Does Good Governance Mediate Relationship between E-government and Public Trust in Lebanon?

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ABSTRACT

The main objective of this research is to study the mediating effect of good governance on the relationship between e-government practices and public trust in Lebanon. Based on extensive literature review and conceptual background including the theories of institutional-based trust and the diffusion of innovation, the theoretical research framework was developed. Primary data was collected using survey involving 400 Lebanese employees from different small and medium enterprises in Beirut. The data have been analyzed using structural equation modeling. The research findings revealed that eight hypotheses were accepted while five hypotheses were rejected. This research contributes practically by offering policy makers in governments the guidelines to empower and build citizens' trust by providing efficient, transparent and accountable government services. Future studies are suggested to extend the research empirically in terms of type of respondents, geographical location and analytical methods.

Keywords: E-government, Good Governance, Public Trust, Lebanon
JEL Classifications: H00, O1, O3

1. INTRODUCTION

The importance of trust in government is demonstrated in a large number of comparative studies in the field of public economy. Several studies generalized trust as a potent catalyst for economic growth, efficiency (EF), development, innovation, success at the organization and country level and conventional growth factors (Das et al., 2009; Kim and Kim, 2007). In addition, Smith (2010) claimed that there is a notable decline in the level of trust in institutions related to democratic governance. In which this form of trust as well as the good governance (GG), play a key role regarding the social and economic progress (Ahrens, 2006).

It has been a central goal for governments to restore, gain and enhance the public trust (PT) to implement their policies and measure it effectively as a part of GG. Furthermore, Kim and Kim (2007) showed that trust in government can improve the degree of accepting the public policies and reduce the costs of administrative procedures while encouraging conformity with regulations and laws.

Hence, trust along with transparency (TRN) are important indicators of a satisfactory relationship between government and the public especially in reducing corruption which frustrates the public and then lead to reduce trust in governments (Park and Blenkinsopp, 2011). Teo et al. (2009) suggested that governments can address citizen's needs and establish legal environment while setting up institutional services in terms of GG and legitimacy and thereby, building trust. Tolbert and Mossberger (2006) considered e-government as a means to advance citizens' attitudes toward government and to solve the problem leading the PT and confidence in government to decline. They proposed e-government as a solution to create an open, efficient, accountable and transparent government to restore that lost trust.

Hence, it is important for the developing countries to implement e-government in order to develop its governance system that enhances the citizen's trust in government. Thus, this research focuses on the use of information and communication technology (ICT) in government practices, mainly e-government or electronic government that has been proposed as a solution to increase the

interaction and trust between citizens and governments. Hence, the successful implementation of e-government system may help the governments to reduce corruption, improve governance and consequently, enhance the PT towards it. Thus, this paper examines the mediating effect of GG on the implementation of e-government and what effects are associated within citizen trust in the Lebanese community.

As Lebanon is one of the developing countries in the Middle East region faces the lack of trust in the government due to the high corruption system in the country. However, Lebanon is facing different challenges that prohibit it from achieving the GG approach. This is empirically evidenced from the mixed results in the World Bank's survey regarding the World Governance Indicators about Lebanon (US Commercial Services, 2012). Lebanon records for the last 4 years 2.5 index value regarding the lack of the TRN and 3 index value for the high level of corruption respectively (The Daily Star, 2012). In addition, Lebanon was ranked below the 10th percentile in 2009 according to the World Bank's Worldwide Governance Indicators, indicating the government's overall poor performance which in turn creates an environment where corruption is pervasive. Moreover, it is reported that the Lebanese government's TRN policymaking is listed in the 104th amongst 135 countries in the world (The Heritage Foundation, 2013).

Saidi (2012) advocated applying GG principles where it is essential to find an environment of EF and TRN as they are required by both government and business in Lebanon. However, he suggested e-government as a significant tool for increasing the TRN and enhancing the citizen's trust through a continuous administrative improvement strategy. Despite Lebanon has launched many improvement projects related to the implementation of e-government and its corresponding laws however, the sector is opposed by some challenges such as corruption index, lack of efficient leadership, bureaucratization, slow speed of internet connection and lack of resources (Alaaraj and Hassan, 2014).

2. LITERATURE REVIEW

Lot of studies such as Alsaghier et al. (2009) and Srivastava and Teo (2005) argued that trust is a fundamental aspect of healthy economies and societies. Practically, recent surveys indicate that the level of trust in governments is declining rapidly and it has become a challenge especially that trust is as a major determinant of public collaboration. (Dimock et al., 2013).

Rousseau et al. (1998) have also defined trust based on three main constructs namely (1) expectation related to confidence, (2) readiness to be at risk and (3) dependency on another that relates to fairness, benevolence, ability and other organizational characteristics. Overall, trust can be defined as the positive expectations and beliefs of one party towards the other party who is supposed to meet all commitments in a proper, social and responsible manner.

Four essential dimensions are associated with the variation of trust level including the political and economic dimensions,

governmental performance dimension, poor political leadership, and socio-cultural dimension such as decline in social capital and family crisis (Moon, 2003).

Trust in public sector institutions and their actors are essential for the functioning of government especially that it has become increasingly associated with governance. No rules would build trust if this logic of governance kept unchanged. Several researches such as UNESCAP (2012) and Shean (2010) indicated that GG covers some or all combinations of the following principles; security, legitimacy, TRN, fairness, openness, commitment, accountability (ACC), EF and others. Nonetheless, these principles show how the dynamic and proactive attitudes applied in the public sector organization would enhance the effectiveness and efficiency (EF) of service delivery and bring benefits to public sector excessively.

Therefore, the objective of this paper is to study these dimensions of GG and examine its mediating effect between e-government practices and citizens' trust within the public services delivery. In accordance with this, the subsequent sections describe the dimensions that best fit the implementation of GG in the public sector. First dimension is about the EF of the governance outcomes that meet up the needs of society through the proper use of resources (Sentosa, 2009). TRN is the second dimension which is related to the open flow of information and characterized by the direct availability and freedom of accessibility (UNESCAP, 2012; Park and Blenkinsopp, 2011). Third dimension is the ACC which is an outcome of TRN that enhances the quality of GG (Egwuonwu, 2011).

However, to increase the levels of the elements of GG it is suggested to adopt the e-government system through continues administrative strategy. E-government is becoming a global phenomenon and has been attracting growing research interest as well as the attention of the authorities and policy makers as well (Al-Mayahi and Mansoor, 2012; Rana et al., 2011). E-government is the act of communication between government and other parties such as citizens, employees and businesses or even other governments through the use of ICT. This revolution of traditional government into e-government is essential for both public and private sectors especially in cutting costs of administration and enhancing its EF (Cellary, 2008). E-government covers many services of the public sector. The components of e-government are identified by UNDP (2008) as e-administration (EA), e-service (ES) delivery, e-participation, access to ICT and connectivity, access to information, policy-enabling environment and regulation.

Similar dimensions are also presented in a study conducted by Khan (2013) that incorporates e-democracy (democratic dimension), EA (administrative dimension) and ES (service dimension). However, Ndou (2004) added a dimension of e-citizen to EA and ES. Since governance services focus on improving quality and TRN, reducing cost and enhancing EF (Siddiquee, 2008), this study highlights some of these components namely EA, ES and e-procurement (EP). EA is the application of ICT to shift from a traditional office into electronic processes in order to enhance ACC and TRN within public organizations (Khan, 2013).

While ES is the investment in public ICT to further enhancement of TRN, anti-corruption and EF among the public associations through providing and accessing the services in all parts (UNDP, 2008). As for EP, it is related to business where online technologies are employed to get services and even goods for public sectors (Rotchanakitumnuai, 2013).

2.1. Relationship between E-government and Trust

Recently, citizen's trust has become one of the main problems facing the governments as the crisis of PT. Applying and utilization of e-government is believed to overcome this gap of PT. Tolbert and Mossberger (2006) have found a significant relationship between trust and use of a local government Web sites through surveying 815 people who were reported as users of government Web sites.

Likewise, Welch et al. (2005) examined the same relation but with mediating effect of e-government and web site satisfaction. They found a significant relationship between e-government satisfaction and citizen's trust in government. Also, the usage of government web site was found to be positively related with both e-government and web site satisfaction.

Using another approach, Welch and Hinnant (2003) surveyed a sample of 806 adults selected randomly from the Council on excellence in US Government to examine the effect of e-democracy, interactivity and TRN on the citizen's trust in government. Based on multiple equation modeling, the results obtained showed that internet usage is positively related to TRN satisfaction. However, internet usage is negatively related to interactivity satisfaction. Both interactivity and TRN were positively related to citizen's trust in government. Moreover, Parent et al. (2005) found a significant and positive impact of using the internet on trust and external political efficacy upon surveying 182 Canadian voters and analyzing it using structural equation modelling.

Furthermore, West (2004) used two samples to examine the relationship between e-government usage and four variables namely trust in government, government is effective in helping people, confidence in government and levels of political activity. The first stage of analysis was based on regression analysis of federal e-government usage. The relationship between visiting federal government web sites and the other variables was insignificant. Then the second stage conducted a cross-sectional examination to determine the effect of e-government on citizens' attitudes. Before-and-after questions were developed, he found that citizen's viewpoint can be changed through education and awareness regarding e-government effectiveness and they can trust government gradually. While citizens with partisan leanings, they seem to have strict beliefs that there is a result of bad experience or long-term feelings about government, thus making such attitudes difficult to change. Therefore, the following hypotheses are proposed to study the relationship between e-government practices and PT:

H_1: E-government is positively related to PT
H_2: ES is positively related to PT
H_3: EA is positively related to PT
H_4: E-procurement is positively related to PT

2.2. Relationship between GG and Trust

It is declared that the lack of governance adoption is a contributing factor to the rise of corruption which has adversely affected the trust in governments. For instance, Osifo (2012) found in his qualitative study a strong linkage between trust in public administration and ethical governance performance. Lee (2005) proved the positive relationship among participation, TRN and trust based on interviews with ICT specialists, policy-making community and public officials around eight post industrial countries. Similarly, Kim and Kim (2007) found a positive impact of both, participation and TRN on the level of trust in government in which all are coupled under reform measures.

However, Grimmelikhuijsen (2012) argued in his experimental study the role of TRN whether it builds trust or provides citizens with more information to blame and criticize government continuously. The results show that TRN does not necessarily leads to trust. Moreover, the level of trust maybe decreased if citizens are dissatisfied with the extent of government TRN. Thus, the fifth hypothesis is proposed:

H_5: GG has a significant and positive influence on the PT.

2.3. Relationship between E-government and GG

There are several empirical studies that have been conducted to investigate the relationship between e-government and GG (Salin and Abidin, 2011; Kalsi et al., 2009). The studies show how the ICT can positively contribute to achieve GG goals. Such contributions are summarized by the following dimensions (1) improving administration processes (2) improving e-citizens and ESs transactions and (3) building e-society with external interactions.

Navarro et al. (2012) found in their study which included 179 Spanish official town websites related to the municipalities a positive relation between e-government and civic engagement even though ICT can influence the adoption of e-government. Furthermore, Gajendra et al. (2012) found empirically a positive relationship between e-government and public participation while enhancing the quality services as well. Moreover, Ochara (2010) explored through a qualitative analysis the relationship between e-government conceptualization and its impact of policy makers and found that the central government can extend its control over local authorities through e-government and reduce the bureaucratization through managerialization.

However, Wong and Welch (2004) tested the impact empirically the effect of e-government on ACC in fourteen countries. As a result, a positive relationship between e-government and enhancing the ACC and empowering citizens was approved. Similarly, Bhatnagar (2004) studied the relationship between e-government and TRN within 16 countries that are developing innovative e-governance applications. He examined 30 cases and the results show that e-government makes corruption less and enhances TRN in governmental operations through introducing data, rules and procedures. He also claimed that citizen's engagement is achieved through promoting an easy access to information and public services.

Despite such observations, Holliday and Yep (2005) stated that Chinese e-government is recently facing limited governance due to different factors that are hindering the effective improvement of e-government in the country. Empirically in USA, West (2004) argued that e-government practices are unable to modernize service delivery and boost the PT in government. Hence, the following hypotheses are developed to study the relationship between e-government and GG:

H_6: E-government is positively related to GG.

H_7: E-service is positively related to GG.

H_8: E-procurement is positively related to GG.

H_9: EA is positively related to GG.

2.4. Mediating Effect of GG on the Relationship between E-government and PT

To empirically demonstrate the importance of these relationships and to specify the direct and indirect relationships among these variables, the mediating effect of GG is highlighted especially upon the weak research background regarding such causal relationship revealed in the previous literature review (Shaver, 2005). Some researchers examined the direct impact of e-government services delivery on the aspect of trust and confidence in government (Tolbert and Mossberger, 2006; Welch and Hinnant, 2003). However, the role of GG as a mediator between e-government and trust is limited, where few suggested indirect effects of internet use on trust in government through perceptions of TRN, interactivity, EF and ACC (Chhabra and Jaiswal, 2008; Welch and Hinnant, 2003).

In addition, Park and Blenkinsopp (2011) suggested public GG agencies can improve the PT by implementing e-government practices such as web sites, promoting the ICT-based public service delivery and making its process more transparent to enhance ACC as well. Therefore, the present study investigates the research model that conceptualizes GG as the mechanism through which e-government influences the PT in Lebanon. As shown in Figure 1. Therefore, to study the mediating effect of GG, the following hypotheses are proposed:

H_{10}: GG is positively mediating the relationship between e-government and PT.

H_{11}: GG is positively mediating the relationship between ES and PT.

H_{12}: GG is positively mediating the relationship between EA and PT.

H_{13}: GG is positively mediating the relationship between EP and PT.

3. UNDERPINNING THEORY OF THE RESEARCH

In the literature, trust is conceptualized as trust in the rules, policies and regulations of an organization (Zucker, 1986). Based on the institutional trust and trustworthiness theory which was adopted by several studies such as Smith (2011), Das et al. (2009) and O'Hara (2004), trust in institutions is affected by the flexibility of frameworks and codes. Likewise, the facilities provided by the institution to deliver services are much related to the degree of ICT

diffusion through the system. Thus, the diffusion of innovation theory can support this research especially that diffusion of innovation is primarily based on the technology features and users' awareness of the system (Sang et al., 2009; Lean et al., 2009).

4. RESEARCH METHODOLOGY

4.1. Data and Sampling Method

A quantitative methodology was used and a survey was performed along with a sample size of 400 employees from small and medium sized enterprises (SME's) in Beirut. Self-administered questionnaires were distributed randomly among the employees within the target SMEs. The survey was conducted from March 10, 2014 to April 25, 2014. Content validity of the questionnaire was evaluated through pre-testing and it included total 65 items derived from valid and reliable studies. Based on a six point Likert scales, the respondents rated their answers from (1) strongly disagree to (6) strongly agree (Rotchanakitumnuai, 2013; Dawlati, 2013; Jalali and Khorasani, 2012; Grimmelikhuijsen, 2012; Al-Zoubi, et al., 2011; Park and Blenkinsopp, 2011; Alanezi, et al., 2010; Teo, et al., 2009; Alsaghier, et al., 2009; Wong and Welch, 2004).

The independent variables of this study include e-government (EG) with its three dimensions, EA, ES, and EP. As was discussed earlier that GG is the mediator through its three dimensions, EF, TRN, and ACC. The last variable is PT which acts as the dependent variable of this study.

4.2. Method Analysis

The data collected was analyzed using structural equation modeling (SEM). SEM combines elements of multivariate models such as regression analysis, factor analysis and simultaneous equation modeling (Wothke et al., 2010). SEM was essentially used as an analytic tool because there this study is based on a mediation model represented by GG as the mediator variable (Anglim, 2007; Wu and Zumbo, 2007). Hair et al. (2010) confirmed that in SEM, internal consistency reliability is assessed and more accurate results with minimum measurements errors are obtained. It also provides goodness-of-fit indices to evaluate the validity of the hypothesized model by indicating the extent to which the model fits the data (Wu and Zumbo, 2007).

5. DISCUSSION OF FINDINGS

The response rate was high (94%) in which 375 usable questionnaires were returned from the originally 400 distributed questionnaires and no missing values were detected. In addition, t-test for equality of means and Levene's test equality of variance indicated the non-response bias as shown in Table 1.

5.1. Demographic Profile of Respondents

As for the demographic profile of respondents, the majority of respondents were males (60%) while female has less percentage 40%. This is rational in Lebanon because the questionnaires were distributed to specific high administrative positions such as managers, financial controllers and head of departments. These positions are usually dominated by males more than females.

Table 1: Results of t-test for equality of means

Variable	Levene's test for equality of variances		T-test for equality of means						
	F	Significant	T	Df	Significant (two-tailed)	Mean difference	Standard error difference	95% Confidence interval of the difference	
								Lower	Upper
PTin									
Equal variances assumed	17.094	0.000	−5.718	373	0.000	−0.707	0.124	−0.945	−0.464
Equal variances not assumed			−6.088	370.462	0.000	−0.70667	0.11607	−0.935	−0.479
ES									
Equal variances assumed	25.307	0.000	−4.920	373	0.000	−0.573	0.116	−0.803	−0.344
Equal variances not assumed			−5.243	370.747	0.000	−0.574	0.109	−0.789	−0.356
EA									
Equal variances assumed	6.292	0.013	−1.908	373	0.057	−0.194	0.101	−0.393	0.006
Equal variances not assumed			−2.001	362.993	0.046	−0.194	0.097	−0.383	−0.003
EP									
Equal variances assumed	16.873	0.000	−4.244	373	0.000	−0.446	0.105	−0.652	−0.239
Equal variances not assumed			−4.451	363.112	0.000	−0.446	0.101	−0.642	−0.249
EF									
Equal variances assumed	1.180	0.278	−2.232	373	0.026	−0.260	0.121	−0.506	−0.032
Equal variances not assumed			−2.269	337.033	0.024	−0.269	0.119	−0.502	−0.036
TRN									
Equal variances assumed	6.805	0.009	−4.472	373	0.000	−0.598	0.134	−0.861	−0.335
Equal variances not assumed			−4.646	356.470	0.000	−0.598	0.129	−0.851	−0.345
ACC									
Equal variances assumed	23.245	0.000	−5.302	373	0.000	−0.649	0.123	−0.886	−0.409
Equal variances not assumed			−5.673	371.848	0.000	−0.649	0.115	−0.874	−0.424

ACC: Accountability, PT: Public trust, ES: e-service, EA: e-administration, EP: e-procurement, EF: Efficiency, TRN: Transparency

The results also show that most of the respondents were between 41 and 50 years old, which reflect the suitable age to be at high administrative positions after years of experience and promotions. Moreover, 49.6% of the respondents have a master degree that is consistent with such positions. Regarding ICT skills, 45.1% of respondents declared that they have very good ICT skills and 43.7% of respondents use ICT very frequently. Therefore, the sample of this research is considered representative, where it provided educated and qualified respondents who were able to use ICT and familiar with the concepts of this study.

5.2. Descriptive Statistical Results

The descriptive statistical results in Table 2 revealed that dimension TRN has the lowest mean value of 3.92, while the EP has the highest mean value 4.95. Thus majority of respondents gave similar data which are close to the mean of 4 (fairly agree). Moreover, the standard deviations for all variables range between 0.94 and 1.28. This reflects a considerable acceptable variability among respondents within the data set. exploratory factor analysis was used to determine the validity of measures (KMO values between 0.782 and 0.947). In addition, internal consistency was measured based on Cronbach's Alpha coefficient $(0.77 < \alpha < 0.93)$.

5.3. SEM Analysis

As a part of SEM analysis, the proposed hypotheses were tested and data was analyzed through confirmatory factor analysis. Reliability and validity of measures are illustrated in Table 3. The factor loadings of the measured items were above 0.5, thus convergent validity was achieved. As suggested by Hair et al.

Table 2: Descriptive statistics and reliability test of all variables

Measures	PT	ES	EA	EP	EF	TRN	ACC
N	350	350	350	350	350	350	350
Mean	4.44	4.54	4.74	4.95	4.23	3.92	4.54
Standard deviation	1.19	1.11	0.94	0.97	1.14	1.28	1.19
Reliability test (α)	0.93	0.88	0.83	0.90	0.86	0.93	0.77

PT: Public trust, ES: e-service, EA: e-administration, EP: e-procurement, EF: Efficiency, TRN: Transparency , ACC: Accountability

(2010), discriminant validity was confirmed and multicollinearity was not detected based on comparing the square root of average variance extracted and inter-construct correlations. In addition, composite reliability was measured and all values were above 0.70 threshold.

Moreover, the developed measurement model achieved the thresholds of goodness of fit indices after deleting 43 items with low factor loading and high modification indices (Hair et al., 2006) as illustrated in Table 4.

In order to measure the direct and indirect effect of the overall model, first order and second order structural models were developed as shown in Figures 2 and 3. Furthermore, the bias-corrected bootstrap method was used since it ensures unbiased estimates and generates accurate confidence intervals at 95% (Cribbie, 2012; Cheung and Lau, 2008). The results are illustrated in Table 5.

The 13 proposed hypotheses of this research were tested using AMOS software, where direct and indirect effects of e-government

Table 3: Average variance extracted and composite reliability of variables

Variables	Item	L	L²	VE	α	CR	AVE
Public trust	TPT1	0.749	0.561	0.438	0.867	0.873	0.582
	TPT3	0.594	0.352	0.647			
	TPT4	0.787	0.619	0.380			
	TPT6	0.81	0.6561	0.343			
	TPT7	0.849	0.720	0.279			
E-service	TES1	0.813	0.660	0.339	0.847	0.852	0.540
	TES2	0.852	0.725	0.274			
	TES3	0.739	0.546	0.453			
	TES5	0.681	0.463	0.536			
	TES6	0.552	0.304	0.695			
Variables	Item	L	L²	VE	α	CR	AVE
E-administration	TEA1	0.516	0.266	0.733	0.749	0.768	0.50
	TEA2	0.825	0.680	0.319			
	TEA3	0.811	0.657	0.342			
	TEA6	0.507	0.257	0.742			
E-procurement	TEP1	0.871	0.758	0.241	0.889	0.894	0.632
	TEP2	0.905	0.819	0.180			
	TEP3	0.870	0.756	0.243			
	TEP5	0.637	0.405	0.594			
	TEP7	0.649	0.421	0.578			
Good governance	EF1	0.809	0.654	0.345	0.899	0.956	0.647
	TEF2	0.886	0.784	0.215			
	TEF3	0.759	0.576	0.423			
	EF4	0.700	0.49	0.510			
	TACC8	0.940	0.883	0.116			
	TACC9	0.703	0.494	0.505			
	TTRN2	0.764	0.583	0.416			
	TRN5	0.785	0.616	0.383			
	TRN6	0.877	0.769	0.230			
	TRN7	0.785	0.616	0.385			
	TRN8	0.806	0.649	0.350			
	TRN9	0.806	0.649	0.350			

L: Loading, L²: Loading square, VE: Error variance, α: Cronbach's alpha, CR: Composite reliability, TRN: Transparency

Table 4: The goodness of fit indices of the structural model

Note	χ^2	Ratio	CFI>0.90	GFI>0.90	AGFI>0.90	TLI>0.90	RMSEA<0.08
Goodness of fit indices	188.741	1.781	0.973	0.939	0.912	0.965	0.047

The CFI: Comparative fit index, the GFI: Goodness of fit index, AGFI: The adjusted goodness of fit index (AGFI), RMSEA: The root mean square error of approximation, TLI: Tucker Lewis index

Table 5: Hypotheses testing results

Hypothesis	Research hypotheses	Accepted/rejected	p-value
H_1	E-government is positively related to public trust	Accepted	0.001**
H_2	E-service is positively related to public trust	Accepted	0.001**
H_3	E-administration is positively related to public trust	Rejected	0.967
H_4	E-procurement is positively related to public trust	Accepted	0.066***
H_5	Good governance has a significant and positive influence on the public trust	Accepted	0.001**
H_6	E-government is positively related to good governance	Accepted	0.001**
H_7	E-service is positively related to good governance	Rejected	0.280
H_8	E-procurement is positively related to good governance	Accepted	0.005*
H_9	E-administration is positively related to good governance	Accepted	0.004*
H_{10}	Good governance is positively mediating the relationship between e-government and public trust	Rejected	0.414
H_{11}	Good governance is positively mediating the relationship between e-service and public trust	Accepted	0.018*
H_{12}	Good governance is positively mediating the relationship between e-administration and public trust	Rejected	0.212
H_{13}	Good governance is positively mediating the relationship between e-procurement and public trust	Accepted	0.014*

* Significant at 0.05 **Significant at level of 0.001, *** Significant at level 0.1

practices and GG towards PT were studied. Results of eight hypotheses were accepted while five hypotheses were rejected. In general, e-government including e-services, has a significant positive effect on both GG and PT in Lebanon. However, e-admini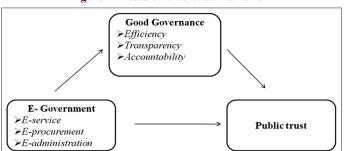stration has a positive effect on GG but not on PT and e-procurement has insignificant effect on GG but significant effect on PT. As for GG, it has a positive significant effect on PT but it has no mediating effect on the relationship between e-government including e-administration and PT. Yet, GG mediates the effect of both e-service and e-procurement on PT.

The findings of hypotheses testing have theoretically and practically contributed to the previous literature. Some have complemented the opinions in literature that adopting e-government is significantly influencing the GG and PT. Similarly GG is positively and significantly related to PT. However, other results opposed previous studies in the positive relationship between e-administration and e-procurement with PT. Overall, the positive and significant mediating impact of GG on the relationship between e-service and e-procurement with PT has a strong potential of improving the application of e-government, especially that the latter has been the concern of all decision-makers in all the developing countries including Lebanon.

6. POLICY IMPLICATIONS

The research findings show that e-service and e-procurement are significantly mediated by GG to enhance the PT. This indicates
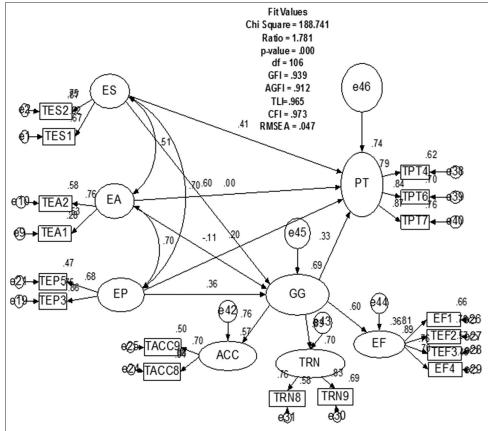
Figure 1: Research theoretical framework

that the Lebanese government has to believe in e-government as one of the main characteristics of any country to become well developed and must adopt a well-integrated strategy to develop these e-government practices to maximize the trust of Lebanese public in the government. However, the e-administration showed insignificant relationship with PT which indicates that the Lebanese government has deficit in this sector and needs restructuring. The contribution here is to highlight these problems and enable future studies to explore more and find solutions for such gaps in government performance.

The findings of this study can raise the awareness among government policy-makers on the importance of developing the ICT sector in their departments. Thereby it enables the public to make wise investment decisions. Policy makers in the Lebanese government have to make priorities in their development strategies, especially that citizens want ease of service and information, security and safe financial transactions, data transfer and privacy policy which can increase their trust in government.

Moreover, policy makers have to believe that corruption flourishes where there is no TRN in government functioning. Thus, publishing all the relevant information on the websites and giving the citizens the legal right to request and receive information on all functions and decisions of government will reinforce the relationship with government and reduce the opportunities of corruption. The economic reform is a multistep procedure that needs lot of combined efforts, starting

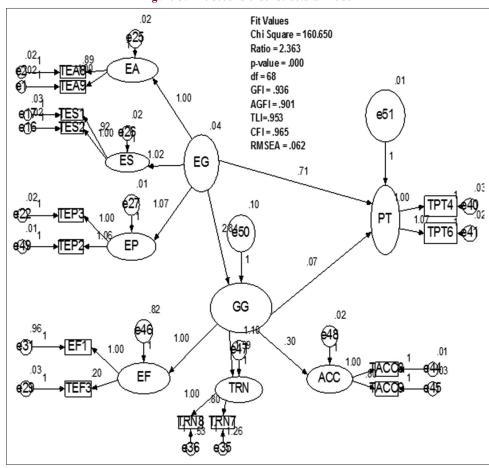**Figure 2:** The first order structural mode

Figure 3: The second order structural model

from developing an effective ICT infrastructure and providing trained and skilled employees to manipulate with. This has to be covered by reliable laws that serve as a norm of conduct for citizens.

7. CONCLUSION

Empirically, this study achieved the objectives and demonstrated the mediating effect of GG on e-government practices and PT in Lebanon. Policy makers in the Lebanese government have to make priorities in their development strategies, especially that citizens are satisfied with the easy access to services and information, security and safe financial transactions, data transfer and privacy policy which can increase their trust in government. As with all studies of this kind, this research has limitations at the methodological and geographical level. First, the results presented in this study were based on one sample of citizens. It included managers and employees from the SME's in Lebanon who interacted with the government online services at a certain point in time. Also, the focus of this study was limited geographically to the SME's at Beirut. Also in the methodological part, this study was limited to a quantitative approach where data was collected through a survey. Additional limitation is the lack of prior empirical studies especially in Lebanon. This means that efforts should be taken to support this research in order to use it as grounded database for future studies in the field of e-government, GG and PT.

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