Institutional Trust:
The Case Study of Mexican State Institutions

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Abstract

The determinants of change in trust have long been a matter of debate in the social capital literature. An area of particular interest for political scientists has been trust in state institutions because of the possible consequences it could have on democratic life. In an attempt to generalize results, most studies have focused on large cross-sectional samples. However, these studies overlook the context in which citizens and state institutions find themselves. The case study of Mexico presented in this paper attempts to contribute to the literature by emphasizing context over generalizability. The case of Mexican state institutions supports the hypothesis that events that taint an institution for not performing according to its prescribed function lead to sharp declines in trust. Consequently, structural reforms that ensure that institutions recur to their constitutive norm may help increase trust in state institutions. In addition, there is strong evidence indicating that GDP growth causes an increase in trust in state institutions. Therefore, democracies in developing countries may benefit when their economies are performing well.

Introduction

My desire to write this thesis is perhaps best explained by a true story. A friend of mine has a house on a very secluded beach on the Mexican Pacific coast. He invited me to escape the Philadelphia winter and spend a week in the sun. This was March 2009. The son of the lady that works at the house came to pick us up at the airport. As we were riding in the truck our conversation naturally shifted towards the state of insecurity in the country – a very common occurrence in Mexican small-talk. Our driver said that things were very calm around his neighborhood *because* of the presence of drug lords. We inquired how this was so. He said, "the cartel has put a new operative in place called *Operación Limpieza* (Operation Cleanup) that has made robbers and kidnappers stay out of my neighborhood. The *capos* want to make money by selling drugs in the streets. But who is going to go out and buy drugs when it is not safe to be on the streets. The cartel posted warnings and murdered anyone who robbed or kidnapped." I wanted to ask more, but our driver immediately changed the subject.

After this conversation, numerous questions started building up in my head. Have the *narcos* replaced public security institutions? Do some Mexicans trust the drug cartels more than the state? How has this affected other Mexican institutions? How has this affected the rule of law in the country? These fascinating questions were enough to keep me busy doing years of field research, perhaps enough to write a book. Given time and geographical constraints, I decided to search for available information on Mexican institutions. After months of searching, I came across a survey conducted by *Consulta Mitofsky* that measures trust in a variety of the county's institutions. Unfortunately, the survey was conducted at a national level, impeding the possibility of comparing institutional trust among states with high vs. low cartel presence. Therefore, I chose to use this national data in order to reveal the factors that cause variations in trust in Mexican state institutions. The central question of this research paper is: what explains changes in trust in Mexican state institutions?

Although different from the initial inquiries, this research question is equally ambitious. Firstly, it contributes to the literature on the determinants of institutional trust from an in-depth and context-based perspective, rather than through a cross-sectional and generalizable approach. The case of Mexico is particularly interesting because it is a developing country that has recently democratized. As such, the second ambitious characteristic of this research endeavor is that it sheds light on the importance of trust in state institutions for young democracies in developing countries. This is made possible by the implications of theories on the determinants of institutional trust from which the hypotheses tested in this paper are derived. Testing the direct effects of institutional trust on democracy would be too complicated of a task. Finally, answering this research question suggests means of action to improve young democracies and identifies economic scenarios that catalyze the further development of democratic society.

The arguments defended by the case of Mexican state institutions are twofold. Firstly, events that taint an institution for not performing according to its prescribed function lead to sharp declines in trust. Consequently, structural reforms that ensure institutions recur to their constitutive norm may help increase trust in state institutions. Secondly, there is strong evidence indicating that GDP growth causes an increase in trust in state institutions. Therefore, democracies in developing countries may benefit when their economies perform well. In order to explain as clearly as possible how these arguments were reached, the paper is divided into six sections. The first section delves into the literature on trust, bringing in definitions of key terms, explaining the debate on the relation between democracy and trust, and developing three basic arguments derived from theories on the determinants of institutional trust. The second section presents three hypotheses derived from the literature and their respective causal mechanisms. The third section

clarifies the selected data and justifies the methodology used for testing the hypotheses. The fourth section describes the data results succinctly, while the fifth section analyzes these results. Finally, the sixth section concludes.

Literature Review

Trust in State Institutions and Democracies

Trust can take a variety of forms. In the most general sense, "trust involves a judgment, however implicit, to accept vulnerability to the potential ill will of others by granting them discretionary power over some good. When one trusts, one accepts some amount of risk for potential harm in exchange for the benefits of cooperation" (Warren 1). Indeed, risk is a central aspect of trust and the outcome that is put at risk to others' malfeasance is of some value to the person that is deciding whether to trust (Tilly 4). Nevertheless, cooperation increases by taking such risks, allowing social coordination problems to be resolved. (Leslie 540). However, an important distinction is that trusting an individual is not the same as trusting an institution. Unlike institutions, individuals can reciprocate and interact in face-to-face relations. Consequently, it is somewhat harder to trust an institution – some even believe that it is impossible to do so (Hardin 35). This dispute on institutional trust, which will be thoroughly developed in the next section, is reflected in the views regarding the decline in political institutions within the United States and Western Europe over the past decades (Inglehart 4, 1997). The central question in this debate asks: is the decline of trust in state institutions favorable or unfavorable for democracies?

The debate on the relation between institutional trust and democracy remains unresolved. However, finding the factors that determine this type of trust sheds light on which stance to take on the debate. On one hand, the cry for democracy stems – at least in part – from a lack of trust in authorities. If people in Tunisia were willing to sacrifice their lives to overthrow the ruling Constitutional Democratic Rally, it is clear that the trust relationship between the citizens and this party had severely deteriorated. Indeed, political legitimacy and trust in government are highly interrelated (Inglehart 104). Furthermore, even developed democracies impose checks and balances on state institutions, as if acknowledging that full trust in the system's institutions is never warranted. On the other hand, some argue that a prerequisite for democratization is the incorporation of trust networks by the government (Tilly 22). In other words, a democracy requires a society that trusts the government will commit – and is able – to fulfill its functions. Moreover, even fully democratized nations benefit from institutional trust. Given that political resources are scarce, warranted trust in particular institutions permits people in democracies to invest their resources more effectively – namely where trust is not warranted (Warren 4). Also, checks

and balances are not necessarily proof of the undesirability of institutional trust within democracies since their function is precisely that of facilitating trust in government institutions. This debate remains unresolved given the complications that arise when testing what institutions (if any) deserve trust conditional on the stage of democratization. Nonetheless, it is possible to test what factors cause changes in institutional trust. The arguments for these factors have theoretical bases that imply either a favorable or an unfavorable view of institutional trust for democracies.

Because theories on the determinants of institutional trust have implications on the effect that trust in state institutions has on democracy, revealing these factors is important not only in itself, but also because it may justify the stance taken on the aforementioned debate. The following section clarifies existing theories found in the literature from which three arguments to construct hypotheses are derived. Moreover, the implications that these arguments have on the relation between democracy and trust in state institutions are clarified. The three arguments are divided into the following subsections: materialist, functional, and security.

The Determinants of Institutional Trust

Materialist Argument

The materialist argument states that low trust in state institutions is not necessarily an unfavorable condition for a democracy. The theories that support this argument affirm that institutional trust is incredibly hard to justify. In its most extreme form, the theories rely on the notion of encapsulated trust, which denies the normative possibility of trusting an institution. But even theorists that believe that institutional trust is possible provide materialist arguments. Both explain the declining trust in state institutions as a result of people refining their conditions for trust. The cause for this refinement lies in increasing material well-being (hence the materialist argument). As such, a decline in trust in state institutions may imply that people are actually better off.

Encapsulated trust, as explained by Russell Hardin, questions the normative possibility of trusting an institution. In Hardin's model, trust is intelligible only when A trusts B to do (or in relation to) x. The variable x must be a definite action or purpose which A expects B to do because B has a reason to do so that is grounded in A (Hardin 26). As such, individuals can genuinely trust only when they have enough information that allows them to know the potential trusted actor's motivations towards the trusting individual (Hardin 24). This means that there are specific cognitive conditions that need to be met in order for one to trust someone or something. Consequently, the complexity and opacity surrounding the interests of modern state institutions leads theorists advocating for encapsulated trust to conclude that it does

not make sense to trust institutions.[1] For example, a citizen (A) should trust Congress (B) to include the public option in the healthcare bill (x) if and only if she has enough information to expect that the motivations of congressmen and congresswomen align with her preferences towards the public option. This type of trust is impossible on two grounds. On one hand, it is incredibly costly – if not impossible – to obtain such information. On the other hand, the nature of democratic systems hinders the possibility of high trust in state institutions because of the variety of preferences and motivations to which these institutions would have to align themselves. As a result, the theory of encapsulated trust deems trust in state institutions as nonsensical because the conditions for trust cannot be met.

The literature points to material well-being as the causal factor that modifies people's cognitive conditions regarding trust. In other words, citizens are refining their conditions for trusting others as their material well-being increases. Specifically, Ronald Inglehart argues that trust in government institutions decreases when people surpass a materialist stage and become Post-materialists (Inglehart 299, 1997). In other words, people's conditions for trusting institutions become more sophisticated once their level of material well-being has an effect on their value-system.[2] A Materialist emphasizes economic and physical security, while a Post-materialist emphasizes autonomy and self-expression (Inglehart 135, 2008). Although it is hard to determine when a country's value-system changes, testing the effect that material well-being has on institutional trust may prove to be quite insightful. In particular, if the effect is negative, this would support the adoption of post-materialist values in a country. In terms of democracy, it is clear that post-materialist values, including autonomy and self-expression, would provide a healthier democratic society. However, increasing material well-being does not always change the value-system of a country since the latter is highly determined by culture. Nevertheless, since a decrease in institutional trust may suggest that post-materialist values are being internalized, such a fall could be seen favorably in some cases.

Functional Argument

The functional argument claims that low trust in state institutions is an unfavorable condition for democracy. Unlike the notion of encapsulated trust, the theories that support this argument state that it makes sense for people to trust certain institutions. The conditions for institutional trust are made possible by the fact that the constitutive norm for which an institution stands is intelligible to the members of society. Moreover, these theories explain declining trust in state institutions as a result of the inability of these organizations to recur to their constitutive norm. Therefore, their performance in terms of their normative function is the determining factor for changes in institutional trust (hence the functional argument).[3] As such,

a decline in trust in state institutions implies suboptimal performance of a democracy's state institutions.

Whereas supporters of encapsulated trust claim that the conditions to trust state institutions can never be fulfilled, other theorists believe that institutions in general can be trusted. Claus Offe's defense of institutional trust aims at explaining how people can trust institutions and discusses why citizens will trust some institutions and not others. Obtaining enough information on the preferences and intentions of an institution is not a necessary condition for institutional trust, but rather one must know the "repertoire of meaning and justification" that is produced by the institution in order to trust it (Offe 71). For example, people can trust their bank because the basic idea for which the institution stands is intelligible to them. The condition that determines whether the bank is trusted depends on whether the institution is structured in such a way that it complies with the idea for which it stands. As opposed to Hardin, Offe believes that institutions can be trusted when they merit such trust.[4]

This defense of institutional trust assumes that institutional frameworks shape people's behavior. In other words, if an institution is structured so as to recur to its "constitutive norms", individuals have reason to expect that strangers within this institutional regime will express predictable patterns of behavior that concur with the meaning inherent to the institution (Warren 7). Unfortunately, members of society cannot determine whether an institution is properly structured. They can, however, observe the performance record of an institution. In the specific case of state institutions, individuals may be more aware of the institutions' performance since it directly affects the lives of all citizens given their all-encompassing functions. As Charles Tilly argues, "integration of trust networks into public politics operates… incrementally in response to governmental performance" (Tilly 22). Consequently, this functional argument implies that trust in institutions can be generated. The most obvious way of achieving this is to have a flawless record of maintaining the institution's constitutive norm. Finally, the functional argument has a clear stance on the debate regarding the relation between trust in state institutions and democracy. Since a decrease in institutional trust suggests poor institutional performance, a democracy that is experiencing a decline in trust in state institutions is not functioning correctly.

Security Argument

It is unclear whether the security argument claims that low trust in state institutions is an unfavorable condition for a democracy. This is because this argument is supported by theories on generalized trust rather than institutional trust. The theories presented here have both rational and psychological aspects. Nonetheless, the common determinant for declining

generalized trust is pessimistic economic outlooks from people in society. In other words, when people are afraid of their present and future economic prospects, they trust others less (hence the security argument). Moreover – as elaborated later on – the corrosion of generalized trust hinders the capacity of individuals to fight for common ends, crippling civil society and allowing corrupt government to arise (Warren 12). Therefore, the effect that declining trust in state institutions has on democracy will depend on whether this type of trust is included in or excluded from the broader notion of generalized trust.

The definition of trust used in this paper emphasizes the fact that trust always involves the risk of being harmed by the agent trusted in exchange for obtaining the benefits of cooperation. Thus, the decision to trust (or not to trust) can be treated as a choice made under uncertainty for which a rational choice approach would be appropriate. Under this framework, people tend to be characterized as risk averse, risk neutral, or risk loving. The rational security argument states that people who enjoy greater economic security tend to be more risk loving when it comes to trusting others, while those that lack this security are more risk averse (Inglehart 89). This difference stems from the fact that a person on shaky economic grounds cannot afford to take the risk of trusting a stranger because if the trusted agent defects on the actions that are expected of him, the trusting individual loses more relative to what an economically secure trusting individual would lose. This argument can also be seen from a psychological lens. Eric Uslaner argues that dispositions to optimism and pessimism, which are highly reflected in economic security, produce the differences in the willingness to trust strangers (Uslaner 139). Therefore, trust is not only determined by economic status, but also by the context in which trust decisions are made. In other words, even a rich person will be less likely to trust others when the future seems dire, such as during a global economic crisis.

The security argument concerns a broader notion of trust than the arguments presented in the previous sections. The trust explained here applies not only to institutions, but to anything that would not be trusted because of informal links, including family or group ties.[5] In other words, the security argument deals with trust conferred to things or people with whom the trusting individual has had no previously established relationships. This trust in strangers and distant institutions has been defined by the literature as generalized trust. On the other hand, trust in acquaintances and kin is considered particularized trust (Warren 9). The social capital literature is heavily invested in generalized trust because it enhances the capability of building social capital. According to Robert Putnam, social capital includes "features of social organization, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions" (Putnam 167).[6] Since trust in strangers and distant institutions eases the

creation of networks that help solve coordination problems, generalized trust is a crucial factor in social capital. Whether trust in state institutions should be considered a part of generalized trust is a contentious issue that will be touched upon in the next section.

In short, the security argument states that generalized trust declines when the economic outlooks from people in society become more pessimistic. Given the positive view that the social capital literature has of generalized trust, a decline in this type of trust is unfavorable for a democracy. In other word, decreasing generalized trust entails a decrease in social capital, which can curtail economic efficiency and civic engagement. As such, the recommendations of this argument would include a stable economic environment and the provision of resources that would increase the people's sense of economic security, including social safety nets. The following section discusses whether generalized trust encompasses trust in state institutions.

Generalized Trust and Trust in State Institutions

The three arguments that have been presented to explain changes in institutional trust are summarized in the table below. These arguments are not exhaustive or mutually exclusive.

	Type of Trust	Decrease in Trust in State Institutions	Recommendation for Democracy
Materialist Argument (Ronald Inglehart and Orlando Patterson)	Institutional trust	Sometimes favorable since this may indicate that a country has internalized post-materialist values	Improve the material well-being of people in society
Functional Argument (Claus Offe and Jean Cohen)	Institutional trust	Unfavorable since this indicates poor democratic performance	Improve institutions so that they recur to their constitutive norm
Security Argument (Ronald Inglehart, Claus Offe, and Eric Uslaner)	Generalized trust	Unfavorable if trust in state institutions is included in generalized trust Uncertain if trust in state institutions is excluded from generalized trust	Provide a stable economic environment and resources that increase people's sense of economic security (e.g. social safety nets)

The question of including trust in state institutions as a part of generalized trust arises as a result of the lack of mutual exclusiveness in the arguments. Both Claus Offe and Ronald Inglehart – advocates of conflicting

views regarding trust in state institutions – are supporters of the security argument (Warren 11).[7] They agree that the economic dispositions of optimism or pessimism play a role regarding generalized trust. Moreover, both concur that more generalized trust is a good thing for democratic societies. Given that Inglehart deems a decreasing generalized trust as unfavorable and a decreasing trust in state institutions as favorable in some cases, he is implicitly excluding institutional trust from the more encompassing notion of generalized trust. This suggests that his vision of a prosperous society entails a discriminating trust in political institutions coupled with strong generalized trust. On the other hand, Offe's view regarding these two notions of trust does not generate any conflict. Thus, it can be implied that there is no need for any division and that generalized trust encompasses the notion of institutional trust. In this last case, a decline in trust in state institutions will always be regarded as unfavorable because it implies a decrease in generalized trust, which promotes the creation of social capital. The same judgment is unclear in the exclusionary case because theorist may still view trust in state institutions as positive for democracies on its own accord.

This inclusion vs. exclusion debate of trust in state institutions and generalized trust contains other mixed stances. Not all advocates of the materialist argument support exclusion and not all advocates of the functional argument support inclusion. For example, Jean Cohen supports the functional argument, but avoids including trust in state institutions as part of generalized trust. He argues that strong institutions are essential to social capital building (Cohen 222). Cohen believes that strong political and legal institutions provide the necessary conditions for creating social trust. Rather than generalized trust encompassing trust in state institutions, the latter is independent and promotes the former. On the other hand, the materialist argument postulated by Orlando Patterson argues for a causal mechanism linking socioeconomic status to both generalized trust and trust in political institutions. He suggests that greater affluence allows for a more reasonable perception of the effectiveness in politics, "which reinforces generalized trust, political trust, and the tendency to become more politically active" (Patterson 196). Therefore, this materialist argument views institutional trust as being in harmony with generalized trust.

To summarize, the literature points to three arguments for explaining changes in trust. Two of these – the materialist and the functional argument – stand in direct contrast regarding trust in state institutions. The former maintains material well-being as the catalyst for change and views a decline in trust in state institutions as favorable for democracy in some cases. The latter focuses on the performance of institutions as the basis of change and regards a decline in trust in state institutions as unfavorable for democracy. The third is the security argument and it refers to generalized trust rather than institutional trust. The cause of change in this argument is the disposition to

economic optimism or pessimism in society. This argument provides no clear normative judgment on a decline in trust in state institutions. The inclusion of trust in state institutions in the notion of generalized trust implies that a decline would be unfavorable. This is because there is a broad consensus in the social capital literature that generalized trust is a crucial factor for building social capital. However, the exclusion of trust in state institutions does not necessarily imply a favorable view of a decline in this type of trust. Finally, these views on exclusion and inclusion are not divided according to materialist vs. functional lines. The following section postulates hypotheses that stem from these theories in order to test them in the specific case of Mexico.

Hypotheses

Based on the literature review, the following hypotheses for explaining changes in trust in Mexican state institutions arise:

1. *Increasing indicators of material well-being lead to decreasing trust in state institutions, and vice-versa*
2. *Events that mark the failure of state institutions to perform according to their proper function lead to decreasing trust in state institutions, and vice-versa.*
3. *Decreasing indicators of economic security lead to decreasing trust in state institutions, and vice-versa.*

The first hypothesis stems from a naïve version of the materialist argument. The causal mechanism starts with an increase in material well-being in Mexico, as measured by Gross Domestic Product (GDP) or the Human Development Index (HDI). With this economic development taking place, the value-system in Mexico shifts gradually away from materialism and towards postmaterialism.[8] Consequently, Mexicans internalize autonomy as a core value and thusly refine their conditions for trusting state institutions. Assuming the notion of encapsulated trust, Mexicans will realize that it is ridiculous to trust in something whose interests are opaque. Therefore, trust in state institutions declines as material well-being increases.

From explaining the causal mechanism of this first hypothesis, it is possible to identify two weaknesses. Firstly, it is unclear whether an increase in GDP or HDI actually improves the material well-being of all Mexicans. This is even true for per capita measurements since most of the wealth may be concentrated in a small percentage of the population. Nonetheless, these two indicators continue to be the common proxies for economic development. Secondly, even assuming that the material well-being of everyone increases with GDP or HDI, it is not certain that Mexican citizens

become Post-materialists as a result (see footnote 8). This is especially the case of historically Catholic countries such as Mexico, where it is harder for values such as autonomy and self-expression to take hold (Inglehart 217, 1997).[9] Nevertheless, it is impossible to test for cultural variations and value-system shifts when dealing with only one case. As such, the first hypothesis rests solely on the notion that people refine their conditions for trust as GDP increases – regardless of changes in values. Because values of autonomy and self-expression are not necessarily internalized, even if this hypothesis is proven correct, it is inconclusive in providing evidence for the argument that low levels of trust in state institutions are good for democracy.

The second hypothesis is based on the functional argument. The causal mechanism starts with an event that proves to citizens that a Mexican state institution is not performing according to its prescribed function. Given that the state institution is not recurring to its constitutive norm, Mexican citizens would realize that the institution cannot be trusted. In other words, the fact that the institution defected from what it is supposed to do means that the institution is not structured so as to align the motivation and interests of its members with its goal. Since the structure of the institution is flawed, Mexican citizens will fear other future defections that may hurt them and will therefore not risk trusting the state institution.

This hypothesis implies that it is possible to improve trust in state institutions by undergoing structural reforms. However, the cause of the failure of an institution to recur to its constitutive norm is not always structural. There may be exogenous factors such as embedded corruption in society or chronic violence that may prevent the state institution from fulfilling its duty. Given that these factors are more common in developing countries that in developed countries, this hypothesis would imply that there is higher volatility of trust in the former. Either way, any action that may increase institutional trust would be recommended primarily because low levels of trust in state institutions are viewed unfavorably by the theories supporting this hypothesis. In other words, since improving the poor performance of state institutions is good for democracy, means of action such as enacting structural reforms, controlling embedded corruption, and fighting chronic violence would be recommended.

The third hypothesis reflects the ideas of the security argument – or the encompassing security argument to be more precise. This specification lies in the fact that the hypothesis works under the assumption that generalized trust encompasses trust in state institutions. The causal mechanism starts with a change towards a more negative attitude in society about economic security, which can be measured by indicators like the Consumer Confidence Index (CCI). This means that Mexican citizens become more risk averse when it comes to trusting strangers or distant institutions. More specifically, the Mexican people fear for their own economic prospects and therefore

avoid the risk of losing more by trusting a state institution. Finally, because this hypothesis assumes that trust in state institutions is encompassed by generalized trust, if this hypothesis is proven correct, it would imply that low levels of trust in state institutions are bad for democracy. This is mainly because social capital would decrease as a result.

To summarize, the three hypotheses are not precisely the same as those stated by the arguments derived in the literature. The first hypothesis is based on a naïve notion of the materialist argument and the third hypothesis assumes that trust in state institutions is included in the notion of generalized trust. These limitations stem primarily from issues related to the feasibility of testing unobservable factors. Nevertheless, the second hypothesis follows the functional argument quite closely. The following section explains the methodology carried out to test these three hypotheses. It also justifies the selection of certain data over others. Finally, the meaning and source of the data used are clarified in order to lay down the implications and limitations of the results obtained.

Methodology

Institutional Trust Data

The data on institutional trust comes from the nonpartisan, independent public opinion research center *Consulta Mitofsky*. The survey samples are representative of the Mexican population.[10] These surveys were held sporadically from April 2004 up until November 2007, after which the survey was carried out on a monthly basis. The total amount of observations per institutions is 41, which is sufficient for observing trends in the data.

The question regarding institutional trust asks: *How much trust do you have in the following institution?* After which a list of institutions is presented and the respondents are given the option to answer using a scale that ranges from 0 (lowest) to 10 (highest). After this information is collected, the arithmetic mean for each month is provided as the resulting trust in the given institution. *Consulta Mitofsky* considers a ranking from 8 to 10 to be high, between 6 and 7.9 to be medium, and from 0 to 5.9 to be low. The use of this particular public opinion data stems from the fact that it is the only publicly available data on institutional trust in Mexico that spans over more than 4 years and includes a variety of the country's institutions.

The institutions selected for this paper can be divided into three categories: state institutions, state-related institutions, and non-state institutions. The reason for selecting more than just state institutions is to evaluate whether there are differences between these categories that would make the case of state institutions more noteworthy. The state institutions selected are the President, Senators, Deputies,[11] the Supreme Court, the Army, and the Police. State-related institutions include the Federal Electoral

Institute (IFE)[12] and the Political Parties. Business and the Media constitute the last category. All the available data on trust in these institutions were inserted into the statistical analysis program *EViews*. This institutional trust dataset is the basis for testing the three hypotheses proposed in the previous section.

First and Third Hypotheses: Regression Model

The method for testing the first and third hypothesis was an OLS linear regression model. The reason for not including the second hypothesis in this analysis is because it is impossible to measure events that mark the proper or improper performance of institutions through time. On the other hand, the first and third hypotheses deal with measurable phenomena.

Firstly, material-well being can be measured through GDP, HDI, and other indicators. This study uses GDP because it is the available indicator with the highest frequency (quarterly data). At most, the other indicators were available on a yearly basis. Such lack of data points would have weakened the analysis, given that the monthly institutional trust data only spans from April 2004 to January 2011 with many gaps in the first months. Secondly, perceptions of economic security can be measured through the Consumer Confidence Index (CCI). The CCI is comprised of five partial indicators: two relate to the current and expected economic situation of the household, the other two attend the current and expected economic situation of the country, and the fifth reflects the willingness of people to buy durable goods at the present time. This indicator is estimated by the Mexican central bank (Banco de México) and the National Institute of Geography and Statistics (INEGI) based on the results of a national survey.[13] Fortunately, the frequency of this data is monthly. The datasets ranging from April 2004 to January 2011 for both GDP and CCI were inserted into *EViews*,[14] and the following OLS regression was run for each institution (*i*):

$$TRUST_{it} = c + \beta_1 GDP_t + \beta_2 CCI_t + \varepsilon_t$$

There is no issue with multicollinearity in this regression because CCI and GDP are not highly correlated. In fact, the correlation between these independent variables is -0.13, which is quite small and surprisingly negative.[15]

According to the first hypothesis (or the naïve materialist argument), the coefficient for GDP (β_1) should be negative and significant for trust in state institutions. This is because increasing material well-being is expected to refine the conditions for trusting institutions. On the other hand, the third hypothesis (or the encompassing security argument) expects the coefficient for CCI (β_2) to be positive and significant, given that a decrease in economic security makes people more risk averse in terms of trust.

Second Hypothesis: Piecewise-Trend-Break

The method for testing the second hypothesis is more complicated than a simple OLS linear regression. This method involves selecting a simplified model that best describes the data in order to view changes in trend. Changes in the trend for trust in institutions can then be coupled with events regarding the proper or improper performance of institutions' respective functions. I call the method proposed here "piecewise-trend-break."

For selecting the most appropriate model, the trust data for each institution was analyzed as a whole. Linear and quadratic trend models were fitted onto every institution's trust data. For reasons specific to the nature of the data, there was no evidence for the possibility of an exponential trend or for any seasonal or cyclical variations. Afterwards, the model with the lowest Schwarz Information Criterion (SIC) was selected.[16] If the trend that fits the data best revealed no change in the direction of trust (i.e. increasing vs. decreasing), no additional steps were taken. This is always the case with linear models, but only occasionally for quadratic models. If the data followed a quadratic trend that showed a change in the direction of trust, the data was broken into no more than two subsamples. In other words, when the fitted trends looked like an inverted U, the maximum was used as the point for dividing the data. Finally, for those institutions where a separation of the sample was necessary, the first and the second step were repeated on each subsample until the entire sample data for each institution was modeled in a piecewise fashion.

This methodology was selected because it allowed for a reasonable, non-idiosyncratic way of analyzing changes in institutional trust. The inherent smooth curve of the quadratic model is appropriate for forecasting purposes since it takes into account the entire sample in a single model. However, the objective of this paper is to identify the determinants of changes in trust in state institutions, not to forecast their future levels. Therefore, it is more reasonable to identify places where the trend breaks. Curves cannot identify these ruptures, but lines can. On the other hand, it would not make sense to analyze every single change in trust that occurs from one observation to the next despite the fact that these are linear. Short-term variations are most likely random and are reflected in the non-zero variance of the sample. Most importantly, an attempt to explain these changes would require utilizing many historical idiosyncrasies. Such an idiosyncratic approach loses analytical power in a manner analogous to data mining: the model fits the noise instead of the signal.

In the end, the objective is to find those linear breaks that cause more than short-term change. In other words, the dates in which the signs of the coefficients in linear trends change indicate a variation in the medium-term trend in institutional trust. Admittedly, this methodology only accounts

for changes in the direction of the trend in institutional trust – increasing, decreasing, or plateau – and exclude changes in intensity. Nevertheless, this information is sufficient for shedding light on the plausibility of the second hypothesis (or the functional argument). According to this hypothesis, there must be a significant event at every trend break such that if the event demonstrates that the institution is not recurring to its constitutive norm, the trend becomes negative, and vice-versa.

Data Description

Regression Model

      The coefficients, their respective significance levels, and the R-squared of the regression ran on each institution are summarized in the following table:

INSTITUTION t	GDP β_1	CCI β_2	R-SQUARED R^2
STATE			
President	0.302724*** (+)	-0.002437	0.221662 (22%)
Senators	0.455490*** (+)	-0.008111* (−)	0.395194 (40%)
Deputies	0.573082*** (+)	-0.003211	0.334416 (33%)
Supreme Court	0.465727*** (+)	-0.014616*** (−)	0.625113 (63%)
Army	0.131636** (+)	0.001496	0.099076 (10%)
Police	0.424061*** (+)	-0.003175	0.285021 (28%)
STATE-RELATED			
Political Parties	0.109534	-0.008032* (−)	0.082288 (8%)
IFE	0.062633	0.003139* (+)	0.084488 (8%)
NON-STATE			
Business	0.734690*** (+)	-0.015732*** (−)	0.622258 (62%)
Media	0.324301*** (+)	-0.005730** (−)	0.475550 (48%)

* = 10% significance, ** = 5% significance, *** = 1% significance

      The coefficient for GDP is positive and highly significant for all state and non-state institutions. The GDP dataset is measured in trillions of pesos, which is approximately tens of billions of dollars. In Mexico, this data is in *billones de pesos*.[17] Therefore, an increase of approximately ten billion dollars

in Mexican GDP leads to a 0.30 increase in trust in the President; 0.46 for Senators; 0.57 in Deputies; 0.47 in the Supreme Court; 0.13 in the Army; 0.42 in the Police; 0.73 in Business; and 0.32 in the Media. In the case of state-related institutions, the coefficients for trust in the Political Parties and the IFE were also positive but not significant.

The results of the CCI are mixed. For non-state institutions, the coefficient for CCI is negative and highly significant. For state-related institutions, the coefficient is significant but positive in the case of the IFE and negative for Political Parties. For state institutions, the coefficient is negative for both Senators and the Supreme Court, but has high significance only in the latter. Lastly, the other state institutions have a non-significant, negative coefficient for CCI, except for the Army, whose coefficient is positive. Moreover, it is hard to conceptualize exactly what a one-point change in the CCI means in concrete terms since it is meant to give economists an idea of how confidence in the economy has changed relative to other times.

In order to put into context how much the CCI changes from safe times to unsafe times, it is helpful to look at the maximum and the minimum of the dataset. The maximum occurs in March 2006 with a value of 112.55, while the minimum takes place in October 2009 with a value of 76.95. Therefore, CCI drops approximately 35.6 points from the economically most secure to the economically least secure period in the sample, making a one-point drop equivalent to 2.8% of the change. Consequently, dividing the coefficients by 0.028 reveals the effect of CCI on institutional trust when drastic changes in the perceptions of economic security occur. In other words, when perceptions of economic security change from extremely positive to extremely negative, trust in the Senators increases by 0.29; in the Supreme Court by 0.52; in the Political Parties by 0.29; in Business by 0.56; and in the Media by 0.20. Finally, trust in the IFE decreases by 0.11 when such a drastic decrease in the perceptions of economic security takes place.

The R-squared indicates what percentage of the variance in the dependent variable is explained by the independent variables. In other words, it reveals how much CCI and GDP explain trust in institution i. Normally, a good R-squared is above 80%. However, the dependent variable studied in this paper is not a typical economic variable. There are many non-measurable factors that could affect institutional trust. Moreover, given that only two independent variables are included, it would be quite impressive if these explained at least a third of the variation in institutional trust.

The R-squared values of the regressions are quite consistent. Non-state institutions hold high R-squared values, and so do three out of the six state institutions. The other three state institutions have decent R-squared values, while the state-related institutions score the lowest of all. The following table will help clarify the former:

High $R^2 \geq 0.33$	Medium $0.33 > R^2 \geq 0.10$	Low $R^2 < 0.10$
Supreme Court (63%)	Police (28%)	Political Parties (8%)
Business (62%)	President (22%)	IFE (8%)
Media (48%)	Army (10%)	
Senators (40%)		
Deputies (33%)		

It is unclear what other measurable independent variables exist that could contribute to institutional trust. Nevertheless, this is a powerful model because only two independent variables lead to relatively decent R-squared values in most of the cases.

Piecewise-Trend-Break

The graphs of the piecewise-trend-break method are located in Appendix E. All institutions begin with increasing linear or quadratic trends. Afterwards, the trust data stabilizes in a smaller range. This increase and stabilization in institutional trust is also clearly visible in the rough data graph on all institutions located in Appendix F. When these initially increasing trends end, there are three different options that may ensue: a drop followed by another increasing trend, a plateau, or a decreasing trend; a simple plateau; or a switch in trend. The defining characteristic of a drop is that the difference between the value previous to the break and the value that follows it is greater than 0.30. This helps to differentiate between the drop followed by a plateau and the simple plateau.

The months where the trend-breaks occur are coupled with relevant political events taking place on those same dates in order to see if a reputation problem may account for these changes. The summary of the results are stated concisely in the following table:

Date	Event	Institution	Change in Trust
May 06-Jun 06	**Pre-election criticism:** media criticized for biased election coverage	Media	Drop: 7.65 to 7.17 (0.48)
Jun 06-Aug 06	**Election controversy:** allegations of electoral fraud	IFE	Drop: 7.54 to 7.10 (0.44)
Aug 06-Sep06	**Election controversy resolved:** no total recount awarded, Calderón wins the presidency	Senators Deputies Political Parties	Drop: 6.26 to 5.52 (0.74), Drop: 6.12 to 5.73 (0.39), Drop: 6.35 to 5.74 (0.61)
Feb 07-Mar07	**Security problems:** Army deployed in Northern states, corruption of Police emphasized	Army Police	Trend: 0.02 to -0.01 (-0.03) Drop: 6.53 to 5.85 (0.68)
Dec 08-Jan09	n/a	Senators Business Media	Plateau: 6.04 Plateau: 6.87 Plateau:7.55
Feb 09-Mar09	n/a	Supreme Court	Plateau: 6.94
Jul 09-Aug09	**Elections:** midterm elections results given	Political Parties	Drop: 6.08 to 5.75 (0.33)
Sep 09-Nov09	n/a	President	Plateau: 6.72

The relevant events corresponded only to times when trust in the institution dropped or the trend switched sign. The following section analyzes the data presented and delves into the details of the events in the table in order to evaluate how they could have affected institutional trust.

Data Analysis

Developing Countries and the Materialist Argument

The regressions provide convincing evidence against the first hypothesis. The precise opposite of the materialist argument's prediction occurred: increasing material well-being increased trust in state institutions, and vice-versa. The most obvious explanation for the collapse of this first hypothesis is that it is based on a naïve version of the materialist argument. Inglehart would point to cultural factors as the reason why

economic development in Mexico may not necessarily lead to a change in the country's value system and consequently refine people's conditions for trust (see footnote 8). But upon closer inspection, there may be a quite simple explanation for these results.

Despite being a member of the OECD, Mexico is still in many ways a developing country. As such, the starting point for material well-being is much lower than in developed countries. Assuming that the material well-being of everyone increases with GDP, a national government's successful economic strategy would imply that the majority of people escape poverty. In this case, people may still rely heavily on the government for maintaining their newly achieved economic status. Consequently, their conditions for trusting institutions are not refined and people become more confident in the institutions they view as responsible for their material improvements. Moreover, the people would be thankful to the government and trust it for bringing them out of such dire conditions. However, this may not be the case in developed countries, where the majority of the population would move up from the middle class as material well-being increases. Indeed, the analysis presented here only contains evidence for the case of developing countries. Therefore – in developing countries such as Mexico – increasing indicators of material well-being lead to increasing trust in state institutions, and vice-versa. A closer look at the results from the regressions provides stronger support for this refined version of the first hypothesis.

All state institutions and non-state institutions have positive and significant coefficients for GDP, while state-related institutions only lack the significance. This evidence suggests that the state-related institutions included in the analysis are not viewed by Mexican citizens as being important factors in changing material well-being. The IFE organizes elections and the Political Parties participate in them. As the economic conditions of the country improve, it is unlikely that Mexicans will rely more on the IFE or the Political Parties. Even though political actors that enact economic change come from some party line and their electoral victories are decided by the IFE, these state-related institutions are not viewed by citizens as key economic players. On the other hand, the non-state institutions included in the analysis clearly contribute to GDP growth. Business is an obvious contributor to the economic prosperity of the country. It is the only institution that is significantly correlated to GDP data (0.70) and its coefficient for GDP is the largest out of all the institutions (0.73). Also, the Media in Mexico is dominated by big business. This is particularly clear in television, where two companies, Televisa and TV Azteca, control almost 100% of the Mexican TV broadcasting market. The owners of these media networks, Emilio Azcárraga and Ricardo Salinas Pliego respectively, are powerful members of the Mexican business community. Another piece of evidence that suggests the tight relationship between business and the Mexican media is that the correlation in trust

between these two institutions is remarkably high and positive (0.87).

If the public's view of an institution as a contributor to economic prosperity determines whether their institutional trust positively depends on GDP, certain doubts exists regarding the results for some state institutions. While the President, the Senators, and the Deputies enact reforms to improve the country's economy, the Supreme Court, the Army, and the Police do not directly contribute to the economy. The first deals with judicial matters, while the last two focus on security issues. The only defense for these results is that reliance on all state institutions increases as the country is developing. A more prosperous country requires a solid judicial system and a safe environment. Thus, when material well-being increases in developing countries, people confer more trust upon those institutions that will further this development. As for the case of the IFE and the Political Parties, it is unclear whether prosperity is directly linked to electoral matters. Therefore, one of two conditions must be satisfied in order for an institution's trust to increase as material well-being increases in a developing country: 1) the institution is a state institution; or 2) the public views this institution as a main contributor to economic prosperity.

Economic Security

The regressions also provide evidence against the third hypothesis: decreasing indicators of economic security lead to decreasing trust in none of the state institutions. The coefficient for CCI was only positive for the Army, but it was not significant. In all the other state institutions, the coefficient was negative and only significant for the Senators and the Supreme Court. Thus, trust in these two institutions decreases as perceptions of economic security increase. This is suggestive evidence against the assertion that people become more risk averse in trusting a state institution as their economic safety weakens. Moreover, these mixed results might be a reflection of the fact that this hypothesis is based on the encompassing security argument. In other words, the third hypothesis is derived from an argument that assumes trust in state institutions is included in generalized trust. Given that the coefficients for all state institutions were not the same sign may indicate that trust in state institutions is not necessarily a category that is encompassed by generalized trust. Instead, each state institution may have its own merits for being included or excluded from this broader category. A closer analysis of the results from all the regressions provides further insights to the previous arguments.

All the state-related and non-state institutions have significant coefficients for CCI and all of them are negative, except for trust in the IFE which is positive and significant. Indeed, the case of the IFE is special, probably because of its autonomy. It is the only institution whose trust is not significantly correlated to that of any other institution. Trust in the IFE is

also small when extreme changes in economic security perception take place (0.11). On the other hand, trust in Business attains the greatest effect (0.56), while the Supreme Court follows closely in second (0.52). This may seem counterintuitive: why would a person whose economic safety is at stake trust Business, the Media, Political Parties, and the Supreme Court more, but at the same time trust the IFE less?

There are two possible answers to this question. The first possible answer is that people who fear they might lose everything will want to gain protection from some state institutions and political parties, secure jobs from non-state institutions, and ensure favorable results in elections. For example, a person will confer more trust to Business and the Media when the economic future is uncertain because these are primary actors in ensuring that jobs in the economy are created. Moreover, trust in Political Parties, the Supreme Court, and the Senators also increases as this person seeks political protection. Finally, this person also holds certain beliefs about how his favorable economic situation could be maintained, and therefore will not trust the IFE in fear that the will of the people does not coincide with his/her preferences. Nevertheless, this explanation is quite a stretch and there is not enough evidence to support it. It does not explain why the coefficients of trust in other state institutions are not significant. Moreover, it contradicts the previous section's explanation that maintained that the IFE and Political Parties are not linked to economic prosperity. The second possible answer to these results pertains to the inclusion vs. exclusion debate between trust in state institutions and generalized trust. Since the IFE organizes elections, it supports relationships among people as democratic citizens. As such, the IFE is an institution that creates trust among strangers, which is precisely the definition of generalized trust. Given that the original security argument addresses generalized trust, it is reasonable for the regression on trust in the IFE to support this argument. Nonetheless, this second explanation does not clarify why trust in Business, the Media, Political Parties, and the Supreme Court have negative coefficients for CCI. In the end, although it is certain that the evidence presented here does not support the encompassing security argument, the results are too mixed to ascertain which other argument they would support.

The previous analysis may cast doubts on the validity of the regressions as a whole. Yet while the regressions have their limitations, they still maintain strong explanatory power. One clear limitation is that the data spans around 7 years, making it impossible to make long-term analyses. Even though this might have affected the results regarding CCI, the fact that the results for GDP are remarkably consistent strengthens the support for the refined version of the first hypothesis. Furthermore, the R-squared values of the regressions are not ideal, meaning that many other factors affect institutional trust. Nonetheless, none of the state institutions fall under

the "low R^2" category. Indeed, those in the middle category are the state institutions in charge of security issues and the President – institutions with high political visibility whose trust is consequently affected by more factors than GDP and CCI. The converse argument applies to the Supreme Court. Given its low political visibility, fewer factors affect the trust that society confers upon this state institution, leading to the highest R-squared value when only GDP and CCI are included in the regression. Finally, even though the regression analysis has not illustrated all the factors that affect trust in state institution, the evidence sheds light on the validity of two possible determinants of institutional trust found in the literature. Therefore, the case study of Mexico supports the idea that increases in material well-being lead to increases in trust in state institutions and that changes in perceptions of economic security have mixed results.

Democratization and Reputation

The general graph of institutional trust in Mexico shows that trust increases considerably from April 2004 until around mid-2006, where the values stabilize within a small range.[18] A possible reason for seeing such trends in trust in state institutions may be due to Mexico's democratizing process. After almost 70 years of single-party rule by the Revolutionary Institutional Party (PRI), Vicente Fox from the opposing National Action Party (PAN) was elected president in 2000. The democratic transition was gradual and built up from the local level: it moved from municipalities to states, to the chambers of Congress, and finally to the presidency (De Remes 177). Fox's election may have caused Mexican citizens to begin to trust these state institutions more. The promise of political inclusion of every citizen and accountability by the government might well account for the increasing trend. However, this is simply speculation, especially since there is no point of comparison given that trust in state-related and non-state institutions also experienced the same increase during this period. Moreover, it is unclear what caused the stabilization of trust within a small range somewhere around mid-2006. On one hand, some may argue that Mexico's democratization took a step backwards in the 2006 presidential elections. After an extremely tight race, Felipe Calderón from the right-leaning PAN beat Andrés Manuel López Obrador from the left-leaning Party of the Democratic Revolution (PRD) with 35.89% of the popular vote against 35.33%. Mr. Obrador and his followers demanded a total recount and laid claims of electoral fraud. Although this matter is still murky, those who believe that fraud occurred have good reason to stop trusting state institutions. On the other hand, trust in state institutions cannot increase forever. It is only logical that the initially increasing trends stabilized after some time. This view is further supported by the fact that state-related and non-state institutions also stabilized within a smaller range around the same period.

The piecewise-trend-break method provides clearer insight into specific political events and how these changed trust in state institutions. Most importantly, it provides strong evidence for the second hypothesis: events that mark the failure of state institutions to perform according to their proper function lead to decreasing trust in state institutions, and vice-versa. Moreover, the evidence presented by the piecewise-trend-break method also supports this functional argument with regards to all institutions studied in this paper – not just state institutions. In other words, when an institution does not recur to its constitutive norm, people stop trusting it in the short-term.

The events surrounding the July 2, 2006 presidential elections caused decreases in trust in several institutions. In that year, trust in the Media dropped 0.48 points from May to June, trust in the IFE dropped 0.44 points from June to July, and trust in the Senators, the Deputies, and Political Parties dropped 0.74, 0.39, and 0.61 respectively from August to September. Firstly, the Mexican media was heavily criticized for the amount of airtime it gave Mr. Calderón as opposed to Mr. Obrador. An important aspect of a trustworthy democratic system is the fair dissemination of information. When it became clear to many that the Media was not fulfilling its democratic responsibility, its trust fell considerably. Secondly, the IFE became the center of attention regarding the possibility of electoral fraud and the demand for a total recount of the votes. Given that the credibility of the IFE was put in doubt and that its reputation was tainted through these events, Mexican citizens reacted by trusting it less. Finally, the political actors that were on the ground discussing and fighting for the resolution of this electoral controversy were the Senators, the Deputies, and the Political Parties. Once it was decided in August that no total recount would be awarded, those who were dissatisfied with the resolution stopped conferring trust to the institutions they depended on. Therefore, when institutions do not do as expected, they suffer the consequences.

That data also shows that Political Parties suffer a similar fate after every election. The piecewise-trend-break method reveals a 0.33 point drop in trust in the Political Parties right after the July 2009 midterm elections as well. In fact, trust in this state-related institution peaks as election time approaches, but suffers from sharp decreases right after the electoral results are announced. This evidence may support the converse of the second hypothesis: as an institution performs according to its proper function, people trust it more. According to this functional argument, these electoral peaks occur because parties are reaching their base and building their constituencies as they campaign. This link between the people and their representatives tends to disappear once elections are over, especially in young democracies. Therefore, as long as institutions perform their appropriate function, their institutional trust increases. Another possible explanation for

these peaks may be attributed to the visibility that Political Parties obtain during electoral periods. However, this explanation is weakened by the fact that other institutions that receive significant media attention during elections, including the IFE, do not have these peaks.

The fight against international organized crime has also taken its toll in terms of institutional trust. The slope for trust in the Army decreased by -0.03, while trust in the Police dropped 0.68 points from February to March 2007. The Army has been one of the most trusted institutions in Mexico.[19] However, its primary function in public life was to provide aid during natural catastrophes. After President Calderón decided to take on the drug cartels, the Army was deployed in several states – starting with Michoacán in December 2006 – because the municipal and state police forces were deemed too corrupt to combat the drug cartels effectively. The amount of political capital the President invested in the Army is reflected in the fact that the trust in the Army data is significantly correlated to that of the President (0.74). After the initial deployment, more Army troops have been deployed and the police forces have been reformed. Both institutions suffered for different reasons. On one hand, the Police were already corrupt. However, it became evident that it could not perform its function as violence escalated. This indicates that there actually has to be a visible problem that affects public life, rather than just a hidden structural issue, in order to see a decrease in institutional trust. On the other hand, the Army faced the problem of a change in function. Given the violent response of the drug cartels and the difficulty in adapting to the duty of ensuring public security, the trend in the Army's institutional trust became negative. This suggests that the problem of recurring to one's constitutive norm is not only an issue of structure and performance, but also a political issue since this norm can be altered by the whims of the executive and legislative powers.

The evidence presented by the piecewise-trend-break method certainly has its limits. Firstly, explanations for drops in institutional trust are the only ones taken into account. Only the speculative argument for democratic consolidation and the case of trust in Political Parties provide evidence regarding increases in trust as institutions recur to their respective constitutive norms. Secondly, the piecewise-trend-break method does not account for non-events. There may be other important political events that were ignored simply because they did not fall around the dates where breaks in the trend occurred. Finally, the analysis only explains short-term changes in institutional trust. In other words, the insights brought by the functional argument may lose significance with a database that covers a longer period of time. However, the analysis still holds value despite these limitations. Firstly, negative events have a sharper and more defining moment for institutional trust than do positive events. Secondly, the short-term nature of these explanations reveals that human beings may also have a short-term

memory in terms of institutional reputation. The case of trust in Political Parties provides the best example for this. Finally, these explanations also allow for the possibility of improvement through policy. By changing the structure of an institution and fighting corruption, it is more likely that an institution can recur to its constitutive norm. However, as the case of the Army suggests, politicians must be careful when they seek to alter the norm to which an institution has to recur.

Conclusion

The arguments defended by the case of Mexican state institutions are twofold. Firstly, events that taint an institution for not performing according to its prescribed function lead to sharp declines in trust. The evidence for this argument is provided by the piecewise-trend-break method, which reveals that all the dates when institutions experienced a drop in trust match political events that mark the failure of the institution to recur to its constitutive norm. Consequently, structural reforms that ensure institutions recur to their constitutive norm may help increase trust in state institutions. Nevertheless, embedded corruption and chronic violence make it harder for some institutions to perform properly even if appropriately structured. Furthermore, it is more probable for trust in an institution to breakdown if constitutive norms change. This may not be a common occurrence, but the example of the Mexican Army shows that certain institutions can experience a shift with respect to their function. Moreover, this decline is more probable when the capability of an institution to perform such a function is limited. Therefore, resources that enhance capabilities are equally relevant to institutional trust. All in all, when an institution does not perform as expected and the public experiences the negative effects of this poor performance, institutions suffer the consequences in terms of the trust.

The second argument supported by the case of Mexico is that GDP growth causes an increase in trust in state institutions, and vice-versa. The evidence for this argument is provided by the regression analysis, which reveals that the coefficient for GDP in all the state institution regressions is positive and highly significant. Therefore, trust in state institutions is not all about the institutions themselves; the economy plays an important role as well. The analysis of the results suggested that the positive effect of GDP growth on institutional trust may only apply to developing countries because the majority of people would be escaping poverty and consequently relying more on the government. It would be interesting to conduct a similar study that focuses on a developed country, in order to take into account the differences between moving up from the middle class and escaping poverty. As opposed to the first argument defended by the case study of Mexico, this second argument does not apply to all institutions. Only state institutions

and institutions that the public regards as main contributors to economic prosperity experience such an effect. Trust in Political Parties and the IFE was not significantly affected by changes in GDP. Finally, the regression analysis revealed mixed results in terms of the effects of economic security concerns on trust in state institutions. These results do not indicate that the security argument for generalized trust should be rejected. Instead, the results suggest that there should be more research focused on determining which specific institutional trust should be included as a part of generalized trust. The analysis in this paper provided some evidence for the IFE because of the relationships it facilitates between strangers as democratic citizens. Perhaps a cross-sectional study that pairs up institutions with similar supporting functions would shed more light on this issue.

The arguments supported by this study also have important implications for the debate on democracy and trust in state institutions. In general, it seems that trust in state institutions is vital for young democracies such as Mexico. On one hand, this study provided supporting evidence for the functional argument, which views decreasing trust in state institutions unfavorably since this would imply that democratic institutions are not functioning properly. On the other hand, the case of Mexico also provides strong evidence against the materialist argument, which views decreasing trust in state institutions favorably because this would imply that people have internalized post-materialist values. Instead, GDP growth leads to increases in trust in state institutions. Therefore, democracies in developing countries may benefit when their economies perform well.

Reflecting back on the story about the driver and Operation Cleanup, it is clear that this paper only answers some of my initial questions. For example, if the state institution that is meant to provide public security fails to do so, trust in that institution will decrease. Consequently, it is worrying that the trend for trust in the Army has become slightly negative. Nevertheless, it remains unclear whether illegal organizations – such as the drug cartels – that perform these function, have gained trust from the population. I find this research topic fascinating, but it requires trust data measured at the local level and years of field research. Fortunately, the arguments defended by the case of Mexican state institutions provide further motivation for these ambitious research endeavors. Most importantly, the arguments indicate the importance of seeking high trust in state institutions and suggest the means to do so.

Appendix A: Institutional Trust Survey Sample Selection

Mexicans over 18 years of age that possess a voting card comprise the survey's population. Three samples are taken every year and the survey is repeated for these samples every three months until the year ends. The sample selection consists of choosing fifty out of the more than 5,000 municipalities in the country at random. The probability of choosing a municipality is proportional to that of its population size. For each municipality, two electoral districts are chosen at random. Within this district, two random blocks are chosen. And from each block, five random households are selected. Only one member of each household is interviewed using a previously designed questionnaire. The sample size is 1,000 in all the months that this survey has been carried out.

TÉCNICA DE RECOLECCIÓN DE DATOS
El estudio fue llevado a cabo en viviendas particulares a través de entrevistas "cara a cara" utilizando como herramienta de recolección de datos un cuestionario, previamente estructurado mismo que es aplicado por personal calificado para esa labor (el cuestionario no es de autollenado).

MÉTODO DE ESTIMACIÓN DE LOS RESULTADOS
Los resultados presentados no son frecuencias simples, sino estimaciones basadas en la utilización de factores de expansión, calculados como el inverso de la probabilidad de selección de cada individuo en la muestra y corrección por no-respuesta en cada sección seleccionada en muestra.

ERROR MÁXIMO Y CONFIANZA DE LAS PREGUNTAS ELECTORALES
Aunque cada porcentaje tiene su propio error asociado, el diseño de muestra garantiza que en las estimaciones nacionales al menos 95 de cada 100 veces, el error no sobrepasa el ±3.1 por ciento. En los estudios de opinión pública, además del error muestral, se debe considerar que pueden existir otros errores ocasionados por el fraseo de las preguntas y las incidencias en el trabajo de campo.

Source: http://consulta.mx/

Appendix B: Consumer Confidence Index

La Encuesta Nacional sobre la Confianza del Consumidor (ENCO) se lleva a cabo durante los primeros veinte días de cada mes y tiene como base una muestra de 2,336 viviendas urbanas a nivel nacional, en las que se entrevista personalmente al informante, para el cual se requiere que al menos tenga 18 años de edad. La ENCO se recaba en 32 ciudades que comprenden a la totalidad de las entidades federativas del país y el Nivel de Confianza de sus resultados es de 90% con un error máximo esperado

del 15 por ciento. La información captada permite estimar el Índice de Confianza del Consumidor, el cual está constituido tanto por la opinión que el entrevistado tiene del presente (comparado con algún punto de referencia en el pasado) como por su opinión de la situación futura (comparada con la presente).

Este es un índice con base igual a 100 en enero de 2003, que resulta de promediar cinco indicadores parciales de los cuales dos hacen referencia a la situación económica actual y esperada del hogar entrevistado, otros dos atienden a la situación económica actual y esperada del país y el quinto índice refleja qué tan propicio consideran el momento actual para la compra de bienes de consumo duradero. De esta manera, cada uno de los indicadores parciales que integran el Índice de Confianza del Consumidor resulta del promedio ponderado de los resultados expandidos de las respuestas a cada una de las siguientes preguntas:

a) Comparada con la situación económica que los miembros de este hogar tenían hace 12 meses ¿cómo cree que es su situación en este momento?
b) ¿Cómo considera usted que será la situación económica de los miembros de este hogar dentro de 12 meses respecto a la actual?
c) ¿Cómo considera usted la situación económica del país hoy en día comparada con la de hace 12 meses?
d) ¿Cómo considera usted que será la condición económica del país dentro de 12 meses respecto de la actual situación?
e) Comparando la situación económica actual con la de hace un año ¿cómo considera en el momento actual las posibilidades de que usted o alguno de los integrantes de este hogar realice compras tales como muebles, televisor, lavadora, otros aparatos electrodomésticos, etcétera?

En cada una de las cuatro primeras preguntas los entrevistados tienen cinco opciones de respuesta: mucho mejor, mejor, igual, peor y mucho peor. En la quinta pregunta las opciones son: mayores, iguales y menores. Los ponderadores utilizados para cada opción de respuesta son los siguientes:

Opción de respuesta Ponderador
Mucho mejor o mayores 1.00
Mejor 0.75
*Igual 0.50*
Peor 0.25
Mucho peor o menores 0.00

Es importante destacar que la gran mayoría de las series económicas se ven afectadas por factores estacionales. Éstos son efectos periódicos que se repiten cada año y cuyas causas pueden considerarse ajenas a la naturaleza económica de las series, como son las festividades, el hecho de que algunos meses tienen más días que otros, los

periodos de vacaciones escolares, el efecto del clima en las diferentes estaciones del año, y otras fluctuaciones estacionales como, por ejemplo, la elevada producción de juguetes en los meses previos a la Navidad provocada por la expectativa de mayores ventas en diciembre.

En este sentido, la desestacionalización o ajuste estacional de series económicas consiste en remover estas influencias intra-anuales periódicas, debido a que su presencia dificulta diagnosticar o describir el comportamiento de una serie económica al no poder comparar adecuadamente un determinado mes con el inmediato anterior. Analizar la serie desestacionalizada ayuda a realizar un mejor diagnóstico y pronóstico de la evolución de la misma, ya que facilita la identificación de la posible dirección de los movimientos que pudiera tener la variable en cuestión, en el corto plazo. Cabe señalar que la serie desestacionalizada del Índice de Confianza del Consumidor se calcula de manera independiente a la de sus componentes.

Source: www.banxico.org.mx/

## Appendix C: Independent Variables in Regression Mod

Gross Domestic Product

Consumer Confidence Index
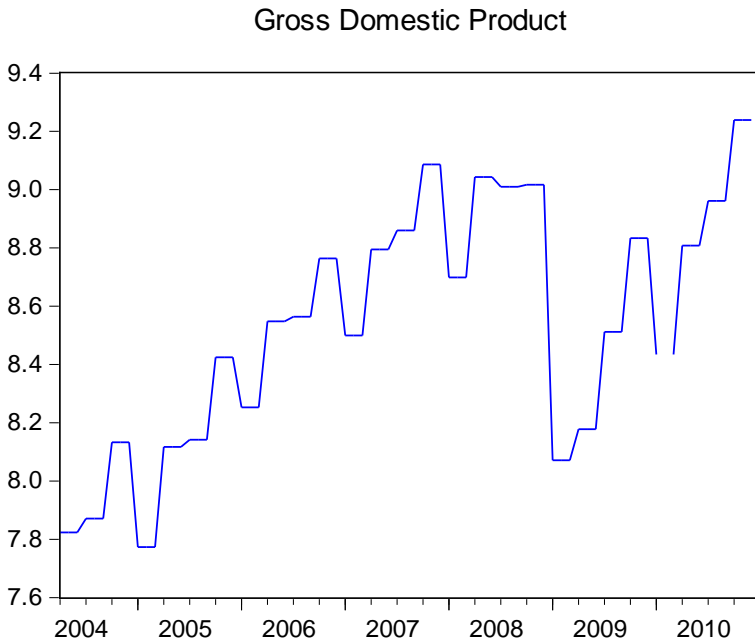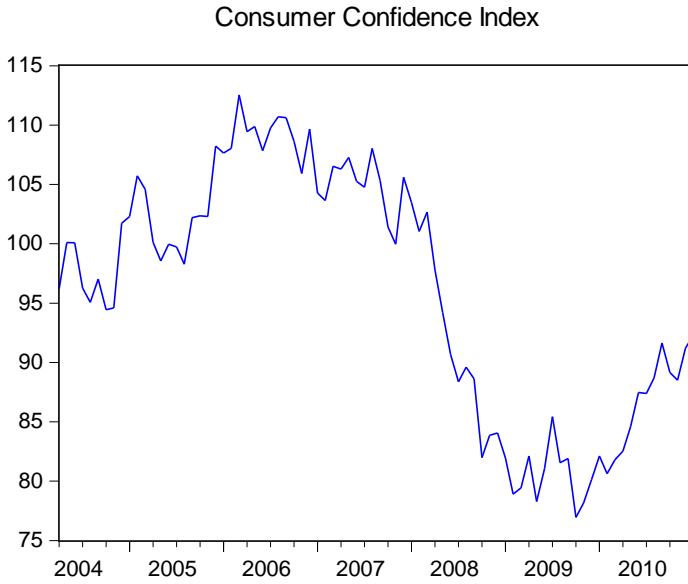
Appendix D: Correlations

	PRESIDENT	SENATORS	DEPUTIES	SUPRCOURT	ARMY	POLICE
PRESIDENT	1.000000	0.813808	0.854844	0.747192	0.737515	0.815137
SENATORS	0.813808	1.000000	0.961632	0.899694	0.406340	0.841706
DEPUTIES	0.854844	0.961632	1.000000	0.839641	0.509069	0.852708
SUPRCOURT	0.747192	0.899694	0.839641	1.000000	0.427503	0.790066
ARMY	0.737515	0.406340	0.509069	0.427503	1.000000	0.594069
POLICE	0.815137	0.841706	0.852708	0.790066	0.594069	1.000000
PARTIES	0.702211	0.845271	0.834255	0.666906	0.336935	0.788376
IFE	0.569866	0.327124	0.356830	0.222216	0.560564	0.343427
BUSINESS	0.731807	0.911222	0.890104	0.909123	0.303362	0.718524
MEDIA	0.799359	0.813653	0.796111	0.808729	0.466112	0.712308
GDP	0.457236	0.568730	0.559691	0.648416	0.361946	0.515214
CCI	-0.155009	-0.324289	-0.169342	-0.529955	0.217405	-0.175230

	PARTIES	IFE	BUSINESS	MEDIA	*GDP*	*CCI*
PRESIDENT	0.702211	0.569866	0.731807	0.799359	0.457236	*-0.155009*
SENATORS	0.845271	0.327124	0.911222	0.813653	0.568730	*-0.324289*
DEPUTIES	0.834255	0.356830	0.890104	0.796111	0.559691	*-0.169342*
SUPRCOURT	0.666906	0.222216	0.909123	0.808729	0.648416	*-0.529955*
ARMY	0.336935	0.560564	0.303362	0.466112	0.361946	0.217405
POLICE	0.788376	0.343427	0.718524	**0.712308**	0.515214	*-0.175230*
PARTIES	1.000000	0.452203	0.657464	0.639471	0.335715	*-0.133867*
IFE	0.452203	1.000000	0.176429	0.481517	0.096089	0.256614
BUSINESS	0.657464	0.176429	1.000000	0.866916	*0.703746*	-0.437738
MEDIA	0.639471	0.481517	0.866916	1.000000	0.637440	-0.339508
GDP	0.335715	0.096089	0.703746	0.637440	1.000000	***-0.126358***
CCI	-0.133867	0.256614	*-0.437738*	*-0.339508*	***-0.126358***	1.000000

Correlations above 0.7 are marked in bold

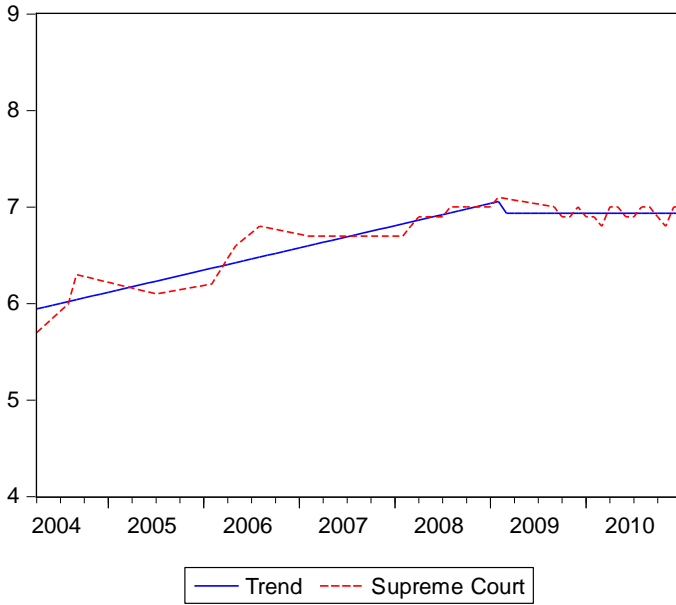## Appendix E: Fitted Piecewise Trends

Trust in the President
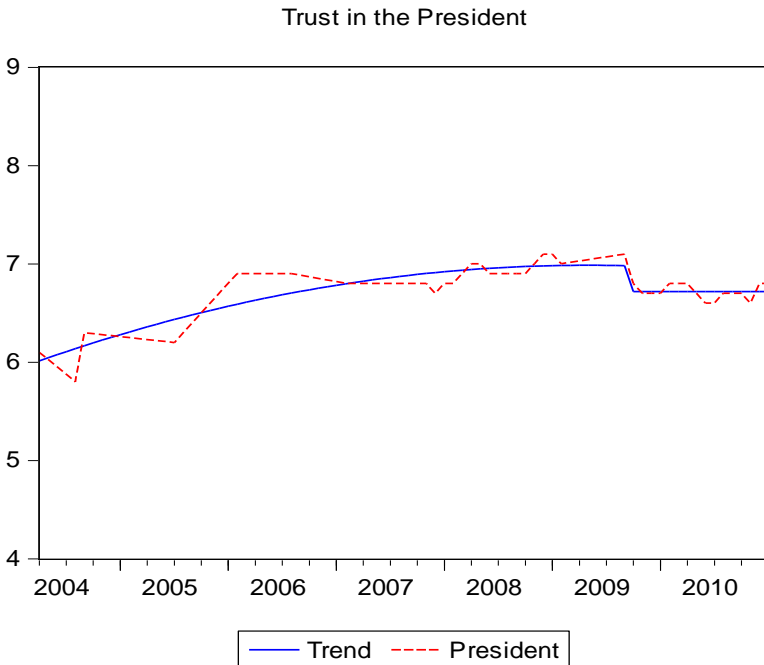
Trust in the Senators
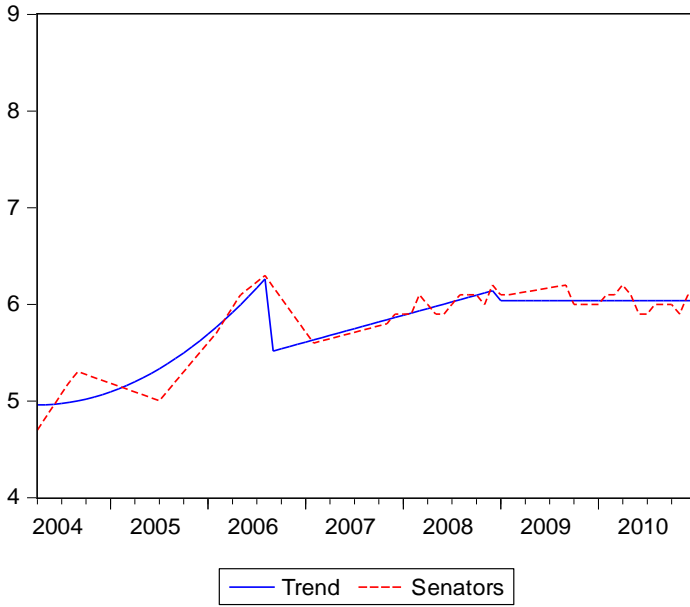
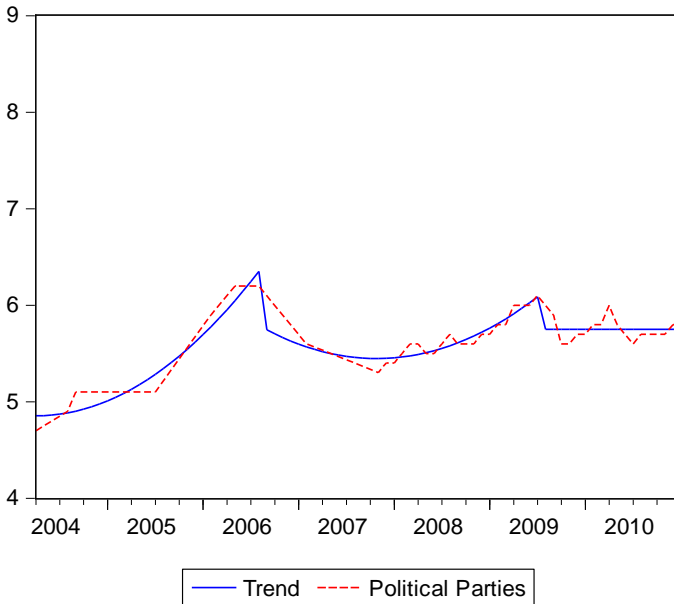Trust in the Deputies
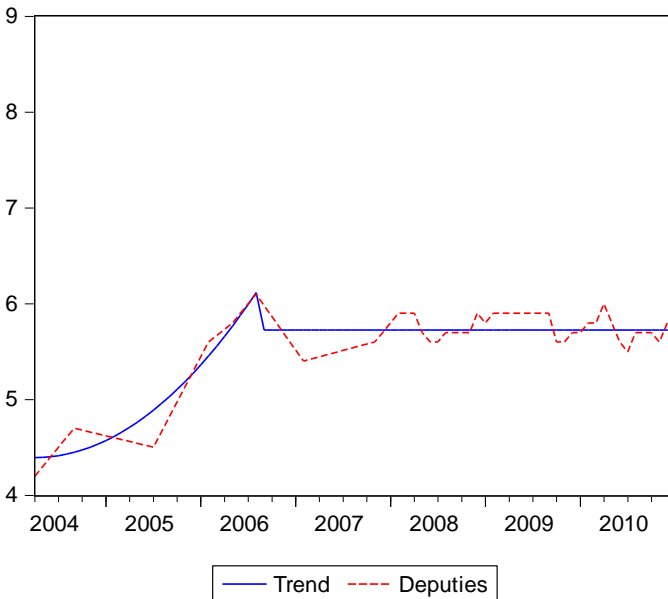
Trust in the Supreme Court

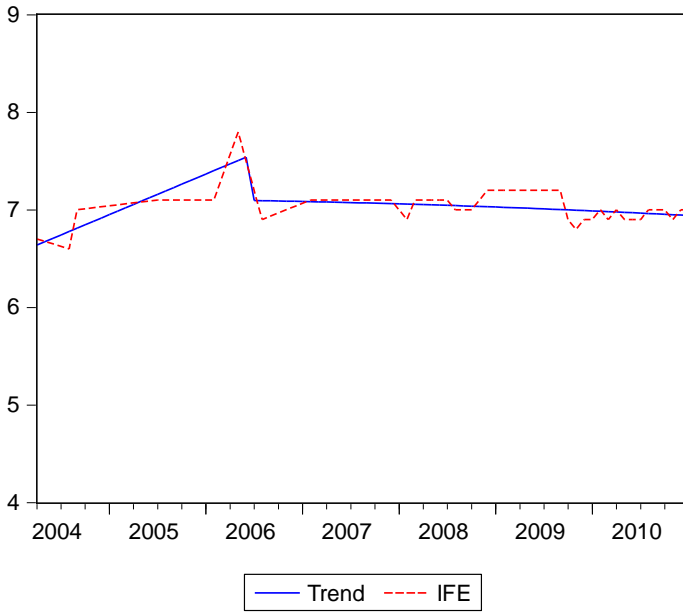Trend — — Supreme Court

Trust in the Army

Trend — — Army
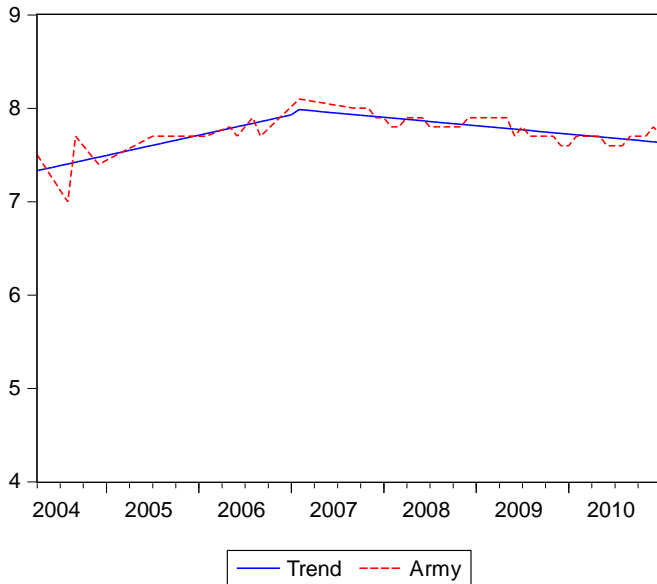
Trust in the Police
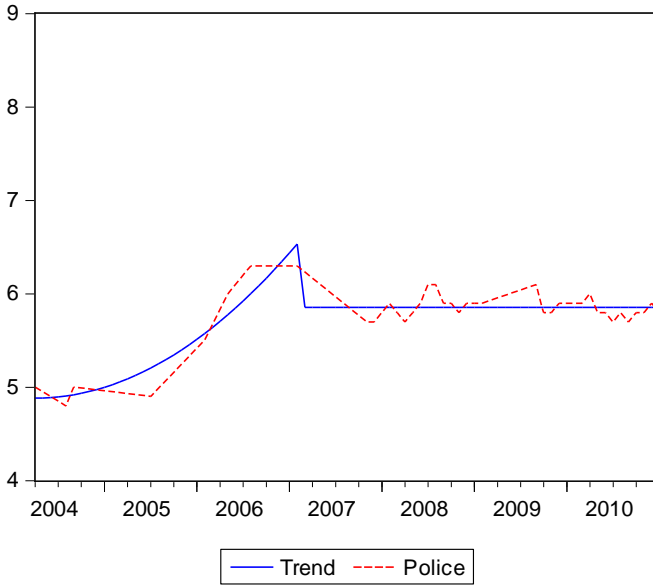
Trust in the Political Parties

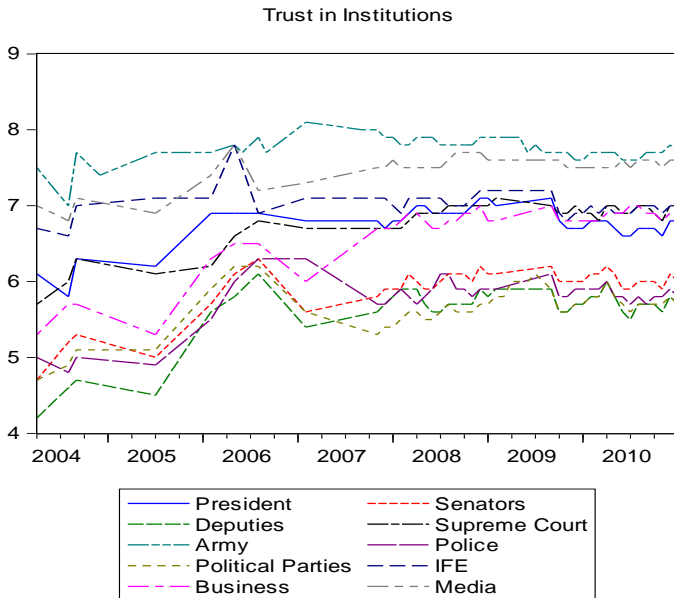Trust in the IFE

Trust in Business

Trust in the Media
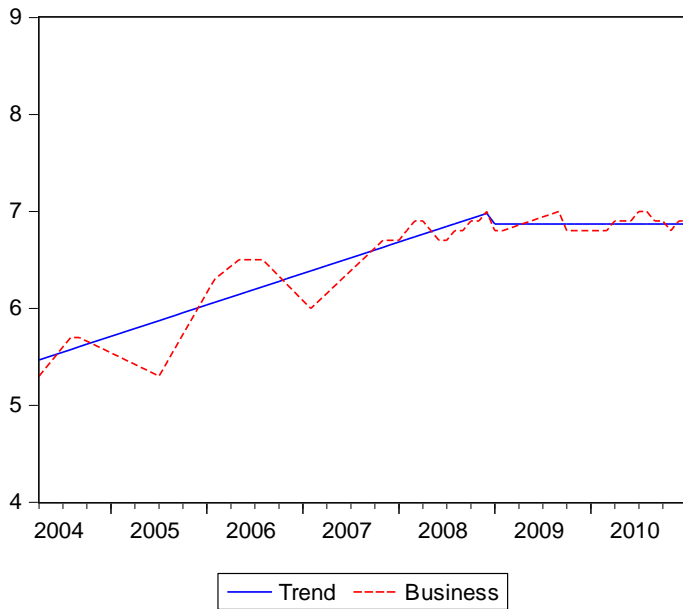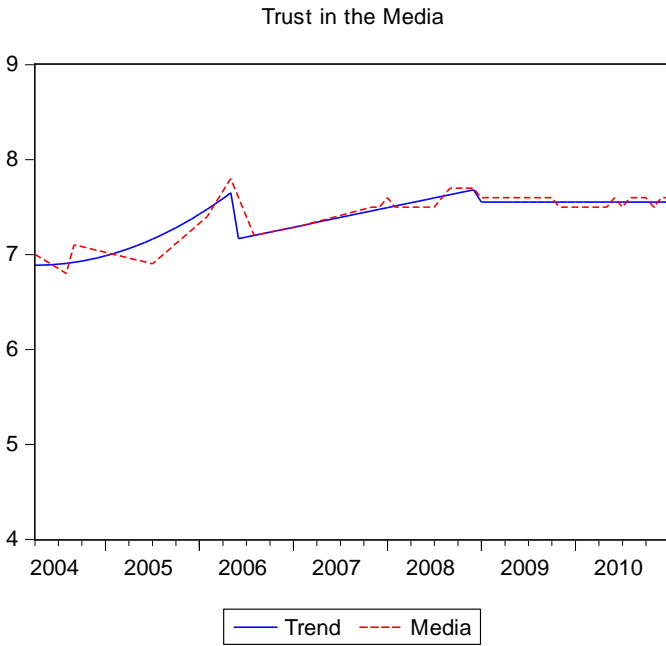
Appendix F: Institutional Trust in Mexico

Trust in Institutions

Appendix G: Rankings

Ranking	April 2006	January 2011	Percentage Change
1st	Army 7.5	Army 7.7	Deputies 35.7
2nd	Media 7	Media 7.6	Business 30.2
3rd	IFE 6.7	IFE and Supreme Court 7	Senators 27.7
4th	President 6.1	Business 6.9	Supreme Court 22.8
5th	Supreme Court 5.7	President 6.8	Political Parties 21.3
6th	Business 5.3	Senators 6	Police 16
7th	Police 5	Police 5.8	President 11.5
8th	Political Parties and Senators 4.7	Political Parties and Deputies 5.7	Media 8.6
9th	Deputies 4.2		IFE 4.5
10th			Army 2.7

Endnotes

1   The encapsulated trust model does not deny that people trust institutions; it only states that this should not occur.

2   Unlike Hardin, Inglehart does believe that it is intelligible to trust an institution.

3   The term functional is used instead of functionalist in order to avoid confusion with structural functionalism

4   Notice that Offe's argument explains when things are trusted, while Hardin's argument focuses on when they should be trusted. The non-normativity of the defense of institutional trust implies that the argument is easier to falsify with data.

5   Informal links refer to those ties where previous relationships have already been established, while formal links are those formed among agents that have had no previous relationship. For an institutionalist explanation of how these links are supported see Nichols 1999.

6   Putnam further draws the distinction between bonding trust (among kin) and binding trust (among people from different groups). See Putnam 2000.

7   Offe and Inglehart have conflicting rather that opposing views since Inglehart also believes that performance has an effect on institutional trust. "It seems inconceivable that governmental performance would not influence public opinion" (Inglehart, 294, 1997). Nevertheless, the stark differences between the materialist and the functional argument elaborated here remain valid.

8   This is certainly a naïve statement because economic development does not always produce changes in culture and social structure (Inglehart, 117).

9   This may be changing in Mexico since the democratic transition in 2000.

10   See Appendix A for more information on the sample selection

11   Deputies in Mexico are analogous to Representatives in the US; both comprise the Lower Chamber of Congress

12   The Instituto Federal Electoral is the autonomous institute that organizes federal elections in Mexico

13   See Appendix B for more information on how the CCI is estimated

14   From observing the graphs located in the Appendix C, it is interesting to note how CCI begins to drop before the 2007-2008 global economic crisis hits.

15   See Appendix D for the table on correlations

16   The SIC is used to select the model that best explains the data by applying a heavy penalty for degrees of freedom

17   The equivalent of trillion in English is billón in Spanish, while a billion in English is mil millones in Spanish

18   See Appendix F

19   See rankings in Appendix G

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