The impact of fiscal decentralisation through 7th NFC award on healthcare and basic education in Balochistan, Pakistan

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Abstract

The 7th National Finance Commission (NFC) Award, passed and implemented in 2009, not only has changed the distribution criteria among the provinces by including more indicators – poverty, reverse population, revenue share and population, though the latter with lion share (82%) – it also enhanced the vertical share of the provinces in divisible pool. The 7th NFC has significantly affected the landscape of resource distribution with positive consequences in Pakistan with postitive consequences on the principles of its federal structure. Owing to this, the provinces in Pakistan now have far better fiscal space with significant autonomy to allocate resources to critical social and economic sectors pertaining to services delivery to the people. Balochistan like other provinces witnessed a quantum jump in receiving transfers from the divisible pool and straight transfers which could potentially be translated into better social services delivery. This study evaluates the effectiveness of the 7th NFC Award on two sectors – health and education – in Balochistan by using a balanced panel dataset 1985-2014. A rich and unique dataset is gathered from various sources of the Government of Balochistan, and is analyzed by using different statistical techniques and econometric models. The empirical results show that while in post 7th NFC Award, where the share of Balochistan in divisible pool and straight transfers has increased many folds, the quality and quality in health and education sectors despite receiving large-scale budgetary allocations failed to witness a marked improvement. The results further demonstrate that while the infrastructure of healthcare and education sectors has shown a slight improvement, the same has not been translated for the benefit of the much-desired outcomes such as gross enrollment rates, number of primary schools, pass-out ratio in secondary schools examination, the overall literacy rate etc. The reason of such ineffectiveness and inefficiency of Balochistan in providing better education and healthcare could be many. But the key among them is the 'elite capture' in line with the bureaucratic and political class corruption and sheer embezzlement of public finances that is widely documented in the province.

Keywords: 7th National Finance Commission Award; Education and Healthcare Outcomes; Elite Capture; Balochistan

JEL Classification: Q51, O40, Q47, Q46, Q58

1. Introduction

The National Finance Commission Award (NFC) gives the legislative provisions of resource distribution – all types of tax and revenues – between the federal government of Pakistan and

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its provinces (vertical distribution) and among the provinces itself (horizontal distribution). The NFC Award, established under the Article 160 (1) of the Constitution of 1973, is to ensure an even and astute distribution of resources mobilized by the federal government. Legally the NFC Award is to be constituted after every five years by the President of Pakistan, appointing the Federal Finance Minister as the chairman and Provincial Finance Ministers and other legal and financial experts as its members – the latter are nominated by the provincial governments (Constitution of Pakistan, 1973). This intergovernmental fiscal transfer takes place in the shape of revenue sharing, recurring grants, development grants, loans and straight transfers to provinces from the federation. It is to mention that only tax revenues are part of the divisible pool; non-tax revenues are not part of it.

The history of resource distribution between the federal government and the provinces goes back to pre-partition India, where for the first time in 1919 a mechanism was established through which the funds were distributed between different tiers of governments (Social Policy and Development Centre, 2010). While, after 1947 the same practice of transnational resource allocations was continued. Yet over the time, it went through numerous changes in line with lawful improvements and additional distributional criteria.

Comparable with other federations, the determination of resource allocation framework in Pakistan is ostensibly aimed at correcting the vertical economic differences owing to the federal and the provincial governments, and horizontal disproportions between the provinces. Since 1947, when Pakistan came into existence after the partition of undivided india, seven resource-sharing commissions were constituted where the Raisman Award being the first in 1951 followed by other Awards in ensuing periods respectively in 1961-62, 1964, 1970, in 1974, 1991, 1997 and 2009. Two more commissions were nominated in 1979 and 1985, yet without any tangible outcomes.

The 7th NFC Award – passed and implemented with a broader consensus in 2009 – modified both the vertical and horizontal distributions criteria. In vertical distribution the federal government has forgone 8.5 percentage of its hitherto share from the divisible pool in favour of the provinces, which enabled the latter to receive 56% of the net separable pool in the first year (2010-11) and 57.5% in each fiscal year throughout the lasting period of the Award, leaving the federal government correspondingly with 44% and 42.5% share. In horizontal distribution, unlike previous Awards in which only the population had been the sole criteria for distribution, the 7th Award is based on multiple indicators, which include Population, Backwardness/Poverty, Revenue Generation/Collection and Inverse Population Density or Area/Total Landmass with 82%, 10.3%, 5.0% and 2.7% of weight respectively (see Table 2) (Ahmed and Baloch, 2015). The principal purpose of a bigger share for provinces out of divisible pool inherently is to enhance the fiscal capacity of the provinces in social services delivery, as after the 18th Constitutional Amendment (2010) the provinces are entrusted with more autonomy and with greater expenditure responsibilities.

In the horizontal distribution, Balochistan province remained the key beneficiary in which its share has sharply increased from mere 3.5% to 9.09%, besides the release of Rs120 billion from the federal government (on annual installment). Thus, given this bigger fiscal space and constitutional mandate – owing to the 18th Amendment – the performance of Balochistan in

social services delivery, among other things, should hypothetically be improved.

Although healthcare and basic education (primary and secondary) have historically been provincial subjects since 1973, yet prior to the 18th Amendment the federal government maintained education and health ministries that had made the overall plans and policies for education. Even after the 18th Amendment the federal government makes policy planning and coordination of the education and healthcare sector, but implementations, executions, operationalization, monitoring and financing relate to the provincial governments.

Notwithstanding, better intergovernmental transfers due to the 7th NFC Award the overall status of social sector in Pakistan is mired with anomalies and weak performances. Especially the smaller provinces are more prone with inefficiencies in fostering their pace to increase the outcomes of social sector, despite ample resource allocation to some of the key services, like health and education. The condition of health and education services in Pakistan, especially in less developed areas such as Balochistan is extremely poor. In Balochistan majority of school going kids are still out of schools, gender disparity, the dropout rates are very high, the physical infrastructure of schools is very poor, the standard and quality of the children who could attain public schools is abysmally weak. According to Education Department, Government of Balochistan 88% of girls is unable to acquire tertiary education after completing secondary school (Government of Balochistan, 2017). Similarly, the service of healthcare in Balochistan is no better: The infant mortality rate is the highest in Balochistan compare to other provinces of Pakistan; the infrastructure of health sector is in dire condition (Institute of Development Studies, 2013).

The debate for decentralization of education has received much attention for over two decades. Educational decentralization is rationalized on three broad categories: 1. Redistribution; 2; Effectiveness; and 3. Finance (Hector, 2006; Winker, 1989). The notion of redistributing resources through decentralization generates from the fact that regional or subnational governments are more effective not only in identifying the issues pertaining to basic education but also being more accountable in rendering better education services. Subnational governments can encourage community participation in schools' affairs, which lead to weaken the influence of strong lobbies such as teachers' union (Winkler and Gershberg, 2000).

The educational finance's argument typically revolves on the idea that the federal government because of administrative and management difficulties and logistics impediments shifts the basic and secondary education responsibilities to subnational or provincial governments, and often time to non-governmental organizations and local communities. Considering that local decision making because of its proximity better identify the local needs can provide education to local people with improved quality and reduced costs. Moreover, the decentralized decision making, regarding education, provides greater voice to the local people makes the official and administrators accountable to the public for their performance.

However, arguments in the favour of centralization vis-à-vis education services are equally strong. Weiler (1993) is clearly illucidates in supporting the centralized provision of education services on the ground of standardization, curriculum development and qualification. For standardization of education and mutual recognition of qualification in nationwide the

centralization of education is required. Critics, including Carnoy and Hannaway (1993), are in the view that resource distribution through decentralization reforms is very unlikely to resolve the problems concerning education. These are complex problems therefore they need of a widespread rethinking in broader policy, in which a resourceful central government is more effectual in addressing such issues than an incapable subnational government riddle with corruption and inefficiencies. The debate of the decentralization of education services through resource redistribution is presented in terms of identifying what functions and responsibilities should be decentralized and what should remain with central government, rather than whether to centralize or decentralize the entire sector. The "partial decentralization" has failed. It has solved neither the problems of general provision of education services nor help in improving the quality of education.

In the 1990s several Latin American countries (Brazil, Bolivia, Chile, Colombia, Costa Rica, Mexico, Nicaragua and Venezuela) decentralized the education services through decentralization reforms, wherein primary and tertiary education provision has entirely become a subnational governments' subject. The purpose of this reform apparently was to enhance the overall quality of education by removing the administrative bottlenecks and inefficient use of resources by the agents of central government. Moreover, it also aimed at increasing the accessibility for those who hitherto were excluded from education. In Argentina for example, all secondary and primary schools have been transferred to the provincial governments and provincial education department was made responsible for planning, financing and management of education (Winkler and Gershberg, 2000). Chile and Colombia are other instances where educational decentralization was begun in 1980s and 1990s respectively to devolve primary and secondary schools to regional governments and municipalities in order to produce improvements at school level.

However, the evidence on this issue is also mixed. The resources transfer to subnational governments for educational decentralization without proper technical and financial supports from the central/federal government have not been successful in improving the quality of education. For instance, Brazil with strong decentralized education system has failed to increase the per capita education expenditure i.e. reducing regional and income inequalities in accessing to education. In Chile the Net Enrollment Rate has further deteriorated following the decentralization (Carnoy and De Moura, 2000).

According to the 1973 Constitution of Pakistan, and further to its 18th Amendment in 2009, education is a provincial subject. However, planning, finance and administration of education is partially conducted by the federal government of Pakistan. The federal education department sets the overall curriculum development, policy planning, coordination and standard for primary and secondary education, while for territory and higher education, even the budget is also carried out by the federal government, through the Higher Education Commission of Pakistan. The implementation and execution of the plans and policies pertaining to primary and secondary education come under the domain of the provincial governments (Khan and Mira, 2011).

The core reason of giving basic education to subnational/provincial governments is to improve the provision and the quality of education. Therefore, it is plausible to assume that with more

fiscal power to the provincial government through the 7th NFC Award the provision of education is likely to increase. Nevertheless, to the best of our knowledge, this relationship has not been empirically examined with robust anlaysis.

Likewise, many scholars (see Mills, 1994) support the resource distribution to subnational government to reinforce the decentralization of health sector. That is because a less unified health service provides by the subnational governments can better tailor to the preferences of local people. Moreover, under the local accountability and greater community participation the subnational governments with adequate finances are more effective providing the basic healthcare services. It can also increase the efficiency through better allocation of resources to the targeted groups, particularly to the poor income groups.

Infant mortality rate is believed to be a barometer of health status of any society Kaufmann et al., (2005) and Robalino et al.'s (2001) cross-country evaluation of the impact of fiscal decentralization on infant mortality rate shows in countries where the subnational governments are responsible to manage higher share of total health expenditures tend to have better health indicators including infant mortality rate. They also show that public expenditure on health is higher in those subnational/local governments that command improved administrative capacity. This evidence suggests that for fiscal decentralization to be more effective it needs to be accompanied by administrative decentralization.

In addition to the cross-country analysis, country-specific analysis has also been conducted to examine the role of subnational governments in providing better healthcare services. Schwartz's (2002) study on the Philippines suggests a positive correlation between fiscal decentralization and health outcomes. The study compares the level and composition of health expenditure during both pre and post devolution reforms carried out in the Philippines in 1994. Their study shows comparative increase in per capita health expenditures following the devolution. The rise on expenditure is more prominent in provincial level compare to the municipalities and districts, which may be because the former are responsible for major health projects and hospitals. Another interesting revelation of the study is that following the devolution reforms the subnational/provincial governments with more unconditional transfers from upper tier of governments/central governments tend to have higher allocation for health sector at the expense of other social services. Similarly, Arze et al. (2003) show a common trend in Bolivia, Ecuador, El Salvador and Nicaragua where higher health expenditure is followed by fiscal decentralization.

However, the decentralization of health sector invites criticism because of many complexities, such as diseconomies of scale, which tend to restraint the local governments in the provision of costly treatments and immunization (De Mello, 2004). Haque (2012) states that, "as an element of decentralization, local government is a result of devolution". No matter how much money the subnational governments are entitled to spend on healthcare sector, unless a stringent accountability system is in place the effectiveness of decentralization on the performance of health services remains to be limited. Khemani (2004) conducts a research on Nigeria's intergovernmental design and its impact on local accountability. He shows that following decentralization, health sector has witnessed a widespread disruption and mismanagement in public health services that ultimately has led to further deterioration of the already low quality

health service in the Nigeria. Interestingly, this situation is not entirely explained by not having sufficient resources at the subnational level. Lack of accountability is also a cause for not utilizing the devolved resources effiecently and effectively. Thus, under conditional intergovernmental transfers for health spending, the local governments are not held accountable to the public, which leads to the inefficient use of health spending by provincial/local authorities. Kaufman et al. (2002) examine the impact of fiscal decentralization on public services delivery, particularly healthcare in Bolivia. Their study shows that albeit both national and subnational governments have failed to provide adequate public services but comparatively the latter has given better access to citizens, particularly to the poor and disadvantaged. They note that since decentralization is at its early stages in Bolivia, positive outcomes of access to social services may be an indication for better health indicators such as infant mortality rate and crude death rate. Yet, it is also shown that resource sharing with provincial governments through fiscal decentralization does not necessarily helps in improving the health outcomes even if it is in accordance with the public demands (Pritchett, 1996; Inchauste, 2000). For example, in Mexico and Jordan despite differences in public spending on health services infant mortality rate was at a similar rate (WDR, 2014). Likewise, both Haiti and Cote d'Ivoire witnessed a reduction in per capita health expenditures during 1980s and 1990s but infant mortality rate improved in the former and worsened in the latter.

In Pakistan since the health and education sectors are in provincial governments purview, any step that helps improving the capacity of provincial governments should supposedly translate into better services of healthcare and education. This study contributes in investigating the impact of the 7th NFC Award on these two services. This research is unique in a sense that it brings out novel data and possible policy issues related to the subject matter, and therefore may contribute to the existing literature. The study encourages further debate in the development economics and public finance on the issue of the impact of decentralization and subnational governments/provinces' fiscal and administrative autonomy on social services delivery.

Rest of the paper is organized as follows: second section provides an overview of the NFC Awards. Section three presents the status of education and healthcare in Balochistan. Section four describes the methodology and data. Section five presents the empirical results and discussions. Section six gives conclusions and policy recommendations.

2. National Finance Commission Awards: An Overview

Fiscal resource distribution in Pakistan traces its history back to the 1935 of the Government of India Act. The 1935 Act governed and delineated the distribution of revenues alongside the legislative responsibilities of central government and its constituent units (Jaffery and Sadaqat, 2006). Table 1 portraits the share of provincial governments in various resource sharing Awards. Though there have been 12 Awards in total since the independence of Pakistan, only 7 could amicably conclude their final recommendations. The data presented in table 1 show that the resource transfers trend has been increasing since the first Award – Raisman Award -, from 12.8% in 1951 to 56-57.5% in 2009. With the exception of 1974 Award, and the following two inconclusive Awards (1979 and 1985), which replicated 1974 Award, the share of provinces in divisible pool, has consistently been increasing. This, therefore, testifies that the country has gradually, albeit very slowly, moved towards fiscal decentralization.

Table 1: Revenue Sharing Arrangement Under Various Awards

Divisible Pool	(Raisman) NFC Awards											
	51	61	64	70	74	79	85	91	97	02	2006	2009
Income Tax and Corporation Tax	50	50	65	80	80	80	80	80	37.5	37.5	41.5 - 46.25	65 - 57.5
Other Direct Taxes									37.5	37.5	41.5 - 46.25	65 - 57.5
Sales Tax	50	60	65	80	80	80	80	80	37.5	37.5	41.5 - 46.25	65 - 57.5
Excise Duty				80								
Tea	50	60	65								41.5- 46.25	65 - 57.5
Tobacco	50	60	65	80				80			41.5 - 46.25	65 - 57.5
Sugar											41.5 - 46.25	65 - 57.5
Betelent	50	60	65	80							41.5 - 46.25	65 - 57.5
Export Duties									37.5	37.5		
Cotton		100	65	80	80	80	80	80				
Jute	50	100	65	80							41.5 - 46.25	65 - 57.5
Import Duties									37.5	37.5	41.5 - 46.25	65 - 57.5
Succession Duties		100		100					37.7	37.7	41.5 - 46.25	65 - 57.5
Capital Value Tax on Immovable Properties		100		100					37.5	37.5	41.5 - 46.25	65 - 57.5
Petroleum Surcharges									100	100	41.5 - 46.25	65 - 57.5
Gas Development Surcharge									100	100	41.5 - 46.25	65 - 57.5
Divisible Pool Transfers as % of Federal Tax Revenue	12.8	23	35	53.4	29.8	29.8	29.8	35	37.3	37.3	41.50 - 46.3	56 - 57.5

Source: NFC Reports (various years*) (Provincial share in %age)*

After a gap of almost 16 years, another Commission was formed, with its final recommendations presented in April 1991. The Award was considered an achievement in the sense that it came after a long delay during which the provinces had experienced large and chronic deficits in their respective budgetary positions given the unbalanced intergovernmental resource transfer patterns. The accomplishment of this Award was that, the size and scope of the divisible pool was expanded with the inclusion of some other taxes and duties, such as duties on Sugar and Tobacco, which hitherto had remained out of divisible pool. Another significant development was the growth of horizontal share of the provinces: the latter registered a noticeable 60% growth – from 28% (Rs 39 billion) in previous Award to 45% (Rs. 64 billion) in this Award (Ghaus and Pasha, 1994). However, the Commission was not successful in including custom duties in divisible pool despite strong demand from the provinces. Another

major failure of the 1991 Award was not reaching out to a consensus on horizontal resource distribution. Consequently, the existing formula of population was carried out as sole criteria even with serious doubts and reservations from the less populated provinces, particularly for Balochistan.

The 1991 Award is considered a way forward towards fiscal decentralization because the provincial share in total revenues collected by the federal government registered a quantum jump of 18% compare to the previous Awards. This increment happened largely due to the inclusion of excise duties on Sugar and Tobacco into the divisible pool, which thus far was not divisible (Ahmed et al, 2007).

Though the horizontal distribution criteria did not change, the size of the transfer has enlarged because of the bigger volume of the divisible pool pie. Under this award the fiscal autonomy of the provinces increased because of the provision of special grants and straight transfers to finance their development needs. Moreover, the share of provinces in two pivotal federally collected taxes – sales tax and corporate income tax – has increased to 80% (Sabir, 2010).

The 5th NFC Award was formed in December 1996 that presented its recommendations in February 1997. This award was a departure from the previous ones in many respects. Most notably it not only expanded the size of the divisible pool with the inclusion of all tax revenues into it but it also extended the royalties and development surcharges on crude oil and natural gas to the provinces in the form of straight transfers. In other words, the Commission recommended that each year province would get "a share in the net proceeds of the total royalties on crude oil, an amount which bears to the total net proceeds the same proportion as the production of crude oil in the province in that year bears to the total production of crude oil" (Jaffery and Sadaqat, 2006: p. 217).

The 6th NFC Award constituted in July 2000 failed to reach to an amicable conclusion despite having 11 meetings and consultations. The fundamental reason for this failure was the lack of consensus on vertical and horizontal distribution criteria respectively. Provinces strived to get at least 50% share of divisible pool, but federal government was reluctant to further increase the provincial share. Similarly, the horizontal distribution was also contentious wherein the smaller provinces demanded the diversification of horizontal resource distribution criteria, which however was resisted by the federation. Thus, this award completed its five years' period without any concrete outcomes (Khatak et al., 2010). The NFC Award in 2006 encountered the similar fate that of 2000. Finalizing the 7th NFC Award was equally difficult like the previous Awards. In 7th Award Balochistan and KP insisted on the inclusion of indicators like poverty, backwardness, inverse population density, poor infrastructure etc. (see Table 2) as criteria for the horizontal distribution. Sindh demanded for the inclusion of tax on services collection in distribution criteria. Thus, in the 7th NFC Award, besides, population and Poverty/Backwardness, the other indicators used for the distribution of resources among provinces are Inverse Population Density and Revenue Collection & Generation.

Table 2: Distribution Criteria for 7th NFC Award (Share in Percentage)

Indicators	Pop.	Poverty/ Backward	Revenue Generation	Inverse Population Density	Grants for Compensation on account of OZ&T*	Grant for War on Grants for War on Terror**	Share on the basis of previous award	7th NFC Award
Weight	82	10.3	5	2.7			100	100
Punjab	57.37	23.16	44	4.34			53.01	51.74
Sindh	23.71	23.41	50	7.21		0.66	24.94	24.55
KP	13.82	27.82	5	6.54	1.8		14.88	14.62
Balochis	5.11	25.61	1	81.92			7.17	9.09

Source: NFC document (2010) and Nabi and Sheikh (2011)

*Grant-in-Aid to Sindh province is equivalent to 0.66% of the net Provincial Divisible Pool, is given as compensation for losses on account t of abolition of OZ&T. **The grant for war on terror is 1% of the total divisible pool, which is equivalent to 1.8% of the provincial share in the net proceeds of Provincial divisible pool.

On December 2009 the 7th NFC recommended a plausible Award to the prime minister with the consensus of all stakeholders. The award introduced some fundamental shifts in both horizontal and vertical distributions:

- It took a drastic step towards the fiscal decentralization in Pakistan by increasing the share of the provinces in divisible pool to 56% in first year, effective from first July 2010, and 57.5% in remaining 4 years of the award. In addition, the collection charges, which hitherto had been 5% by the federal government, has reduced to 1%. The federal government also relinquished the sales tax on services under federal excise duties to the provinces (Nabi and Sheikh, 2011).
- Alongside vertical distribution the horizontal distribution has also undergone into a major shift. Population as a sole resource distribution criterion among provinces very often caused impasse in previous awards. This award, however, tool a positive step to mitigate the horizontal imbalance by diversifying the distribution criteria. Besides population, poverty, backwardness, resource mobilization and inverse population density determined the distribution of resources among the provinces (see table 2). Albeit, population yet remained as the major indicator compare to other included indicators, with 82% weight, against the poverty/backwardness, revenue mobilization and invers population density with 10.3%, 5% and 2.7% weight respectively, however, because of the enlargement of the provincial share in vertical distribution the smaller provinces particularly received a big financial relive to consolidate their deteriorating budgetary positions.
- In order to compensate the provinces that faced extraordinary financial difficulties special considerations have been made in this award to deal with it in every fiscal year. It is agreed upon that, each province would receive 50% of net proceeds on total royalty on crude oil. Additionally, Balochistan was to receive Rs. 120 billion under the head of the Gas Development Surcharges, which federal government owed to Balochistan, of the installment of 12 years. Likewise, KP was to get Rs. 110 billion on the head of hydel profit in 5 years' time (Pakistan, 2010).

The bottom line of the 7th NFC Award is that it recognized the federal spirit of Pakistan and conceded the fact that without greater fiscal decentralization provinces would desperately fail in providing social services like education, healthcare basic infrastructure, drinking water and sanitation to their respective population, for which they are constitutionally responsible.

3. The State of Education and Healthcare in Balochistan

3.1. The State of Education

A body of literature suggests that human capital plays a vital role in economic growth and development. Education not only helps in improving the income-earning potential of individuals by increasing the chances of employability but also enables them to actively participate in local and national policy discourse. Education provides individuals with skills and knowledge to improve quality of life, and to become more productive (World Bank, 1995). The conditions of education services in Pakistan in general and particularly in its less developed province of Balochistan are less promising, which lag far behind other regions and provinces of the country. In Balochistan a big number of school going kids are still out of schools, gender disparity, the dropout rates are very high, the physical infrastructure of schools is poor, the standard and quality of those children who could even attain public schools is abysmally weak. According to Education Department, Government of Balochistan, 88% of girls are unable to acquire secondary school education.

District Education Rankings (2014) of Alif Ailaan, a NGO working in education sector, suggests that in the ordinary rankings, the Capital Territory, Islamabad, and the Punjab province were on top, while Balochistan and the Federally Administrated Tribal Areas (now merged with Khber Phukhtoonkhua province) were at the lowest. Similarly, ISPS's (2013) estimates show that 55% adults (10 years or above) in Balochistan have never gone to schools and Net Enrolment Rate is mere 47%. Out of 3.6 million children who could go to schools, just 1.3 million are enrolled in formal schools, indicating that an alarming number of children are out of schools because of the absence of fundamental infrastructure and teaching staff. Alif Ailaan's reports further suggest that in Balochistan 216 schools are totally nonfunctional, 36% of total schools lacks drinking water facility, 56% are without electricity. Similalry, 5,000 schools do not have buildings hence running in shaky huts. Just a single teacher runs many schools. As indicated by the ASER report, in Balochistan, just 34% of government schoolteachers are simple graduates, and 71% of the schools have no drinking water, while 75% schools need limit dividers and 83% schools need legitimate toilets. Situation in some of the districts, like Dera Bugti, Kohlu, Awaran and Muskhail far worse.

The previous Provincial Government of Balochistan had designated 24% of total provincial budget to education in fiscal year 2014-15. 75% of of total allocated budget was spent on salaries and other recurrings and the remaining 25% was spent on developing the infrastructure. In any case, 71% of the training-spending plan has been reserved for intermittent use and the remaining 29% for advancement activities. In addition, 36% of the monetary allowance has been dispensed for optional instruction, 24% for essential training, 19% for advanced education and 21% for other instructive tasks (ISPS, 2013).

Table 3: Literacy Rate (10 Years and above) for Pakistan and Balochistan (Percent)

Province/ Area	2008-09			2012-13			2015-16		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Pakistan	69	45	57	71	48	60	70	48	58
Rural	48	74		64	37	51	63	36	49
Urban	50	59		82	69	76	81	68	74
Balochistan	62	23	45	62	23	44	56	24	41
Rural				55	15	37	48	15	33
Urban				81	47	65	76	44	61

Source: Economic Survey of Pakistan (2010-11, 2016-17)

Astonishingly, in spite of a sizable budgetary allocation, the overall literacy rate in Balochistan has decreased from 45% to 41% during 2008-09 and 2015-16. Whereas during the same period the literacy rate in overall Pakistan has increased (see table 3).

Table 4: National and Provincial NER at Primary Level (Percent)

Province/Area	2008-09			2015-16		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**
Pakistan	**61**	**54**	**57**	**56**	**51**	**54**
Punjab	64	60	62	60	58	59
Sindh	57	49	54	52	44	48
Khyber Pakhtunkhwa	58	45	52	58	47	53
Balochistan	51	36	44	38	26	33

Source: Economic Survey of Pakistan (2010-11, 2016-17)

Similarly, the net enrollment rate (NER) in Balochistan has surprisingly decreased from 44% in 2008-09 to 33% in 2015-16 (see table 4). Such a poor NER testifies that despite a substantial budgetary allocation to the education sector in post 7th NFC Award, in general the resource allocations has failed to translate in improving the outcomes variables. The dropout rates are too high in schools in Balochistan.

3.2. The State of Health in Balochistan

Access to basic health services is one of the fundamental human rights accorded by the United Nations. The Universal Declaration of Human Rights (UDHR) declares that everyone has a right to a standard of living adequate for the health and well-being of him/her and of his/her family (The UN, Article 25). Pakistan is a member of the UDHR. A member the declaration Pakistan therefore recognizes the importance of the health in its Constitution that 'the State shall secure the well-being of all people by raising their standard of living and shall provide basic necessities of life, such as food, clothing, housing, education and medical relief for all such citizens as are unable to earn their livelihood by reason of disease, infirmity or unemployment' (Constitution, 1973).

The provision of basic healthcare services in Pakistan is abysmally poor, where a vast majority of population particularly the disadvantaged communities are deprived of any access to the basic health facilities. But in Balochistan the situation of basic health services is either nonexistent or in very bad conditions.

Table 5: The Health Statistics in Pakistan and Balochistan (2015)

Health and Nutrition	Balochistan	Pakistan
Under-5 mortality rate	122	101
Infant mortality rate (under 1)	104	77
% of total population using safe drinking water sources	51	90
% of total population using adequate sanitation facilities	40	54
% of one-year-olds fully immunized against measles	52.16	67
% of pregnant women immunized for tetanus	63	45
% of under-fives suffering from underweight (moderate & severe)	43	38
% of children who are exclusively breastfed with complementary food (<6-9 months)	29	31
Vitamin A supplementation coverage rate (6-59 months)	14.1	95
% of households consuming iodized salt	15	17
No. of hospitals	73	916
Dispensaries	685	4582
RHCs	61	552
BHUs	442	5301
MCHCs	76	906
No. of beds	4856	99908

Source: Multiple Indicators cluster Survey (MICS), Government of Balochistan

As shown in Table 5, where the health statistics in Balochistan are reported in comparison with the country, virtually in all indicators the province lags the national averages. For instance, in Balochistan, more than 785 pregnant mother out of 100,000 live with incredible pregnancies with adverse consequences on overall family lives and their earning capabilities. The proportion of mortality in Balochistan is grotesquely high: 600 for each 100,000. Newborn child mortality proportion is 128 for each 1,000 inferable from the low capacity of birthing specialists, deficient backing of wellbeing administrations, under age relational unions and wellbeing obviousness (Health Facility Assessment-Balochistan Provincial Report, 2012). The majority of its population in the province (more than 70%) lives in far-flung areas where there is an urgent need of maternity specialists and wellbeing administrations.

Table 6: Number Of Public Sector Health Facilities In Balochistan

Type of health facility	2008-09	2015-16
Teaching hospitals	4	4
District headquarter hospitals	27	27
Tehsil headquarter hospitals / civil hospitals	10	10
Rural health centres	76	82
Basic health units	530	549
Dispensaries	572	575

Type of health facility	2008-09	2015-16
Mother and child health centres	90	90
Sub-health centres	21	24

Source: Government of Balochistan (2016)

The Basic Health Units (BHU) and Rural Health Centers (RHCs) provide fundamental healthcare services to people at country side, where in total 549 BHUs, 89 RHCs and 82 Maternal Child Care Centers (MCHs) in Balochistan are officially registered with an addition to 575 Civil Dispensaries (CDs). As Table 6 shows, although the physical infrastructure has increased over the times, yet these BHUs, RHCs and MCHs are either officially closed or dysfunctional in rendering any meaningful services. This is partly because of the non-supply of medicines and other equipements to Units and Centres by provincial and district health department(s) and officals. The statistics reveal that for the past 10 years 11 million children died before achieving the age of five. Maternal rate (MMR) is alarmingly high with 785/100,000 live births while baby death rate (IMR) is 97/1000 live births. Birth by Skilled Birth Attendant is 18%, Birth Offices are 16% and 12-23 month completely inoculated kids are 16%. The province has the highest Infant Mortality Rate compare to other provinces of Pakistan; and the infrastructure of healthcare sector is in dire condition. Thus, Similar to the education, the service of healthcare is not better by any means in Balochistan.

4. Data and Methodology

This section discusses the structural framework and methodology to address the research questions of the paper. The emphasis is given on an approach along with the design and construction of the model, data and sources of data following the flexible research strategy earlier used by researchers including Faizan and Haque (2015), Faizan et al., (2019), Haque, et al. (2019), Haque and Oino (2019), Javed et al. (2018) and Urbański et al. (2019) in social sciences to investigate social phenomenon. This sector provides a description of the variables used in empirical models. It presents a suitable data collection tools, and procedures for data measurement.

4.1. Data Resources

The data were obtained through different sources from the Government of Balochistan including the Planning and Development Department, Directorate of Education, Directorate of Health Department and Finance Department. The final datasets with a time series of 1985 to 2016 were constructed from the annual statements and budgetary documents of these sources. Since 1974 population was the sole criterion for resource distribution among the province, given the data limitation we begin our time series from 1985.

4.2. Variables and Models

The study uses robust econometric techniques to deal with the research hypotheses specified below. It follows a procedure in applying a simple descriptive technique follows by a sophisticated model to obtain robust results. The variables, models and procedures are explained as under.

The variables specified in Table 7 are considered and, widely accepted in relevant literature, to be the key determinants of education and healthcare indicators. The variables of interest to this study include: Total Expenditure to Healthcare and Basic Education, Balochistan Budget, Federal Receipts, Fiscal Decentralization and Provincial Autonomy.

Table 7: The Independent and Explanatory Variables

• **Education Outcomes as Independent Variables**	
Variables	**Remarks**
The **adult Literacy Rate (LR)**	Literacy rate is the ratio of those (use 10 years and above) to total population who can read (at least a newspaper) and write a letter in any language.
• **Education Outcomes as Dependent Variables**	
Total no of teachers (ToT)	This variable indicates the total number of male and female government teachers of all Districts of Balochistan.
High school enrollment (HSER)	It Indicates the total number of enrollment of students including boys and girls from high schools from all Districts of Balochistan.
Middle school enrollment rate (MSER)	Indicates the total number of enrollment of students including both boys and girls from government middle schools from all districts of Balochistan and is also an independent variable.
Primary school enrollment rate (PSER)	It includes both boys and girls from all Districts of Balochistan.
Education Budget (EB)	It indicates the overall Education Budget of Balochistan from 1985 to 2016. This captures both the development and recurring education budget.
Balochistan Budget (BB)	It indicates the overall Budget of Balochistan from 1985 to 2016 This captures both the development and recurring education budget.
Intermediate passing ratio (IPR)	It includes the male and female candidate of intermediate, and passed their intermediate examination from arts and science group from 1985 to 2016 from all districts of Balochistan.
Matriculation passing ratio (MPR)	It includes capturing the male and female candidates of matriculation, and passed their matriculation examination from 1985 to 2016 from all Districts of Balochistan.
Dummy Variable 1(financial decentralisation)	A dummy is included to capture the impact of 7th NFC Award. It takes 1 from 2009 onward and zero (0) otherwise.
Dummy Variable 1(Provincial Autonomy)	A dummy is included to capture the impact of 18th Amendment. It takes 1 from 2010 onward and zero (0) otherwise.
• **Healthcare Outcomes as Independent Variables**	
Variables	**Remark**
Infant Mortality Rate (IMR)	Total infants who die before reaching to the age of five out of one thousand per year.
Crude Death Rate (CDR)	Total number of people of society who die out of one thousand per year.

• Healthcare Outcomes as Dependent Variables	
Health Budget (HB)	It indicates the overall Health Budget of Balochistan from 1985 to 2016 including both development and recurring expenditures.
Federal Receipts (FR)	**It** variable captures the financial resources that Balochistan received from the federal from year 1985 to 2016.
Total Number of Midwives (NMV)	It includes in the model that indicates the total number of midwives from the government sector hospitals of Balochistan from year 1985 to 2016.
Total Number of LHVs (NLHVs)	It indicates the total number of Lady Health Visitors from government sectors hospitals of Balochistan from year 1985 to 2016.
Total Number of Health Education Officers (HEO)	It indicates the total number of health education officers from government sectors hospitals of Balochistan from year 1985 to 2016.
Total number of Pharmacists (NPs)	**It** indicates the total number of pharmacists from government sectors hospitals and institution of Balochistan from year 1985 to 2016.
Total Number of TB Clinics (TBCs)	**It** indicates the total number of T.B. clinics from government sectors of Balochistan from year 1985 to 2016 and the variable is an independent variable.
Total Number of Mother Child Health Care Centres (MCHs)	**It** includes in the model as a supporting independent variable from year 1985 to 2016.
Total no of Basic Health Units (BHU)	It indicates the total number of Basic Health Units from government sectors of Balochistan from year 1985 to 2016 and the variable is an independent variable.
Total Number of Rural Health Centre (RHC)	It indicates the total number of Rural Health Centers from government of Balochistan from year 1985 to 2016.
Total Number of Doctors (NDs)	**It** indicates the total number of Doctors including all categories of doctors from government sectors hospitals from all districts of Balochistan from year 1985 to 2016.
Total Number of Nurses (NN)	It indicates the total number of Nurses from government sectors hospitals and institutions from all districts of Balochistan from year 1985 to 2016.
Total Number of Dispensaries (NDis)	It indicates the total number of Dispensaries from government sectors hospitals and institutions from all districts of Balochistan from year 1985 to 2016.
Total Number of Hospitals (NH)	**It** indicates the total number of Hospitals from government sectors including every category from all districts of Balochistan from year 1985 to 2016.
Dummy Variable 1(financial decentralisation)	A dummy is included to capture the impact of 7th NFC Award. It takes 1 on 2009 onward and zero (0) otherwise.
Dummy Variable 1(Provincial Autonomy)	A dummy is included to capture the impact of 18th Amendment. It takes 1 on 2010 onward and zero (0) otherwise.

The study applies a quantitative method, as the information obtained is quantitative in nature.

Since the nature of the dataset is panel, applying only simple OLS or other such models may produce spurious results. Instead the study applies the Fixed Effect (FE) and the Random Effect (RE) Models.

The FE (Fixed Effect) model controls for all time invariant differences between the individuals so the estimated coefficients of the FE models cannot be biased because of the omitted time invariant characteristics like culture, religion, gender, race etc. The rationale of using the RE Random Effect (RE) model is that unlike the FE model the variation across entities is assumed to be random and uncorrelated with the predictor or independent variables included in the model.

Given the nature of panel dataset of this study, the selection of the FE model against the RE model is supported by theory (see Wooldridge, 2002) to control the potential cross regions/districts unobserved effects. Besides theoretical rationale our choice of the FE model over RE model is made on the Hausman Test. The Hausman (1978) Test compares the FE with the RE, where the null hypothesis is that the coefficients of the RE model are same as that of the FE. The Hausman Test shows the RE model is inconsistent if the difference between the FE model and the RE model is significant. This inconsistency may be due to the unobserved district/region effect and the regressors. Based on these theoretical and empirical rationles, we adopt the FE model for final analysis.

The results of the FE models, their interpretations and analyses are reported in section 5, while the results of the RE models are not reported in the paper.

4.3. Testable Model for Education

The dependent variable for this model is the Adult Literacy Rate in Balochistan. Besides the literacy rate other variables could be used to assess the quality and quality of education. However, the paucity of data restricts us to the literacy rate only to examine the overall education performance in post 7th NFC period.

The following model (equation 1) empirically examines the relationship between the 7th NFC Award and education outcomes in Balochistan. Two dummy variables are included in the model 1 and in the subsequent models (equations 2&3) to capture the effects of the 18th Amendment to the Constitution in 2010, a significant step towards provincial autonomy, and the 7th NFC Award that enhanced fiscal decentralisation.

4.4. Testable Model for Healthcare

The Infant Mortality Rate and the Crude Death Rate the healthcare indicators in the following two models (equations 2 &3), which examine the impact of the 7th NFC Award on key healthcare outcomes. The independent and dependent variables are explained in table 7, above.

While “t” is the time variable with total 32 maximum observations for each time series, “i” is the group variable. The group variable accounts for districts in Balochistan, which are divided 6 groups. Hence the panel dataset is formed using district group variables. Two dummy variables are included in the models to capture the effect of two major initiatives that led towards more decentralization and federalism. The 7th NFC Award in 2009 with multiple criteria for resource distribution gave a greater impetus to fiscal decentralization. Likewise, the 18th Amendment to the Constitution in 2010 is considered to be an important initiative towards

provincial autonomy.

4.5. Propositions

Provincial governments with more fiscal autonomy and decentralization would increase expenditures on social services, including education and health. Enikolopov and Zhuravskaya (2007) consider decentralisation more effective in providing basic healthcare, education and other basic economic and social services to local communities. In Pakistan With the initiative of the 7th NFC Award provincial governments receive more resources and hence can allocate more to health and education sectors among others. Winkler (1989), Carnoy and Hannaway (1993), and Winkler and Gershberg (2000) argue that subnational governments with better financial and administrative authorities have a far better and wider impact in basic education services provisions than a remote central/federal government.

Following the same line of argument this paper postulate the two hypotheses:

Hypothesis 1: Ceteris paribus Provincial Government's fiscal autonomy (due to the 7th NFC Award) leads to more expenditure/investment on education (Tertiary education not included, as it is yet to be devolved in Balochistan) sector that translates into better basic education (primary and secondary) outcomes.

Hypothesis 2: In post the 7th NFC Award the expenditure on health sector has increased, which leads to better healthcare outcomes in Balochistan.

5. Results and Discussions

We examine the effects of decentralization on healthcare and education services through the 7th NFC Award. While a macro-level approach enables us to identify, evaluate and portray a larger picture of the impact of decentralization/7th NFC Award on healthcare and basic education services, it provides only a very narrowed understanding on the impacts and efficacy of decentralization on education and healthcare programmes as whole. Although, a provincial level analysis does not reflect a micro level impact of the 7th NFC Award on health and education, this approach shows with greater details the effectiveness of the provincial fiscal autonomy on these two services given the relative level of decentralization. A micro-level analysis could certainly provide a robust understanding of the issue. Yet the unavailability of district or local level data restricts us to provincial level analysis. We instead employ a holistic approach in order to be able to present a general and accurate analysis of the subject matter.

The regression results are presented with the sign and level of significance of the coefficient of all included variables. The reported results are followed by a rigorous analytical discussion. The descriptive statistics and correlation matrix for both sets of variables are shown in Appendix A.

5.1. The Impact of the 7th NFC Award on Education Outcomes

The empirical results shown in table 8 illustrate regression results of education outcomes – proxied by the Adult Literacy Rate – and the 7th NFC Award – proxy by the Education Budget and fiscal decentralization – along with other control variables. Basic education has been in the provincial governments' domain since the promulgations of the 1973 Constitution. Thus, we

can assume that increasing the fiscal space of Balochistan should have a positive impact on education outcomes. Results in table 8 *on the conterary* suggest a statistically significant and strong association between education budget and fiscal decentralization, and the literacy rate, which *are not* consistent with the preposition of this study. They show that other things being constant, fiscal autonomy to Balochistan with more resources would worsen the basic education in the province. Likewise, among other important variables included in the model, the results show that if other variables remain constant, 10% increase in total numbers of teachers would decrease the literacy rate by 0.034 and the coefficient is statistically significant. Similarly, 10% increase in total High School's Enrollment would lead to increase the overall literacy rate by 0.12, if other things remain unchanged. As expected the coefficient is statistically significant at 10%, yet with wrong sign, which negates the basic prepositions of this study. This inference contradicts not only the assumptions of this study; it also refutes a range of empirical literature on the subject. Gupta et al. (2002) and Psacharopoulos (1994) for example show that more expenditure on social services, such as education, is highly likely to enhance economic growth, decrease income inequality and reduce poverty. Psacharopoulos (1994) illustrates how expenditure on basic education is associated with high literacy rate.

Table 8: The Determinants of Education (Literacy rate is the dependent variable)

Fixed-effects (within) regression		**Number of observation =**	192
Group variable:	i	**Number of groups =**	6
R-sq: within =	0.7803	**Observation per group: max =**	32
Between =	0.8823	**Average =**	5.0
Overall =	0.8764	**Max=**	5
F (11,13) =	3.53	**Corr(u_i,Xb) =**	- 0.2767
Prob > F =	0.0171		
Variables	**Coefi.**	**Std. Err.**	**P>|t|**
Education Budget*	-0.701	-1.0566	0.001
Balochistan Budget*	-0.201	-5.5097	0.214
Dummy1 (fiscal decentralisation)	-1.433	-2.2112	0.000
Dummy2 (provincial Autonomy)	0.321	0.3331	0.001
Number of teachers*	0.347	5.326	0.014
High schools enroll*	-1.1767	-2.9101	0.019
Middle schools enroll*	-3.661	-7.5454	0.0636
Primary schools enroll*	-0.805	-8.8157	0.029
Number of high schools*	1.596	16.567	0.0925
Number of middle schools*	7.878	18.186	0.672
Number of primary schools*	7.620	6.7689	0.0281
Inter pass ratio*	0.066	0.0734	0.0385
Matric pass ratio*	0.034	0.0412	0.0041
Constant	-194.24	80.413	0.031
sigma_u	3.8978		
sigma_e	1.5929		

*Variables expressed in Logarithm

Furthermore, 10% increase in total Middle School's Enrollment and Total Primary School's Enrollment are associated with a decrease of 0.4 and 0.1 respectively in the overall literacy rate, while taking other condition identical. Also, if other variables remain constant, 10% increase in total number of High Schools would enhance the literacy rate by 0.2. An increase in total number of Middle Schools would increase the literacy rate overall, if other things remain unchanged and the coefficient is statistically significant at 10% level of significance. Another control variables worth commenting are the Number of Primary Schools, the Inter Pass Ratio and the Matric Pass Ratio. More primary schools and more ratios suggest the overall education performance, and interestingly these variables are statistically significant with expected signs.

In a nutshell, we may argue that the regression analysis invariably negates our hypothesis (1) that the 7th NFC Award leads to increase the basic education services. These findings contradict many academic studies regarding the role of subnational/provincial/local governments in increasing and improving the basic education services. For example, Ranis et al. (2000) argue that decentralized governments increase education services. This leads to increasing the human development with a significant and sustainable impact on productivity, boosts economic growth, reduce income equality, and poverty reduction. Basic education is also crucial in reducing gender inequality, improving healthcare, and creating social and political awareness, which are considered potential channels and means to address poverty.

The results may not support our theoretical understanding and hypothetical underpinning, besides contradicting a body part of relevant literature, yet looking at the stylized facts that are shown in table 1, where education indicators are worsening in Balochistan despite heavy budgetary allocation. We may argue that the results are not surprising and to a large degree may reflect the ground realities in the province.

5.2. The Impact of 7th NFC Award on Healthcare

The empirical results of the relationship between healthcare and fiscal decentralization are reported in tables 9 and 10. Healthcare service is proxied by the Infant Mortality Rate (IMR) and the Crude Death Rate (CDR) while the impact of 7th NFC Award is captured by provincial health expenditure and fiscal decentralization dummy variable. A positive relationship between the 7th NFC Award and healthcare (IMR and CDR) with a coefficient having a positive sign vis-à-vis the core regressors is not expected. The results show that the elasticity of the CRD with respect to provincial health budget and decentralization dummy variable is high and statistically significant at 5%, though with unexpected sign. Broadly speaking, other factors remaining the same one-unit increase in the health expenditure owing to the 7th NFC Award leads to increase the IMR by 14.2 points (See table 9). Similarly, one-unit increase in the health expenditure following the 7th NFC Award will increase the CDR by 13.7 points correspondingly. This is in complete negation of our preposition and hypothesis (2), which assumes with a sound theoretical understanding that provincial/subnational governments with better fiscal space given more responsibilities to healthcare services are more effective than central/federal level government.

Table 9: The Determinants of Healthcare Outcomes (Infant Mortality Rate is the dependent variable)

Fixed-Effects (within) regression		**Number of observation =**	192
Group variable:	i	**Number of groups =**	6
R-sq: within =	0.7803	**Observation per group: max =**	32
Between =	0.9388	**Average =**	5.0
Overall =	0.9159	**Max =**	5
F (16,8) =	3.68	**Corr (u_i, Xb) =**	-0.7616
Prob > F =	0.0338		
Variables	**Coef.**	**Std. Err.**	**P>|t|**
Health Budget*	14.221	45.2331	0.001
Balochistan Budget*	1.582	420.22	0.009
Dummy1 (Fiscal Decentralisation	0.322	0.211	0.003
Dummy2 (Provincial Autonomy)	0.221	0.122	0.001
Federal Budget*	16.332	145.27	0.892
Number of midwives	-0.115	0.332	0.485
Number of LHVs	-0.165	0.985	0.871
Number of health officers	18.102	35.140	0.718
Number of drug inspectors	2.57	9.968	0.615
Number of pharmacists	-0.541	2.088	0.552
Number of TB clinics	-2.484	11.385	0.821
Number of MCHs	-13.215	7.525	0.13
Number of BHUs	-2.585	1.863	0.067
Number of RHCs	-11.918	6.941	0.143
Number of Doctors	0.7286	0.038	0.161
Number of Nurses	-0.7714	0.123	0.294
Number of dispensaries	-0.999	1.232	0.784
Number of Hospitals	4.769	4.394	0.401
Constant	-110.05	87.233	0.364
sigma_u	23.154		
sigma_e	38.904		

*Variables expressed in Logarithm

The results underline that devolving fiscal resources to the provincial governments that lead to have more resources allocations to healthcare sector may not help reducing the IMR and the CDR. These two indicators are considered good healthcare predictor in the literature.

This outcome does not support our argument that provincial autonomy couple with a fiscal space (read the 7th NFC Award that as given more resources to provinces in Pakistan including Balochistan) improves the allocation efficiency of resources by allowing the sub-national/provincial governments to allocate the funds as per local people basic needs and preferences. However, Oates (1972) in his classic public finance theory posits that such kind of inefficiency mainly comes due to the "elite capture" and bureaucratic corruption, which in any case does not undermine the overall argument in the favour of decentralization. Pakistan, because of multiethnic, linguistic, socioeconomic, political diverse historical and cultural

background in each province in region may be more effective in service delivery including healthcare with more fiscal, political and admistrative decentralizations. The analysis points to the fact that notwithstanding basic healthcare being a provincial subject (the 1973 Constitution makes healthcare a provincial mandate), Balochistan, due mainly to insufficient of resources from the federal government and inadequate local revenue generation that has created serious resource constraints, has failed to finance the healthcare expenditure with sufficient allocations along other social sectors. However, in post 7th Award as Balochistan has obtained a far greater fiscal space – as discussed before in the paper – the provincial government is yet to be effective in providing the healthcare services compare to the pre 7th NFC Award period. This conclusion is in line with the previous literature (for example, World Bank, 1995; Younger, 1999; Gupta et al., 2002), which shows that although fiscal decentralization initially encourages some kind of corruption and mismanagement owing to the weak system of accountability and institutionalization, it however leads to enhance expenditures on health and education with better outcomes in the long run.

Table 10: The Determinants of Healthcare Outcomes (Crude Death Rate is the dependent variable)

Fixed-effects (within) regression		**Number of observation** =	180
Group variable:	i	**Number of groups =**	6
R-sq: within =	0.8803	**Observation per group: Max =**	30
Between =	0.9388	**Average =**	5.0
Overall =	0.9159	**Max =**	5
F (16,8) =	3.68	**Corr (u_i, Xb) =**	-0.7616
Prob > F =	0.0338		
Variables	**Coef.**	**Std. Err.**	**P>|t|**
Health Budget*	13.659	81.60111	0.001
Balochistan Budget*	278.5821	320.104	0.409
Dummy1 (Fiscal Decentralisation	-0.244	0.223222	0.003
Dummy2 (Provincial Autonomy)	0.221	0.211122	0.001
Federal Budget*	26.01793	185.2782	0.892
Number of midwives	-0.29507	0.403517	0.485
Number of LHVs	-0.16553	0.985659	0.871
Number of health officers	28.10252	75.14013	0.718
Number of drug inspectors	5.215789	9.968264	0.615
Number of pharmacists	-0.57541	1.757088	0.752
Number of TB clinics	-2.65484	11.33385	0.821
Number of MCHs	-13.0215	7.723525	0.13
Number of BHUs	-2.43585	1.151863	0.067
Number of RHCs	-11.0918	6.829341	0.143
Number of Doctors	0.537286	0.348038	0.161
Number of Nurses	-0.77914	0.694123	0.294
Number of dispensaries	-0.30999	1.091232	0.784

Number of Hospitals	4.330769	4.880394	0.401
Constant	-1201.05	6807.233	0.864
sigma_u	93.5154		
sigma_e	68.9304		

*Variables expressed in Logarithm

In spite of the theoretical discussion about the role of fiscal decentralization in improving the healthcare systems, there exists some, yet with mixed, empirical evidence of the potential impact of decentralization on healthcare sector. As Khaleghian, (2004) argues that fiscal decentralization and fiscal autonomy of subnational governments may increase the accountability of policy makers and local representatives to local electorates hence allows for better matching between peoples' basic needs and social service delivery. Healthcare being an essential social service is expected to receive much better treatment under provincial/local governments than the federal/central government (Uchimura and Jütting, 2009; Jiménez-Rubio, 2010). For instance, in Ecuador, Younger (1999) finds out that subnational governments better provide public healthcare services. However, Soto et al. (2012) conclude that decentralization has a negative impact in reducing the IMR in Colombia. Nevertheless, it is equally argued that the local governments have to provide healthcare services within the local institutional context that may characterise market failure and spillover effects. This may discourage the local authorities in health service provisions. Yet, a good amount of literature shows an empirically significant and negative relationship between decentralization and the IMR. Following the second argument, we propose that the 7th NFC Award that was a hallmark of fiscal decentralization and provincial fiscal autonomy is to improve healthcare services in Balochistan – where in fact the health sector is constitutionally a provincial and local matter. Notwithstanding the recognized advantages of decentralizing the policy-making and expenditure authorities of healthcare services to the provinces in Pakistan, empirical evidence so far does not support the relationship between [fiscal]decentralization and healthcare services in Balochistan in post 7th NFC Award.

6. Conclusions and Recommendations

This study was aimed to provide a detailed analysis of the situation before and after the 7th NFC Award on the two key social sectors – healthcare and education outcomes. The results do not substantiate our hypotheses (hypotheses 1 & 2) and basic proposition on the impact of the 7th NFC Award on healthcare and basic education. These findings suggest that Balochistan with fiscal and administrative autonomy and the better financial positon is failed to increase education and health services.

However, it is important to emphasis that the subnational governments' efficacy in delivering better education and healthcare services depends also on strong and substantive coordination with other key stakeholders including the federal government. The federal government apparently has no interest in socioeconomic betterment of Balochistan; the interest of federal government is largely limited to geostrategic landscape of the province.

While looking at the performance of education sector in Balochistan, we do not noticeable change after the 7th NFC Award. The latter has apparently failed to reform the sector in terms of infrastructure with better education outcomes. For health sector the infrastructure has been

somehow improved after the 7th NFC Award. Yet it is important to note that the quality of health provided to the general public is still very poor in Balochistan, which needs a far reaching interventions not only by the provincial government but also by federal government and concerned national and international private organizations.

After the 7th NFC Award, when the provincial government of Balochistan received a substantial amount from the straight transfers, the divisible pool, grants and others, the provincial government resultantly has increased its resources allocation to education sector. Yet the allocation to education has not been as much as one should expect, given the urgent situation of education in Balochistan. Hypothetically one may expect that after the 7th NFC Award the education sector would experience a modest, if not spectacular, improvement in terms of literary rate, lower dropout rates and better infrastructure. Although some of the outcome variables have improved in post 7th Award period, yet the actual situation in terms of overall education service structure is not different than what one would perceive. This somehow suggests that the provincial government has failed to bring any substantial improvement in education sector despite having far better fiscal space by the virtue of quantum improvement in resource transfer from federal government after the 7th NFC Award.

For healthcare sector it is important to point out that health is in bad condtion in Balochistan, and given the lack or absence of any coordination and poor governance, the availability of data major issue for systematic analysis and policy interventions. Given the paucity of data, this study relied on the best available dataset from the concern Ministries, Government of Balochistan.

Based on evidenc and analysis we can conclude that the province has not been able to bring a large-scale reform to the health and education sectors with far reaching coverage. The reason for this failure would be many, and the future research may examine it with insightful conclusion. But what we can perceive is that the “elite capture” in line with bureaucratic and political elite corruption are the key reasons of this ineffectiveness and inefficiency.

The political stability with better governance is required to achieve the target of better performance in all sectors working under the political system. The steady and continuous monitoring is necessary to check out the performance of institutions for further improvement. Unfortunately, in Balochistan the institutions and concerned departments perform very poorly. It happens due to the lack of infrastructure but in some cases it is because of sheer mismanagement, dearth of political will and embezzlement of public money, which is a no secret in Balochistan. Thus, there is an urgent need of such a political system with robust and accountable governance that restructures the institutions and reduces the opportunities of the mismanagement of available resources.

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Appendix A

Table A: Descriptive Statistics – First Set of Variables

Variable	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
Federal Receipts	192	2495	159500	35538.10	46244.67
Balochistan Budget	192	4 B	200 B	45.4 B	48.03 B
Education Budget	192	0.4 B	10 B	3.24 B	3.55 B
Primary Schools	192	2942	10668	8196.2	2815.899
Middle Schools	192	390	1165	735.9	203.612
High Schools	192	184	783	458.2	175.726
Enroll Of Primary Schools	192	246692	642322	480000	89539.912
Enroll Of Middle Schools	192	36511	184484	107000	45238.302
Enroll Of High Schools	192	11545	327927	140000	125779.879
No Of Teachers	192	4021	59581	32200	16186.979
Degree Colleges	192	11	40	21.9	9.841
Enroll Of Degree Colleges	192	4232	22425	10900	5270.51
No Of Teachers in Degree Colleges	192	389	1844	940.9	405.412
Inter Colleges	192	17	66	39.47	16.788
Enroll Of Inter Colleges	192	998	42099	14700	12426.953
No Of Teachers in Inter Colleges	192	178	873	460.8	205.641
Appeared in Matriculation	192	7277	53867	28700	13906.587
Passed in Matriculation	192	2294	46741	18000	13460.603
Appeared in Intermediate	192	5562	40206	22900	12200.205
Passed in Intermediate	192	731	32765	10600	9114.026
Literacy Rate	192	15	46	30.5337	10.34527
Valid N (list wise)	192				

Table B: Descriptive Statistics – Second Set of Variables

	N	Minimum	Maximum	Mean	Std. Deviation
Federal Receipts	192	2495	159500	35538.10	46244.67
Balochistan Budget	192	4 B	200 B	45.4 B	48.03 B
Health Budget	192	0.1 B	10 B	2.46 B	3.716 B
No Of Hospitals	192	40	98	58.93	18.491
No Of Beds	192	2139	4840	3590.8	881.024
No Of Dispensaries	192	262	685	506.4	121.142
No Of Nurses	192	114	790	408.87	218.573
No Of Doctors	192	450	2231	1257.73	585.707

No Of Patients	192	266602	5975793	2920000	2278096.143
No Of RHCs	192	33	98	61.73	20.398
No Of BHUs	192	235	642	468.63	97.791
No Of MCHs	192	70	99	86.2	9.268
No Of T.B. Clinics	192	5	24	18.23	5.587
No Of Pharmacists	192	15	440	115.67	168.027
No Of Drug Inspectors	192	7	72	21.43	22.663
No of Health Edu. Officers	192	7	17	10.13	3.115
No Of LHVs	192	93	829	350.1	229.202
No Of Midwives	192	282	1673	1062.7	421.84
No Of Deaths	192	236	754	516.57	139.6
Valid N (list wise)	192				

Table C: Correlation Matrix of Education Variables

	Pearson Correlation	**Sig. (2-tailed)**	**Pearson Correlation**	**Sig. (2-tailed)**
Federal Receipts	1		.987**	.000(Sig)
Balochistan Budget	.987**	.000(Sig)	1	
Federal Receipts	1		.914**	.000(Sig)
Education Budget	.914**	.000(Sig)	1	
Primary Schools	1		.781**	.000(Sig)
Middle Schools	.781**	.000(Sig)	1	
Middle Schools	1		.978**	.000(Sig)
High Schools	.978**	.000(Sig)	1	
Enroll of Primary Schools	1		.625**	.000(Sig)
Enroll of Middle Schools	.625**	.000(Sig)	1	
Enroll of Middle Schools	1		.927**	.000(Sig)
Enroll of High Schools	.927**	.000(Sig)	1	
No Of Teachers	1		.838**	.000(Sig)
No Of Teachers in Degree Colleges	.838**	.000(Sig)	1	
No Of Teachers	1		.883**	.000(Sig)
No Of Teachers in Inter Colleges	.883**	.000 (Sig)	1	
Degree Colleges	1		.975**	.000(Sig)
Inter Colleges	.975**	.000(Sig)	1	
Enroll of Degree Colleges	1		0.088	0.643(In Sig)
Enroll of Inter Colleges	0.088	0.643(In Sig)	1	
Appeared in Matriculation	1		.712**	.000(Sig)
Appeared in Intermediate	.712**	.000(Sig)	1	

Passed in Matriculation	1		.951**	.000(Sig)
Passed in Intermediate	.951**	.000(Sig)	1	
Passed in Matriculation	1		.800**	.000(Sig)
Literacy Rate	.800**	.000(Sig)	1	
Passed in Intermediate	1		.825**	.000(Sig)
Literacy Rate	.825**	.000(Sig)	1	
**. Correlation is significant at the 0.01 level (2-tailed)				

Table D: Correlation Matrix of Health Variables

	Pearson Correlation	Sig. (2-tailed)	Pearson Correlation	Sig. (2-tailed)
Federal Receipts	1		.987**	.000(Sig)
Balochistan Budget	.987**	.000(Sig)	1	
Federal Receipts	1		.978**	.000(Sig)
Health Budget	.978**	.000(Sig)	1	
Balochistan Budget	1		.939**	.000(Sig)
Health Budget	.939**	.000	1	
No Of Hospitals	1		.665**	.000(Sig)
No Of Beds	.665**	.000(Sig)	1	
No Of Dispensaries	1		.581**	0.001(Sig)
No Of RHCs	.581**	0.001(Sig)	1	
No Of Nurses	1		.982**	.000(Sig)
No Of Doctors	.982**	.000(Sig)	1	
No Of Patients	1		-.395*	0.031(In Sig)
No Of Deaths	-.395*	0.031(In Sig)	1	
No Of Pharmacists	1		.980**	.000(Sig)
No Of Drug Inspectors	.980**	.000(Sig)	1	
No Of Health Edu Officers	1		.697**	.000(Sig)
No Of Midwives	.697**	.000(Sig)	1	
No Of LHVs	1		.912**	.000(Sig)
No Of Nurses	.912**	.000(Sig)	1	
**. Correlation is significant at the 0.01 level (2-tailed)				