FREE Policy Brief Series

Adapting to Capitalism

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When transitioning to a free-market economy, do people adapt to the new circumstances immediately? Undoubtedly, major shifts in the political system do not escape people's notice. They often follow extended demonstrations, spectacular coups d'état or even violent uprising. However, the changes in economic institutions that go along with such transitions, and their implications for optimal economic behavior, although fundamental, may not be apparent immediately. The German reunification provides the opportunity to study this learning process.

In the past two decades many Eastern European countries have started to transition from communism to Western-oriented democracies. Along with the political change, many economic institutions have been transformed into more market-oriented systems. Some of these changes are undoubtedly very obvious and easy to adapt to; others are more subtle.

Take for example the welfare-related institutions. Under socialism, health care, social security and the like were planned and run by the state, often with extreme levels of redistribution. Private markets for insurance and services were absent; there was no room for individual choice. The question is then, after state-planning was abandoned and people were confronted with the transition to a capitalist system, did they understand their new individual responsibility immediately? Were the individual opportunities in market-based economies apparent to everyone, or did people need to learn to act optimally? Moreover, has transition been a success? How long did it take, and what factors make it successful?[1]

Hard economic indicators like growth rates and income receive much attention in attempts to answer these questions. But how do people fare under the new regimes? Using Data from the World Values Survey as well as the EBRD's transition report from 2007, Guriev and Zhuravskaya (2009) document a significantly lower life satisfaction for people living in transition economies. They show that two big factors explaining this "happiness gap" are unmatched expectations about continued high public-good provision and an increase in economic uncertainty. Yet, people living in western democracies with equally low public-good provisions, and equally high levels of individual economic risk, report higher life satisfaction. Well-developed market economies provide opportunities to privately buy the goods that were state-provided before, and insure at least parts of the risk individuals face in non-command societies. Is it that in the transition economies, these market solutions are not sufficiently developed yet, leaving people indeed without a chance to achieve higher life satisfaction? Or, have they not learned to use these markets optimally? An

[1] The European Bank of Reconstruction and Development provides yearly reports on the state of transition in the Central and Eastern European economies.

answer to this question is essential to evaluate the success of institutional change and draw lessons for future transition economies.

Intuitively, it seems clear that neither building new institutions nor getting used to them is immediate. Yet, while the transition path for policy reform has received much attention, evidence for how people learn is hard to come by. Typically, institutions evolve at the same time as people learn to adapt to the change, making it impossible to disentangle the two.

The German "Natural Experiment"

The German reunification presents a unique opportunity to study people's reaction to institutional change. Two characteristics of the German case are special. First, the influence of socialism can be interpreted as an exogenous shock on a random subset of the German people. The division of Germany was not their choice, but imposed by the Allied Forces, and the new border determined by where the forces were standing at the end of World War II. During the time of separation, migration was minimal.

Reunification then came rather surprisingly. The large protest that led to the fall of the Berlin Wall in November 1989 had started only two months earlier. Re-unification of the two German states was finalized a mere year later. Former West Germans thus constitute a credible control group for former East Germans.

Second, with the Unification Treaty in 1990, East Germany implemented the political and economic system of the FRG in its pre-existing form. New institutions did therefore not need to be developed; they were already well-functioning and rapidly imposed onto the East German population. Any observed adaptation process can thus be interpreted as people adjusting to the new institutions rather than the parallel development of these institutions.

Health-Insurance Reforms and Differential Reaction

To identify whether former East Germans adapted to the new economic order immediately, I study their reaction to a series of health care reforms and compare it to that of former West German citizens.

Before 1990, both German health care systems had provided almost universal coverage. Their organization however differed: while in East Germany, all health care provision had been state owned and health care free to citizens, West Germany had a market for health services and a public health insurance (funded out of pay- roll taxes) had provided extensive coverage to the vast majority of the population. With reunification, the market-based system was implemented in East Germany. However, since coverage remained de facto the same, the institutional change may not have been immediately apparent to East Germans at the time. Only starting in 1997, a series of reforms decreased coverage under the public health insurance system.

Following such reforms, a rational and well-informed individual would assess his personal insurance status and potentially sign a complementary private insurance.

This decision would depend on demographic characteristics, risk attitudes and possibly aggregate economic circumstances. But what if he does not understand the market institutions at work? What if he has not realized that health insurance is not entirely state-planned, but rather his individual responsibility. After living in a socialist regime, were seven years enough for East Germans to understand the new institutional structure? Or did they need more time to adapt to the capitalist institutions of the unified Germany?

A basic regression analysis of a probability model reveals that on average, over the course of several health insurance reforms, former East Germans were indeed significantly less likely to purchase additional private insurance than their West German counterparts. Table 1 shows the results[2] of this baseline regression, which also controls for several demographic characteristics that ought to affect the probability of purchasing private insurance.

Table 1. Basic Regression

Did respondent sign complementary health insurance?	Coefficients (Standard Errors)		Coefficients (Standard Errors)
East	-0.517*** (0.008)		
Age	-0.022* (0.010)	High school degree*	0.334*** (0.051)
Female	0.116*** (0.033)	Full or part time employed*	0.071* (0.036)
Widowed	-0.148*** (0.023)	Log (household net income)	0.244*** (0.017)

Probit regression. * Dummy variable
*** Significant at 1%, ** significant at 5%, * significant at 10%.

Adapting to New Institutions - a Learning Process

How did this pattern change over time then? Breaking down the results year by year reveals that the difference between former East and West Germans is indeed largest in 1995 and then steadily declines over the following ten years.[3]

Table 2: Basic Regression with East-Year Interactions

Did respondent sign complementary health insurance?	Coefficients (Standard Errors)		Coefficients (Standard Errors)
East	-0.978*** (0.012)		
East * 1996	0.230*** (0.006)	1996	-0.095*** (0.007)
East * 1997	0.269*** (0.004)	1997	-0.198*** (0.013)
East * 1998	0.470*** (0.001)	1998	0.245*** (0.001)
East * 1999	0.403*** (0.008)	1999	0.271*** (0.012)
East * 2000	0.458*** (0.008)	2000	0.258*** (0.014)
East * 2001	0.444*** (0.015)	2001	0.353*** (0.023)
East * 2002	0.460*** (0.012)	2002	0.365*** (0.026)
East * 2003	0.512*** (0.014)	2003	0.406*** (0.027)
East * 2004	0.548*** (0.008)	2004	0.453*** (0.028)
East * 2005	0.544*** (0.007)	2005	0.564*** (0.032)

Probit regression.
*** Significant at 1%, ** significant at 5%, * significant at 10%.

The coefficients in table 2 measure the increase in the probability of signing a private insurance contract since the base year 1995. This change in the signing probability is determined by two independent effects: On the one hand, it changes because of the policy reforms - decreasing coverage of the public insurance system make it more likely for each individual, East or West German, to sign a private insurance. On the other hand, there is a learning effect - the more time passes, the more likely people are to understand the underlying institutions, and so the more likely they are to sign a private health insurance.

The coefficients on the year dummies (right column) document that the likelihood for West Germans to buy additional health insurance increases every year, starting in 1998, after the

[2] All tables present only an excerpt of the results. The full analysis can be found in Simon (2011). Data is taken from the German Socio-Economic Panel (SOEP (2007)) and ranges from 1995 to 2005. Note that due to the nonlinearity of a probit regression, the estimated coefficient cannot be interpreted as the marginal effect of each explanatory variable on the likelihood of getting private insurance. The interpretation of the regression results here just focuses on the sign and the level of significance of the coefficients.

[3] A series of one-sided hypothesis tests confirms that the coefficients on the East-year interactions are indeed increasing over time. For details see Simon (2011).

first big health care reform. The east-year interaction coefficients (left column) present the same measure for East Germans. Notice that the left column coefficients are larger than those in the right column every year: the probability of buying additional health insurance increases faster among East Germans than among West Germans. While the change due to reforms is the same for all Germans, the learning effect is stronger for East Germans.

How Long Does It Take to Adapt?

While these results are evidence for a stronger learning effect among East Germans, drawing a definite conclusion about the speed of convergence is difficult. Only if all West Germans were assumed to have the correct beliefs (so that their learning effect is zero), would the difference between East and West Germans in any given year correspond only to a learning effect among the former East German population.

It is remarkable, however, that 15 years after the German reunification there were still significant differences in how the formerly West- and East Germans react to insurance reform. Within the eleven years of the sample, this gap only decreased by roughly 50%.

Adapting to new institutions does not happen overnight. Despite the very obvious political changes following the fall of the wall, the East German people seem to take their time in absorbing the institutional changes that went along with the transition to a market economy.

Who learns faster: Young vs. Old

Arguably, not everyone learned at the same pace. In terms of health risks, age is an important factor. The health care reforms have cut benefits for artificial dentition and glasses, and so have a particularly strong impact on older people. Moreover, the number of pharmaceuticals regularly prescribed on average increases with age, so that higher co-pay affects the older population more. Given the higher risk they face, older people should be more likely to have additional coverage.

Among the East German population, however, there are two opposing effects: while older people in general are more likely to buy additional health insurance, they were also exposed to the socialist regime the longest, making them potentially more likely to have the wrong beliefs about the welfare state, and therefore less likely to buy private insurance contracts than younger East Germans.

The data confirms that older East Germans are even less likely to have the right beliefs than younger East Germans. Table 3 reports regression results for five different cohorts. East Germans in the youngest group have spent only their childhood in the socialist regime. For them, the “East-effect” is the least pronounced. They do not, however, learn faster than the older population on average.[4]

Preferences and Attitudes

Systematic differences in preferences or attitudes towards risk could be an alternative explanation for the observed “East-effect”. Maybe East Germans were well aware of the changed institutions, but had other reasons to buy less insurance.

Alesina & Fuchs-Schündeln (2007) document that living under a socialist regime can influence preferences about public social policies. They show that former East Germans are more likely to prefer the state to be responsible for providing social services, insurance, and redistribution. Observing former East Germans to be less likely to seek additional insurance beyond the coverage of the public health insurance could be a consequence of or at least correlated with them having a stronger preference for state intervention. If, for example, an agent thinks

[4] See Simon (2011) for the full analysis.

that the contracts offered in the private market are unfair, he might have a stronger preference for the state to intervene and be less likely to buy private insurance.

Table 3. Basic Regression for Different Age Groups

Did respondent sign complementary health insurance?	Born 1975-1989	Born 1965-1974	Born 1955-1964	Born 1945-1954	Born before 1945
East	-0.332*** (0.022)	-0.579*** (0.001)	-0.808*** (0.016)	-1.195*** (0.030)	-1.594*** (0.055)

Probit regression.
*** Significant at 1%, ** significant at 5%, * significant at 10%.

Interestingly, the effect of the preferences for state responsibilities is quite different among former East- and West Germans. While a stronger preference for state intervention makes respondents significantly less likely to purchase additional insurance among West Germans, there is no significant effect among the former East German population (see table 4 below).

Table 4: Preference Regression

Did respondent sign complementary health insurance?	Coefficients (Standard Errors)
East	-0.727*** (0.001)
Preference	-0.208*** (0.020)
East * Preference	0.024 (0.039)

Probit regression. Preference is a variable that contains the answer to the question of who should be responsible for the financial security incase if illness. It takes on the value 1 if the answer was "only the state" or "mostly the state", and 0 for "both state and private forces", "mostly private forces", or "only private forces".
*** Significant at 1%, ** significant at 5%, * significant at 10%.

It could also be the case that East Germans are either less risk averse or simply take less risks, prompting them to buy less additional insurance. Table 5 reports the results of the baseline regression augmented by measures of risk taking and risk aversion variables. The coefficients are as expected: the more willing a respondent is to take risks, the more likely he is to buy additional insurance. Most likely, insurance contracts cannot control for these attitudes towards risk taking, so that this effect could be evidence for adverse selection or moral hazard. Naturally, the more risk averse a respondent reports he is, the more likely he is to have insurance. Interestingly, these effects are very similar for East and West Germans. For risk taking, the coefficients are almost exactly the same, while risk aversion is a little bit more influential among East Germans than it is among West Germans.

Table 5: Risk Regression

Did respondent sign complementary health insurance?	Coefficients (Standard Errors)
East	-0.782*** (0.011)
Risk taking	0.03*** (0.002)
East * Risk taking	0.03*** (0.003)
Risk aversion	0.011*** (0.001)
East * Risk aversion	0.037*** (0.002)

Probit regression.
*** Significant at 1%, ** significant at 5%, * significant at 10%.

These risk attitudes, however, are not a function of which regime an individual lived in before reunification. Table 6 shows that former East Germans seem a little more willing to take risks than West Germans. If anything, this should make them more likely to buy additional insurance, but the effect is only significant at the 10% level. For risk aversion, the East dummy is not significant at all. These results make it safe to reject the hypothesis that the differences in the probability to take

up complementary health insurance between East and West Germans is due to differences in risk taking behavior or risk aversion.

Summary

It is hard to know how exactly people adapt to new institutions. The results presented here, however, provide evidence for the existence of a substantial learning period. Taking into account that people need time to adjust is critical for predicting the success and speed of an economy's transition to capitalism.

Table 6. Risk Regression

Dependent Variable:	Risk taking	Risk aversion
East	0.121*	0.245
	(0.009)	(0.023)

* Significant at 10%.

References

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