Institutional Trust and Pro-Social Behaviour in a State Capacity Building Process

Luca Andriani

Department of Management – Birkbeck College University of London – London, Malet Street WC1E 7HX luca.andriani@bbk.ac.uk

Fabio Sabatini

Sapienza University of Rome, Faculty of Economics, via del Castro Laurenziano 9, 00161, Rome, Italy <u>Fabio.sabatini@uniroma1.it</u>

This is a DRAFT: Please do not quote or cite

Comments are very welcome (Email to luca.andriani@bbk.ac.uk)

Abstract

Weak state control might breed corruption, crime and confusion among the population about the pro-social behaviour to adopt. This is valid especially in a geopolitical arena under state capacity building like the Palestinian one. We recall the concept of psychological contract theory from organisational behaviour and we argue that there exists a psychological contract between the institutions and the citizens based on mutual obligations. A decrease in trust in the institutions would lower the perceived obligations of the citizens toward the institutions with a negative impact on the individuals' cooperative behaviour. The main concern of this work is to address one crucial unquestioned issue: do all institutions have the same impact on pro-social behaviour? The context of analysis refers to the Palestinian Territories. This issue becomes essential in a context under state capacity building where different forms of institutions (political civil, domestic and international) and governance (institutional and community) tend to coexist and overlap systematically. The analysis will make an extensive use of a unique survey data on social capital in West Bank and Gaza Strip collected and developed in the Nasr and Hilal (2007) study. The survey contains several sections with opinions regarding trust, shared values and norms. The relations between institutional trust and prosocial behaviour will be detected by employing a structural equation modelling. Preliminary finding shows that international institutions play only a secondary role for Palestinians. On the contrary, Palestinians rely only on domestic institutions, political institutions, clans and the rule of law, for fulfilling the terms and conditions of the psychological contract. We believe that this is a crucial message for the parts involved in a state capacity building process

Keywords: Structural Equation Modelling, Institutional Trust, Pro-Social Behaviour

JEL: C51; D64; Z13; O17

1. Introduction

Prosocial orientation individuals tend to be natural co-operators, trying to maximise the joint outcome even under the condition of incurring in personal costs (Bogaert et al 2003). Weak state control might breed corruption, crime and confusion among the population about the pro-social behaviour to adopt. This is valid especially in a geopolitical arena under state capacity building like the Palestinian one.

We recall the concept of psychological contract theory from organisational behaviour and we argue that there exists a psychological contract between the institutions and the citizens based on mutual obligations (Rousseau 1989). A decrease in trust in the institutions would lower the perceived obligations of the citizens toward the institutions with a negative impact on the individuals' cooperative behaviour (Aselage et al 2003).

The main concern of this work is to address one crucial unquestioned issue: do all institutions have the same impact on pro-social behaviour? The contexts of analysis are the Palestinian Territories. This issue becomes essential in a context under state capacity building where different forms of institutions (political, civil, domestic and international) and governance (institutional and community) tend to coexist and overlap systematically.

The analysis will make an extensive use of a unique survey data on social capital in West Bank and Gaza Strip collected and developed in the Nasr and Hilal (2007) study. The survey was administered to a representative sample of 2508 Palestinians in June and July 2007 by the Palestinian Central Bureau of Statistics and it contains several sections with opinions regarding public spirit, trust, shared values and norms.

The relations between institutional trust and prosocial behaviour are detected by employing structural equation modelling (SEM). The model is based on a combination of measurement and structural path models. This technique facilitates a more robust construction of latent variables such as prosocial attitudes and trust by taking into account measurement errors. The construction of the SEM follows the standard two-step approach. In the first step we develop the measurement model where unobserved attitudes such as trust and pro-social behaviour are estimated. Each latent variable is estimated through a number of attitudinal items provided by the survey. In the second step we complete the model by including the structural part where the relationships between the latent and the observed variables and between the endogenous latent variables and the exogenous one are estimated. The model is subject to a model fit evaluation analysis based on a combination of goodness-of-fit indices: absolute fit indices and relative or comparative fit indices (Kline 2005). The latter category of fit indices tests the validity of the specified model in comparison with the baseline (or independent) model (Bentler 1989; Schumacker et al 2004).

Preliminary finding shows that international institutions play only a secondary role for Palestinians. On the contrary, Palestinians rely mainly on domestic institutions, political institutions, clans and the rule of law, for fulfilling the terms and conditions of the psychological contract. We believe that this is a crucial message for the parts involved in a state capacity building process. These findings can suggest important policy recommendations. If between citizens and State there exists a psychological contract of loyalty, under a state capacity building process this contract is under a permanent state of

emergency. State accountancy is, then, one of the building blocks of this contract. Hence, these findings can suggest insights about which institutions suffer more of lack of accountancy and what type of consequences this might have with respect to pro-social attitudes. Indubitably, this structural path relationship can provide an important contribution in delineating the role of the social and institutional economic factors in the road map of the state capacity building process.

The paper is structured as follows: section 2 provides a theoretical discussion about the concept of psychological contract and the relationship between institutional trust and prosocial behaviour within this contract; section 3 describes the methodology; section 4 presents the data, the model and the discussion of the findings; section 5 concludes.

2. Psychological contract, trust in institutions and prosocial behaviour

There is an ongoing debate across several social sciences disciplines about the key determinants of proself and prosocial behaviours. We can think at the proself oriented individuals in terms of self-interest agents who try to maximise their individual outcomes in the classical one-shot prisoner dilemma where both players will choose the non-cooperative strategy. Unlike proselfs, prosocials are individuals acting to help others even under the condition of incurring in personal costs (Bogaert et al 2008). So they play in order to maximise the joint outcomes by opening room to mutual cooperation and violating the classical prisoner dilemma solution. The reasons of their cooperative behaviour can be attributed to mechanisms of strong reciprocity (Bowles and Gintis 2002) or to social norms and values internalised in the community where the social exchange takes place (Kandory 1992; Putnam 1993 and many others). In both of the cases altruistic co-operators are aware of the risk of exploitation. If continuous exploitation occurs then they are likely to stop from a cooperative strategy. In this sense signalling of trust can be important moderators of cooperation (Bogaert et al 2008).

A growing literature interested on the relationship between trust and prosocial behaviour has brought about some peculiar empirical evidence. For instance, Irwin (2009) shows that in collectivistic societies, institutional trust is a stronger predictor of pro-social behaviour than generalised trust. In support of his empirical findings, he argues that a collectivistic society (Arab society is a good example) is based on strong rather than weak ties (typical of individualistic society). This implies that a collectivistic society is endowed of a strong sense of in-group reciprocity and trust but not out-group. Indeed if social sanctions are more likely to be effective within the group, monitoring and punishment of *strangers* is more likely to be effective when institutions take action. This is why generalised trust breaks down and it becomes a weaker predictor of pro-social behaviour compared to institutional trust (Irwin 2009). Hence, "institutional trust can promote prosocial behaviour among strangers

¹ The literature in general refers to individualistic societies Western cultures and to collectivistic societies Asian, Latin American and Arab cultures (Hofstede 1991; Buda 1998)

regardless of whether or not individuals believe that others have benign intentions" (Irwin 2009, p.173). On a similar line Devos, Spini and Schwarz (2001), Hofstede (1991) and Triandis (1995) suggest that trust in institutions promotes pro-social behaviour (based on conformity, security and traditions) and cooperation with strangers in a collectivistic society. According to the definition of William et al (2010, p.251) institutional trust refers to "individuals trust on large organisations or institutions made up of people with whom they have low familiarity, low interdependency and low continuity of interaction" (Lewicki & Benedict-Bunker 1995; Marguire & Phillips 2008)". Even though the interaction between the individuals and the institutions is not continuous, this is based on a long run rather than on harm-length relationship. This allows institutions and individuals to engage in social exchanges and shape the nature of their relationship.

The social exchange process requires a certain degree of reciprocity between the parties. This sense of reciprocity is somehow linked with the element of trust. For instance, Costigan, Ilter and Jason (1998) and Marguire & Phillips (2008) claim that individuals trust institutions under the expectations that institutions will act according to goodwill. In organisational behavioural science this mechanism is explained in a more structural way through the psychological contract theory. This theory finds its theoretical framework on the relationship between organisations and their members and mainly between employer and employee (Rousseau 1989). The psychological contract theory states that in the employer-employee relationship, the social exchange process is based on norms of reciprocity embedded in a psychological contract that the employee "stipulates" with the organisation (Aselage and Eisenberg 2003). This contract implies reciprocal expectations existing between the parties (Roussau 1989) such that employees form beliefs about the resources that are obliged to provide to the organisation and that the organisation has to provide to the employees in return (Aselage et al 2003). Schein (1980) considers this psychological contract a key determinant of the employees' attitudes and behaviours. The trust of the employee in the organisation becomes the major fuel for this contract to run and to be respected. If this trust decreases, due to broken expectations or real or perceived contract breaches, also employees' efforts and cooperative behaviour to help the organisation reduce (Aselage et al 2003).

Whether or not the organisation is limited to an employer or to a more complex system of institutions, the social exchange between the organisation and its members is facilitated in the presence of trust. In the tax morale literature, Feld and Frey (2002) argue that there exists a psychological contract between taxpayers and government that involve loyalty. This contract can be maintained through trust. Well functioning institutions augment institutional trust in the citizens with a positive impact on their cooperative behaviour. This theoretical perspective finds support in a large variety of empirical evidence. For instance, an increasing number of works on tax morale reports a positive impact of institutional trust on tax compliance across different contexts, Latin America (Torgler 2005b); Switzerland (Torgler 2005a) and Europe (Lago Penas et al 2010). In these cases, institutional trust refers to trust on formal organisations including trust in government (Torgler 2004; Torgler and Schneider 2007), trust in the President (Torgler 2005a; 2005b), trust in the Parliament (Martinez-Vasquez and Torgler 2009) and trust in the legal system (Torgler and Schneider 2007). Other cross-country studies report that the size of the shadow economy reduces when the trust in government and in the civil servants increase (D'Hernoncourt and Meon 2012), while trust in

the court reduces the perception of corruption in terms of use of bribes in 12 Sub-Saharan African countries (Attila 2012).

In the Palestinian context the trust in institutions cannot be limited to the formal organisations represented by the government, the parliament and the court. The particular geopolitical condition of the Palestinian Territories requires the consideration of two other main organisations: the international civil society and the Palestinian clans.

The international civil society occupies an important role in the Palestinian economy. Palestinians are probably the largest per capita recipients of international aid (Lasensky 2004). International donors as well as international organisations provide first aid in different sectors from education to food security.

The clans are one of the expressions of the long tradition of the Palestinian community governance. In the Palestinian Territories the clans (*hamail*) are sort of family associations whose members do not necessarily need to be related. Usually these associations group several extended families that might be connected through a common tribal father, fictive or real, dating back several generations (Crisis Group 2007). The role of the clans can be compared to the role of a social-based institution in which the community governance becomes active and recognised somehow at the same level (if not sometimes more) of an official institution. In fact, the clan provide protection to its members in exchange of obligations and loyalty (Landinfo, 2008). For instance, alongside with the official court system, there is a traditional conflict resolution system based on a mediation committee whose members are not judges but mediators. This system is more likely to occur in case of conflicts where members of different clans are involved.

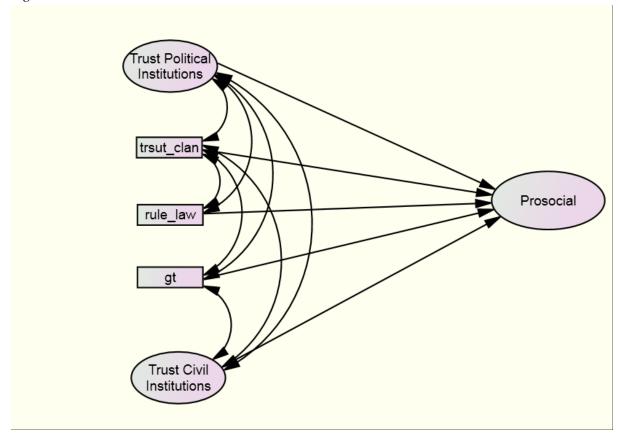
3. Methodology

The relationship between trust in institutions and prosocial behaviour will be estimated by using structural equation modelling (SEM).

The construction of the SEM follows the standard two-step approach: in the first step we develop the measurement models and in the second step we include the structural path model. The measurement model is a common approach to estimate unobserved attitudes or, more commonly called, latent variables. The latent variables are variables that do not have available observations in a give study (Raykov and Marcoulides 2006). In our case, the latent variables estimated are: trust in formal institutions, trust in civil institutions and prosocial behaviour. Each latent variable is estimated through a number of attitudinal items provided by the survey (see measurement models for further details). The measurement model allows residuals or errors to correlate and allows the correlation among the latent variables.

The structural path model estimates the relationships between the latent and the observed variables and between the endogenous latent variables and the exogenous one (figure 1).

Figure 1 Structural Model



The model in figure 1 shows that Prosocial behaviour (*Prosocial*) is an exogenous latent variable with respect to five crucial indicators: Trust in Political Institutions, trust in clan (*trust_clan*), the rule of law (rule_law), generalised trust (gt) and the Trust in Civil Institutions.

Notice that the trust in political institutions and the trust in civil institutions correspond to two endogenous latent variables (see measurement model for more detail).

The model is subject to different robustness checks based on a combination of goodness-of-fit indices: absolute fit indices and relative or comparative fit indices (Kline 2005). The latter category of fit indices tests the validity of the specified model in comparison with the baseline (or independent) model (Bentler 1989; Schumacker et al 2004).

The advantages to conduct our analysis through the SEM are at least three.

First of all, the model takes into account measurement errors of the observed variables and of the exogenous variable. This becomes important especially when several unobservable characteristics are included in the model analysis.

Secondly, the model allows for multivariate correlations. This means that the endogenous variable can correlate without suffering of multicollinearity problems. In other words, when we estimate the impact of trust in formal institutions and trust in civil institutions on prosocial behaviour, the two variables of trust can correlate. In a context like the Palestinian one, the independency assumption of the variables trust, as it would be in the case of an OLS analysis, would deprive the analysis of important information.

Finally, SEM allows the construction of the latent variables through a psychometric approach. This implies that the construction of the latent variable has to be validated through several tests of goodness-of-fit in the measurement models. In this way the unobservable indicator results less arbitrary.

4. Data and Analysis

The contexts of analysis are the Palestinian Territories. The analysis will make an extensive use of a unique survey data on social capital in West Bank and Gaza Strip collected and developed in the Nasr and Hilal (2007) study. The survey was administered to a representative sample of 2508 Palestinians in June and July 2007 by the Palestinian Central Bureau of Statistics and it contains several sections with opinions regarding public spirit, trust, shared values and norms.

The sections of the survey we are particularly interested are essentially the sections titled "Trust" and that one titled "Shared values and norms"

The first one list a number of questions about generalised trust and trust in several institution including family clans, formal organisations (government, parties, parliaments and so on) and civil organisations (donors, international organisations and international organisations like United Nations). We will discuss these items more in details in the section dedicated to the measurement models.

The section of the survey on shared values and norms list a number of questions on behavioural items relative to the use of bribery, the respect of traffic rules and so on. This section list also a specific question about the importance of the rule of law.

4.1 Measurement Model: Prosocial Behaviour

Prosocial behaviour is a latent variable measured through a combination of different items reflecting the public opinion of the respondents on a series of potential behaviours adopted by other people. The questionnaire provides a list of behaviours under the following statement: In your opinion can you justify these behaviours by other people?" The list of behaviours includes

- Absence from work without reasonable reasons (*work*)
- Bribery at work (*bribe*)
- Assenteism in elections (assenteism)
- No commitment to traffic rules (traffic)
- Buying stolen products (*stolen*)

The answer of the respondents follows a scale (1-3) in the order of 1"*I can justify it*", 2 "*I can justify it sometimes*", 3 "*I can't justify it at all*". We interpret this scale as follows: the higher

the rank, the higher is the prosocial behaviour of the respondent. Table 1 shows a descriptive summary of the behavioural items

Table 1 Summary Statistics of the behavioural items

Variable	Obs	Mean	Std. Dev.	Min	Max
work	2435	2.712526	.5721444	1	3
bribe	2435	2.95154	.2566148	1	3
assenteism	2435	2.288706	.7750313	1	3
traffic	2435	2.835318	.4178449	1	3
stolen	2435	2.871458	.3965579	1	3

All the behavioural items show a quite high score. Table 2 shows the correlation matrix. All the behavioural items are positively and significantly correlated at 1% significance level

Table 2 Correlation Behavioural Items

	work	bribe	assent~m	traffic	stolen
work	1.0000				
bribe	0.2353	1.0000			
assenteism	0.2336	0.1344	1.0000		
traffic	0.3346	0.2244	0.2826	1.0000	
stolen	0.1684	0.2860	0.2424	0.3557	1.0000

We apply a standard measurement model to analyse the relationship between the observed behavioural items and an unobservable components that we call *prosocial*. The measurement model in figure 2 indicates that each observed measure shares an unobserved component that we call *prosocial*

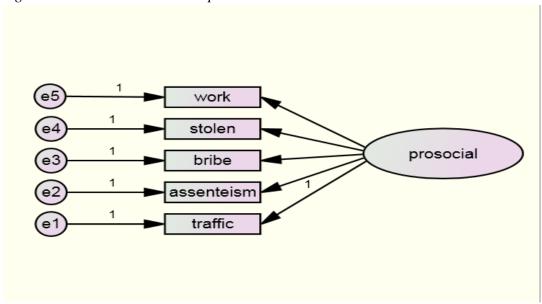


Figure 2 Measurement Model – prosocial

Due to a large sample size and to a not multivariate normally distribution, in order to achieve a better empirical fit, the measurement model is estimated by suing a Generalised Least Square estimation method as suggested by Olsson et al (2000).

Table 3 shows a positive and a highly significant correlation (1% significance level) between the unobserved factor *prosocial* and the behavioural items and in most of the cases the standardised regression weight is above 0.5.

Table 3 Regression Weights

			Estimate	S.E.	C.R.	P	Label
stolen	<	Prosocial	1.000				
traffic	<	Prosocial	.993	.073	13.649	***	par_1
assenteism	<	Prosocial	1.273	.110	11.619	***	par_2
bribe	<	Prosocial	.409	.032	12.876	***	par_3
work	<	Prosocial	1.250	.089	14.043	***	par_4

*** 1% significance level

The Squared Multiple Correlations indicate that the unobservable factor *prosocial* significantly explains more than 30% of the observed variables *work*, *traffic* and *stolen* (almost 40% in this case) and almost 20% of the remaining behavioural items.

As warned by Kline (2005) and by Templaar et al (2007) due to a large sample size the Chi Square tends to reject any formal test of significance. For this reason, like in Templaar et al (2007) we rely on alternative fit model indices.

Table 4 Model Fit Indicators

Indicator	CIMN/DF	RMSEA	GFI	AGFI	NFI	CFI
Level in this	3.67	0.038	0.997	0.988	0.969	0.977
analysis Minimum						
Threshold level	5<	0.08<	0.9	0.9	0.9	0.9

Table 4 lists the fit indices. All the levels of the relative fit indicators are above the minimum threshold and all the levels of the absolute fit indicators are below the limit threshold level. The reliability analysis shows a Cronbach's Alfa of almost 0.6.

4.2 Measurement Model: Trust in Institutions

The questionnaire reports several "trust" items assessing the level of trust of the respondent on different institutions. We use these items to estimate two main unobservable factors of trust. The first one refers to the so called *trust in political institutions* (Chang 2006, Andersen 2003) including trust in government (*trust_gov*), political parties (*trust_parties*), local government (*trust_localgov*), president (*trust_president*), parliament (*trust_parliament*), juridical system (*trust_juridical*) and police (*trust_police*). The second one refers to the *trust in civil institutions* (Chang 2006) including trust in international donors (*trust_donors*), international organisations related to UN (*trust_un*) and international organisations not related to UN (*trust_intorganisation*).

The Palestinians' trust on institutions is assessed through the following question: "How is your trust for these institutions?" The answer of the respondents follows a scale (1-4) in the order of 1"lot of trust", 2"somehow trust", 3"little trust", 4"no trust". We re-scale the order such that the scale 1 corresponds to no trust and the scale 4 to lot of trust so that we can interpret the high score with the high institutional trust of the respondent.

Table 5 shows the summary statistics of all the trust items and table 6 and table 7 the relative correlation matrix.

Table 5 Summary Statistics of the Trust Items

Variable	Obs	Mean	Std. Dev.	Min	Max
trust_gov	1992	2.013052	1.005175	1	4
trust_part~s	1992	2.006526	.9350895	1	4
trust_loca~v	1992	2.450301	.9569014	1	4
trust_parl~t	1992	2.149096	.99186	1	4
trust_pres~t	1992	2.203815	1.018476	1	4
trust_juri~l	1992	2.403112	.9909943	1	4
trust_police	1992	2.433233	.9975157	1	4
trust_un	1992	2.239458	1.033536	1	4
trust_into~n	1992	2.145582	.9850161	1	4
trust_donors	1992	2.242972	1.067393	1	4

Table 6 Correlation Matrix of the Trust Items in Political Institutions

	tru~_gov	trust~es	tru~lgov	tru~ment	tru~dent	trust_~l	trust_~e
trust_gov	1.0000						
trust_part~s	0.5519	1.0000					
trust_loca~v	0.4033	0.4272	1.0000				
trust_parl~t	0.6686	0.5037	0.4949	1.0000			
trust_pres~t	0.3354	0.4606	0.3325	0.4010	1.0000		
trust_juri~l	0.3275	0.3435	0.4165	0.4304	0.5356	1.0000	
trust_police	0.3144	0.3981	0.3438	0.3520	0.5221	0.5005	1.0000

Table 6 shows that all the trust items in political trust are positively correlated one to another. The correlations are significant at 1% significance level in all cases.

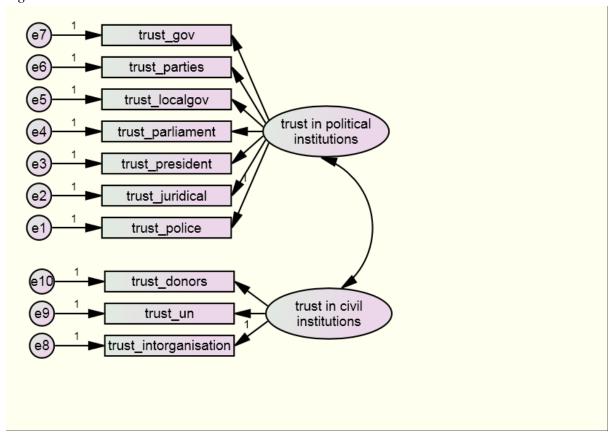
Table 7 Correlation Matrix of the Trust Items in Civil Institutions

	trust_un	trust~on	trust~rs
trust_un	1.0000		
trust_into~n	0.7038	1.0000	
trust_donors	0.6652	0.6738	1.0000

Table 7 reports that all the items of civil trust are positively correlated. All the correlations are significant at 1% significance level.

The measurement model is estimated on basis of the GLS estimation methods and the model design is presented in figure 3

Figure 3 Measurement Model – Trust in Institutions



The upper side of the model indicates that each observed trust item in "political" institute shares an unobserved component of institutional trust. Similarly, in the bottom side of the model each observed item of trust shares an unobserved component of trust in civil institutions. The two later variables are linked by a covariance double headed arrow.

The regression weights estimations of the measurement model are indicated in the table 8. All the relationships between the latent variables and the observed factors are positive and significant at 1% significance level.

Table 8 Regression Weights – Trust in Institutions

			Estimate	S.E.	C.R.	P	Label
trust_juridical	<	Trust Political_Institutions	1.274	.061	20.791	***	par_1
trust_president	<	Trust Political_Institutions	1.379	.068	20.159	***	par_2
trust_parliament	<	Trust Political_Institutions	.989	.047	20.941	***	par_3
trust_localgov	<	Trust Political_Institutions	1.000				
trust_parties	<	Trust Political_Institutions	1.056	.051	20.908	***	par_4
trust_gov	<	Trust Political_Institutions	.814	.048	17.064	***	par_5
trust_police	<	Trust Political_Institutions	1.169	.062	18.963	***	par_6
trust_donors	<	Trust Civil_Institutions	1.000				
trust_intorganisation	<	Trust Civil_Institutions	.996	.028	35.387	***	par_7
trust_un	<	Trust Civil_Institutions	1.020	.028	35.802	***	par_8

The standardised total effect of the latent variable of *trust in political institutions* on the trust items are in general largely above 0.5 except in the case of trust in government which is about 0.46. The standardised regression weights of the latent variable of *trust in civil institutions* on the trust items are largely above 0.7 (table 9).

The covariance between the latent variables is significant at 1% significance level

Table 9 Standardised Total Effect of the Latent Variables on the Observable Factors

	Trust Civil_Institutions	Trust Political_Institutions
trust_un	.829	.000
trust_intorganisation	.849	.000
trust_donors	.789	.000
trust_police	.000	.666
trust_gov	.000	.461
trust_parties	.000	.642
trust_localgov	.000	.596
trust_parliament	.000	.566
trust_president	.000	.766
trust_juridical	.000	.727

The Squared Multiple Correlations in table 10 indicate that trust in civil institutions can explain more than about 62% of trust in donors, almost 69% of *trust_un* and 72% of *trust_intorganisation*. Trust in political institutions can explain in general a very good proportion of each trust items with a lower performance in the case of trust in government.

Table 10 Squared Multiple Correlations

	Estimate
trust_un	.688
trust_intorganisation	.721
trust_donors	.622
trust_police	.443
trust_gov	.212
trust_parties	.412
trust_localgov	.355
trust_parliament	.320
trust_president	.586
trust_juridical	.529

In terms of goodness-of-fit of the model, table 11 reports that all the levels of the relative fit indicators are above the minimum threshold and all the levels of the absolute fit indicators are below the limit threshold level.

Table 11 Model Fit Indicators

Indicator	CIMN/DF	RMSEA	GFI	AGFI	NFI	CFI
Level in this	4.22	0.042	0.988	0.975	0.939	0.952
analysis						
Minimum						
Threshold	5<	0.08<	0.9	0.9	0.9	0.9
level				• 12	• • •	

4.3 Final Structural Model

The final structural model integrates the measurement models of *prosocial* and *trust in institutions* with an additional path analysis model where the observed variables are *trust-clan*, *rule-law* and the binomial variable generalised trust (*gt*) assuming value 1 if the respondent reply that "*you can trust people in general*" and 0 otherwise.

The variable trust_clan derives from the question what is the confidence that you have in family clan? The corresponding reply options are scaled in the questions as follows: 1.Lot of trust, 2.Somehow trust, 3. Little trust, 4.No trust. We re-scale the answers so that the value 4 corresponds to Lot of trust and the value 1 to No trust

The variable rule_law derives from the question listed in the section "Shared values and norms". The question asks *which is the importance of the rule of law?* The reply options are scaled as follows: 1. Very important, 2. Important, 3. Not important. We re-scale the answer such that the value 1 corresponds to Not important and the value 3 to Very important.

In the final structural model the additional observed variable are considered predictors of *prosocial* and they are correlated to the other latent variables of trust (figure 4).

-.03 stolen assenteism bribe work trust_gov 1.00 trust_localgov Prosocial trust_parliament Trust Political trust_president Institutions trust_juridical trust_police trust_clan trust donors rule_1|aw Trust Civil trust_un Institutions trust_intorganisation

Figure 4 Final Structural Model

The final structural model is subject to tests of goodness-of-fit based on absolute as well as relative indicators. Table 12 reports the fit indicators

Table 12 Model Fit Indicators for the Final Structural Model

Indicator	CIMN/DF	RMSEA	GFI	AGFI	NFI	CFI
Level in this	3.018	0.033	0.980	0.969	0.90	0.902
analysis						
Minimum						
Threshold level	5<	0.08<	0.9	0.9	0.9	0.9

All the indicators of fit satisfy the respective threshold minimum and maximum limits Table 13 reports the regression weights of the final model and table 14 reports the covariances.

Table 13 Regression Weights of the Final Model

			Estimate	S.E.	C.R.	P	Label
Prosocial	<	Trust Political_Institutions	.044	.019	2.298	.022	par_20
Prosocial	<	trust_clan	.020	.012	1.690	.091	par_21
Prosocial	<	rule_law	.140	.029	4.779	***	par_22
Prosocial	<	Trust Civil_Institutions	.009	.012	.716	.474	par_23
Prosocial	<	@gt	.001	.024	.063	.950	par_32
trust_juridical	<	Trust Political_Institutions	1.223	.062	19.788	***	par_1
trust_president	<	Trust Political_Institutions	1.302	.067	19.464	***	par_2
trust_parliament	<	Trust Political_Institutions	.972	.047	20.739	***	par_3
trust_localgov	<	Trust Political_Institutions	1.000				
trust_parties	<	Trust Political_Institutions	.997	.050	20.132	***	par_4
trust_gov	<	Trust Political_Institutions	.787	.047	16.589	***	par_5
trust_police	<	Trust Political_Institutions	1.126	.061	18.354	***	par_6
trust_donors	<	Trust Civil_Institutions	1.000				
trust_intorganisation		Trust Civil_Institutions	1.004	.029	34.657	***	par_7
trust_un		Trust Civil_Institutions	1.023	.029	35.123	***	par_8
work		Prosocial	1.000				
stolen		Prosocial	.812	.061	13.313	***	par_16
assenteism	<	Prosocial	1.143	.100	11.385	***	par_17
traffic	<	Prosocial	.835	.066	12.637	***	par_18
bribe	<	Prosocial	.333	.029	11.449	***	par_19
trust_juridical	<	rule_law	090	.062	-1.448	.148	par_33
trust_juridical	<	trust_clan	.061	.025	2.458	.014	par_34
trust_donors	<	@gt	.145	.054	2.685	.007	par_35
trust_un	<	@gt	.085	.051	1.661	.097	par_36

The estimation in table 13 indicates that all the variables of trust are positive and significant predictors of prosocial behaviour with the exception of trust in civil institutions and generalised trust. Unlike trust in institutions, generalised trust is not significant. This confirms previous findings discussed in the literature (Irwin, 2009 and Berigan et al, 2011). Trust in political institutions and rule of law seem to be strongly significant and positive predictors of prosocial behaviour with coefficient values of 0.044 and 0.140 respectively. Likewise institutional trust, the importance of the rule of law captures the individual's view of formal institutions. This might affect her behaviour in dealing with public goods and prosocial behaviour. For instance, Cummings et al (2009) identify the individual's perception of

good governance as being one of the determinants of tax compliance. We might speculate that an individual that considers the rule of law very important has a positive view about formal institutions. An individual might show a negative view of the formal institutions when he considers the rule of law not important. Hence we consider the rule of law (*rule_law*) a variable indicating the level of importance of the rule of law for Palestinians.

Trust in clan is positively and significantly related to *prosocial* even though the coefficient is smaller compare to the previous two cases.

Table 14 Covariances – Final Structural Model

			Estimate	S.E.	C.R.	P	Label
Trust Political_Institutions	<>	Trust Civil_Institutions	.184	.015	12.051	***	par_24
Trust Political_Institutions	<>	trust_clan	.081	.013	6.288	***	par_25
Trust Political_Institutions	<>	rule_law	.011	.004	2.653	.008	par_26
trust_clan	<>	rule_law	.011	.005	2.092	.036	par_27
Trust Civil_Institutions	<>	trust_clan	.053	.016	3.280	.001	par_28
Trust Civil_Institutions	<>	@gt	.013	.008	1.528	.127	par_29
trust_clan	<>	@gt	.030	.007	4.597	***	par_30
Trust Political_Institutions	<>	@ gt	.039	.006	6.781	***	par_31

Table 14 reports that the trust in civil institutions does not have any significant prediction power with respect to prosocial behaviour. However, it is worthy to notice that the trust in civil institutions shows a positive and significant co-movement with trust in political institutions and trust in clan. Palestinians that trust clans and political institutions also trust the international civil society. This can be explained by the fact that part of the socio-economi policy of the Palestinian Territories consists of foreign aid provided by donors, United Nations and other international organisations. This aid passes through the Palestinian institutions that work as filter or intermediaries. In this sense the trust in the intermediaries and in the international source are likely to be connected. There is also a positive and significant co-movement between the importance of the rule of law and the trust in clan. This might be due to the recognised role of the clans as mediators in disputes.

5. Conclusions

The Palestinian geopolitical context suffers of lack of institutional independence. This implies the coexistence of a system of overlapping institutions: political, clans and civil institutions. This makes the Palestinian case sensitive to the institutional trust dynamics.

Our analysis seems to confirm the theoretical framework proposed by the psychological contract theory. Individuals that trust institutions have a positive opinion about prosocial behaviour. The element of trust becomes essential for the psychological contract to be respected.

Interestingly the model estimations show that All the three types of institutions, political clans and civil, seem tobe positively and significantly connected one to another but only internal institutions, political and clan, seem to be significant predictor of a prosocial attitude. This finding might drive to interesting reflections and speculations. Firstly, the complex mechanism of institutional trust among Palestinians shows a strong correlation between international and domestic institutions. Secondly, within this complex system, Palestinians seem to attribute to the international institutions only a secondary role. In other words, these institutions are important but they do not play an active part in the psychological contract. In other words, Palestinians rely only on domestic institutions, political institutions, clans and the rule of law, for fulfilling the terms and conditions of the contract. We believe that this is a crucial message for the parts involved in a state capacity building process.

References

Anderson, C J and Tverdova, Y V 2003 Corruption, Political Allegiances, and Attitudes toward Government in Contemporary Democracies *American Journal of Political Science* Vol.47, 91-109

Aselage, J and Eisenberger, R 2003 Perceived Organizational Support and Psychological Contracts: A Theoretical Integration *Journal of Organisational Behaviour* Vol. 24 No.5 491-509

Attila, G 2012 Individual attitudes toward anti-corruption policies in Sub-Saharan Africa:Microeconometric evidence *Economic Bulletin* Vol. 29, 3, 1-6

Bentler, P. M. (1989). *EQS Structural Equations Program Manual*.Los Angeles, CA: BMDP Statistical Software

Berigan, N and Irwin, K Culture, Cooperation, and the General Welfare 2011 Social Psychology Quarterly 341-360

Boagert, S Boone, C Declerck, C (2008) Social value orientation and cooperation in social dilemmas: a review and conceptual model *British Journal of Social Psychology* 47, 453-480 Bowles, S Gintis, H 2002 "Social Capital and Community Governance" *The Economic Journal* Vol. 112 No. 483 pp. 419-436

Chang, E C C and Chu, Y-H 2006 Corruption and Trust: Exceptionalism in Asian Democracies? *The Journal of Politics*, Vol. 68, No. 2 259-271

Costigan, R D, Iler, S S Berman, J J 1998 A Multy-Dimensional Study of Trust in Organisations *Journal of Managerial Issues* Vol.X, 3, 303-317

Crisis Group (2007) Inside Gaza: the challenge of clan and families Middle East Report N. 71, 20 December 2007

Cummings, R. G. Martinez-Vasquez, J. McKee, M. Torgler, B. 2009. Tax morale affects tax compliance: evidence from surveys and an artefactual field experiment, *Journal of Economic Bheaviour & Organization*, vol. 70, 447-457

Cummings, R.G., Martinez-Vazquez, J., McKee, M., Torgler, B., 2009. Tax morale affects tax compliance: evidence from surveys and an artefactual field experiment *Journal of Economic Behaviour & Organization* 70 (3), 447–457.

D'Hernoncourt, J. and Meon, PG. 2012. The not sodark side of trust: Does trust increase the size of the shadow economy? *Journal of Economic Behaviour and Organization*, vol. 81, 97-121

Development and Decline." In *Conflict, Cooperation and Justice* Edited by Barbara B. Bunker and Jeffrey Z. Rubin, Jossey-Bass

Devos, T. Spini, D. and Schwarz, S. H. 2001. Conflict among human values and trust in institutions, *British Journal of Social Psychology*, vol. 41, no. 4, 481-494

Feld, L. P. Frey, B. S. 2002. Trust breeds trust: how taxpayers are treated, *Economics of Governance*, vol. 3, 87-99

Garison, D, 2000 Structural Equation Modelling David Garison and Statistical Associate Publishing 12th Edition, Asheboro, USA

Hostfede, G. 1991 Cultures and organisations: The software of the mind, London, McGraw Hill

Irwin, K. 2009 'Prosocial behaviour across cultures: the effects of institutional versus generalised trust', in Shane R. Thye and Edward J. Lawler Ed. *Advances in Group Processes: Altruism and Prosocial Behaviour in Groups*, pp 165-198, JAI Press

Kandori, M 1992 "Social Norms and Community Enforcement" *Review of Economic Studies* Vol. 59 pp. 63-80

Kline, R. B. (2005). *Principles and practice of structural equation modelling* (2nd ed.). New York: Guilford Press

Lago-Penas, I. Lago-Penas, S. 2010. The determinants of tax morale in comparative perspective: Evidence from European countries, *European Journal of Political Economy*, vol. 26, no. 4, 441-453

Landinfo (2008) "Clan conflicts in Palestinian Territory" 28 July 2008

Landinfo 2008. 'Clan conflicts in Palestinian Territory', 28 July 2008

Lasensky, Scott (2004). Paying for Peace: The Oslo Process and the Limits of American foreign Aid *Middle East Journal* 58(2) 210-234

Lewicki, R. J. and Barbara Benedict Bunker 1995 "Trust in Relationships: A Model of Trust Maguire, S & Phillips, N 2008 Citibankers at Citigroup: A study of the loss of institutional trust after a merger. *Journal of Management Studies*, 45(2): 372-401.

Martínez-Vázquez, J., Torgler, B., 2009. The evolution of tax morale in modern Spain. *Journal of Economic Issues* 43 (1), 1–28

Nasr, M, Hilal, J 2007 *Measuring Social Capital in the Palestinian Territories* The Palestine Economic Policy Research Institute, Jerusalem

Olsson, U H Foss, T Troye, S V and Howell, R D, 2000 The Performance of ML, GLS, and WLS Estimation in Structural Equation Modelling Under Conditions of Misspecification and Nonnormality *Structural Equation Modelling*, 7(4) 557-595

Putnam, R D Leonardi, R Nanetti, R Y 1993 Making Democracy Work, Princeton: Princeton University Press

Raykov, T Marcoulides, G A 2006 A First Course in Structural Equation Modelling LEA, 2nd Ed. London

Rousseau, D. M. 1989. Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal*, 2, 121-139

Schein, E. H. (1980). Organizational psychology. Englewood Cliffs, NJ: Prentice-Hall

Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modeling*. ahwah, NJ: Lawrence Erlbaum

Tempelaar, D T SYBRAND SCHIM Van Der Loeff, S S Gijselaers, W H 2007 Statistics Education Research Journal Vol.6 No.2, 78-102

Torgler, B. 2004. 'Tax morale, trust and corruption: empirical evidence from transition countries', CREMA Working Paper No 2004-05

Torgler, B. 2005A. Tax Morale and Direct Democracy, *European Journal of Political Economy* vol. 21, no. 2, 525-531

Torgler, B. 2005B. Tax Morale in Latin America, *Public Choice*, vol. 122, no. 1/2, 133-157

Torgler, B. Schneider, F. G. 2007. What shapes attitudes toward paying taxes? Evicende from multicultural European countries, *Social Science Quarterly*, vol. 88, no. 2, 443-470

Triandis, H. C. 1995. *Individualism and collectivism*, San Francisco. Westview Press

William A. Pasmore, William Pasmore, Richard W. Woodman, Abraham B. (Rami) Shani 2010 *Research in Organizational Change and Development: Vol. 18* Emerald Group Publishing Limited Bingley, UK