Modern Economy, **2012, 3, 11-15**
http://dx.doi.org/10.4236/me.2012.31002 Published Online January 2012 (http://www.SciRP.org/journal/me)

Identifying the Public Administration Reform Performance through the Lens of Provincial Competitiveness Index and GDP per Capita in Vietnam

Thai Thanh Ha, Le Thi Van Hanh
National Academy of Public Administration (NAPA), Hanoi, Vietnam
Email: thaiha63@yahoo.com

Received September 6, 2011; revised November 2, 2011; accepted November 26, 2011

ABSTRACT

This study was conducted to test the hypothesis of whether the public administration reform (PAR) and provincial competitiveness could be causally linked to the GDP welfare per capita in Vietnam. By adopting the factor analysis and then the natural logarithm linear regression, the author found out that there were causality linkages between those above mentioned parameters. Namely, legal institutions were the main huddles for GDP per head, while public administration reform services and public services delivery exert positive impacts on GDP per capita. The dynamism of provincial leadership was also positively influential to the GDP outcome for Vietnamese citizens. Conclusions and recommendations were drawn for Vietnamese policy makers to modernize the public administration reform process.

Keywords: Vietnam; Public Administration Reform; Provincial Competitiveness Index (PCI); GDP per Capita

1. Introduction

Vietnam's fast economic development and impressive growth of the past decade can be attributed to the successfully implemented public policies and internationally accepted public governance practices that its government has actively embarked right since the start of the public administration reform. The public administration reform (PAR) in Vietnam has been considered as an ambitious process that seeks the "rules by laws" within a centralized and centrally managed framework. Having been lasting for more than a decade until now, this PAR aims to lift the state governance up to a more efficiency level, and thereby to cater better public services to the people at large [1-3]. As the results, the whole economy of Vietnam has been functioning in a competitive mechanism, rather than being centrally planned one [4]. The organizational structure of state governance has become leaner and more efficient with the objective of unleashing the creativeness among the members [5]. Public officers and civil servants have been sent to the trainings and capacity-building on "the sense of responsibility" as well as awareness of "serving the people unconditionally". There is no doubt that these PAR efforts have been contributing positively to the success of Vietnam's economy miracles, overcoming the roadblocks, and narrowing the gap of difference in an emerging civic society of Vietnam [6].

In this context, there have been a number of studies on the public administration reform in Vietnam. However, they are merely qualitative in nature with the traditional approach aiming to touch the surface, to describe the status-quo of PAR process or to identify the roadblock hurdles to the local economic development [3,4]. For that reason, there is a need to set more light on the PAR performance with a quantitative method. Specifically, this study is to be conducted to identify the causal relationship between public administration reform performance, provincial competitivenesses and the GDP per capita. The reasoning behind the above mentioned causality is that public administration reform performance should be measured on the bottom-line quantitative indicators. That is, it should give rise to the understanding of whether or not PAR process would bring the better-off to the provincial competitiveness and more welfare to the public in the form of per-capita GDP. Against all odds, these are important indicators, indirectly reflecting the so-called economic development for every province in a broad sense [7].

2. Data and Study Model

2.1. Data for the Study

Data on provincial competitiveness index (PCI) for the year of 2010 was taken from the PCI Vietnam. This independent entity investigated the provincially-based data to explain the from-province-to-province difference in terms of legal environments and public policy [8]. This type of index assisted in explaining why provinces of the

same country are different from each other on the ground of economic growth and dynamic development, especially from the private sector. The provincial competitiveness index consists of the component sub-indices such as: Entry cost; Access to Land; Transparency; Time cost of regulatory compliance; Informal charges; proactivity of provincial leadership; Business support service; labor training; and legal institution [9].

Data on public administration reform performance, known as PAPI measurement for the year of 2010 were extracted from the United Nations Development Program's recent study [5]. The PAPI score was used to identify the two main dimensions of PAR process: public administration reform services and public services delivery. These are two most important bottom-line dimensions which could be interpreted as the reflection of whether PAR process is successful in Vietnam [10]. Meanwhile, the data on per capita GDP for the year of 2010, measured in US dollar terms were taken from respective provincial web-site or Committee for Ethnic Minorities, a ministerial level agency under the Government [11].

2.2. Study Model

To quantify the causality relationships between GDP per capita and PAR performance index as well as the provincial competitiveness sub-indices, the following econometric model was adopted in this study:

$$\ln Y_{GDPi} = a_{0i} + \sum_{j=1}^{n} \beta_1 \ln X_{ji} + \sum_{k=1}^{m} \beta_k \ln X_{ki} + \xi_i \quad (1)$$

where:

$\ln Y_{GDPi}$ is natural logarithm of the GDP per capita for province i^{th};

$\sum_{j=1}^{n} \beta_j \ln X_{ji}$ is the vector of PAR sub-indices from 1^{st} to j_m^{th} for province i^{th};

$\sum_{k=1} \beta_k \ln X_{ki}$ is the vector of provincial competitiveness sub-indices from 1^{st} to k^{th} for province i^{th};

ξ_i is residual term in the model.

The above-mentioned econometric model adopted in this study has obtained the two-pronged objectives. Firstly, it allowed the quantification of the causal linkages between the GDP per capita as dependent variable and the provincial competitiveness sub-indices and public administration reform performance indices as independent variables. Secondly, the model also overcame the normality condition or statistical normality test known as Komogorov-Smirnov test [12,13]. As it came to decide the number of independent variables as presented in more detail in the next section, the econometric Equation (1) could be expanded in the following form:

$$\ln Y_{GDPi} = a_{0i} + \beta_1 \ln X_{1i} + \beta_2 \ln X_{2i} + \beta_3 \ln X_{3i} + \beta_4 \ln X_{4i} + \xi_i \quad (2)$$

where:

$\ln Y_{GDPi}$ is natural logarithm of the GDP per capita for province i^{th};

$\ln X_{1i}$ is the natural logarithm of legal institution sub-index for the province i^{th};

$\ln X_{2i}$ is the natural logarithm of "proactivity of provincial leadership" sub-index for the province i^{th};

$\ln X_{3i}$ is the natural logarithm of "PAR services" sub-index for the province i^{th};

$\ln X_{4i}$ is the natural logarithm of "public services delivery" sub-index for the province i^{th};

β_{j+k} is respective linear regression coefficients for PAR and PCI variables;

ξ_i is the error terms in the model.

This was the final econometric equation to be used for testing the causality linkages between the dependent and independent variables. The next section describes in more detail the extent to which the PAR performance and PCI sub-indices should exert a causal impact on the GDP per capita.

3. Data Analysis and the Findings

Data processing and analysis were carried out with the use of the SPSS 18 software. Due to the complexity of the provincial competitiveness index which consists of 9 sub-indices, factor analysis technique was used to condense them into a smaller and more meaningful number of variables [12]. These newly created factors would, on the one hand, facilitate the understanding of causality in question. On the other hand, they would allow the avoidance of multi-colinearity which could often be seen as a distortion of the "down-to-earth" causality relationship in the econometric equation. **Table 1** presents the result of the factor analysis of the 9 provincial competitiveness sub-indices mentioned above. It shows that two new factors were identified and created with the statistically signifycant level. Below is the detailed description.

The first factor was composed of four sub-indices which attained high loading coefficients of 0.86, and 0.82, and 0.78, and 0.78, all exceeding the conservative cut-off point of 0.5. Thus, on the basis of the nature of PCI sub-index scores, this factor was labeled as legal institutions with the biggest factor loading. **Table 1** also reveals that the internal consistency for this factor was assured with the Cronbach Alpha reliability of 0.86, exceeding the Kaiser's threshold of 0.7 [12]. The average scores of these four sub-indices reflected the degree of the legal matters, thus serving as a basis for creating a "legal institution" variable for hypothesis testing on a later stage.

By the same token, the second factor was identified with high loading coefficients for Proactivity of provincial leadership; Entry costs; Informal charges; Transparency and access to information; Time cost of regulatory compliance; as well as the dynamic leadership. The sec-

Table 1. Factor analysis of 2010 provincial competitiveness sub-indices.

Provincial competitiveness sub-indices	Factor analysis	
	Factor 1 with loadings	Factor 2 with loadings
1. Legal institution	0.86	
2. Access to Land	0.82	
3. Business support services	0.78	
4. Labor training	0.78	
5. Proactivity of provincial leadership		–0.80
6. Entry costs		0.77
7. Informal charges		0.60
8. Transparency and access to information		0.58
9. Time cost of regulatory compliance		0.55
Eigenvalue	3.66	2.19
Cumulative variance (%)	40.7%	65%
Cronbach Alpha reliability	0.86	0.79

Source: Data analysis with SPSS 18.

ond factor possessed Eigenvalue of 2.19 and Cronbach Alpha reliability of 0.79 which satisfied the threshold of 0.7. The second factor was named as "provincial dynamism" on the basis of the item with the highest loading coefficient. The average score of the PCI sub-index scores would be used as a new variable in the model. Both these newly created factors accounted for a relatively high cumulative variance of 65% and satisfied the conditions imposed by the factor analysis technique.

To set more light on the question of whether provinces with high PAPI score can be highly linked to high PCI score, Pearson correlation was used with the findings to be presented in the **Figure 1**. It reaches the correlation degree of 0.45 and shows that the provinces such as Ho Chi Minh city, Phu Yen, Ha Tinh; Da Nang and Binh Phuoc are the ones with a positive correlation between public administration effort and PCI score. In the mean time, the provinces such as Kon Tum, Lai Chau, Dak Lak, Yen Bai, Quang Tri; Kien Giang and Tien Giang maintain a low degree of correlation between PAPI and PCI.

Similarly, the correlation between the PAPI and GDP per capita was presented below in the **Figure 2**. The public administration performance was positively correlated with per capita GDP at a close level of 0.6. Such cities as Ho Chi Minh, Da Nang, Dong Nai; and Hai Phong are the ones that were ranked as the highest in terms of public administration reform performance and GDP per capita. The capital of Ha Noi maintained a high level of GDP average. However, it came as a surprise that the heart of the country fell into the group with lowest PAPI score. The group of such provinces as Dak Lak; Lai Chau; Cao Bang; Yen Bai and Dien Bien is mountainous and poor. Understandably, they reached a level of low PAPI score with an exception of Phu Tho province which reached a high level of PAPI score as shown in **Figure 2**.

Table 2 presents the results of the log linear regression which was adopted to study the causal linkages between dependent variable on GDP per capita and independent variables in terms of public administration reform performance and provincial competitiveness.

Table 2. Causality of GDP per capita and PAPI and PCI in 2010.

Dependent variable Y_i (Natural Logarithm of GDP per capita)	Model statistical parameters			
	Beta coefficients	t	sig	VIF
Constant	–7.62	–1.05	0.30	
X_1: Legal institutions	–0.02	–0.16	0.87	1.36
X_2: Provincial dynamism	0.20	1.61	0.12	1.29
X_3: Public administration reform services	0.99	0.34	0.74	1.17
X_4: Public services delivery	6.22	2.26	0.03	1.56

R square = 0.67; F statistics = 4.043; p-value = 0.012; Two-tailed significance level of $\alpha = 0.05$.

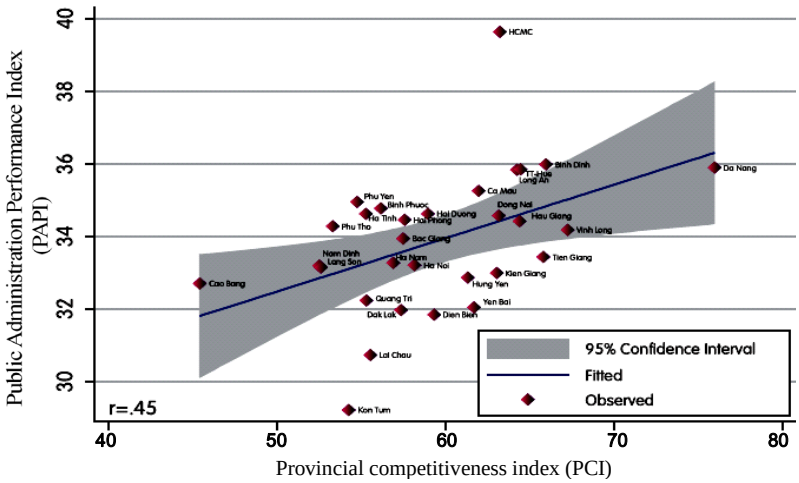

Figure 1. Correlation between PAPI and PCI for the year of 2010.

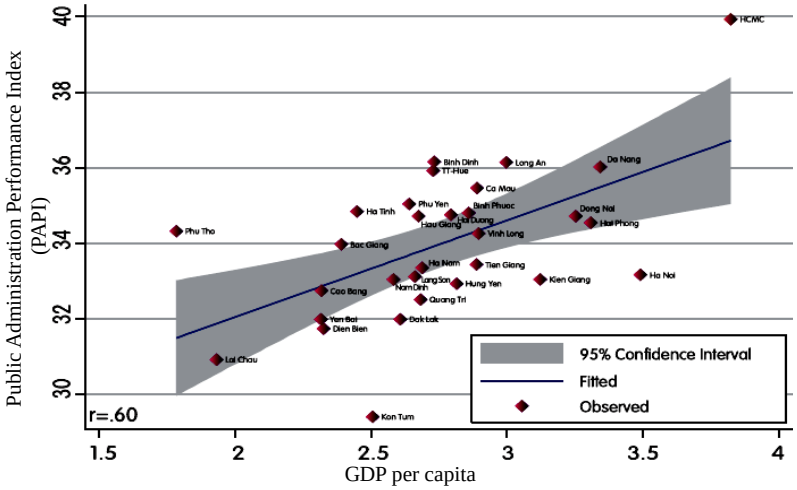

Figure 2. Correlation between PAPI and GDP per capita in 2010.

In general, the results as presented in **Table 2** show the robustness of the model. Variance inflation factors known as VIF fall within the acceptable level as proposed by Hair *et al.* The beta coefficient parameters found in **Table 2** could be put into Equation (2) which should become:

$$\ln Y_{GDPi} = -7.62 - 0.02 \ln X_{1i} + 2.0 \ln X_{2i} + 0.99 \ln X_{3i} + 6.22 \ln X_{4i} + \xi_i$$

The interpretation of beta coefficients shows that the legal institution exerts a negative impact on the GDP per capita while Public services delivery is positively related to the GDP per capita with the beta coefficient of 6.22. The data analysis also points out to the fact that the remaining two independent variables on public administration reform services and Provincial dynamism have positive influences on the GDP per capita with beta coefficients of 0.99 and 0.20 respectively.

4. Discussion and Conclusions

The findings of the study confirm the causal relationship between GDP per capita and the efforts on public administration reform as well as the provincial competitiveness. Clearly, those provinces which had high scores on provincial competitiveness would accordingly have a high level of GDP per capita. This implication sent a strong message to Vietnamese policy makers, government officers, and thus served as a clear answer to the skepticism that the effort spent on public administration reform is just a waste of time and money. Such provinces as Da Nang, Ho Chi Minh City and Hai Phong are the case in point. In contrast, the capital of Ha Noi, albeit being the heart of nation's political and public administration, merely maintain a humble PAPI and PCI scores. Yet, it had a surprisingly high level of per capita GDP as compared to the other provinces. This very thing raised a question of whether there are the other factors behind this contradiction. One possible answer could be that Ha Noi is the cradle of trade, commerce and investments. Therefore they would naturally bring about a high level of GDP per capita without much PAR efforts. It has been found that foreign direct investment inflows have been a central driver of this high per-head GDP indicator [7,13]. Other rumors have attributed this to the phenomenon "government tourism" or "lubricating money" in the nation's capital. Regardless of any possible explanation, the capital of Ha Noi must be an advance-guard city in making serious PAR efforts as a role model for the others to follow. The findings also point out that remote and mountainous provinces are lagging behind the rest of the other in terms of public administration reform and GDP average. Should not the serious efforts on public administration reform be made for this disadvantaged mountainous provinces, the poor might fall back to the vicious cycle of poverty again [10].

To bring the discussion to a conclusion, it could be seen clearly from the result of logarithm linear regression that in Vietnam, legal institutions are the barricades to the efforts on public administration reform and the GDP welfare of the Vietnamese citizens. Public services quality and delivery are positively influential to the GDP per capita [14]. Therefore, they should be designed in such a way that expectations and needs for the Vietnamese people at large are met. Whether all those expectations and needs can be met or not, depending heavily on the proactivity of the provincial leadership in the public administration reform process. Even though the process of this kind is continuously dynamic and multi-oriented [14,15].

REFERENCES

[1] Q. Dinh, "Public Administration Reform in transitional Economy: The Case of Vietnam," *Philippine Journal of Development*, Vol. 15, No. 2, 1998, pp. 315-332.

[2] M. Painter, "Public Administration Reform in Vietnam: Problems and Prospects," *Journal of Public Administration & Development*, Vol. 23, No. 3, 2003, pp. 259-271.

[3] UNDP[a], "Public Administration Reform in Vietnam: The Status-Quo and Solutions," National Political Publishing House, Hanoi, 2009.

[4] N. V. Tham, "Public Administration Reform in Vietnam: Achievements and Present Road Blocks-VNH3.TB7.756," 2009. http://tainguyenso.vnu.edu.vn/jspui/handle/123456789/6167.

[5] UNDP, "The Viet Nam Provincial Governance and Public Administration Performance Index 2010—Measuring Citizens' Experiences," UNDP Publication, Hanoi, 2010.

[6] I. Lornund, "Narrowing the Difference: Emerging Civil Society in Vietnam," UNDP Publication, Hanoi, 2007.

[7] C. F. Ketels, "Vietnam Competitiveness Report 2010," Yew School of Business & NUS and CIEM, Singapore, 2010.

[8] PCI Vietnam[a], The Provincial Competitiveness (PCI) Report for the Year 2010. http://www.pcivietnam.org/uploads/report/Bao%20cao%20PCI%202010.pdf, 2010

[9] PCI Vietnam[b], Data on the Provincial Competitiveness for the Year 2010[b]. http://www.pcivietnam.org/download_file.php?file=Indicator_PCI2010_VN_1104.xls&uploadname=report, 2010

[10] UNDP[b], "Public Administration Reform and Anti-Corruption: Can Public Administration Reform Deliver Institutional Reform without Deeper Structural Change?" UNDP Publication, Hanoi, 2009.

[11] Committee for Ethnic Minorities, "Websites and Data Portal of the Provinces and Cities for the Year 2011 throughout Vietnam," 2011.

[12] J. F. Hair, R. E. Anderson, R. L. Tatham and W. C. Black, "Multivariate Data Analysis," McGraw Hill Publishing House, Boston, 2008.

[13] T. C. Mills and K. Patterson, "Palgrave Handbook of Econometrics: Volume 2 Applied Econometrics," Palgrave Macmilan, Hampshire, 2009.

[14] D. Mellor, "Asian Development Outlook 2011: Vietnam". Viet Nam Resident Mission, ADB, Hanoi, 2011.

[15] E. Vigoda, "Public Administration: An Interdisciplinary Critical Analysis," University of Haifa, Haifa, 2002.

