An Evaluation of the Performance of Government of Pakistan

FAROOQ RASHEED and EATZAZ AHMAD

1. INTRODUCTION

The use of social and economic indicators to evaluate and rank governments' performance is often found in literature. The Anglo-Commonwealth and Scandinavian countries rest on the surveillance of work in the various ministries. This performance accounting approach thus becomes crucial for any regime to perform superlatively to their predecessors and thus it provides the basis to suggest why it is important to inspect governance of a government.

Government's efficacy also depends on the magnitude of the welfare that it is able to achieve. Debate on welfare is dated back to Adam Smith at-least. Now the question is what should be the welfare gauging indicators. We understand that, issues related to poverty, land utilisation, agriculture and industrial sectors, health services, education, growth rate of national income, per capita income, employment, etc. are important factors that can explain welfare status of a nation. Thus by developing an index based on performance in these areas, various political regimes can be evaluated and ranked. These evaluations and rankings set standards for future governments to improve. Thus these studies can be useful for developing and improving social welfare standards.

Governments' trustworthiness depends on delivering apparent improvements towards public services. If a government's reliability is to be defined by the consequences of its applied policies then there is a need to define and include those efforts that are to be used as litmus tests.

Accountability through "naming and shaming" via public reporting of output information is most common in relation to the Anglo Saxon countries [Dubnik (1998)]. This is almost a step that reflects the objective of *National Accountability Bureau (NAB)* in Pakistan. However, there is a lot of criticism that political influence is creating impediments toward achieving the goals of accountability. In the context of this environment, it is all the more important to provide some measures of governments' performance. In this paper we attempt to compare the performances of various regimes in Pakistan by using index-based methodology to rank these regimes.

Farooq Rasheed <farooqeco@yahoo.com> is Assistant Professor at Karachi Institute of Economics and Technology, Karachi. Eatzaz Ahmad <eatzaz@qau.edu.pk> is Professor of Economics, Quaid-i-Azam University, Islamabad.

Authors' Note: The authors are grateful to Dr Faisal Bari, Associate Professor at LUMS, Lahore, for his valuable comments on an earlier version of this paper.

The rest of the paper is organised as follows. Section II covers literature review, Section III discusses data and methodology. The results are provided in Section IV, while Section V concludes the paper.

II. LITERATURE REVIEW

Evaluation of various governments refers to the measures that capture the volume, quality and value of government. Atkinson, *et al.* (2005) provide insights into the evolution of output measurement in four sectors: health; education; public order and safety and social protection. Matheson, *et al.* (2006) have noted that the achievements of government are seen as essential to the path towards modernisation, thus leading to vital steps by governments. Therefore, as suggested by Pollitt and Bouckaert (2004), political public speaking about the measurement of performance becomes obvious. Ammons (2003) and Dubnik (1998) agreed that accountability through "naming and shaming" via public reporting of output information is most common in relation to the Anglo Saxon countries, where this form of accountability is strong.

Rothstein and Stolle (2004) argue that governments' effectiveness has a positive influence on the level of social trust. There is a need to monitor the progress of governments through the education system, that is, by supporting plans for the provision of schools and training of teachers. For agencies such as *United Nations*, these measures are important component of their comparative analysis of the socioeconomic conditions in different countries.

Indexing technique is used to summarise a range of information as the tangible outcome of empirical investigations. Guenno and Tiezzi (2000) build a macroeconomic index that includes some non-market variables, to be compared to the traditional GDP. Economists have used optimisation to derive indices that can be used to rank economic performance. This type of welfare indices has received wide attention on emphasising trends of 'welfare' as compared to GDP growth rates.

Cobb and Daly (1989) provide such welfare index model, which includes variables related to the growth of economic welfare, environmental variables, costs of pollution from air, water and noise.

Developing a methodology to calculate an Index for economic growth, Ivonin and Trostyanskiy (2004) define the calculation of the index in steps. These steps include 'sampling', use of interim statistical indices (ISI) evaluated by using a certain scale and integration of the block indices as an arithmetically average value. For the qualitative criteria a system of indices is required that is similar to the statistical system of indices. Qualitative indices are integrated into separate block indexes in terms of their average arithmetic values and lastly "A compound index of economic reforms is calculated on a certain stage of reforms in terms of the average arithmetic sum of the block of quantitative and qualitative indices.

Ebert (1984) explains the relationship between welfare measures and economic index numbers both by formulae and definitions. The study develops characterisations of economic measures and index numbers by a self-evident approach. However, the study also discouraging the self-evident approach because of varied nature of evaluation. This is reasonably true. Self-evident approach is highly skeptic in nature. For that reason one may rely just of the calculable performance to measure the index for the ranking purpose.

The *Human Development Index (HDI)* is a good example to understand non-skeptic analysis. HDI is a comparative measure of poverty, literacy, education, life expectancy, childbirth, and other factors for countries worldwide. It is a standard means of measuring well being of a country. It is also used to measure the impact of economic policies on quality of life.

III. DATA AND METHODOLOGY

Following the rationale behind the structure the formula of *HDI*, we base our analysis on three derived indices. Each index envelopes around the growth rates of the 13 selected socio-economic indicators. The list of these indicators is provided in Table 1.

Note that since a positive value of the growth rate of crimes has the adverse effect on the performance index, the growth rates of crimes is multiplied by minus one. The same treatment has been given to the data series of the growth rates of consumer price index, student-teacher ratios and unemployment.

Table 1

The Performance Indicators Used for the Construction of Government's Performance Index

| Serial | | |
|--------|--|------------------------------|
| Number | Variables | Expected Effect on the Index |
| 1 | All crimes reported | Negative |
| 2 | Arable Land | Positive |
| 3 | Consumer Price Index | Negative |
| 4 | Electricity Generation | Positive |
| 5 | Foreign visitors | Positive |
| 6 | Number of hospitals | Positive |
| 7 | Human Development Index | Positive |
| 8 | Real Income per capita | Positive |
| 9 | Rural Health Centres | Positive |
| 10 | Student-teacher ratio at primary level | Negative |
| 11 | Student-teacher ratio at secondary level | Negative |
| 12 | Universities | Positive |
| 13 | Unemployment | Negative |

The first step in the construction of the index is to calculate the series of annual growth rates of all the indicators. Note that some variables are known to grow faster their moderate growth is not considered as substantial as the similar growth in some other variables. For example three percent annual growth rate of CPI is considered low, while the same growth rate in student-teacher ratio must be considered very high. To overcome this problem, all the growth rates are standardise using sample means and sample standard deviations for the entire period of analysis. This yields standardised growth rates. The next step is to calculate means of the standardised growth rates of all the indicators for each regime. The index representing performance of various regimes can then be determined by the following three alternative approaches.

Index 1 = (Max of
$$\dot{\mathbf{E}}_j$$
 – Min of $\dot{\mathbf{E}}_j$) / (Max of $\ddot{\mathbf{E}}$ – Min of $\ddot{\mathbf{E}}$), ... (1)

Index 2 = (Max of
$$\dot{\mathbf{E}}_{j}$$
 – Mean of $\dot{\mathbf{E}}_{j}$) / (Max of $\ddot{\mathbf{E}}$ – Min of $\ddot{\mathbf{E}}$), ... (2)

Index 3 = (Mean of
$$\dot{\mathbf{E}}_{i}$$
 – Min of $\dot{\mathbf{E}}_{i}$) / (Max of $\ddot{\mathbf{E}}$ – Min of $\ddot{\mathbf{E}}$), ... (3)

where \dot{E}_{j} represents average growth rate of *j*th regime and \ddot{E} represents average growth rate from all the regimes.

All the three above-mentioned indices are the derivatives of the index structure used in *HDI*. *Index 3* is based on the mean performance of the *j*th regime. However, since the central tendency approach overlooks the best performance, therefore we have also calculated the index on the basis of best performance (maximum value). *Index 1* and *index 2* are those two indices in which the maximum factor has been accommodated.

In the manner of 'Ahluwalia-Chenery Welfare Index' has been developed by taking weighted means of various welfare indices such that all the weights are nonnegative and sum up to one, we will finally rank the regimes on the basis of weighted average of all the ranks (obtained under the three approaches) to yield what we label as the *Regime Performance Index (RPI)* designed for ranking the performance or efficiency of regimes. The *RPI* gives some degree of importance to all the approaches of ranking that we are using.

Ranking by *RPI* is performed by measuring weighted average of the three ranks we have measured by the approaches mentioned above. As usual, the lower value of *RPI* means a better ranking of a regime under study. The have been assumed by a logical perception as used by Ivonin and Trostyanskiy (2004) mentioned earlier in literature review section. Table 2 present the summary of these weights and ranks.

Table 2

Ranks and Weights

| Ranks | 1 | 2 and 3 | 4 and 5 | 6 and above |
|---------|----|---------|---------|-------------|
| Weights | 0% | 15% | 35% | 50% |

We have given zero weight to the best rank because we want to give maximum credit to the regime if it has got the best position. Similarly, 15 percent weight for 2nd and 3rd ranks, 35 percent weight for 4th and 5th ranks and 50 percent weight for 6th or above have been assigned in such a manner that the impact of high-quality performances on *RPI* must strike stronger. Table 2 present the summary of these weights and ranks. Therefore our equation for *RPI* would be:

Normally, during the time periods used by an interim government (form due to a politically unstable situation or a transfer of power process after new elections) the intention towards socioeconomic issues is very low or almost none. Thus we will not evaluate the index on the basis of the actual time period a regime has reigned but by the re-defined era for each regime. For example, Ms. Bhutto's first era commenced on

November 1988 and ended in August 1990 and Mr Nawaz Sharif took charge in October 1990. The 3-month time period, from August 1990 to October 1990, was under the administration of an interim government. It is highly expected that during these three months the interim government had no time to offer any significant change in social policy aspects. Also roughly first two to three months of a newly elected regime are quite hectic for forming and designating ministries. This suggests that the change in the policies towards social issues remain none or insignificant. Thus it is quite realistic to relate the time period from August 1990 to October 1990 to Ms Benazir Bhutto. On similar basis we have defined other regimes' time periods in reign.

After Zia era, the elections in 1988, 1990, 1993 and 1997 were held. General Pervez Musharraf came into power in October 1999 and held election in 2002. The time period of each government is summarised in Table 3.

Table 3

Time Periods of Various Governments in Pakistan

| | | | | | | Nawaz |
|----------------|--------------|-------------|-------------|-------------|-------------|-------------|
| | | Benazir | Nawaz | Benazir | Nawaz | Sharif |
| | Zia ul Haq | Bhutto 1 | Sharif 1 | Bhutto 2 | Sharif 2 | Combined |
| Ruling Periods | Jun 1978 to | Nov 1988 to | Oct 1990 to | Oct 1993 to | Feb 1997 to | Oct 1999 to |
| | Aug 1988 | Aug 1990 | Jun 1993 | Nov 1996 | Oct 1999 | Present |
| | (11.1 years) | (1.9 years) | (2.8 years) | (3.2 years) | (2.9 years) | (7 years) |
| Defined Era of | 1979 to | 1989 to | 1991 to | 1994 to | 1997 to | 2000 to |
| Regime | 1988 | 1990 | 1993 | 1996 | 1999 | Present |

General Zia ul Haq's era is so far the longest era in Pakistan's history. Ms. Benazir Bhutto and Mr. Nawaz Sharif both were elected as prime minister of Pakistan twice. Thus we are also including their combined performance for index and ranking purposes. As expalined earlier we have ignored the possible fragmentation division in eras formed by the interim government on the assumption that these interim governments have not played any significant role towards the social sector issues in Pakistan.

Inclusion of Z. A. Bhutto's regime would have provided an improved version of this paper, but due to non-availability of past records we have taken the yearly data of above-mentioned variables from 1979 to 2004 from various issues of *Pakistan Statistical Year Book* of Federal Bureau of Statistics and *World Development Indicators*.

IV. RESULTS

We performed the test of equality for mean and variance among the selected regimes. The mean equality test is based on a single-factor analysis of variance. The basic idea is that if the subgroups have the same mean, then the variability between the sample means (between group) should be the same as the variability within any subgroup (within group).

Levene test is also based on the analysis of variance (ANOVA) of the absolute difference from the mean. The *F*-statistic for the Levene test has an approximate *F*-distribution with G-1 numerator degrees of freedom and N-G denominator degrees of freedom under the null hypothesis of equal variances in the subgroups.

In Table 4 the result of mean equality test suggests that the mean growth rates achieved by each regime for 13 indicators are different significantly. Using Levene test to check the hypothesis of equality of variance among the regimes we find that variation among the means of selected variables are insignificantly different. These two parameters (mean and variance) are required for the standardisation of values and since at least one parameter (mean) is found significantly different therefore the obtained standard values will provide significantly different index values.

Table 4

Tests of Mean and Variance Equality

| | | Annova | | |
|-------------|--------------------------------------|-------------|-------------|-----------------------|
| Test | H_0 | F-statistic | Probability | Result (for two tail) |
| Equality of | | | | _ |
| Mean | $H_{0:} \ \mu_1 = \dots = \mu_6$ | 0.26 | 0.96 | Ho is rejected at 5% |
| | | Levene Test | Probability | Result (for two tail) |
| Equality of | | | | |
| Variance | $H_{0:} \sigma_1 = \dots = \sigma_6$ | 0.88 | 0.52 | Ho is accepted at 5% |

Table 5 provides correlation coefficients across various governments calculated in cross section of the mean values of the 13 selected variables. Considering 70 percent or more a relatively strong correlation coefficient, results of cross correlation coefficients shows that Benazir's first era is highly correlated with both the eras of Nawaz Sharif government, Zia era and marginally weaker with her second era, while a very weak coefficient of correlation is found with Musharraf's era. Her second era is found weakly correlated with others. Benazir's combined performance is found to be amply correlated with Nawaz's second and combined eras.

Nawaz's both eras are strongly correlated with Zia's era. Finally the era of Pervez Musharraf is found weakly correlated with all the regimes. An overall glance suggests that there is a weak association among the regimes at least for the socioeconomic objectives.

Table 5

Correlations among Regimes

| | | corretations among regimes | | | | | | | | |
|------------------|-------------------|----------------------------|-------------------|-----------------|-----------------|-----------------|---------------------|-----------|--|--|
| | Benazir Bhutto | Benazir BBhutto | Benazir Bhutto | Nawaz Sharif | Nawaz Sharif | Nawaz Sharif | Pervez Musharraf | Zia ul | | |
| | 1 | 2 | combined | 1 | 2 | combined | | Haq | | |
| Benazir Bhutto 1 | 1.00 | | | | | | | | | |
| Benazir Bhutto 2 | 0.60 | 1.00 | | | | | | | | |
| Benazir Bhutto | | | | | | | | | | |
| combined | 0.74 | 0.98 | 1.00 | | | | | | | |
| Nawaz Sharif 1 | 0.69 | 0.52 | 0.60 | 1.00 | | | | | | |
| Nawaz Sharif 2 | 0.75 | 0.60 | 0.68 | 0.48 | 1.00 | | | | | |
| Nawaz Sharif | | | | | | | | | | |
| combined | 0.84 | 0.65 | 0.74 | 0.86 | 0.86 | 1.00 | | | | |
| Pervez Musharraf | 0.10 | -0.10 | -0.06 | 0.24 | 0.34 | 0.34 | 1.00 | | | |
| Zia ul Haq | 0.84 | 0.52 | 0.63 | 0.74 | 0.85 | 0.92 | 0.54 | 1.00 | | |

Table 6 provides ranking on the basis of the three indices given by Equations 1, 2 and 3 and the *RPI*. The table shows that the ranking of the six regimes depends on the performance index used for the ranking. The best three and the bottom most ranks obtained under all the approaches are discussed as follows.

Table 6

Regime Rankings

| | | | | | | (f) | (g) |
|-------------------------|---------|---------|---------|------------|------------|------------|-------------|
| | | | | (d) | (e) | Normalised | Regime |
| | (a) | (b) | (c) | Mean of | Median of | Mean of d | Performance |
| Regimes | Index 1 | Index 2 | Index 3 | a, b and c | a, b and c | and e | Index |
| Zia ul Haq | 3 | 1 | 5 | 3.0 | 3 | 1.82 | 3 |
| Benazir Bhutto 1 | 4 | 3 | 6 | 4.3 | 4 | 2.52 | 4 |
| Nawaz Sharif 1 | 1 | 5 | 1 | 2.3 | 1 | 1.00 | 1 |
| Benazir Bhutto 2 | 8 | 8 | 4 | 6.6 | 8 | 4.42 | 7 |
| Nawaz Sharif 2 | 7 | 7 | 8 | 7.3 | 7 | 4.33 | 8 |
| Pervez Musharraf | 6 | 2 | 7 | 5.0 | 6 | 3.33 | 6 |
| Benazir Bhutto combined | 5 | 6 | 3 | 4.6 | 5 | 2.91 | 5 |
| Nawaz Sharif Combined | 2 | 4 | 2 | 2.6 | 2 | 1.39 | 2 |

Ranking from *index 1* perspective, which is based upon maximum and minimum growth rates achieved by a regime, affirms that performance under first era of Nawaz Sharif regime is the best, Zia era is at second place and Benazir Bhutto's first era is at third rank. The last rank is grabbed by second regime of Benazir Bhutto. Under the *Index 2* point of view, which is based upon maximum and mean performance of a regime, Zia regime outperformed the other regimes followed by Pervez Musharraf era and at third it is the first era of Benazir Bhutto, while the last ranked is grabbed by the second Benazir Bhutto era. Using the third approach of index which is based on mean and minimum values of the growth rates achieved by a regime, first era of Nawaz government is ranked first, Benazir Bhutto second era is ranked second and Zia era is at third. At the bottom we find second government of Nawaz Sharif.

For consideration of consistency factor in the ultimate ranking it is important to give weights to all the three measures. Thus we also ranked each regime on the basis of normalised average of means and medians of the three ranks obtained earlier. Nawaz Sharif's regime is found to be the best performer for addressing the selected socioeconomic indicators, Zia era achieved the second rank and Benazir Bhutto's first era secured third rank. Benazir Bhutto's second era obtained the lowest rank. The results under this approach will be similar to *RPI* assigned with equal weights.

Finally the rankings under *RPI* methodology reflects that the first government of Nawaz Sharif is at the top rank for performing in social issues, followed by Zia era at second place and first regime of Benazir Bhutto at the third place. Ironically the second era of Nawaz Sharif government is ranked at the bottom under *RPI*.

V. CONCLUSIONS

To summarise our findings, the rankings under *RPI* methodology reflects that Nawaz Sharif's first era is the best era in Pakistan for performing in social issues, followed by Zia era first era and Benazir's first era. Nawaz Sharif's second government is ranked at the bottom.

We agree this is as a sensitive study and, hence, prone to controversy. However, the purpose for carrying out this study is not align with any political viewpoints. Our findings are completely impartial towards any regime. Our results or conclusions are never suggesting that the regime that has achieved the lowest rank is inefficient or dishonest or corrupt. This study would be helpful to enhance the social standards in our country. The purpose of this study is to unearth the already achieved performance as a yardstick for coming regimes to go beyond it for further enhancing socioeconomic growth in Pakistan.

Table 7 provides the list of three strongest performances and three weakest performances by each regime. It is interesting to note that under top three growth rates almost all the regimes have mainly focused on electricity generation task. Under Pervez Musharraf's regime the best performance was for increase in the number of foreign visitors, which might be reflecting a favourable environment for foreign investors. Building rural health centres is also found common among the regimes.

Table 7

Highest and Lowest Growth Rates among 13 Selected Indicators

| | | | | | | | Benazir | Nawaz |
|-----------|--------|----------|----------|----------|----------|-----------|----------|----------|
| | Zia ul | Benazir | Nawaz | Benazir | Nawaz | Pervez | Bhutto | Sharif |
| | Haq | Bhutto 1 | Sharif 1 | Bhutto 2 | Sharif 2 | Musharraf | combined | combined |
| 3 Highest | 1.EG | 1.EG | 1.EG | 1.EG | 1.FV | 1.FV | 1.EG | 1.YPC |
| | 2.FV | 2.RHC | 2.U | 2.H | 2.EG | 2.STRS | 2.RHC | 2.UE |
| | 3.RHC | 3.H | 3.ACR | 3.RHC | 3.RHC | 3.U | 3.H | 3.U |
| 3 Lowest | 1.CPI | 1.CPI | 1.CPI | 1.CPI | 1.ACR | 1.CPI | 1.CPI | 1.CPI |
| | 2.ACR | 2.ACR | 2.STRP | 2.STRS | 2.CPI | 2.ACR | 2.STRS | 2.ACR |
| | 3.STRP | 3.FV | 3.FV | 3.STRP | 3.STRS | 3.UE | 3.ACR | 3.AL |

Generally ignored areas among the selected variables are consumer price index, students-teacher ratio both at secondary and primary levels and the number of crimes. There is little improvement found under almost all the regimes towards developing arable land, student teacher ratio at all levels and foreign tourism in Pakistan. Ever increasing level of corruption is another problem for Pakistan and this indicator is least address issue.

Introduction of graduation degree requirement for the candidates to take part in election is deemed as a splendid effort towards the betterment of a society. Any regimes must take up the issues for improving the availability of clean drinking water, solving environmental issues, reduce inequality, health caring specially for the population below the poverty line, better law and order etc. are always considered vital to evaluate and rank the governance. These areas, which were not selected in our study due to non-availability of data, are regarded as the limitations of our study. Thus the room for the improvement in the index to rank the performance of any regime is always there.

REFERENCES

Ammons, D. N. (2003) Performance and Managerial Thinking. *Public Performance and Management Review* 25:4, 344–7.

- Atkinson, Tony, Joe Grice, Aileen Simkins, Liz de Freitas, James Hemingway, Ben King, Phillip Lee, Michael Lyon, Nicola Mai, Sukwinder Mehmi, Alwyn Pritchard, Janet Snelling, Amanda Tuke, Lorraine Watson and Georgina Fletcher-Cooke (2005) Measurement of Government Output and Productivity for the National Accounts. (available at http://www.statistics.gov.uk/about/data/methodology/specific/PublicSector/Atkinson/downloads/Atkinson Report Full.pdf)
- Cobb, John, and Herman Daly (1989) For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future. Boston: Beacon Press.
- Dubnik, M. J. (1998) Clarifying Accountability: An Ethical Theory Framework. In C. Sampford, N. Preston, and C.-A. Bois (eds.) Public Sector Ethics: Finding and Implementing Values. London: Routledge.
- Ebert, Udo (1984) Exact Welfare Measures and Economic Index Numbers. *Journal of Economics* 44: 1, 27–38.
- Guenno, G. and S. Tiezzi (2003) The Index of Sustainable Economic Welfare (ISEW) for Italy. (FEEM Working Paper No. ENV-5.98).
- Ivonin, V. and D. Trostyanskiy (2004) Development of a Methodology to Calculate the Economic Reforms Progress Index. Conducted by the Centre of Investment and Financial Analysts with the Financial Support of the USAIDs Economic Policy Reform Project in Uzbekistan. (www.bearingpoint.uz/php/download.php?../ files/3/a45.pdf)
- Mateson, V. R. Baade, and R. Baumann (2006) Selling the Big Game: Estimating the Economic Impact of Mega-Events through Taxable Sales. International Association of Sports Economists. (Working Papers 610).
- Pakistan, Government of (Various Issues) *Pakistan Statistical Year Book*. Federal Bureau of Statistics.
- Pollitt, Christopher and Geert Bouckaert (2004) *Public Management Reform: A Comparative Analysis.* Oxford: Oxford University Press.
- Rothstein, Bo, and Dietlind Stolle (2004) How Political Institutions Create and Destroy Social Capital: An Institutional Theory of Generalised Trust. Paper prepared for the 98th Meeting of the American Political Science Association, Boston.
- Todaro, M. P. and S. C. Smith (2003) *Economic Development*. Delhi: Pearson Education 8th Ed.

Comments

The paper by Messers Farooq Rasheed and Eatzaz Ahmed makes a comparative analysis of the efficiencies of various governments of Pakistan spanning the period 1976 to 2005. The first regime covered in the analysis is that of General Zia followed by the two regimes each of Benazir Bhutto and Nawaz Sharif and culminating in the Musharraf regime. Taking each one separately, a total of eight regimes are compared and analyzed by the authors.

One of the most interesting but the most confusing aspect of the paper pertains to the claim made by the authors in the abstract of the paper, which rads: "Using the index developed by Dr Mahbub ul Haq, we attempt to evaluate performance based rankings of various political regimes in Pakistan using socio-economic indicators. Our results show that Zia's Era is the highest ranked era followed by Nawaz Sharif".

To support their contention, the authors have developed a Human Development Index which is based on fourteen variables such as crimes reported, education budget, electricity generation, foreign visitors, gross national product (cfc), number of hospitals, health budget, land utilisation, net exports, rural health centers, roads length, student-teacher ratio (primary), student-teacher ratio (secondary) and number of universities.

No justification or rationale has been provided in the paper about developing an index based on fourteen variables. However, the authors observe: "During sixty years, Pakistan's democratic process has been overruled by dictatorships. Military has invalidated the democratically elected governments. Therefore it has become vital to study the performance of both types of regimes. Thus we will estimate averages of growth rates of all the factors on regime basis and 5-year time interval basis". Obviously, this is not an acceptable approach to analyze the relative efficiencies of different regimes in Pakistan especially when four regimes out of the total eight could not last more than three years. Hence in the case of analysis on 5-year intervals, there is a clear disconnect seriously imparing the relevance of the study.

In the paper, the authors focus less on HDI criteria but more on to the new approaches identified as "Mean Growth Rates" and "Performance Index". Before furnishing the results of the two approaches, the authors present the Correlations Matrix of performance of different regimes and conclude as following: "Results of correlation show a high correlation between Zia and Musharraf eras. Nawaz-Musharraf and Zia-Nawaz epochs are also highly correlated. Finally a high correlation was found in Benazir era 1 and Nawaz era 2". The authors fail to explain the meanings, the relevance and the implications of these correlations. In the absence of appropriate explanation about these correlations, the entire exercise on government efficiencies looks to be vacuous.

The authors provide the results of their analysis using the "Mean Growth Rate" and "Performance Index" and rank different periods/regimes in order of their efficiency. Amazingly, the two approaches give diametrically opposed results. Under the "Mean Growth Rate" or the "Mean Value" approach, the top three rankings belong to the military regimes, while under the "Performance Index" approach., the top three rankings are captured by the civilian governments. The authors add nothing to untie the knot of contradictory results. Rather, they proceed further with different time-period and lagrelated rankings which multiply the contradiction ad nauseam.

Comments 841

At the concluding stage, the authors use the weighted average methodology along with the estimates of co-efficient of variation and declare the Zia era as "the best as far as good governance is concerned", followed by Nawaz era 1 and Musharraf era. While giving these results, the authors fail to appreciate that only a holistic approach incorporating other variables of the economy such as the debt and deficit profiles, the literacy level, the nutrition and health standards and the number of the households living below the poverty line, can a real comparison of the relative performance of different regimes b made. One thing is however, quite clear that the regimes discussed in the paper had pursued policy paradigms which were fairly similar and parallel to each other. In these paradigms, no serious and consistent direction or thrusts are visible to help the country get out of the deep morass of poverty, illiteracy and backwardness. If one had to pick up a single regime for its regressive socio-economic policies, it was General Zia's regime which sowed the seeds of social disharmony and religious fanaticism taking Pakistan further away from the take-off stage of economic development.

Aqdas Ali Kazmi

Planning Commission, Islamabad.