Learning, Political Attitudes and the Crisis in Transition Countries

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Abstract

We estimate the impact of the recent economic crisis on support for democracy and a free market economy in 30 post transition countries and five western European countries. Political values are cyclical and reflect a learning process. Support for the market and democracy has decreased between 2006 and 2010 in countries that were hit the hardest and that were the most advanced on the path to liberal reform, and notably new EU members. By contrast, it has increased in the CIS. This last result is driven by the young and unemployed. Although individual exposure to the crisis is associated with lower average support to democracy and markets, it leads these segments of the population, which were most excluded from the political-economic system in place to demand more liberal reforms in countries with corrupt institutions and that lag behind in terms of economic and political reform. We rely on individual level, within-country variation and on the use of a large set of individual controls in order to identify the causal effect of the economic crisis on political attitudes.

Keywords: Crisis, cycles, corruption, learning, political preferences

JEL Codes: E32, H12, O57, P26,

1. Introduction

How cyclical are political attitudes, and what can mitigate the extent of their variations? In the context of the current economic crisis, these questions bear important implications, especially in countries where democracy is still fragile, and market institutions are not full-fledged. In the context of Central and Eastern Europe, the issue of political attitudes is both important as such, and full of lessons on the process of construction of social-democratic institutions. The very momentum of Transition from communism was triggered by the popular aspiration to democracy and free competition and the belief that these institutions were superior in terms of welfare and performance to authoritarianism and state regulation. Twenty years after the start of the process, how have these beliefs and aspirations evolved? Have they been influenced by the adverse shock of the recent economic crisis? Are new members of the European Union, the most advanced transition economies, more supportive of democracy and free markets?

This paper adopts the view that political attitudes are driven by a process of slow and home-biased formation and updating of beliefs about the relative performance of different institutions. Imperfect learning is at the heart of potential multiple politico-economic equilibria. It is also at the origin of a "cyclicality" of political attitudes, i.e. the sensitivity of political opinions to the short run state of affairs and business cycle of the country.

Within this frame of analysis, this paper analyzes the political attitudes in Central and Eastern European countries (plus five "benchmark" western European countries: Sweden, Germany, U.K., Italy and France) in 2010, and their evolution since 2006, using the *Life in Transition Survey (LiTS)*. The LiTS is a nationally representative survey of socio-economic attitudes and conditions. It was conducted in 2006 in 29 post-transition countries and Turkey and repeated in 2011, with the addition of four western European countries.

At first sight, it appears that, surprisingly, the more democratic and market-friendly the institutions of a country, the smaller the average popular support for these institutions in 2010. This could suggest that citizens of transition countries have been disappointed by the evolution of their country in the direction of a social democracy, perhaps because of reform fatigue and disenchantment with the once idealized western-type societies. However, this interpretation does not survive the test of the business cycle. Controlling for the level of economic activity or the extent of the crisis, it appears that it is not institutions, but the

business cycle, which is the main driver of political attitudes. People blame the negative consequences of the business cycle of their country on the system in place, hence the greater rejection of market system in more advanced market economies.

Moreover, it seems that people's political attitudes, are influenced by the *relative* impact of the crisis. People became less supportive of democracy if the crisis hit them harder relative to their previous transition experience. As many of the Commonwealth of Independent States (CIS) countries endured much deeper downturns early in the transition process, this softened the negative impact of the more recent turmoil on attitudes towards democracy and markets. The relationship between institutions in place, economic outlook and political attitudes also depends on individual experience. People who are hit harder by the shock of the crisis reject the institutions in place in their countries harder. Beliefs of the population concerning their institutions and their government also play a role in mitigating or enhancing the reaction of the population: the more the population believes that institutions and public services are corrupt, the harder they reject the system in place in case of economic slump. Finally, it appears that merely receiving aid from social safety nets has helped mitigate the impact of the crisis on popular support to democracy and free markets.

Identification of the causal effects of the crisis on support for market and democracy supposes that crisis exposure is exogenous to political preferences. We employ several strategies to deal with the issue of endogeneity. First, the discussion of the causal effect of the crisis rests upon within-country, individual level analysis, thereby controlling for country-level characteristics that could be correlated both with a given country's exposure to the economic crisis and average political preferences. Second, we control for observable individual characteristics that may be correlated both with political attitudes and with exposure to the crisis. Such selection is much less likely at the level of an individual rather than at the country level but we may still worry that factors such as education, age and gender but also occupation and ownership structure of companies in which people are employed may be correlated both with exposure to the crisis and with attitudes towards the political-economic system and we control for them. However, we may not be able to observe all the variables that may jointly influence exposure to the crisis and political preferences. Our last strategy consists in assessing the size of the omitted variable bias that would explain away the observed effect of crisis exposure on political preferences. We find that the influence of unobservable factors would need to be between 3 and 5 times that of all combined observable individual characteristics. Last, the issue of endogeneity is of particular concern when we discuss the relationship between

people's perception of corruption, exposure to the crisis and attitudes to the political system. One may worry that perceptions of corruption are determined by unobservable variables that may also be correlated with preferences for democracy and free markets. In order to deal with this issue, we check that the results are robust to instrumenting perceived corruption in public services by the number of time people have actually used public services.

Literature

This paper draws on a large literature dedicated to popular beliefs and preferences concerning political and economic institutions, regimes and economic policy. An important strand of the literature has endeavored to measure how much these attitudes depend on past outcomes through the formation of beliefs about the relative performance of different institutions. It points to the crucial importance of the process of learning and updating beliefs and to the potential multiple politico-economic equilibria generated by imperfect learning (see Piketty, 1995, Di Tella and MacCulloch, 2009, or Kremer et al., 2001). Because of imperfect learning, political attitudes of the inhabitants of a country may depend on the current state of affairs and the business cycle in that country. Landier et al. (2008) indeed find that beliefs are slowly moving, home-biased and path-dependent. In the same spirit, Buera et al. (2010) explain the slow adoption of liberal policies after the Second World War, by the slow process of learning and Bayesian updating of beliefs of policy-makers. Their model predicts that a reversal to state intervention could happen if the current financial crisis had consequences of the same size as the Great Depression. Their paper is particularly relevant to the LiTS survey, as it analyzes explicitly the beliefs about the relative performance of free markets versus state intervention.

Aghion et al. (2010) is another illustration of how beliefs determine the demand for different institutions and political regimes. The authors hypothesize that less trustful individuals expect entrepreneurs to be uncivic and exert more negative externalities in the absence of government intervention. Empirically (using the *World Values Survey*), they test this idea using distrust in others as a proxy for concerns about market failures. They show that trust is indeed negatively related to preferences for state control on economic activity. De facto, as noted by Pinotti (2010), recent corporate scandals and the financial crisis have resulted in a dramatic drop in trust, rising pressures for increased state intervention and regulation in various countries. A consequence of the continuous learning and updating of beliefs is the cyclicality of political beliefs and preferences. Stevenson and Wolfers (2011), using the

Gallup surveys of Trust in Institutions, document the fact that trust in public institutions, such as banks, business and governments, is influenced by the business cycle in the United-States. Using the *World Gallup Poll*, which surveyed about 1000 people in 155 countries between 2006 and 2010, they also show that countries which have experienced the largest drop in unemployment due to the current financial crisis also experienced the largest declines in trust in financial institutions, governments and the judicial system. This is particularly true in developed countries.

The next section describes the data. Section 3 discusses the evolution of attitudes between 2006 and 2010. Section 4 deals with the cyclicality of political attitudes and their sensitivity to the recent economic crisis. Section 5 investigates in more details the heterogeneity in responses to the crisis and the particular role of the youth in corrupt countries as a catalyst of positive political change. Section 6 explores the role of social security transfers in softening the sensitivity of political attitudes to economic fluctuations. Section 7 concludes.

2. Data

Our study uses the *Life in Transition Survey* (LiTS) conducted by the European Bank for Reconstruction and Development and the World Bank 2006 and 2010. The survey was conducted in 28 post-transition countries[1] and Turkey in 2006. It was repeated in all countries in 2010, with the addition of Kosovo and of five western European countries for comparison: France, Germany, Great Britain, Italy and Sweden. The LiTS is a nationally representative survey and includes between 1000 and 1500 (for Great Britain, Poland, the Russian Federation, Serbia, Ukraine and Uzbekistan in 2010) observations per country. The total number of observations is 28,000 in 2006 and 38,800 in 2010. Respondents to the survey were drawn randomly, using a two stage sampling method, with electoral districts, polling station territories, census enumeration districts or geo-administrative divisions as Primary Sampling Units (PSUs)[2], and households as secondary sampling units.

LiTS is a repeated cross section and includes questions that are common to the two waves. Of particular interest to the present study, both waves of LiTS contain analogous questions to gauge the strength of household support for markets and democracy, respectively. To assess market support, respondents were asked which of the following three statements they agreed

[1] Kosovo was not included in 2006. Turkmenistan was neither included in 2006 nor in 2010.
[2] PSUs were selected randomly, with probability proportional to size.

with the most: *"(i) a market economy is preferable to any other form of economic system; (ii) under some circumstances, a planned economy may be preferable to a market economy; and (iii) for people like me, it does not matter whether the economic system is organised as a market economy or as a planned economy*". The corresponding question on support for democracy similarly asks whether it is preferable to any other political system, whether in some circumstances authoritarian government may be preferable, or whether it does not matter what system is in place.

The 2010 LiTS includes several potential measures of the impact of the crisis on respondents and their households. We build a synthetic consumption response index, constructed as a simple sum of positive responses to questions of whether the households had to reduce consumption of staple foods, reduce tobacco smoking, postpone or skip medical treatment, stop buying regular medications or had utilities cut off because of delayed payment. This measure captures the way that a household had to adjust its most basic consumption in response to changed circumstances (such as unemployment, reduced wages, and so on) and how it felt the impact of the crisis after any mitigating effect of actions it may have taken in response to crisis-related shocks – for instance, attempting to find a new job, drawing on household savings, borrowing from friends or applying for, and receiving, government benefits. It is this extent to which the household felt the crisis that is most likely to have had an impact on a respondent's attitudes, rather than the primary events triggered by the crisis such as reduced working hours or wages.

Two sources of variation are exploited in the rest of the paper. First, we make use of the country panel dimension. Second, we rely on the cross sectional variation in individual exposure to the crisis in order to investigate the effect of crisis exposure on individual political preferences.

In addition to LiTS, we use aggregate indicators of economic growth and output and of political governance. Our aggregate measures of the economic crisis come from individual countries' national statistics. Measures of the quality of institutions are from the World Bank governance indicators (World Bank 2006, 2010) and Polity IV (CIDCM, 2006, 2010). The World Bank governance indicator rates six dimensions of governance: voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law and control of corruption. The indicator takes values from -2.5 to 2.5, with a higher score reflecting better quality institutions. In the region covered by LiTS

in 2010, the country ranking lowest is Uzbekistan (-1.26) and highest is Sweden (1.74). The Polity Score captures the extent of democracy on a 21-point scale ranging from -10 (hereditary monarchy) to +10 (consolidated democracy). Autocracies are characterized by a score between -10 and -6, anocracies by a score between -5 and +5 and any score above 6 denotes democracies. Among the 2010 LiTS countries, Hungary, Mongolia, Poland, the Slovak Republic, Slovenia and all five western European countries but France are graded 10. Uzbekistan has the lowest Polity score in the sample (-9).

Descriptive statistics are displayed in Table 1 (Panel A). Selected descriptive statistics by region are displayed in Panel B of Table 1. The next section comments on descriptive statistics and complements the analysis with multivariate regressions that control for individual characteristics.

3. Evolution of attitudes between 2006 and 2010: The ups and downs

Twenty years after the fall of the Soviet Union and the disintegration of socialist bloc, how strong is the support for democracy and free markets in the countries of Central and Eastern Europe? Starting from about the same point in 1990 (past history notwithstanding), some countries have adopted social democratic institutions and market-friendly regulations at an accelerated pace in order to enter the European Union and adopted its "acquis commmunautaire" since the mid-1990s', while others, absent the potential reward of EU membership, progressed at a much slower pace. Have subjective attitudes followed these different paths? Is there more support for democracy and a market economy in countries of the new Europe? Is support for democracy dependent on the existence of democratic institutions?

A naïve look at self-declared political preferences in 2010 would suggest that this is not the case. It would even suggest that the further the progress of social democracy, the stronger the current backlash against this system! Figures 1 and 2 plot the proportions of each country's populations who unequivocally preferred democracy and markets to any other political and economic system, respectively. In 2010, eastern Europe is lagging behind not only western European countries but also the Western Balkans and the CIS in respondents' average support for a market economy and democracy. The upper panel of **Figure 2** shows the inverse

correlation between the quality of social-democratic institutions, measured by the Polity score, and the popular support for the economic and political foundations of these systems in 2010. This observation agrees with a series of studies that have analyzed the disenchantment of citizens of transition countries in face of the realization of their hopes and expectations. Authors like Krastev (2007) have assessed the reform fatigue of the inhabitants of this region, as well as the backlash of their support to the new regime as a reaction to the unabated corruption and the widening of income inequalities (see also Grosfeld and Senik, 2010). It may also be the case that inhabitants of these countries have become "blasé" as they became accustomed to capitalist and democratic institutions. This theory could explain why popular support to social democracy and life satisfaction is lower in those countries that are most advanced in this direction. However, if it was the case that people need to be disappointed by market and democratic institutions once they experience them, we would observe the same patterns in 2006 as well as 2010. But this is not what the lower panel of **Figure 2** shows. In 2006, there is no systematic relationship between popular support for democracy and for the market and the Polity score. Hence the lower support for market system and democracy in more advanced countries is a new feature of 2010.

In fact, a closer look at **Figure 1** reveals large swings between 2006 and 2010 in average support for democracy and free markets. . In particular, the new EU member, which were among the top 10 supporters of markets in 2006 experienced a sharp decline in their preference for a market system. The Czech Republic, Estonia, the Slovak Republic and Slovenia all saw popular support for markets shrink by at least 10 percentage points. Overall support for a market economy and democracy has decreased in Eastern Europe but has increased in the CIS. The CIS is the only region in which popular support for democracy and the market has increased between 2006 and 2010. This is confirmed in regression results displayed in **Table 2**. These regressions use the pooled cross section of the two waves of LiTS and control for respondents' individual characteristics, regional dummies and a dummy indicating the second wave of the survey (variable: *year 2010*). The coefficient on the year 2010 indicates how values have evolved between 2006 and 2010. Regressions are run on the sample of Eastern Europe and CIS only since there are no observations in western Europe in 2006. The coefficient associated with the year 2010 is negative and significant across the whole sample both for support for democracy and support for markets. On average, support for democracy and market economy went down by 4.5 and 3.6 points, respectively, between 2006 and 2010. However, interaction terms with regional dummies in Column 2 and 4 reveal

that support for democracy and free markets has *increased* in the CIS. Similarly, when we control directly for the quality of institutions, as measured by the World Bank governance indicators or Polity index, regression results displayed in Columns 4, 5, 7 and 8 show that the backlash against democracy and the market was more intense in countries that benefit from more open institutions.

In summary, support for democracy and free market has changed significantly since the first round of the LiTS survey in 2006. It has declined in many of the more advanced transition countries, including all the new EU members, except Bulgaria. On the other hand, it has increased in quite a few of the countries of the CIS, which are not as far along the path of transition. The changes have been significant enough so that in 2010, as opposed to 2006, almost all the strongest supporters of democracy and free markets were to be found in the CIS or other less advanced transition countries. This contrasts with the view that better institutions necessarily protect against anti-liberal backlash. The next section explores to what extent the recent economic crisis has contributed to this changing landscape of popular support for reform across the region.

4. Cyclicality of attitudes: the role of the economic crisis

The implication of the learning hypothesis is that the relationship between exposure to the crisis and political attitudes will depend not only on the severity of the crisis but also on the quality of existing institutions: for people living in more democratic and capitalist countries, the shock of the crisis will be interpreted as a failure of the system in place, which will thus lose popular support. Hence support to democracy and capitalism is expected to recede in countries where these institutions are more developed, whereas they will increase in countries where the system in place is still authoritarian and far from market competition. In this section, we explore how exposure to the economic crisis affects preferences for the political economic system. We find that this varies greatly according to the level of institutional quality.

3.1. Recent economic crisis: Estimating Equation and Empirical Results

A close look at the data reveals that the contrast between the CIS and the rest of Eastern Europe is very much correlated with the extent of the crisis. The two groups of countries vary to a large extent in their degree of integration in the world market, and especially their degree

of international financial integration: countries of the CIS are much less integrated financially, hence exposed to the international business cycle. As a result, the impact of the crisis was much higher in the EU countries (see chapter 2 of Transition Report, EBRD 2010). Descriptive statistics in **Table 1** confirm the fact that the perceived intensity of the crisis is lower in the CIS than in Eastern Europe. The crisis has the highest perceived intensity in eastern Europe and the lowest perceived intensity in western European countries, probably because of the presence, in these countries, of functioning social safety nets, a point which we will come back to in Section 7.

Estimating Equations and Identification

The rest of this section hinges on cross-sectional variation in the 2010 LiTS in order to explore how political attitudes co-vary with the extent of the economic crisis at the individual level. Political attitudes are regressed on the composite indicator of individual consumption response to the crisis, controlling for a number of observable individual characteristics. Estimating equations are of the following form:

$$Support_{ic} = \alpha_i + \beta Crisis_{ic} + \varphi X_{ic} + \delta D + \varepsilon_{ic}$$

where $Support_{ic}$ measures the political attitude towards either democracy and free markets of individual *i* in country *c*. $Crisis_{ic}$ measures individual *i*'s consumption response to the crisis (see section 2). X_{ic} is a vector of individual controls and *D* is a vector of country dummies. Results are also reported for regressions without country dummies.

Cross-country regressions are subject to a severe omitted variable bias that jeopardizes the causal identification of the effect of an economic crisis on political attitudes. Indeed, identification in a country cross section supposes that there are no unobservable factors that would correlate both with the severity of the crisis and with political attitudes in a given country. This assumption is very hard to satisfy. Instead, it is likely that, for example, the quality of institutions, or more broadly 'culture' may influence both political attitudes and not only the severity of an economic crisis but also people's adjustment to the crisis, which is what our $Crisis_{ic}$ variable captures.

Instead, we rely, for the purpose of causal identification, on within-country variation at the individual respondent's level. The use of country dummies enables us to keep constant the country level characteristics that could be correlated both with the severity of the crisis in a

given country and with political attitudes. Still, causal identification is impaired if individual characteristics may predict both political attitudes and individual exposure to the crisis. While such selection bias is much more unlikely at the individual level than at the country level, we undertake a number of strategies to establish the causal character of our results. First, we control for observable characteristics that may be correlated both with attitudes and with exposure to the crisis. In particular, we control for education, age and gender but also for occupation and for the ownership structure of companies in which people are employed. This is justified by the concern that employees of foreign firms may not only be exposed to the crisis in a different way but may also hold different attitudes towards the political-economic system. However, we may not be able to observe all the variables that may jointly influence exposure to the crisis and political preferences. Our second strategy consists in assessing the size of the omitted variable bias that would explain away the observed effect of crisis exposure on political preferences.

Table 3 presents the results of the basic regressions of individual support for markets and democracy on this crisis-response measure and other individual-level control variables. They confirm that the intensity of the perceived crisis at the individual level is associated with lower support for democracy and for market economy. More specifically, one additional point on the consumption response index makes it 2 to 3 per cent less likely that a person would prefer democracy or markets.[3] This means that individuals hit particularly hard by the crisis could be more than 10 per cent less likely to favor democracy or markets over any other political and economic systems, respectively.

The negative association between the intensity of the economic crisis and support for democracy and a market economy holds at the within country level, when country dummies are included (Columns 3, 4 7 and 8) as well as across countries (Columns 1, 2 6 and 7). Although one should be careful in interpreting the results of cross-country regressions, it is till worth noting that support for democracy and market economy declined more in countries that experienced a more severe economic crisis. **Figure 3** illustrates this result in a graphic way, showing the negative correlation between output growth in 2009 and the change in support for democracy and free markets between 2006 and 2010. Many countries that experienced a comparatively mild crisis or even grew in 2009, such as Azerbaijan and Uzbekistan, saw an increase in both democracy and markets support, while harder-hit countries, such as Estonia,

[3] The value of the consumption response index for the average household in the transition region is just below 1.

Latvia and Lithuania, experienced a decline. That said, there are some significant outliers in the two charts, such as Armenia, where support for markets and democracy grew in spite of a large output decline in 2009. Additional results indicate that the share of people who declare that for people like them, it does not matter whether the economy is market-driven or planned also increases with the perceived intensity of the crisis.

Additional results not displayed here but available upon request show that, if we include as a control the polity 2 or World Bank governance indicators in the cross-country regressions, the coefficient on proxy for quality of institutions is not significant, while the variable that measures exposure to crisis remains statistically significant. Hence, it is not because of adaptation or reform fatigue that inhabitants of Transition countries seem to be disappointed by their capitalist and democratic institutions in 2010. Rather, political attitudes are sensitive to the business cycle.

In Table 4, the results are presented for the sub regions of the CIS and the new EU member countries and for the five western comparator countries, as well as for groups of countries defined by the quality of their political institutions as measured by the Polity indicator. The main result discussed above that holds in the transition region as a whole is also true in the new EU members. The relationship is rather weaker in the CIS countries regarding attitudes to democracy. At the sample averages, the crisis is associated with a reduction in support for democracy by 2.4, 1.7 and 1.3 percentage points[4] in Eastern Europe, the CIS and Western Europe respectively. As for preferences for market economy, the crisis is associated with lower support by 2.3, 3.5 and 1.8 percentage points in Eastern Europe, the CIS and Western Europe respectively.

When groups of countries are defined by institutional quality, the picture is rather different. Attitudes towards the market and democracy are only significantly negatively affected by the crisis in countries that rank higher on the Polity index (above 8). By contrast, in countries with lower polity scores, preferences for markets and democracy are not significant affected – if anything, they are positively affected. Indeed, the coefficient is positive, although it falls short of standard levels of statistical significance. The following Section will show that this hides individual heterogeneity, with the youth in these countries turning significantly more in favor of markets and democracy as a result of the economic crisis. But before that, the rest of

[4] Computed by multiplying the coefficients controlling for country dummies and individual characteristics by the sample averages in the different regions displayed in panel B of Table 1: 0.019*1.19; 0.02*1.12 and 0.028*0.46 for support for democracy.

the section provides further evidence on the causal character of the results and presents additional results.

Robustness and omitted variable bias

Following Altonji, Elder, and Taber (2005) and Nunn and Wantchekon (*forth*.), ratios are computed that reflect how much greater the influence of unobservable factors would need to be, relative to observable factors, to explain away the full relationship between political attitudes and crisis exposure. This test is based on the ratio of coefficients of regressions including full or restricted sets of control variables.[5] The intuition is that the smaller the difference between the two coefficients, the less the estimate is affected by selection on observables so that the larger the selection on unobservables needs to be, relative to observables, in order to explain away the entire effect of the variables of interest. The ratios can be computed directly from Table 2, which displays regression results alternatively with no controls and with the full set of controls. The influence of omitted variable individual level variables would need to be between 3 (3.33) and 5 higher than that of all individual characteristics included in Columns 4 and 6 of Table 2 in order to explain away the full effect of the crisis on political attitudes. Considering the wide extent of individual controls that we include in the regression, we believe that it is unlikely that the presence of omitted variable bias could explain away the full effect of individual crisis exposure and political attitudes.

We also check that all results are also robust to using probit or logit specifications.

3.2. Past Economic Crisis: The Impact of the Relative Crisis

As explained in **Section 1,** the cyclicality of political attitudes can be explained in terms of learning by the population. The idea is that people have priors about the different economic systems and update them continuously. This process has both a stock and a flow dimension, in the sense that as people accumulate experience, they reinforce their beliefs and their support to the system in place, depending on how beneficial the outcomes have been for them. In the LiTS survey, the stock dimension of this process is attested by the higher support of

[5] The first coefficient $\hat{\beta}^R$ is obtained when only the variable capturing individual exposure to the economic crisis is controlled for. The second, $\hat{\beta}^F$ is obtained when the full set of observable characteristics are controlled for. The ratio is calculated as: $\hat{\beta}^F / \left(\hat{\beta}^R - \hat{\beta}^F\right)$.

Western European citizens who have a longer experience of the social democracy and whose political attitudes are more resistant than those of eastern Europe. The learning process is home-biased and state-dependant because people judge the system that affects them in a salient way. In the words of Buera et al. (2010): people "*tend to attribute economic outcomes to the system in place in their country: when faced with a positive growth shock, pro-market opinions become relatively stronger in countries that have pro-market institutions*".

If people's political attitudes derive from a learning process, it is not farfetched to imagine that they will assess the current crisis with reference to other past crisis experiences. Those individuals who experienced a much larger crisis in the past, might be less likely to view the current episode as severe enough to question the system in place.

The biggest economic contraction in the recent history of transition countries occurred right after the fall of communism. It can be measured by the real output drop in percentage points between 1990 and the year following the start of the transition period when output reached the lowest level. For some countries, such as Poland or Slovenia, output growth recovered early in the post-communist era (1991 or 1992). For others, including Russia, recovery did not start until the late 1990s, and five of the transition countries have yet to fully restore their pre-transition output levels according to official data.[6]

Figure 4 shows that support for democracy declined less between 2006 and 2010 in countries that had experienced a deeper crisis at the start of the transition process. Indeed, support *increased* in several countries that went through particularly deep downturns in the early to mid-1990s, such as Georgia, Moldova and Tajikistan. A similar pattern is apparent in support for markets. This result is confirmed by individual-level regressions based on the 2010 LiTS data, taking into account the experience of the past crisis of respondents depending on their age (not shown, but available in Chapter 3 of the 2011 Transition Report).

4. The role of the youth in corrupt countries

In the nexus between institutions and the effect of the crisis, perceived corruption occupies a special place. This is because corruption is not only perceived as illegal or inefficient, but also

[6] Georgia, Moldova, Serbia, Tajikistan and Ukraine.

unfair. We thus expect that when hit by the crisis, people will turn against the political and economic system in place all the more so that they perceive corruption to be high.

In related pieces, Aghion, Algan and Shleifer have modeled the relationship between Trust and State Regulation and predicted that "*individuals in low trust countries want more government intervention even though the government is corrupt"*. This is because they perceive that the inefficiency from non-regulated unfair individuals is potentially greater than that of the corrupt state sector. Identically, Di Tella and Mc Culloch (2009) try to explain the fact that despite being the system most conducive to growth, capitalism is confronted with persistent negative attitudes in developing countries. Their explanation relies on the perception of corruption which is associated with the image of the unfair enrichment of capitalists, hence demand for more state regulation and less market competition. Anti-capitalist policies can be seen as the fruit of a social contract between citizens and policy makers/regulators to constrain corrupt and unfair capitalists.

In our analysis, corruption is measured through survey questions on the frequency of solicited illicit payments by public officials. Each respondent was asked how frequently, in their opinion, unofficial payments were made across a wide range of public services that are meant to be free – including traffic policing, public education and health care. The response scores (from 1 for never to 5 for always) from the separate categories are averaged to produce a single measure of corruption perception for every individual. This variable takes values from 1 to 5 with a sample mean of 1.73. Corruption is, as expected, higher in the CIS (1.98) than in the rest of the region and it is negatively and significantly correlated with the World Bank governance and Polity indices (-0.35 and -0.28, respectively, both significant at the 1% level).

Table 5 presents results from multivariate linear regressions in which political attitudes are regressed on the usual individual characteristics, crisis and corruption measures as well as an interaction term that reflects the combined effect of the perception of corruption and of being personally hit by the crisis. The first four columns of the table summarize the models for the transition region as a whole. All regressions control for country dummies.

Results in the first and third columns suggest that, for the entire population of the region, corruption tends to be negatively correlated with support for democracy and markets. This is a weak confirmation of the hypothesis that corruption drives people to desire more restrictive economic and political systems so as to constrain capitalists. However, while corruption

reduces popular support for market and democracy, it plays a more subtle role in the reaction of political attitudes to an adverse economic shock. When hit by the crisis, individuals who face corruption and are the most sensitive to it revise their pro-market and pro-democracy attitudes upward. This effect is particularly strong for the young. The coefficients on the interaction term between the crisis impact and corruption is positive and significantly different from zero at the 5% level for the sample of young people. In other words, the young become more pro-market and pro democracy as a response to the combined effect of high levels of corruption and being personally hit by the crisis. This result is nevertheless specific to countries with low levels of institutional quality. Indeed, among the transition sub-regions, the effect only holds in the CIS (columns 5-8 of Table 5) and, more generally, in countries with low polity scores (results not displayed here but available upon request). By contrast, it is not observed in countries with good quality institutions, such as the new EU members. To sum up, the effect of the crisis on the rejection of corrupt governments by the young is higher, the lower the quality of institutions. This observation is conducive to a parallel with Arab revolutions of the Spring 2011, where the role of the youth was particularly important in the expression of social discontent and the reversal of the political institutions. The interpretation is that the young are generally the most excluded from the closed political-economic systems in place and, as such, beomce the strongest supporters of social and political change as a result of the crisis.

The strong result obtained for the young also holds for other categories of people who were most excluded from the political-system in place: the unemployed, and those who would benefit most from liberalization reforms: the geographically mobile. These groups are the greatest losers from the bureaucratic and corrupt governance and would benefit most from political and economic reform. For them, the occurrence of an economic crisis may render the situation too hard and generate a strong reaction of rejection of statist policies and in favor of free markets and, possibly, democracy.

An impediment to causal identification of the effect of corruption on political attitudes is that perceptions of corruption are heavily correlated with respondents' attitudes to the political and economic systems in general, and support for democracy and markets in particular. To circumvent this issue, we check that the results are robust to using the number of times respondents have used public services as an instrumental variable for the perception of corruption. The identifying assumptions are that perceptions of corruption in public services are influenced by actual use of such services and that the number of times people use public

services is uncorrelated with their preferences for market or democracy. Results are displayed in Table 6. Instrumental variable estimations are implemented using two stage least squares. The results of the first stage, which regresses perceived corruption on the use of public services are displayed in Panel A. The use of public services is a strong predictor of perceived corruption, leading us to conclude that this is a relevant instrument. Results of the second stage, in which political preferences are regressed on the level of (instrumented) corruption, on individual crisis exposure and on an interaction term between the two are displayed in Panel B. All regressions control for the full set of individual controls. The results discussed above are robust to this alternative estimation method.

5. Policy implications: The Role of Public Transfers

Chapter 2 of *Transition Report 2011* shows that a variety of mechanisms – personal savings, family aid, bank borrowing – allowed households to cushion the impact of crisis events on their actual consumption. It also uncovered that public safety nets were generally not very effective in the transition region.

Table 6 presents the results of linear estimates that investigate the direct impact of government programs on political and economic attitudes, while controlling for individual crisis exposure. The LiTS asked respondents whether they sought unemployment, social assistance, child and housing benefits during the crisis and whether they were successful. The estimates presented in Table 6 control for eight relevant variables – for each of the four benefit programs the regressions include a dummy variable that equals 1 when a household applied for it and another dummy equaling 1 if the household was successful. For conciseness, only results for unemployment and social assistance benefits are presented.[7]

No benefit program had a significant direct impact on attitudes to political and economic systems in the transition region as a whole.[8] Among the new EU members, however, receiving social assistance is associated with higher support for markets and democracy. The fact that these countries have high levels of democracy and free market development suggests

[7] Child and housing benefit variables are not statistically significant in these regressions. This is not entirely surprising, as they are least likely to be applied for as a result of a crisis event.
[8] The actual importance, quality and efficiency of the four benefit programmes vary considerably across the transition subregions, which may contribute to this finding.

that safety nets can help governments maintain support for the political and economic systems in place, at least to some extent.

Interestingly, within the CIS region, receiving unemployment benefits reduced support for free markets. While this coefficient has the opposite sign to the coefficient for social benefits in the new EU members, its interpretation may be very similar. CIS countries generally have less developed markets. Here, it seems, the government can then also buy support for the system in place – by providing unemployment benefits. Their recipients are less likely to support free markets, i.e. they are happier with the system in place.

These results suggest the direct role that governments can play in lessening the effect of economic downturns on people's preferences regarding political and economic systems. Importantly, the impact of state aid on attitudes goes beyond the (lack of) its impact on consumption. On a positive note, democracies and free market economies can bolster citizen support for the systems in place. Perhaps more negatively, people in countries with limited, or no, free markets can also be influenced to desire less change in their country's economic system as a result of a crisis.

6. Conclusion

The two waves of the Life in Transition Survey confirm the hypothesis that political preferences are cyclical, and that their sensitivity to large swings in the business cycle can be interpreted as the result of a process of learning and beliefs updating. People tend to attribute the harshness they experience to the political and economic system in place, and hence reduce their support to the prevalent system.

Accordingly, preferences for political and economic systems in transition countries have changed significantly between 2006 and 2010. Support for democracy and free markets has dropped in many of the more advanced transition countries, in particular the new EU members, but increased in some of the less-developed CIS ones. This effect was sometimes mitigated by the social safety nets put in place by governments.

The rejection of the regime in place due to the crisis was magnified by the perception that the country's institutions are corrupt. This effect is particularly true for the youth. Accordingly, young people in non-democratic countries that have been hit by the crisis have particularly

strong feelings against their poor quality institutions. This is reminding of the role of the youth in the Arab spring of 2011, suggesting that the crisis could be a catalyst of positive change in countries with low-quality institutions.

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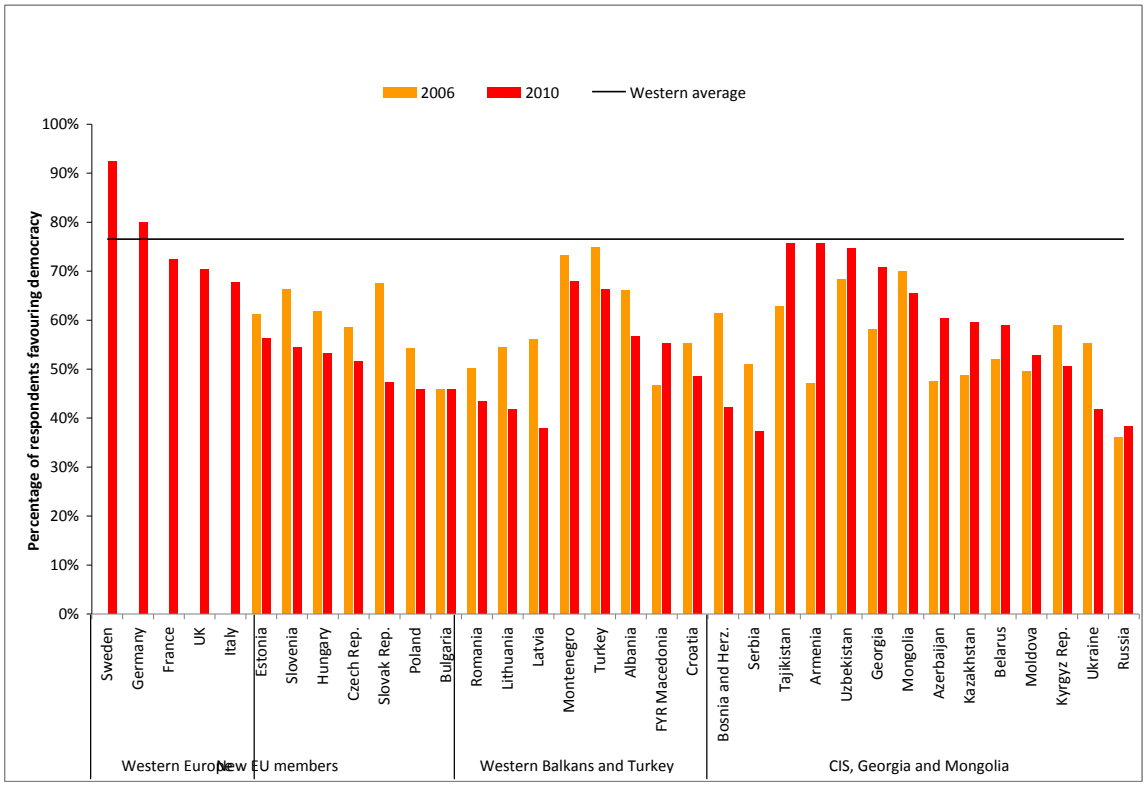
Tables and Figures

Figure 1: Support for Democracy and a Market Economy

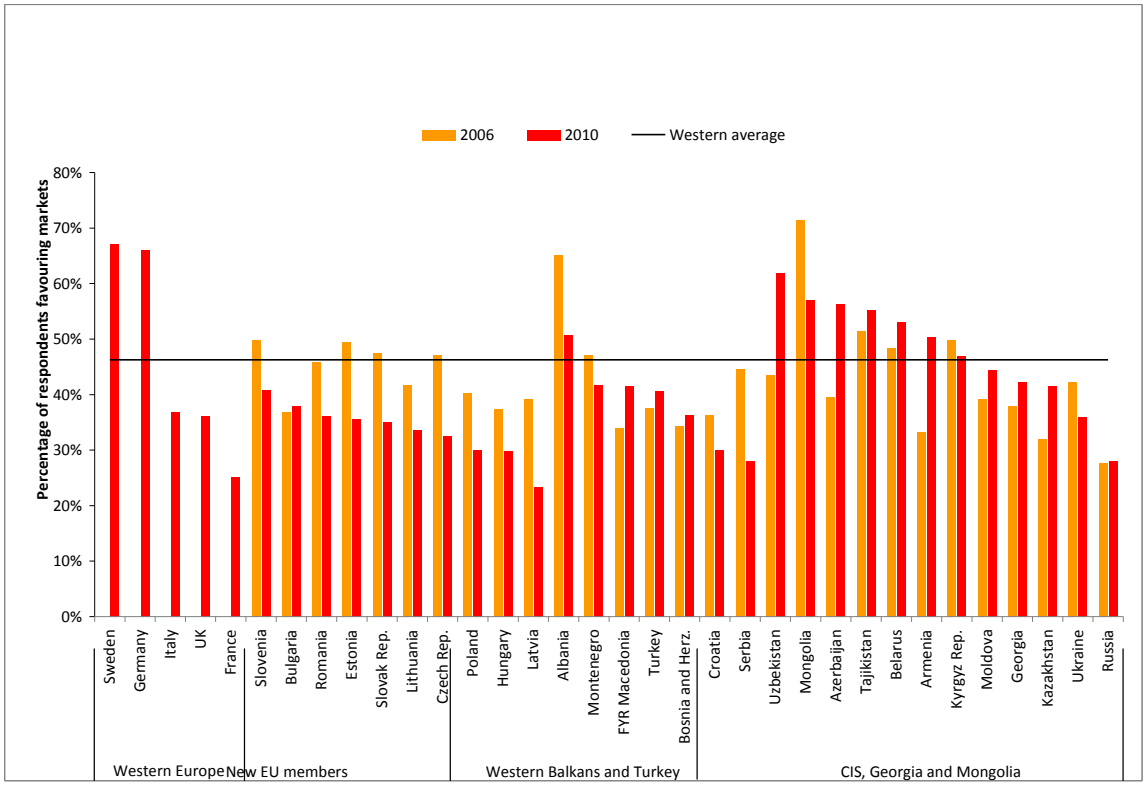
Panel A. Transition region support for democracy is below the Western average



Source LiTS, 2006 and 2010

For each country, this graph plots the share of the population that unequivocally supports democracy. The horizontal line indicates the 2010 average for the western comparator countries (France, Germany, Italy, Sweden and the UK).

Panel B Support for markets is down among new EU members

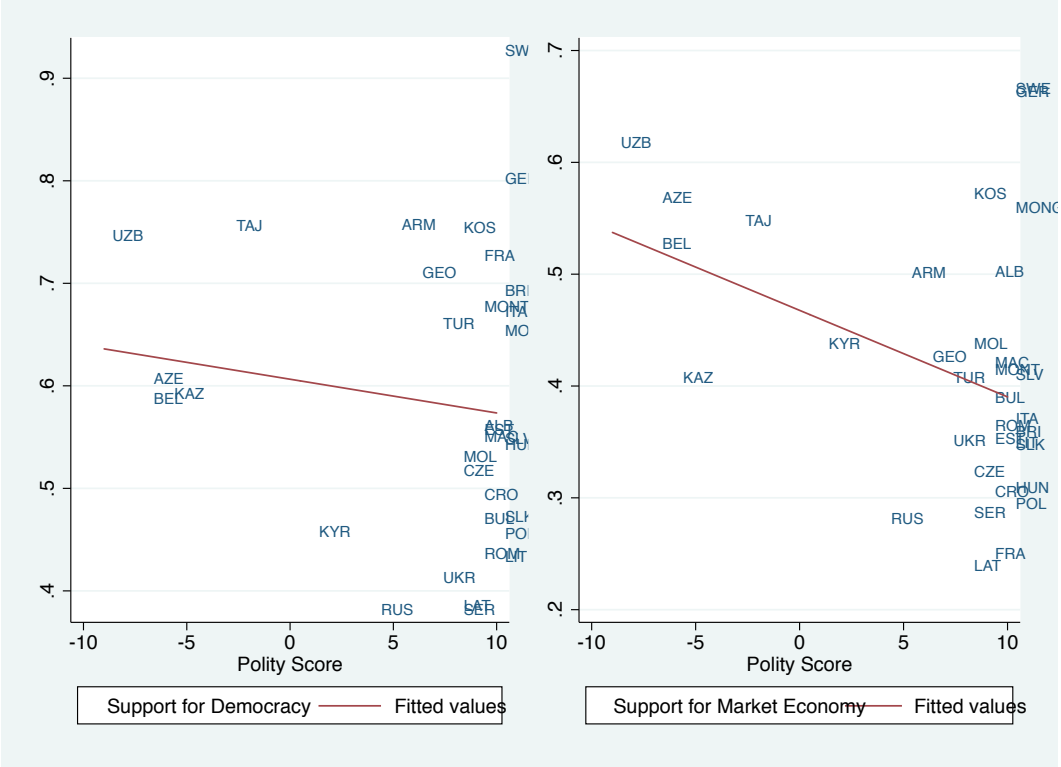


Source LiTS, 2006 and 2010

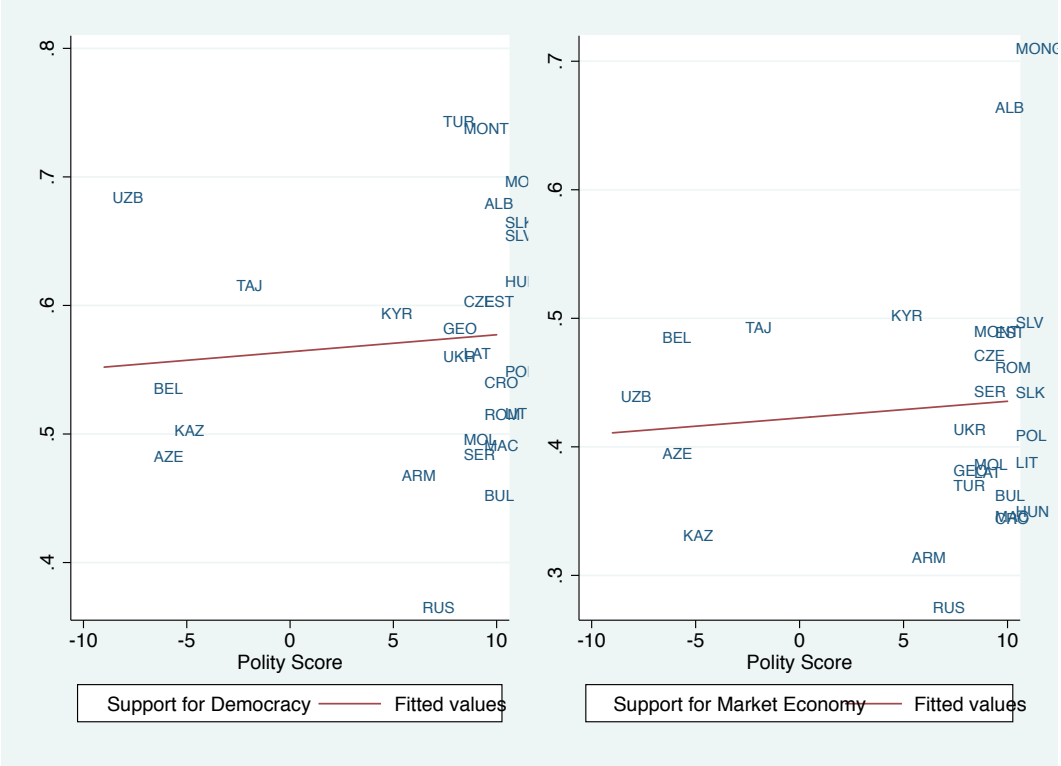
Note For each country, this graph plots the share of the population that unequivocally supports the free market. The horizontal line indicates the 2010 average for the western comparator countries (France, Germany, Italy, Sweden and the UK).

Figure 2: Political Preferences and Polity Score

Panel A: Negative relationship between support for democracy and market and polity socre in 2010



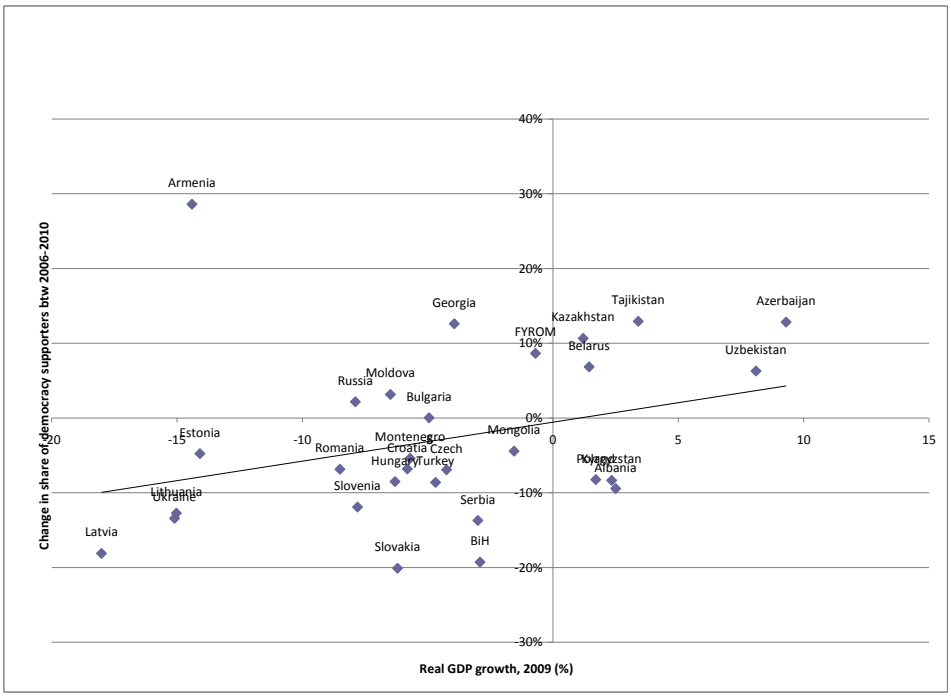
Panel B: Panel A: Weak positive relationship between support for democracy and market and polity socre in 2006



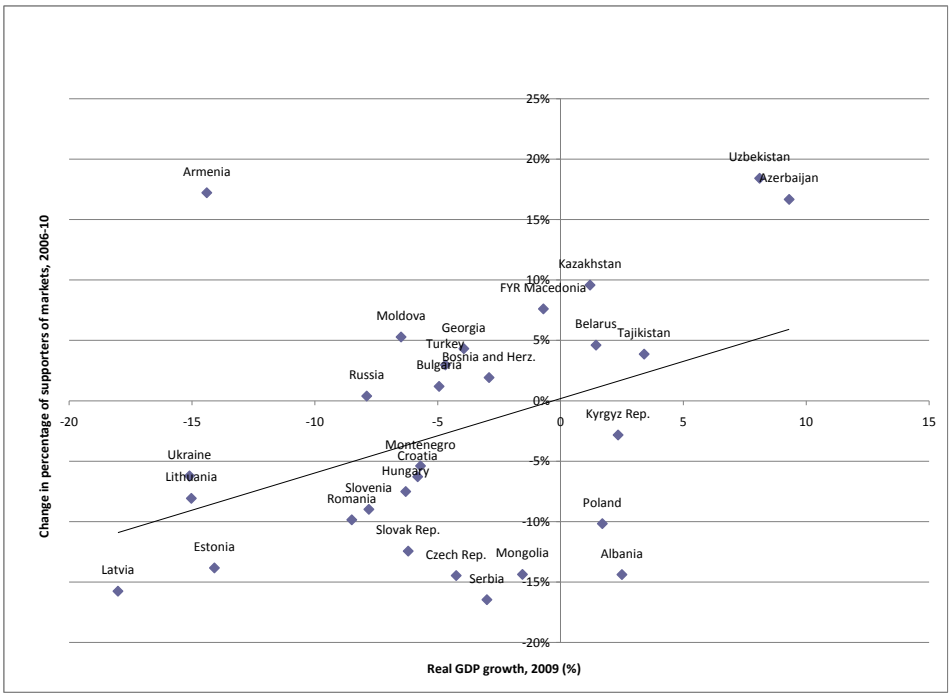
Source LiTS, 2006 and 2010, World Development Indicators

Figure 3: Inverse Relationship between Pro-democracy or Market Attitudes and GDP growth

Panel A: Decline of support for democracy where crisis hit



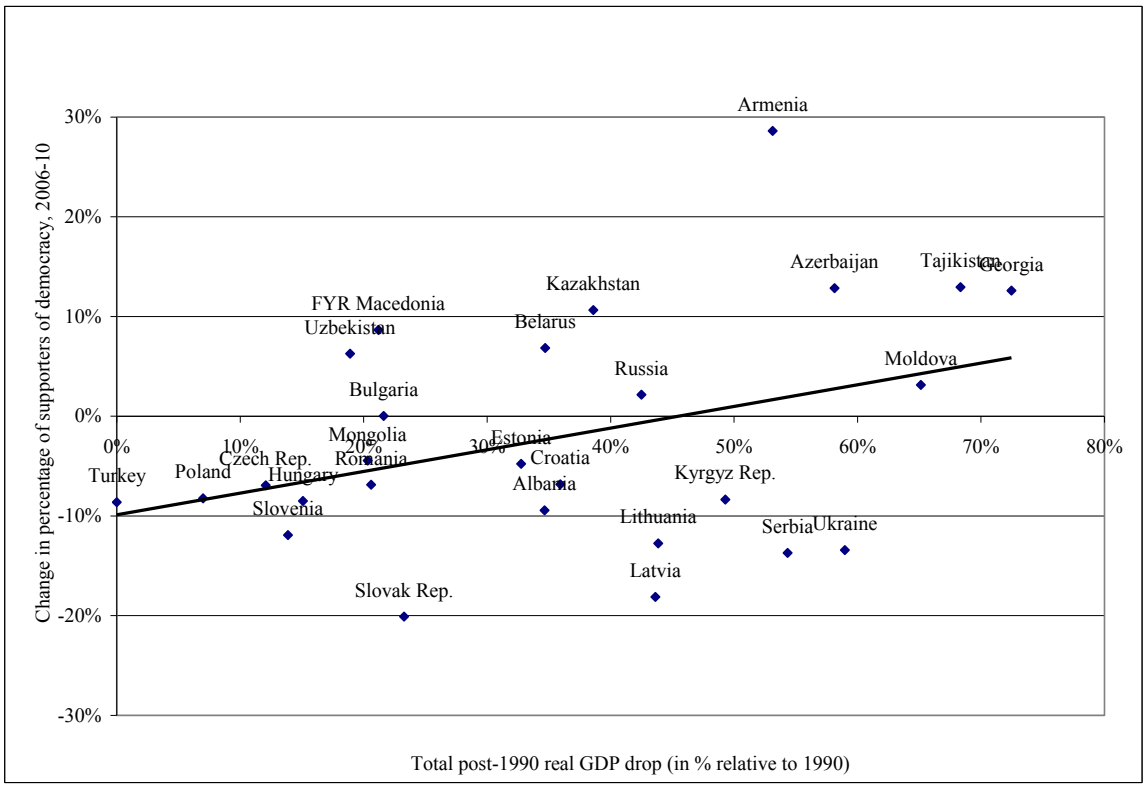
Panel B: Decline of support for market economy where crisis hit



Source LiTS, 2006 and 2010, World Development Indicators

Note For each country, this graph plots the change in the share of the population that unequivocally supports democracy (panel A) or free markets (panel B) between 2006 and 2010 against the country's real GDP growth rate in 2009. The line represents the best linear approximation of the relationship between the two variables, as determined by an OLS regression model.

Figure 4: Decline in support for democracy was greater in countries with smaller post-1990 recessions



Source: LiTS, 2006 and 2010, World Development Indicators

Note: For each country, this graph plots the change in the share of the population that unequivocally supports free market between 2006 and 2010 against the total percentage drop in the country's real GDP after 1990, relative to the 1990 GDP level. The line represents the best linear approximation of the relationship between the two variables, as determined by an OLS regression model.

Table 1: LiTS Descriptive statistics for 2006 and 2010

Panel A: Whole sample

	Year	Obs	Mean	Std. Dev.	Min	Max
Support democracy	2006	28956	0.57	0.49	0	1
	2010	34060	0.58	0.49		
Support market economy	2006	28936	0.43	0.49	0	1
	2010	32799	0.41	0.49		
Crisis consumption response	2010	38836	1.06	1.32	0	8
Mid income	2006	29002	0.33	0.47	0	1
	2010	35346	0.33	0.47		
rich	2006	29002	0.33	0.47	0	1
	2010	35346	0.33	0.47		
age	2006	29000	46.52	17.72	17	97
	2010	38840	45.89	17.37		
young	2006	29008	0.14	0.35	0	1
	2010	38864	0.14	0.35		
old	2006	29008	0.12	0.32	0	1
	2010	38864	0.10	0.30		
male	2006	29002	0.42	0.49	0	1
	2010	38820	0.40	0.49		
secondary edu	2006	27411	0.51	0.50	0	1
	2010	37572	0.32	0.47		
tertiary edu	2006	27411	0.01	0.09	0	1
	2010	37572	0.06	0.24		
pensioner	2006	29002	0.23	0.42	0	1
	2010	38864	0.21	0.41		
student	2006	29002	0.03	0.18	0	1
	2010	38864	0.03	0.17		
housewife	2006	29002	0.07	0.26	0	1
	2010	38864	0.08	0.27		
farmer/farm worker	2006	29002	0.05	0.22	0	1
	2010	38864	0.05	0.21		
unemp	2006	29002	0.07	0.26	0	1
	2010	38864	0.08	0.27		
outlab	2006	29002	0.07	0.25	0	1
	2010	38864	0.05	0.23		
employee of state company	2006	29002	0.18	0.38	0	1
	2010	38864	0.17	0.37		
employee private domestic company	2006	29002	0.18	0.39	0	1
	2010	38864	0.21	0.41		
employee foreign company	2006	29002	0.02	0.13	0	1
	2010	38864	0.03	0.16		
Corruption institutions	2006	28987	1.66	0.87	1	5
	2010	37719	1.79	0.96		
Use institutions	2006	29002	0.16	0.16	0	1
	2010	38696	0.22	0.18		
Polity 2	2006	29002	5.64	5.86	-9	10
	2010	38696	5.49	5.90	-9	10
World Bank gov.	2006	29002	-0.09	0.70	-1.47	1.67
	2010	38696	-0.06	0.66	-1.26	1.07

Panel B: By region, selected statistics

	Variable	Year	Mean	sd	sd
Eastern Europe	Support democracy	2006	0.58	0.49	0.49
		2010	0.51	0.50	0.50
	Support market economy	2006	0.43	0.50	0.50
		2010	0.37	0.48	0.48
	Crisis	2010	1.19	1.38	1.38
	Corruption institutions	2006	1.57	0.80	0.80
		2010	1.67	0.80	0.80
	Use institutions	2006	0.16	0.17	0.17
		2010	0.23	0.20	0.20
	Polity 2	2006	9.07	0.77	0.77
		2010	9.06	0.76	0.76
	World Bank gov.	2006	0.37	0.52	0.52
		2010	0.38	0.47	0.47
CIS	Support democracy	2006	0.56	0.50	0.50
		2010	0.59	0.49	0.49
	Support market economy	2006	0.42	0.49	0.49
		2010	0.46	0.50	0.50
	Crisis	2010	1.12	1.29	1.29
	Corruption institutions	2006	1.78	0.93	0.93
		2010	2.17	1.11	1.11
	Use institutions	2006	0.16	0.16	0.16
		2010	0.22	0.17	0.17
	Polity 2	2006	1.69	6.65	6.65
		2010	1.23	6.50	6.50
	World Bank gov.	2006	-0.66	0.42	0.42
		2010	-0.62	0.37	0.37
Western Europe	Support democracy	2010	0.76	0.43	0.43
	Support market economy	2010	0.45	0.50	0.50
	Crisis	2010	0.46	0.97	0.97
	Corruption institutions	2010	1.19	0.47	0.47
	Use institution	2010	0.17	0.16	0.16
	Polity 2	2010	9.82	0.39	0.39
	World Bank gov.	2010	1.24	0.37	0.37

Table 2: The evolution of attitudes between 2006 and 2010 – Pooled Cross Section OLS Estimates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Support for democracy				Support for market economy			
year 2010	-0.044*	-0.084***	-0.003	-0.048**	-0.036*	-0.071***	0.011	-0.040**
	[0.023]	[0.021]	[0.033]	[0.021]	[0.019]	[0.022]	[0.021]	[0.017]
CIS	0.002	-0.040			0.012	-0.025		
	[0.034]	[0.034]			[0.031]	[0.038]		
year 2010*CIS		0.089*				0.078**		
		[0.044]				[0.035]		
Polity			0.003				0.003	
			[0.003]				[0.002]	
year 2010*Polity			-0.006*				-0.008***	
			[0.003]				[0.002]	
WB gov				0.032				0.011
				[0.021]				[0.017]
year 2010*WB gov				-0.049				-0.067***
				[0.032]				[0.020]
mid income	0.049***	0.050***	0.050***	0.049***	0.041***	0.041***	0.042***	0.041***
	[0.008]	[0.008]	[0.008]	[0.008]	[0.006]	[0.006]	[0.006]	[0.006]
rich	0.086***	0.087***	0.086***	0.086***	0.082***	0.083***	0.083***	0.083***
	[0.010]	[0.010]	[0.010]	[0.010]	[0.008]	[0.008]	[0.009]	[0.008]
young	0.025**	0.024**	0.024**	0.027***	0.037***	0.036***	0.039***	0.035***
	[0.010]	[0.010]	[0.010]	[0.009]	[0.009]	[0.009]	[0.010]	[0.009]
age	-0.044***	-0.045***	-0.045***	-0.047***	-0.062***	-0.063***	-0.061***	-0.061***
	[0.011]	[0.011]	[0.011]	[0.011]	[0.012]	[0.012]	[0.012]	[0.011]
male	0.037***	0.038***	0.038***	0.038***	0.042***	0.043***	0.042***	0.042***
	[0.008]	[0.008]	[0.008]	[0.008]	[0.008]	[0.008]	[0.008]	[0.008]
second edu	0.046***	0.039***	0.043***	0.043***	0.046***	0.040***	0.043***	0.041***
	[0.013]	[0.013]	[0.014]	[0.014]	[0.011]	[0.011]	[0.013]	[0.012]
tertiary edu	0.122***	0.111***	0.107***	0.117***	0.103***	0.093***	0.082***	0.096***
	[0.030]	[0.032]	[0.031]	[0.030]	[0.020]	[0.023]	[0.023]	[0.023]
pensioner	-0.110***	-0.110***	-0.112***	-0.113***	-0.136***	-0.136***	-0.142***	-0.134***
	[0.016]	[0.016]	[0.016]	[0.015]	[0.017]	[0.018]	[0.017]	[0.017]
student	0.052**	0.051**	0.056**	0.048**	-0.017	-0.018	-0.017	-0.017
	[0.021]	[0.021]	[0.020]	[0.020]	[0.023]	[0.023]	[0.024]	[0.022]
housewife	-0.004	-0.003	-0.002	-0.001	-0.033	-0.032	-0.029	-0.035*
	[0.020]	[0.020]	[0.019]	[0.019]	[0.020]	[0.020]	[0.017]	[0.019]
farmfarmworker	0.005	0.008	0.004	0.010	-0.003	-0.001	-0.005	-0.004
	[0.017]	[0.017]	[0.017]	[0.017]	[0.024]	[0.024]	[0.023]	[0.022]
unemployed	-0.025	-0.023	-0.023	-0.024	-0.047***	-0.045**	-0.048**	-0.047***
	[0.015]	[0.016]	[0.016]	[0.015]	[0.017]	[0.017]	[0.018]	[0.017]
outlab	-0.064***	-0.063***	-0.061***	-0.062***	-0.078***	-0.077***	-0.077***	-0.078***
	[0.014]	[0.015]	[0.015]	[0.015]	[0.017]	[0.018]	[0.018]	[0.017]
state employee	-0.014	-0.011	-0.014	-0.012	-0.052***	-0.050***	-0.054***	-0.050***
	[0.015]	[0.015]	[0.015]	[0.014]	[0.017]	[0.017]	[0.016]	[0.016]
priv. dom.	-0.051***	-0.050***	-0.055***	-0.053***	-0.054***	-0.053***	-0.058***	-0.051***
employee	[0.014]	[0.014]	[0.013]	[0.013]	[0.016]	[0.017]	[0.017]	[0.016]
foreign employee	0.027	0.028	0.030	0.020	-0.019	-0.019	-0.023	-0.013
	[0.021]	[0.022]	[0.023]	[0.021]	[0.018]	[0.018]	[0.021]	[0.018]
Observations	52,357	52,357	50,621	52,357	51,568	51,568	49,853	51,568
R-squared	0.028	0.030	0.029	0.030	0.031	0.032	0.034	0.033

Notes: The table reports OLS estimates. The unit of observation is an individual. All regressions are with a constant. "WB gov" is the World Bank country level governance indicator. Robust standard errors clustered at the country level are reported in brackets. *** significantly different from 0 at the 1% level, ** significantly different from 0 at the 5% level, * significantly different from 0 at the 10% level.

Source: 2006 and 2010 LiTS, World Bank, Polity IV.

Table 3: Political attitudes and exposure to the crisis – Individual level OLS estimates

	1	2	3	4	5	6	7	8
	Support for democracy				Support for market			
crisis	-0.033***	-0.031***	-0.026***	-0.020***	-0.029***	-0.028***	-0.030***	-0.025***
	[0.008]	[0.008]	[0.004]	[0.004]	[0.007]	[0.007]	[0.005]	[0.005]
mid income		0.034***		0.035***		0.027***		0.027***
		[0.009]		[0.008]		[0.008]		[0.009]
high income		0.059***		0.063***		0.057***		0.058***
		[0.013]		[0.010]		[0.010]		[0.011]
young		-0.001		0.005		0.029*		0.015
		[0.017]		[0.013]		[0.017]		[0.013]
old		-0.040**		-0.039**		-0.057***		-0.049***
		[0.019]		[0.015]		[0.015]		[0.013]
male		0.038***		0.025***		0.035***		0.027***
		[0.010]		[0.007]		[0.010]		[0.008]
Second edu		0.055**		0.061***		0.039		0.027*
		[0.023]		[0.013]		[0.025]		[0.014]
Tertiary edu		0.102***		0.127***		0.085***		0.078***
		[0.035]		[0.018]		[0.025]		[0.013]
pensioner		-0.089***		-0.051***		-0.119***		-0.084***
		[0.020]		[0.014]		[0.018]		[0.014]
student		0.033		0.046**		-0.030		-0.019
		[0.026]		[0.022]		[0.032]		[0.028]
housewife		0.004		-0.032*		-0.014		-0.037**
		[0.022]		[0.016]		[0.021]		[0.015]
farmfarmworker		-0.022		0.011		-0.007		0.002
		[0.033]		[0.019]		[0.020]		[0.014]
unemp		0.005		-0.028**		0.003		-0.019
		[0.019]		[0.012]		[0.022]		[0.016]
outlab		-0.043**		-0.059***		-0.032**		-0.049***
		[0.019]		[0.014]		[0.014]		[0.014]
urban		0.008		0.001		-0.008		-0.008
		[0.019]		[0.013]		[0.013]		[0.012]
state employee		-0.013		-0.003		-0.055***		-0.048***
		[0.017]		[0.013]		[0.015]		[0.010]
private domestic emp.		-0.030		-0.021*		-0.039*		-0.013
		[0.018]		[0.010]		[0.019]		[0.011]
foreign firm emp.		0.050*		0.021		0.019		0.025
		[0.027]		[0.024]		[0.032]		[0.021]
Country dummies	no	no	yes	yes	no	no	yes	yes
Observations	34,036	30,909	34,036	30,909	32,781	29,703	32,781	29,703
R-squared	0.008	0.029	0.084	0.104	0.006	0.029	0.061	0.072

Notes: The table reports OLS estimates. The unit of observation is an individual. All regressions are with a constant. Robust standard errors clustered at the country level are reported in brackets. *** significantly different from 0 at the 1% level, ** significantly different from 0 at the 5% level, * significantly different from 0 at the 10% level.
Source: 2010 LiTS

Table 4: Political attitudes and exposure to the crisis in different regions – Individual level OLS estimates

	1	2	3	4	5	6	7	8	9	10	11	12
	Support for democracy											
	High Polity		Low Polity		Very low Polity		Eastern Europe		CIS		Western Europe	
crisis	-0.044***	-0.023***	0.000	-0.011	0.010	0.005	-0.019**	-0.020***	-0.008	-0.015**	-0.038***	-0.028***
	[0.009]	[0.004]	[0.010]	[0.008]	[0.012]	[0.010]	[0.007]	[0.006]	[0.008]	[0.006]	[0.003]	[0.004]
socio-eco controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
country dummies	no	yes	no	yes	no	yes	no	yes	no	yes	no	yes
Observations	20,578	20,578	10,331	10,331	5,085	5,085	15,434	15,434	10,184	10,184	5,291	5,291
R-squared	0.047	0.112	0.023	0.092	0.029	0.066	0.037	0.079	0.026	0.081	0.062	0.084

	13	14	15	16	17	18	19	20	21	22	23	24
	Support for market economy											
	High Polity		Low Polity		Very low Polity		Eastern Europe		CIS		Western Europe	
crisis	-0.029***	-0.023***	-0.023*	-0.028**	0.009	0.005	-0.018***	-0.019***	-0.025**	-0.031**	-0.061**	-0.039***
	[0.009]	[0.005]	[0.012]	[0.011]	[0.014]	[0.012]	[0.006]	[0.006]	[0.011]	[0.010]	[0.017]	[0.008]
socio-eco controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
country dummies	no	yes	no	yes	no	yes	no	yes	no	yes	no	yes
Observations	19,676	19,676	10,027	10,027	4,993	4,993	14,840	14,840	9,961	9,961	4,902	4,902
R-squared	0.033	0.082	0.029	0.056	0.025	0.044	0.032	0.056	0.031	0.059	0.034	0.132

Notes: The table reports OLS estimates. The unit of observation is an individual. All regressions are with a constant. Robust standard errors clustered at the country level are reported in brackets. *** significantly different from 0 at the 1% level, ** significantly different from 0 at the 5% level, * significantly different from 0 at the 10% level. "Individual controls" are: income categories, age categories, gender, education categories, pensioner, student, housewife, farmer or farm worker, unemployed, outside labor force, employee of state enterprise, employee of private domestic company, employee of foreign firm. "High Polity" defines a group of countries with Polity scors above 8. "Low Polity" and "Very low polity" define groups of countries with Polity scores strictly below 8 and 4, respectively.
Source: 2010 LiTS, Polity IV

Table 5: The Struggling Youth as a Vector of Political Change in Corrupt Countries – Individual level OLS estimates

	1	2	3	4	5	6	7	8	9	10	11	12
	Support democracy								Support market economy			
	Whole transition region		CIS		Eastern Europe		Whole transition region		CIS		Eastern Europe	
	All	Young	All	Young	All	Young	All	Young	All	Young	All	Young
crisis	-0.030***	-0.033**	-0.039***	-0.061***	-0.020	-0.019	-0.031***	-0.047***	-0.056***	-0.081***	-0.023*	-0.030
	[0.002]	[0.010]	[0.004]	[0.004]	[0.108]	[0.262]	[0.003]	[0.004]	[0.003]	[0.002]	[0.074]	[0.138]
corruption	-0.021**	-0.039***	-0.018	-0.036**	-0.021	-0.046**	-0.015	-0.032**	-0.002	-0.015	-0.035***	-0.058***
	[0.016]	[0.002]	[0.117]	[0.035]	[0.127]	[0.017]	[0.143]	[0.013]	[0.880]	[0.377]	[0.006]	[0.001]
crisis*corruption	0.006*	0.011**	0.010**	0.019***	0.001	0.006	0.004	0.014*	0.010*	0.024**	0.003	0.007
	[0.066]	[0.014]	[0.026]	[0.001]	[0.888]	[0.371]	[0.318]	[0.067]	[0.075]	[0.012]	[0.581]	[0.496]
individual controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
country dummies	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Observations	24,973	7,386	9,825	3,294	15,148	4,092	24,193	7,155	9,627	3,229	14,566	3,926
R-squared	0.08	0.06	0.08	0.06	0.08	0.06	0.06	0.05	0.06	0.05	0.06	0.05

Notes: See Notes to Table 4

Table 6: The Struggling Youth as a Vector of Political Change in Corrupt Countries – 2 Stage Least Square estimates

Panel A: First stage estimates: Dependent variable: corruption												
	Whole transition region		CIS		Eastern Europe							
	All	Young	All	Young	All	Young						
	1	2	3	4	5	6						
Use institutions	0.526***	0.504***	0.967***	0.870***	0.266**	0.259						
	[0.000]	[0.001]	[0.000]	[0.000]	[0.018]	[0.107]						
Individual controls	yes	yes	yes	yes	yes	yes						
country dummies	yes	yes	yes	yes	yes	yes						
	28,738	8,361	11,602	3,840	17,136	4,521						
	0.26	0.27	0.26	0.27	0.11	0.12						
Panel B: Second stage estimates												
	7	8	9	10	11	12	13	14	15	16	17	18
	Support democracy						Support market economy					
	Whole transition region		CIS		Eastern Europe		Whole transition region		CIS		Eastern Europe	
	All	Young	All	Young	All	Young	All	Young	All	Young	All	Young
crisis	-0.041**	-0.074**	-0.088**	-0.146***	-0.055	-0.028	-0.045***	-0.049**	-0.042	-0.099**	-0.055**	-0.043
	[0.038]	[0.010]	[0.017]	[0.001]	[0.134]	[0.591]	[0.001]	[0.018]	[0.117]	[0.017]	[0.036]	[0.157]
corruption	0.086	-0.019	0.038	-0.027	0.134	-0.030	0.153***	0.085	0.116**	0.032	0.231*	0.152
	[0.164]	[0.808]	[0.301]	[0.690]	[0.480]	[0.891]	[0.004]	[0.253]	[0.018]	[0.607]	[0.099]	[0.458]
crisis*corruption	0.009	0.027**	0.025*	0.052***	0.021	0.005	0.013**	0.018**	0.011	0.035**	0.021	0.019
	[0.377]	[0.044]	[0.060]	[0.000]	[0.327]	[0.873]	[0.029]	[0.035]	[0.296]	[0.023]	[0.212]	[0.265]
individual controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
country dummies	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Observations	24,709	7,288	9,929	3,343	14,780	3,945	25,524	7,533	10,152	3,417	15,372	4,116
R-squared	0.06	0.05	0.06	0.05	0.06	0.04	0.08	0.05	0.08	0.06	0.08	0.06

Notes: See Notes to Table 4

Table 6: Crisis, government programmes and support for democracy and a market economy - Individual level OLS estimates

	1	2	3	4	5	6
	Transition region		Eastern Europe		CIS	
	Support democracy	Support market economy	Support democracy	Support market economy	Support democracy	Support market economy
Crisis	-0.0240***	-0.0293***	-0.0291***	-0.0360***	-0.0199**	-0.0333**
	[0.00464]	[0.00620]	[0.00357]	[0.00509]	[0.00816]	[0.0116]
Apply for social	0.00211	0.0206	-0.0398	-0.00668	-0.0149	0.00655
assistance	[0.0180]	[0.0267]	[0.0399]	[0.0357]	[0.0243]	[0.0393]
Receive social	0.0107	-0.0147	0.0976**	0.0415	-0.0254	-0.0570
assistance	[0.0268]	[0.0278]	[0.0411]	[0.0235]	[0.0366]	[0.0399]
Apply unemp. benefits	-0.0298	-0.0253	-0.0111	-0.0410	-0.0131	0.0140
	[0.0197]	[0.0212]	[0.0509]	[0.0524]	[0.0345]	[0.0238]
Receive	-0.0108	-0.0232	-0.0299	-0.0185	-0.00764	-0.113*
unemp.benefits	[0.0292]	[0.0281]	[0.0609]	[0.0609]	[0.0710]	[0.0600]
Individual controls	yes	yes	yes	yes	yes	yes
Country dummies	yes	yes	yes	yes	yes	yes
Observations	25232	24411	7607	7416	9128	8832
R-squared	0.082	0.062	0.074	0.068	0.078	0.051

Notes: See Notes to Table 4