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Democracy, Inequality and Economic Development: The Case of Pakistan

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Abstract

In this paper, we made an attempt to understand the costs and benefits of democracy for economic growth in Pakistan by analyzing the relationship between democracy and its various measures. Using instrumental variables and RALS (rth-order autoregressive least squares) estimation techniques, it is shown that during the period 1972-2005, there is only a tenuous and uncertain relationship between democracy and fiscal policy variables like expenditures, revenues and deficit; whereas democracy has no impact at all on the income inequality. Moreover, we observed that the political rights had a significant negative impact on fiscal expenditures, suggesting that with an increase in political rights, the governing institutes begin to feel themselves more accountable and as such are more circumspect in expenditures.

JEF Classification: P5, P16, H53
Keywords: Democracy, Political Rights, Fiscal Expenditures, Economic Growth, Income Inequality, Well-Being

1. Introduction

Democracy as a political system in Pakistan has been an elusive goal since 1947. The year 2007 has seen one of the most intense and vociferous displays of the demands for the restoration of democracy in Pakistan's history, and as such has attained a special significance in the context of the struggle for democratic ideals. The rights groups, politician and opinion makers at all levels seem to sell the idea of democracy as a panacea for all the ills of the nation. It is often claimed that continuous administration of "larger" doses of democracy will strengthen the institutions and help realize the ideal of fairness and justice in the society. However, the question between the lines is that "Does this sound and fury have an economic logic?"

The focus of the existing studies on the relationship between economic growth, income inequality and democracy can be classified into two directions. First, they examined the impact of certain existing levels of "collective wellbeing" and "education" in a given time on the process of democratization. Second, they studied the impact of adoption of democratic institutions on the economy of the country.

Historically, the correlation between democracy and income inequality has been a subject to which social sciences have given singular attention, and has achieved an added interest in recent times against the background of intense demands for democratic rights in many parts of the world. The conventional wisdom suggests that smoothing the angularities in the distribution of political power leads to a more equitable distribution of income. Aristotle way back in (1111) held that in democratic systems "the poor have more sovereign power than the men of property, for they are more numerous and the decisions of the majority prevail.''

However, in recent times, a lot of effort is being spent on exploring the effect of the democratization process on the growth of national economy. For example, Roll and Talbott (2001) interpret democracy as an "information mechanism" which enables the rulers to get a feedback from the electorate about the success or otherwise of different economic policies which they have pursued during the period of their incumbency.

Similarly, the study by Tavares and Wacziarg (2001) developed a channel through which democracy affects economic growth. They has traced a definite link between the level of democracy and the accumulation of human capital and the distribution of income, the latter two being considered important factors for economic growth.

Democracy is ascribed the virtue of changing the political power structure along the lines which are conducive for bringing about egalitarian changes in the society. Democracy is also known to tone down the inequalities left in the wake of autocratic governments[1]. Recording empirical evidence, although a massive amount of research has focused on the interaction between democracy and growth, it is difficult to establish definitively whether democracy has a positive or negative effect on growth. This difficulty derives partly from the fact that democratic dispensations at times generate diverging effects on the factors on which economic activity largely depends. Thus democratic system, believed to lower the rate of physical capital investment, is also considered as notoriously susceptible to the arm-twisting of various lobby groups. Similarly, as said by Portar et al (1998), democratic system, though known to reduce political instability, is also considered responsible for a skewed income distribution.

Theoretically, the relationship between democracy and income inequality has been established in the median-voter models of Persson and Tabellini (1994) and Alesina et al. (1992), who taking a cue from Meltzer and Richard (1981), suggest that democracies generate redistribution policies based on the median-voter's income. In autocracies, on the other hand, the rulers are by no means constrained to meet the public demands for redistributive policies. Thus, following the well-known existing literature, we examine the dynamic influence of democracy on income inequality, economic development and the people well-being in Pakistan[2].

This paper is organized as follows. In the next section, we present the literature review. Section 3 provides a brief description of the econometric methodology and data. Section

[1] For more details on this subject, see Lenski (1966) and Bollen and Jackman (1985).
[2] According to our knowledge best no systematic research has been undertaken in Pakistan regarding the impact of democracy on economic growth, distribution of resources and fiscal policy etc.

4 presents the empirical results, while in section 5, some concluding remarks are provided.

2. Literature Review

Lipset (1959) stated that in democracies, elections serve as a vehicle for enabling the electorate to vote for the proponents of working class interests. He said that over the past one hundred years, political lines are so drawn that the political parties have started showing leftist tendencies with the explicit aim of reducing inequalities. He assumed that in the countries where a certain level of "collective wellbeing" exists, the electorate will not favor excessively redistributive policies, and secondly, a certain level of education is a prerequisite for the prosperity of the country.

Borner et al. (1995) point out a shift in the attitude towards democracy in the research literature in 1980, before which the discussion about compatibility between democracy and development was largely carried out in terms of a "cruel choice" between the two. Democracy was considered to single out consumption as a target of policy instead of investment (crucial for development in its own right), with the result that investment on physical capital could never reach such a level as to ensure economic growth in subsequent periods.

The economic successes in the countries of Soviet bloc and South-East Asia as well as Chile in South America, all run by autocratic governments, led researchers like Przeworski and Limongi (1993) to establish a relation between "ideology and statistics" which explains the diversity in results in earlier literature. There is also evidence related to the growth-promoting and egalitarian tendencies of autocratic regimes in East Asia. The remarkable reduction in inequality in countries like Taiwan and South Korea under dictatorial regimes is a case in point (Gradstein and Milanovic (2000)).

In an extreme case, the democracy has been found to be positively related to inequality, the reason of which may lie in the fact that despite the claims of democracy as catering to the demands of the public, democratic dispensations can rarely assuage the claims of the

poorer segments of society when they are faced with a vast range of competing claims (Beitz (1982)).

In terms of the link between democracy, growth, inequality and fiscal policy (see Barro (2001)), democracy has been found out to be a major element for government size in various models, where the governments which are too unwieldy to be efficient correspond to non-democratic forms of governance. The reason is not difficult to assess because the autocracies tend to maximize the tax rate so that highest amount of resources could be earmarked for their private interests like "ostentatious consumption" and "military expenses" (see Olson (1991)).

Efforts are underway recently to explain the apparent dichotomy in the effects of democracy on inequality. An inverse U-shaped relationship between democracy and inequality has been discovered. In fact, a unique historical experience in Europe, especially in Germany, the United Kingdom, France, and Sweden has informed most of the discussion about the interaction of democracy and inequality in Kuznet's curve framework. In these countries, enfranchisement was preceded by gross inequality, which in its part led to social conflicts and tussles. Democratization process ensued only through redistribution and education. These historical undercurrents have been captured in the models of Bourguignon and Verdier (2000) and Acemoglu and Robinson (1998a, 2002).

Acemoglu and Robinson (1998a) contend that the poor are unable to invest in human capital, when the few rich individuals accumulate resources following heavy investment in industrialization. This is precisely the discrepancy which leads to an intensified inequality. Once the poor sections of the society are pushed to the wall, they take desperate measures to break out of the vicious circle of deprivation. In the face of a threatening posture of the poor sections, where revolution begins to seem like a distinct reality, the power brokers are compelled to share the political powers with these sections with the result that there would be an increased redistribution and higher investment in human capital. Thus inequality will begin to subside.

A competing view of democracy being determined by inequality is presented by Acemoglu and Robinson (2002) who argue that development is responsible for widening income disparities, and the increased income disparity in its turn leads towards political violence and instability. In such a situation there is a heightened pressure on jittery political elite for decentralization in the political power. The democratization thus achieved encourages institutional reforms which lead to a decrease in inequality.

However, the impact of institutional reforms is not invariably positive for the economy in terms of the income inequality. The institutional reforms may also result in greater income inequality. Certain informal sectors in the economy, especially of the developing countries, may have to bear the initial cost of institutional changes. As most of the members of the informal economy are already marginalized, a sharp decrease in the income may deepen the problem of income inequality (see Chong and Caldero (2000)).

3. Variable Description, Sample Period and Econometric Modeling

3.1. Fiscal Policy

The Olson's hypothesis linking democracy and government size has been analyzed and government size has been measured with two variables: the size of overall public expenditures (EXP) and overall revenues (REV) both as a percentage of GDP. We also analyzed the size of social expenditure that helps implement redistributive policies in the framework of median voter models. Therefore we used the expenditure of the government on community, social and public services (CSPS) as a ratio of GDP. We also investigated central government's budget deficit (DEF), which merits high attention in any fiscal policy analysis. Budget deficit has important ramifications for a level of democracy.

We obtained the data for EXP, REV, and DEF from International Financial Statistics database for the period from 1953-2001. Data for the period from 2002 to 2005 is taken from Handbook of Statistics on Pakistan Economy (HSPE) prepared by State Bank of Pakistan (SBP) and adjusted for small differences found in both the series because of different measurement techniques used by IFS and SBP. We first calculated the ratio of

the observations from IFS to HSPE for as many years as the data was available, and then took the average of this ratio variable and used it as a conversion factor for multiplying with HSPE values to calculate the last four data points for years 2002-2005. The source of CSPS is HSPE and data is available for the period 1950-2005.

3.2. Inequality

The second dependent variable is Gini coefficient which measures the degree of income concentration in the whole economy (GINI). We used Deninger and Squire (1996) dataset. However, the problem with this dataset is that the data for GINI is available only for the years 1964, 1966-72, 1979, 1985-92 and 1996. The GINI data for the years 1993 is available in two published research papers namely Mahboob (2000) and Iqbal and Siddiqui (1998). The data for the year 2002 was available at WDI 2006. The data for the years 2001 and 2005 was available from the Economic Survey of Pakistan 2006-2007. For the missing years we took two data series "age dependency ratio (dependents to working-age population)" and "claims on private sector (annual growth as % of M2)" (WDI (2006)) which were found to have the highest correlation with the available GINI observations. Then GINI was regressed on these variables and the resulting OLS estimates were used for generating data for the missing years. For the years 2003 and 2004, the simple average of GINI values in years 2001 and 2005 was used. The regression model was found to pass all the diagnostic tests (See the Appendix II).

3.3. Independent Variables: Democracy

Democracy is the independent variable in this study. The democracy – as defined by Schumpeter (1947) – is formally defined as a corpus of laws and procedures which regulate the transfer of political authority in conjunction with freedom of expression at all levels of public life. A competing view of democracy also takes in its purview civil liberties like freedom of speech and freedom of press (see Huntington (1993)).[3] An analysis based on a formalist definition of democracy consisting only of constitutional

[3] Huntington suggests that civil liberties are essential elements of an effective democracy.

rules and procedures gives results quite different from those which do not limit democracy to constitutional rules and procedures.[4]

In this study, two different variables are used as a proxy for democracy.[5] Polity, the first natural choice for the analysis of the issue which we are pursuing in this paper, is taken from POLITY IV Project data set by Marshall and Jaggers (2004) that contains data for all those countries where the population is above 500,000 individuals since 1800.

Basically, the variable POLITY is computed by subtracting AUTOC score from the DEMOC score. The resulting unified polity scale ranges from +10 (strongly democratic) to -10 (strongly autocratic). So this variable measures the degree of political activity, the openness of the executive authority to new candidates and the limitations imposed on the executive. The years 1969, 1970 and 1972 in Pakistani history have been assigned a score -88, and the year 1971 has been assigned a score of -77. The score -88 indicates a transition period in which new political paradigms are preceded by a transition period, the latter being guided by some executive authority or some other legislative measures.

To avoid the negative scoring, we used the variable POLITY2 instead, which is a modified version of POLITY variable with the sole purpose of making the POLITY2 data series amenable for time-series analysis. It changes the combined annual POLITY score by applying a "fix", a technique to convert the "standardized authority scores" (i.e. -88, -77) to conventional polity scores between the range -10 to +10. The values have been converted according to the following rule set: -77, the score indicating "interregnum" or anarchy, is converted to a "neutral" Polity score of 0; whereas the score -88, indicating "transition" is prorated across the span of the transition. For example, if a country X has a Polity score of -7 in 1957, and the following three years have been assigned the score -88 and the score in 1961 is +5, the change (+12) would be prorated over the intervening

[4] These differences, however, characterize all the empirical studies in which the categorical variable democracy is used for empirical analysis. For instance different notions of democracy lead to different results (see Persson T. and Tabellini G. (1994)).

[5] The purpose of using the two different measures of democracy is to see if differences in the estimated effects of democracy arise from the different definition of it.

period of three years at a rate of per year, such that the converted scores are as follows: 1957(-7), 1958(-4), 1959(-1), 1960(+2) and 1961(+5)[6].

The second variable used as a democracy index is GASTIL, which is average between two indicators of political rights (POL-RIGHTS) and civil liberties (CIV-LIB). The source of this variable is Freedom House, which has covered almost all countries of the world since 1972 through its Freedom in the World survey (see Helliwell (1994)). GASTIL differs from POLITY in the sense that POLITY is almost identical to the POL-RIGHTS component of GASTIL, whereas the POLITY is totally unrelated to the other component of GASTIL, that is, CIV-LIB.

3.4. Empirical Methodology

Earlier literature on the relationship between democracy, growth and inequality has mainly depended on simple OLS regression analysis. However, the validity of the results from OLS regression analysis depends on the conditional independence of the regressors and even more importantly on the normality of errors. Hence the *F, t* and *chi-squared* statistics that we use are not reliable because they crucially depend on the assumption of normally distributed disturbances. If the assumption of the normality of errors is violated, then the exact distributions of these statistics depend on the data and do not follow *F, t* and *chi-squared* distribution (see Greene (2003)).

In order to take into account these empirical issues such as "normality" and "direct reverse causation", we apply the two other methods namely the Instrumental Variables (IV) and $r^{th} - order$ Autoregressive Least Square (RALS) in this study. The RALS method in general form is defined as follows:

$$\beta_o(L)y_t = \sum_{i=1}^{m} \beta_i(L)z_{it} + u_t \quad \text{with } \alpha(L)u_t = \varepsilon_t \qquad (1)$$

[6] For further details on this subject, see Marshals and Jaggers (2004).

when:

$$\alpha(L) = 1 - \sum_{i=s}^{r} \alpha_i (L^i) \tag{2}$$

This can be written as:

$$y_t = \mathbf{x}_t' \boldsymbol{\beta} + u_t, \quad u_t = \sum_{i=s}^{r} \alpha_i u_{t-1} + \varepsilon_t, \quad t = 1,..., T, \text{with} \quad \varepsilon_t \sim IN(0, \sigma_\varepsilon^2) \tag{3}$$

By maximizing:

$$f(\boldsymbol{\beta}, \boldsymbol{\alpha}) = -1/T \sum_{t=1}^{T} \varepsilon_t^2 \tag{4}$$

OLS estimates of $\{\beta_i\}$ are calculated before estimating by RALS, as are LM-test values of $\{\alpha_i\}$, where the autocorrelation order is `data frequency+1' (for example, 13 for monthly data). These estimates are again used to initialize θ. On convergence, the variances of the θs are calculated (from Q^{-1}), as are the roots of $\alpha(L) = 0$[7,8].

4. Empirical Results

4.1. Fiscal Policy

The estimated results using IV method are presented in Table 1. It is interesting to note that the estimates of all the four variables namely CASTIL, POLITY2, PLO-RIGHTS CIVIL-LIB are negative. The coefficients of GASTIL and POL-RIGHTS are statistically significant at the 5% level. Moreover, the results provide evidence that the POLITY2 and CIVI-LIB appeared statistically insignificant.

[7] See Dooenik and Hendry (2006), for details.
[8] Doornik, Jurgen A. And Hendry, David F., (2006) have formulated the above RALS estimation method in "Empirical Econometric Modelling, PcGive 11: Volume I", London, Timberlake Consultants Ltd.

Table 1
Fiscal Policy, Instrumental Variables Results,
Sample Period: 1972 to 2005

(1)	GASTIL (2)	POLITY2 (3)	POL-RIGHTS (4)	CIVIL-LIB (5)	OBS (6)	χ^2 (7)	IVs (8)
EXP	-0.014				34	1.049	XRCOMP
	(0.006)**					[0.306]	DEMOC
EXP		-0.001			34	0.717	DEMOC
		(0.000)				[0.397]	PARCOMP
EXP			-0.009		34	1.449	XRCOMP
			(0.004)**			[0.229]	DEMOC
EXP				-0.095	34	0.449	XRCOMP
				(0.102)		[0.503]	DEMOC
REV	-0.006				34	2.167	XRCOMP
	(0.005)					[0.141]	DEMOC
REV		0.001			34	2.037	XRCOMP
		(0.000)				[0.154]	DEMOC
REV			-0.003		34	2.448	XRCOMP
			(0.003)			[0.118]	DEMOC
REV				-0.064	34	0.052	XRCOMP
				(0.063)		[0.820]	DEMOC
CSPS	0.004				34	0.855	XRCOMP
	(0.002)**					[0.355]	DEMOC
CSPS		0.000			34	0.754	XRCOMP
		(0.000)**				[0.385]	DEMOC
CSPS			0.002		34	1.344	XRCOMP
			(0.001)**			[0.246]	DEMOC
CSPS				0.024	34	0.560	XRCOMP
				(0.024)		[0.454]	DEMOC
DEF	0.006				34	1.590	XRCOMP
	(0.004)					[0.207]	DEMOC
DEF		-0.001			34	1.629	XRCOMP
		(0.000)				[0.202]	DEMOC
DEF			0.003		34	2.049	XRCOMP
			(0.002)			[0.152]	DEMOC
DEF				0.052	34	0.106	XRCOMP
				(0.060)		[0.745]	DEMOC

*, **, *** denote the significant at the 90%, 95% and 99% level. Standard Errors are given in parentheses; probabilities for the specification test-stat χ^2 are given in square brackets[9].

[9] The specification χ^2 tests for the independence of the instruments (XRCOMP, DEMOC and PARCOMP), given in the column (8) of the Table 1, and their standard errors are given in column (7). However, the null of the independence of instruments from errors in all the democracy variables could not be rejected.

Using IVs estimation method, GASTIL, POLITY2 and POL-RIGHTS are found to be significantly and positively related to CSPS, whereas the civil liberties variable has a correct positive sign but is insignificant. However, a direct link between community, social and public services and democracy has been established beyond doubt but is tenuous in case of independent variable civil liberties. The specification test statistic probability in all the cases where CSPS is a dependent variable suggests that there is statistically no significant correlation between instruments used in the specification and the errors.

As far as the relationship of democracy and its various measures with budget deficit is concerned, all the coefficients, except POLITY2, are positively related with budget deficit, but are insignificant. POLITY2 is negatively related with all the measures of democracy and is also significant. As mentioned above, there are two competing but plausible theories regarding the relationship between budget deficit and any measure of democracy. The autocratic governments may have low budget deficit because they have been ostracized from the international capital market because of not espousing the globally accepted democratic ideals, but the democratic governments may also have low budget deficits because they are compelled to maintain a budgetary discipline. Thus, it can be stated that the data rejects any significant relationship between democracy and two components of GASTIL in Pakistan.

We now present the results from the RALS estimation method and see that the errors are not autocorrelated except in the case of the variable CSPS. The variable CSPS took a nosedive in the year 1981 which caused a big outlier leading to the non-normality of the data. However, when we introduced a dummy variable D1981 to pick the effects of a sudden fall in the CSPS, the errors were this time found to be normal. However, the errors could not pass the test for heteroskedasticity and autocorrelation at 95%; it could not be rejected at 99%. We also present the autoregressive conditional heteroskedasticity (ARCH) test, normality test, heteroskedasticity test and Breusch-Godfrey Serial Correlation LM Test in the Table 2.

Table 2
Fiscal Policy, RALS Results,
Sample Period: 1972 to 2005

	Gastil	Polity2	Pol-Rights	Civ-Lib	OBS	Partial R^2	ARCH 1-1 Test F	Normality Test X^2	Hetero Test F	B-G(A) Auto. F
EXPEN	-0.007				33	0.083	0.359	1.221	0.219	3.66
	(0.004)						[0.554]	[0.543]	[0.805]	[0.07]*
EXPEN		0.001			33	0.083	0.273	0.393	0.018	3.63
		(0.001)					[0.605]	[0.821]	[0.982]	[0.07]*
EXPEN			-0.003		33	0.038	0.003	0.660	0.423	3.87
			(0.003)				[0.956]	[0.719]	[0.659]	[0.06]*
EXPEN				0.008	33	0.084	0.482	0.330	0.844	1.04
				(0.005)			[0.493]	[0.848]	[0.441]	[0.32]
REVEN	0.004				32	0.067	0.647	2.044	0.386	2.27
	(0.003)						[0.429]	[0.360]	[0.683]	[0.14]
REVEN		0.000			32	0.000	1.381	3.817	2.677	2.54
		(0.000)					[0.250]	[0.148]	[0.086]*	[0.12]
REVEN			0.001		32	0.022	0.169	1.032	0.968	3.79
			(0.002)				[0.684]	[0.597]	[0.393]	[0.06]*
REVEN				0.003	32	0.021	0.130	0.215	1.071	2.89
				(0.003)			[0.722]	[0.898]	[0.357]	[0.10]
CSPS	0.001				33	0.037	1.122	2.951	4.347	7.32
	(0.001)						[0.299]	[0.229]	[0.013]**	[0.01]**
CSPS		0.000			33	0.044	1.027	3.424	3.444	7.20
		(0.000)					[0.320]	[0.181]	[0.031]**	[0.01]**
CSPS			0.000		33	0.015	0.927	2.503	4.560	6.63
			(0.001)				[0.344]	[0.286]	[0.011]**	[0.02]**
CSPS				0.000	33	0.001	0.936	2.245	3.635	8.04
				(0.001)			[0.342]	[0.326]	[0.026]**	[0.01]**
DEF	0.002				33	0.008	1.011	0.368	0.168	0.22
	(0.004)						[0.323]	[0.832]	[0.846]	[0.64]
DEF		-0.001			33	0.031	1.085	0.393	0.221	0.37
		(0.000)					[0.306]	[0.822]	[0.803]	[0.55]
DEF			0.002		33	0.033	0.829	0.422	1.531	0.40
			(0.002)				[0.370]	[0.810]	[0.234]	[0.53]
DEF				-0.002	33	0.005	1.197	0.425	0.174	0.44
				(0.006)			[0.283]	[0.809]	[0.841]	[0.51]

*, **, *** denote significant at the 90%, 95% and the 99% level, respectively. Standard Errors are given in parentheses; probabilities for autoregressive conditional heteroscedasticity of errors test-stat F, the normality of errors test-stat χ^2 and the heteroscedasticity of errors test-stat F are given in square brackets.
(a) is the Breusch-Godfrey Serial Correlation LM Test. Probabilities are given in brackets.

Table 2 shows that GASTIL is insignificantly and inversely related with expenditure thus confirming Olson's theory of inverse relationship between democracy and expenditure because the aim of an autocratic regime is to impose tax at a rate where it is possible for it to channel highest amount of resources towards displaying military might as well as expenditure on other ostentatious consumption. However, the other measures of democracy POLITY2, is positively but insignificantly related to expenditure thus contradicting Olson's theory of inverse relationship between democracy and expenditure. GASTIL and POLITY2 are however positively but insignificantly related to revenue thus contradicting the Olson's theory which provides that autocracies tend to maximize the tax rate so that highest amount of resources could be earmarked for their private interests like "ostentatious consumption" and "military expenses"[10].

The components of GASTIL, POL-RIGHT and CIV-LIB are related with expenditures and revenues positively but are insignificant. The extremely small magnitude of the explanatory variables shows that there is no discernable impact of democracy and its various measures and components on expenditures and revenues. GASTIL and POLITY2 and two components of GASTIL, POL-RIGHT and CIV-LIB are related with CSPS positively and insignificantly. Again the magnitude is so small that no interesting relation is visible.

Regarding the relationship of democracy and its various measures with budget deficit is concerned; GASTIL is insignificantly and positively related with deficit, whereas POLITY2 is negatively but insignificantly related to deficit. As mentioned above, there are two competing but plausible theories regarding the relationship between budget deficit and any measure of democracy. The autocratic governments may have low budget deficit because they have been ostracized from the international capital market because of

[10] See Olson (1991), for further details on this subject.

not espousing the globally accepted democratic ideals, but the democratic governments may also have low budget deficits because they are compelled to maintain a budgetary discipline. The data rejects any significant relationship between democracy and two components of GASTIL in Pakistan. POL-RIGHT and CIV-LIB has positive and negative relationship with budget deficit respectively. However, both POL-RIGHT and CIV-LIB are insignificant.

Table 3 shows the IVs method results to analysis the impact of different measures of democracy on inequality. It can be observed from the table that both measures are significant at 90% level. GASTIL has a theoretically plausible negative sign, but POLITY2 has positive sign. The chi-squared probability shows that the both the instruments used in the specification, XRCOMP and DEMOC are uncorrelated with errors. But unlike GASTIL and POLITY2, POL-RIGHTS and CIVIL-LIB are insignificantly related with GINI. Both POL-RIGHTS and CIVIL-LIB have theoretically plausible negative sign. The IVs estimation method establishes a very tenuous relationship between democracy and GINI. However GASTIL and POL-RIGHT as well as CIV-LIB have correct negative sign in sync with the theory which provides that a higher level of democratization leads to lower level of income inequality (see Decarolis (2003)). By using the individual components of GASTIL, POL-RIGHT and CIV-LIB, we tried to find the specific institutional effects on democracy. However, both the components show no significant results.

Table 3
Instrumental Variables Results for Inequality,
Sample Period: 1972 to 2005

	GASTIL	POLITY2	POL-RIGHTS	CIVIL-LIB	OBS	χ^2	IVs
GINI	-1.500				34	0.634	XRCOMP
	(0.877)*					[0.426]	DEMOC
GINI		0.148			34	0.63649	XRCOMP
		(0.085)*				[0.4250]	DEMOC
GINI			-0.898		34	0.936	XRCOMP
			(0.545)			[0.333]	DEMOC
GINI				-9.974	34	0.334	XRCOMP
				(12.270)		[0.563]	DEMOC

*, **, *** denote significant at the 90%, 95% and the 99% level, respectively.

Table 4
RALS Results for Inequality,
Sample Period, 1972 to 2005

	GASTIL	POLITY2	POL - RIGHTS	CIV-LIB	OBS	Partial R^2	ARCH 1-1 test F	Normality test χ^2	Hetero test F	B-G[(a)] Auto. F
GINI	0.802				33	0.026	2.028	4.179	1.712	3.28
	(0.899)						[0.166]	[0.124]	[0.199]	[0.08]*
GINI		0.125			33	0.040	3.267	2.149	2.119	2.71
		(0.112)					[0.082]	[0.342]	[0.139]	[0.11]
GINI			-0.463		33	0.024	1.839	3.684	1.627	3.26
			(0.534)				[0.186]	[0.159]	[0.215]	[0.08]*
GINI				0.139	33	0.000	2.053	4.477	0.631	3.39
				(1.281)			[0.163]	[0.107]	[0.539]	[0.08]*

*, **, *** denote significant at the 90%, 95% and the 99% level, respectively. Standard Errors are given in parentheses; probabilities for autoregressive conditional heteroskedasticity of errors test-stat F, the normality of errors test-stat χ^2 and the heteroskedasticity of errors test-stat F are given in square brackets.
(a) is the Breusch-Godfrey Serial Correlation LM Test. Probabilities are given in brackets.

Using the RALS estimators to analyze the relationship between GINI and both measures of democracy, GASTIL and POLITY2, we found that both measures are insignificant. Both GASTIL and POLITY2 have a positive sign which are theoretically implausible, because the theory predicts that a higher level of democratization leads to lower level of income inequality. A low Partial R^2 precludes any relationship between democracy and GINI. The diagnostic tests do not reject the validity of the specification of the model. POL-RIGHTS and CIVIL-LIB are found insignificant. POL-RIGHT has a theoretically plausible negative sign, but CIVIL-LIB has positive sign.

5. Conclusions

Using the instrumental variables estimator, one measure of democracy GASTIL was found to have significant and theoretically plausible inverse relationship with expenditure variable. We observed that the POL-RIGHTS had a significant negative impact on expenditures perhaps suggesting that with an increase in political rights, the governing

institutions begin to feel themselves more accountable and as such are more circumspect in expenditures. GASTIL and POLITY2 as well as POL-RIGHTS have a positive effect on the government expenditures on community, social and public services (CSPS) indicating that the democracy is a better form of political dispensation where the guarding the public interests are concerned.

Our research therefore partly corroborates the Olson's theory that with less democracy, the expenditure is expected to increase because the aim of an autocratic regime is to channel highest possible amount of resources towards displaying a military might as well as expenditure on other ostentatious consumptions.

It has been shown that there is no significant impact of democracy on the fiscal policy variables like expenditure, revenues and deficit. Similarly, the non-existent relationship between democracy and social expenditure (the relationship between the democracy and its various components and the community, social and public services has been proved insignificant in our benchmark model) is quizzical. Why should it be so raises more questions than answers? Is the weakness of the democratic institutions over the years responsible for the near absence of any relationship between the various definitions of democracy and fiscal policy variables? Or is that the alternating democratic and non-democratic regimes have not been much different in their policy formulations and policy implementations? Further research is required to offer insights into this enigmatic situation.

An important issue in this research is that even though both measures of democracy GASTIL and POLITY2 show inverse and only weakly significant impact on income inequality (significant at 90%) when we used instrumental variables estimator, even this tenuous relationship was found to be absent in our benchmark model using RALS estimation method. A great deal of research has to be focused on the mechanisms lying behind the relationship between democracy and inequality, and more importantly what *is* the cause of inequality. One of many possible reasons for this insignificant relationship may be that the democratic institutions have not been given the opportunity to take firm roots in Pakistan since independence, the result of which is that the brief interludes of

democracy saw politicians fighting their own pitched battles instead of making sincere and concerted efforts aimed at reducing inequality and promoting growth.

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