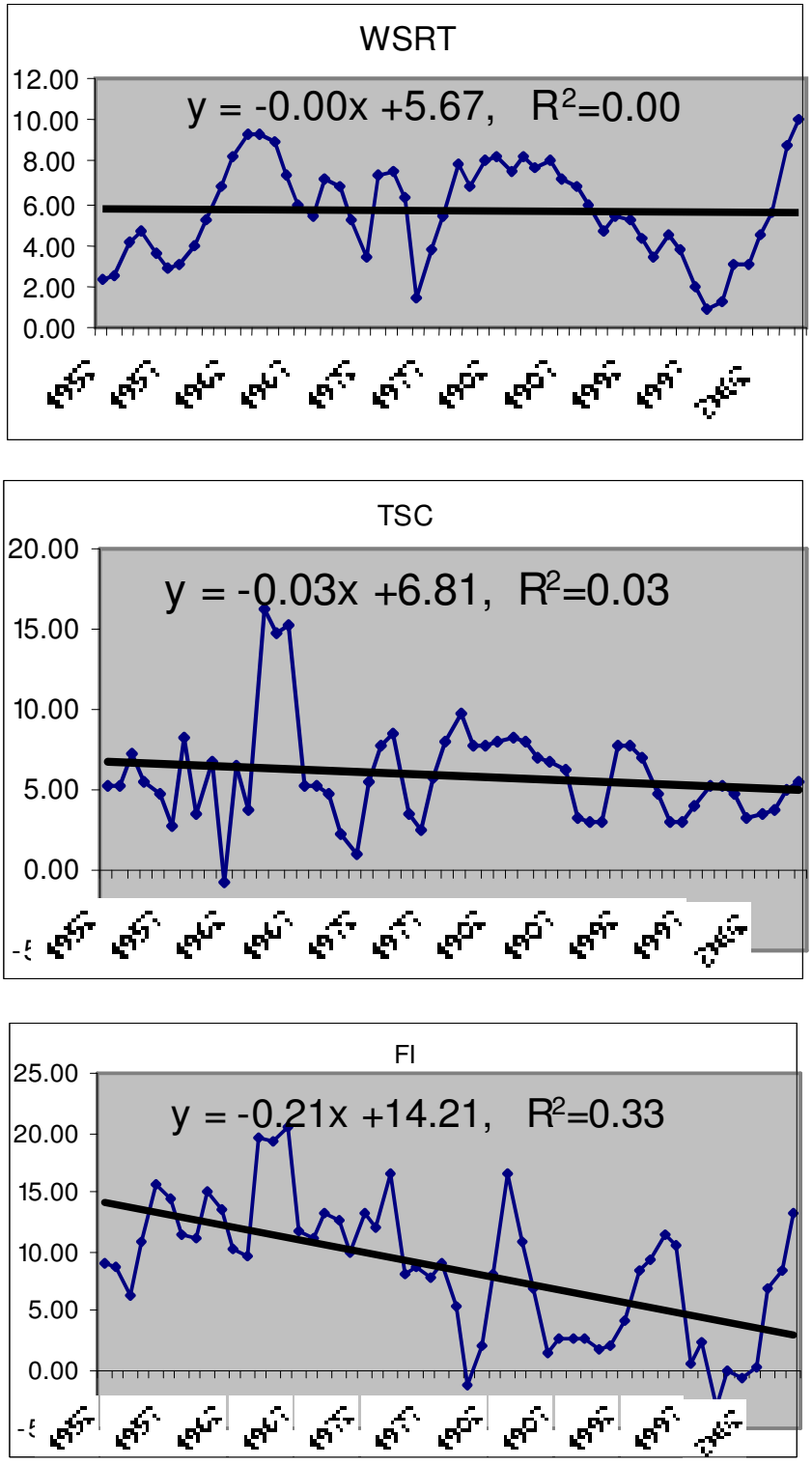
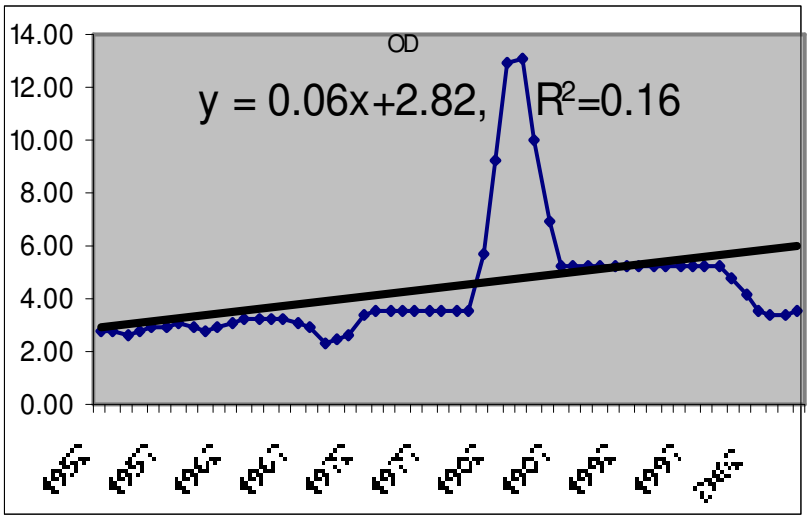
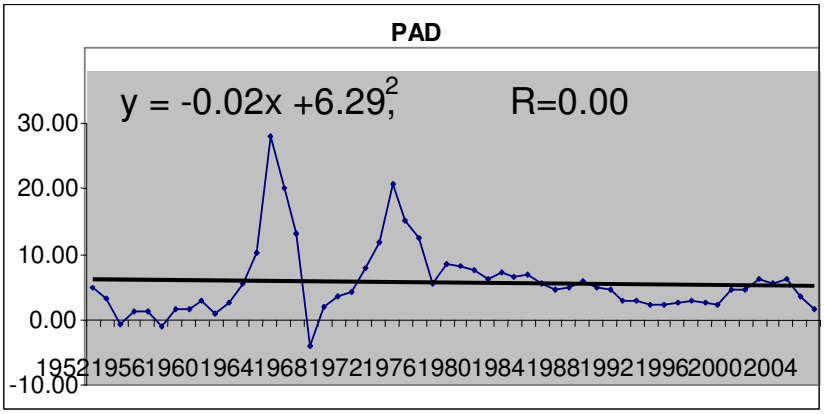
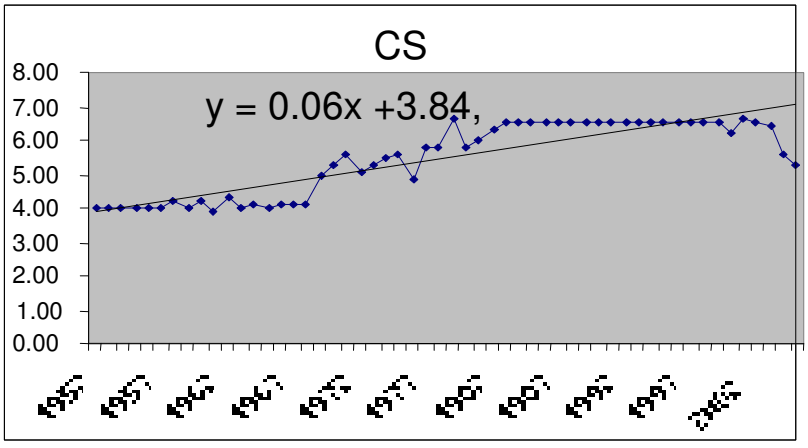


Chart 3: Fast and Trend Growing Services Segments in Pakistan: (Three Year Moving Averages) - continued





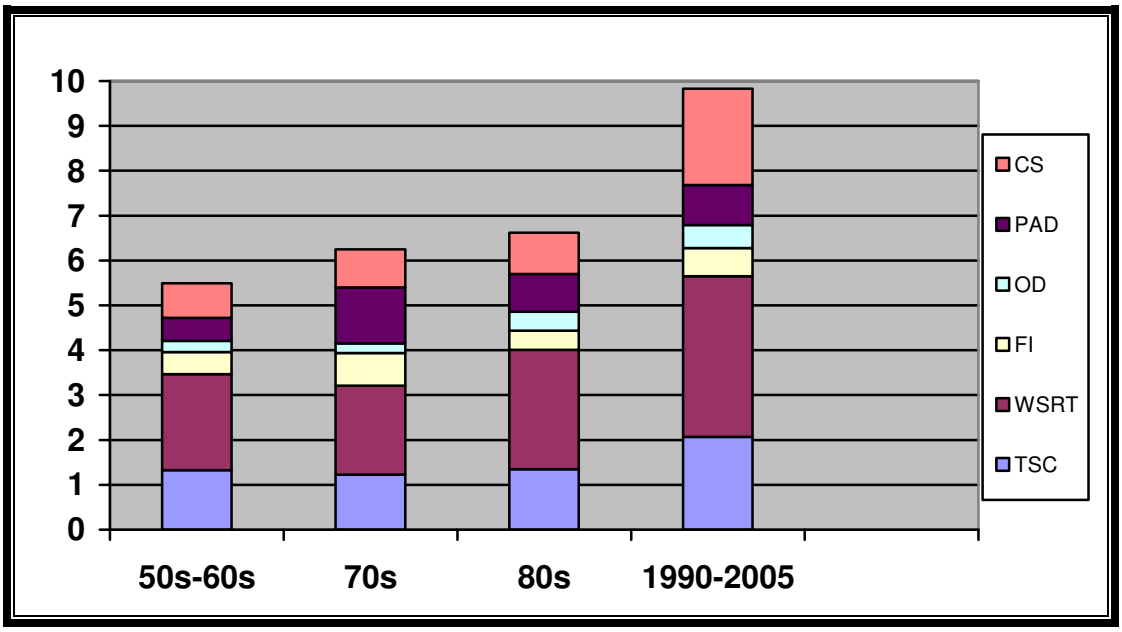


Contribution of Fast and Trend Growers to Services Growth

The fast growing activities accounted for about a quarter of services output in the 1980s, but because of their relatively fast growth, these activities represented one-third of these services output by 2005. In Chart 4, we estimate the average contribution of the fast growers and trend growers to services growth in the 1950s-1960s, the1970s, the 1980s, and in the period 1991-2005

Chart: 4 shows that the high services growth in the 1980s was primarily due to the fast growing sub-sectors. In the 1990-2005, TSC, WSRT and CS have main role in the growth of services sectors. In 1970s Finance and Insurance played a major role in boosting up the services sector growth.

Chart 4: Contribution of Fast and Trend Growers to Growth in Services



Factors Explaining Services Sector Growth

A number of studies have attempted to explain the fast growth in the share of service activity observed in cross country data. The literature draws a distinction between demand and supply factors (Kravis, 1982, Francois and Reinhart, 1996). On the supply side, the share of services can be boosted by a switch to a more service-input intensive method of organizing production. Such a change in production methods can arise as a result of increasing specialization as the economy matures. For example, over time, industrial firms may make greater use of specialist sub-contractors to provide services that were previously provided by the firms themselves. Legal, accounting, and security services are obvious candidates to be contracted out. Bhagwati (1994) calls this process of specialization splintering. Kravis (1982) points out that splintering will lead to growth in the share of services in GDP, even when GDP itself is not growing.

On the demand side, an increase in the output share of services can arise from rapid growth in the final demand for services. This could be from domestic consumers with a high income elasticity of demand for services, or from foreign consumers with a growing demand for the country's service exports. Demand-led growth of this type is likely to result, at least initially, in higher prices of services, as well as a shift of resources into the production of services.

Service activity can also be stimulated by technological advances, whereby new activities or products emerge as a result of technological breakthrough—such advances are likely to be particularly relevant in the case of the IT sector (e.g. the internet), telecommunication (cellular phone services) and to some extent in financial services (credit cards, ATMs etc.) Liberalization can also provide a boost to services. In Pakistan, important policy reforms were made in the 1990s which were conducive to the growth of services sector, such as deregulation, privatization and opening up to FDI. If the growth of services was previously inhibited by government controls, then policy changes may provide a positive shock that unleashes new activity and growth. We review each factor in turn and discuss their applicability to Pakistan.

3. Methodology and Data

Taking a different approach from the previous section, we empirically test for the significance of different factors in explaining growth. We estimate regression equations separately for each activity.

The right hand side variables in the regressions include measures of the effect of Commodity Producing Sector, variations in input coefficients effects, the effect of increased trade in goods and services, and a measure of policy changes. Reasonable proxies are available for most of these variables, but constructing a satisfactory measure of policy changes in each sub-sector did not prove feasible. A more precise way to account for the effect of reforms in services would have been to create separate indices for liberalization in industry, external sector; and the services sector. However, since usually more than one set of major reforms were carried out in any one particular year it was not possible to create different dummies for liberalization in different sectors.

I estimated separate regression equations using time series data to explain growth in each service activity. To capture the influence of reforms, I use a dummy variable for the period 1990-2005. The justification for such a dummy is that reforms in the services sector were mostly carried out in the 1990-2005. After controlling for other effects, a significant coefficient for this dummy would indicate that there is an unexplained part of growth which could possibly be attributed to reforms. Using simple dummy variables is a very crude way to proxy reforms. It has the limitations that it cannot isolate the effects on growth of reforms or other events that might have been happening in the period1990-2005; it does not precisely capture the timing of the reforms; it does not distinguish between different types of reforms; and finally, does not measure the extent or intensity of reforms.

3.1. Model

Decade -Specific Dummies (Time Series Regression)

$$GSER^{i}_{t} = C^{i} + \alpha^{i} GCDTY_{t} + \beta^{i} GTRD_{t} + \gamma^{i} EXS_{t} + \lambda^{i} D\,90 + \varepsilon^{i}_{t} \quad (1)$$

t=1950……2005

$\varepsilon^{i} = N(0,\sigma^{2})$

D 90 = dummies for period 1990-2005

The dependent variable in (1) is the annual growth in the i-th service activity in year t. The right hand side variables include growth rate of the commodity producing sectors (GCDTY), growth rate of the external trade volume of goods (GTRD), and growth of exports in services (GEXS), all in year t. To smooth out the noise in the annual data, all growth rates are measured as 3 year moving averages (see Appendix A for details on construction of these variables).

The first argument in the above equation (growth rate in commodity producing sectors) is intended to capture the effect of growth in income on final demand, and the effect of growth in other sectors on the demand for service inputs. We include growth in the volume of external trade to see whether increased openness of the economy to external trade has resulted in higher growth for services as well.

Since certain sectors, especially business services, and the hotel industry, are highly dependent on foreign demand, we include service exports in the regressions. In order to account for any residual in growth which cannot be explained by these three variables, we include separate dummies for the period 1991-2005. The equations are estimated using Ordinary Least Squares.

3.2. Results

Regression results show that for all the fast growing sub-sectors, the dummy for TSC is significant at 10% level, for WSRT at 5%, for FI at 5%, for PAD at 5%,for CS at 1% level, and the dummy for OD is insignificant for the period1991-2005. Constant values for all Sub-services are positive and highly significant. The effect of Growth rate of Commodity Producing Sector on PAD is significant at 10% level and in case of CS significance level is 5%, other activities are insignificant. The effect of growth rate of external volume of trade of goods on WSRT is significant at 1% level and the other activities are insignificant.

Table A: Explaining Services Growth Using Time Series Data: 1950-2005

	TSC	WSRT	FI	OD	PAD	CS	SER
Constant	6.40* (11.51)	6.00* (16.63)	9.02* (9.77)	4.60* (11.32)	7.44* (8.12)	5.34* (34.45)	3.9 (5.4)
GCDTY	-0.007 (-0.09)	-0.00 (-0.00)	0.13 (1.01)	-0.05 (-0.87)	-0.21*** (-1.63)	-0.04** (-2.00)	0.32 (2.42)
GTRD	0.02 (0.45)	0.08* (2.92)	0.00 (0.04)	0.003 (0.12)	0.08 (1.13)	0.003 (0.28)	0.03 (2.32)
GEXS	-0.02 (-0.27)	-0.02 (-0.53)	-0.02 (-0.19)	0.01 (0.22)	0.03 (0.30)	0.01 (0.74)	0.003 (0.48)
D90s	-1.67*** (-1.65)	-1.62** (-2.46)	-4.00** -2.38	0.07 (0.10)	-3.69** (-2.21)	1.04* (3.69)	-0.80 (-1.52)
R^2	0.06	0.26	0.19	0.046	0.16	0.36	0.25

Regressions estimated using data for 1950-2005. Number of observations is 54 after adjusting endpoints. T values are given below the coefficient estimate in each cell.
*, **, *** indicate significance at 1, 5 and 10 percent levels respectively.

4. Conclusion and Future Recommendation

This study studies the growth of the services sector in Pakistan. It shows that in common with the experience of many other countries, the service sector in Pakistan has grown faster than agriculture and industry. As a result, the share of services in GDP has increased over time. In the period 1990-2005, services growth was particularly strong, and this has led to the services share in output being relatively large. What is also striking about Pakistan's growth experience is that the services sector does appear to have created many jobs. Like the experience of many countries where productivity growth in the service economy has tended to lag behind that of other sectors, it appears that the Pakistani service sector has high labor productivity.

The acceleration in growth of the service sector in Pakistan in the period 1990-2005 was due to fast growth in the communication, financial services, business services (IT) and community services (education and health). The remaining sectors grew at a constant or trend growth rate. The paper shows that factors such as high income elasticity of demand and increased input usage of services by other sectors have played an important part in elevating services growth. However, other factors such as economic reforms and the growth of services exports also played an important role in accelerating services growth in the 1990s. Significant productivity gains appear to have occurred in the faster growing sectors, leading to a decline in their relative prices. The findings of the study suggest that there is considerable scope for further rapid growth in the Pakistani service economy. That Pakistani service exports have strong future growth prospects is well known, but the study also finds that there is considerable scope for further rapid growth in the Pakistani service economy provided that deregulation of the services sector continues.

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Appendix A: Sources of Data and Construction of Variables.

Variable Name	Construction of Variable	Source
	Variable Used in Regression Equation.	
Growth	Average Growth rate of Output in Activity "i" during the period 1950-2005	Own Calculations using data from different surces.[1]
GCDTY	3 year moving average of growth rates in the Commodity Producing Sectors.	Own Calculations using data from different surces.[1]
G Trade	3 year moving average of growth of the Volume of external trade (Exports +Imports)of goods.	Own Calculations using data from different surces.[1]
G Ser Ex	3 year moving average of growth of Services Exports	Own Calculations using data from different surces.[1]
D 90s	**Dummy variable which takes the value one for the years 1990-2005 and 0 otherwise.**	