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Institutions, Recessions and Recovery in the Transitional Economies

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In the early 1990s, after the collapse of the Berlin Wall and the break-up of the Soviet Union, many economists argued that the post-communist countries could rapidly develop a capitalist and market system.[1] Some held the market order would rapidly germinate and grow once the old state bureaucracies were swept away. As the influential Western advisor Jeffrey Sachs (1993, xxi) contended: "markets spring up as soon as central planning bureaucrats vacate the field."

In fact, markets did not spring up spontaneously; capital markets, in particular, were slow to develop. As Ronald Coase (1992, 718) observed: "The ex-communist countries are advised to move to a market economy . . . but without the appropriate institutions, no market of any significance is possible." From an institutionalist perspective, markets are not the universal physical ether of economic existence, but social institutions that depend upon the evolution of detailed rules and norms (Hodgson 1988; 2001; Vanberg 2001). In the former communist countries, the requisite commercial rules, norms and institutions were scarce (Clague 1997; Kozul-Wright and Rayment 1997; Grabher and Stark 1997).

More than a decade and a half after the fall of the Berlin Wall, there is now plentiful evidence to consider in explaining the differences in performance in the transitional or post-communist countries of the former Soviet Bloc. All these countries experienced severe or extreme recessions in the 1990s, followed by a subsequent recovery. Jan Svejnar's (2002) survey showed that only Poland and Slovenia had significantly exceeded their 1989 GDP by the year 2000. Hungary, Slovakia and the Czech Republic just about matched their 1989 GDP after 11 years. Other former Eastern Bloc countries were still well below their 1989 GDP levels as late as 2001, with Russia about 40 percent lower and the Ukraine about 60 percent lower. Nauro Campos and Fabrizio Coricelli (2002) reported similar results.[2]

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This article updates these earlier studies and attempts to identify the principal underlying factors that account for overall post-1989 economic growth in the transitional economies. Priority is given to institutional factors rather than standard macroeconomic variables. The sections below respectively present the relevant growth data, consider a number of hypotheses that might account for these growth outcomes, report the econometric results, discuss their significance, and offer some deeper explanations. The concluding section highlights the importance of effective national institutions, enforcing non-discriminatory rules and overcoming the negative economic legacy of ethnic and other divisions.

Data

The statistical analysis here focuses on the growth in GDP and on absolute levels of GDP per capita. Of course, it should not be assumed that GDP is an accurate measure of welfare or well-being. Official GDP figures may also be inaccurate, particularly in assessing the size of undeclared revenues and the illegal economy.

The data cover 27 former communist countries, including nineteen in Europe and eight in Central Asia.[3] Seven of these countries – Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, and Slovenia – joined the European Union (EU) in 2004. Some key indicators are shown in Table 1, which shows a very mixed picture. Fourteen of these former communist countries have experienced negative overall growth in the sixteen-year period. On the other hand, nine have achieved an average 1989-2005 GDP growth rate of over one percent, and in Poland and Albania growth has exceeded two percent. Taking the 1989-2005 period as a whole, only nine countries can claim a modestly successful overall growth rate. The remaining countries have experienced stagnation or decline.

Moreover, two of the more rapidly growing countries – Albania and Turkmenistan – are extremely poor compared with the more developed European countries. Their levels of GDP per capita are instead comparable to developing economies such as Algeria, Guatemala, Namibia and Thailand. The five remaining countries – Poland, Slovenia, Slovakia, Hungary and the Czech Republic – that have exceeded one percent overall growth in the 1989-2005 period have GDP per capita levels well below the 2001 figures of $34,946 per capita in the United States, and $20,860 per capita in the European Union.

The 1990s recessions in transitional economies varied considerably in severity, as shown in Table 1. The least severe was in the Czech Republic, where the downturn of 1992 brought the economy to 87 percent of its 1989 level. In Russia the 1996 downturn brought the economy to 59 percent of its 1989 level. The extremely severe recessions in Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Kyrgyzstan, Moldova, Serbia and Montenegro, Tajikistan, and the Ukraine meant the loss of at least half of their GDP levels in 1989. In some of these countries, the recession was at least partly the result of civil war and the breakdown of internal order.

Table 1. Data for 27 Transitional Economies

	Lowest 1990s GDP level as % of 1989 GDP	Year of lowest 1990s GDP level	Projected 2005 GDP level: 1989=100	Average annual % GDP growth rate, 1989-2005	Estimated 1989 GDP in US$ per capita	Projected 2005 GDP in US$ per capita	Number of years under communist rule	Fearon (2003) index of ethnic fractionalization	Polity IV democracy index for 2000	Inclusion in Western Christendom (Winiecki, 2004)
	RECESS			*GROWTH*	*GDP1989*	*GDP2005*	*YRSCOMM*	*ETHNICFR*	*DEMOC*	*WESTCHR*
Albania	60	1992	144	2.31	1125	1622	41	0.097	6	0
Armenia	43	1993	106	0.36	994	1053	70	0.134	6	0
Azerbaijan	37	1995	92	-0.52	1195	1100	70	0.188	0	0
Belarus	63	1995	118	1.02	1373	1615	70	0.372	0	0
Bosnia & Herzegovina	12	1993	63	-2.85	2252	1418	41	0.681	0	0
Bulgaria	66	1997	93	-0.50	2210	2041	41	0.299	8	0
Croatia	60	1993	98	-0.15	5514	5387	41	0.375	7	1
Czech Republic	87	1992	120	1.13	5317	6367	41	0.505	10	1
Estonia	62	1994	114	0.83	4509	5148	50	0.511	7	1
FYR Macedonia	70	1993	82	-1.20	2235	1843	41	0.535	6	0
Georgia	25	1994	48	-4.38	1662	811	70	0.490	5	0
Hungary	82	1993	126	1.46	4813	6065	41	0.186	10	1
Kazakhstan	61	1995	112	0.70	1836	2052	70	0.664	1	0
Kyrgyzstan	49	1995	79	-1.06	440	371	70	0.679	1	0
Latvia	52	1995	96	-0.27	4427	4242	50	0.585	8	1
Lithuania	53	1994	95	-0.32	4801	4561	50	0.338	10	1
Moldova	33	1999	46	-4.84	978	442	50	0.510	7	0
Poland	82	1991	147	2.47	3560	5259	41	0.047	9	1
Romania	75	1992	105	0.27	2076	2167	41	0.300	8	0
Russian Federation	59	1996	89	-0.95	3125	2683	74	0.333	7	0
Serbia & Montenegro	41	1993	58	-3.29	2114	1238	41	0.575	7	0
Slovakia	75	1993	126	1.53	3603	4597	41	0.332	9	1
Slovenia	82	1992	135	1.67	8279	10786	41	0.231	10	1
Tajikistan	39	1996	75	-1.82	331	247	70	0.513	2	0
Turkmenistan	53	1997	120	1.14	1407	1686	70	0.392	0	0
Ukraine	38	1998	61	-3.08	1725	1046	70	0.419	7	0
Uzbekistan	83	1995	118	1.01	437	513	70	0.485	0	0

Sources: EBRD (2002, 2005), UNCTAD (2003). Data for 2004 and 2005 are estimates or projections given in EBRD (2005). GDP per capita levels were estimated by taking the 2001 levels from UNCTAD (2003) and imposing the growth rates reported in EBRD (2002, 2005).

Explanatory Hypotheses

Several additional datasets exist to test a number of hypothetical explanations of the varied, post-1989 performances of the transitional economies.[4] For convenience we group these different hypotheses together according to the different types of independent variable they identify.

(a) **Property rights and corruption**. The first group of hypotheses addresses the conditions under which legitimate contracts and exchanges may be secured in a market economy. These explanations emphasize the importance of well-defined and enforceable property rights and of the minimization of corruption. These factors can be tested by using the indices of corruption for different countries provided by Transparency International, the indices of property rights from Freedom House, and the index of economic freedom from the Heritage Foundation.[5] A widespread opinion is that economic growth in these transitional economies would be positively correlated with well-defined property rights and negatively correlated with the degree of corruption.

(b) **Governance, democracy and civil liberties**. The second group of hypotheses concerns the characteristics of government and civil liberties. Some variables from the widely used Polity IV dataset were selected, namely the indices of democracy (*DEMOC*), autocracy (*AUTOC*), and regime durability.[6] Another chosen variable in this group was the Freedom House index of civil liberties. Finally, the European Bank for Reconstruction and Development data on the percentage of GDP taken in taxes were included to assess the significance of the capacity of government to raise revenue on economic performance. The aim was to test whether the post-1989 performance in the transitional economies was in any way correlated with these variables.

(c) **Social fractionalization and conflict.** A third group of hypotheses address measures of social fractionalization and conflict. James Fearon's (2003) indices of ethnic and cultural fractionalization were used here, as they refine and supersede other similar datasets. There is significant evidence that ethnic fractionalization has a negative effect on economic activity in other developed and underdeveloped countries, including the United States (Alesina, Baquir and Easterly 1999) and Africa (Easterly and Levine 1997). The hypotheses here are that ethnic or cultural fractionalization might have had similarly negative effects in the transitional economies since 1989. The third variable in this group is an index of militant conflict for the 1989-2004 period. The hypothesis is that armed conflict has inhibited post-1989 economic recovery.[7]

(d) **The legacy of past institutions**. An additional hypothesis, elaborated by Jan Winiecki (2004), Steven Fish (1998) and others, is that the degree of post-1989 recovery is significantly affected by ingrained institutional and cultural factors, dating as far back as the pre-modern era. Winiecki identifies the zone of "Western Christendom" during the sixteenth century. This includes all the countries that were then predominantly Catholic or Protestant, but not those under the sway of Islam or Russian Orthodoxy.[8] The hypothesis is that the culture and institutions of Western

Christendom were more amenable to trade and entrepreneurship. Winiecki draws attention to notions of liberty, entrepreneurship and trust, inherited from the sixteenth century or thereabouts. Similarly, Katchanovski (2000) and others have argued that Protestant and modern Catholic cultures are less amenable to corruption, in part because of the diminished role of family ties in civil society. Katchanovski provides data in the percentage of the population in each country that were Catholic or Protestant in the early 1990s and thus provides a second cultural variable (*CATHPROT)* used here. A third variable concerning the institutional legacy of the past is simply the number of years under communist rule prior to 1991 (*YRSCOMM).* Arguably, the greater the longevity of the communist period the greater the inhibition of pro-market institutions and cultural norms, and the more limited the capacity to develop such institutions after 1989.[9] A fourth variable in this group is the 1989 level of GDP per capita (*GDP1989),* which acts as a baseline for subsequent growth and thus, is expected to be statistically significant in explaining the 2005 level of GDP. Another variable *OTTOMAN* was used to indicate whether a country was a longstanding part of the Ottoman Empire. Yet another variable (*MUSLIM)* indicates whether it was predominantly Muslim. The latter two variables are used to test if the institutional or cultural legacy from Ottoman rule or Muslim practices affects recent performance.

(e) **The depth and timing of the 1990s recession**. Proponents of "shock therapy" argue that in difficult economic circumstances the more resilient, productive and energetic firms and organizations would be more likely to survive than the others, thus leading to more dynamic growth later. This would suggest that the severity of the 1990s recession would be positively correlated with subsequent growth. Opponents argue that deep recessions undermine fledgling entrepreneurial activity and nascent market institutions. Both hypotheses can be tested by a variable (*RECESS)* that captures the level of GDP per capita at the lowest point in the 1990s as a percentage of the 1989 level. Another factor taken into consideration was the timing of the lowest point. The later the recession, the more disadvantaged a country would be in terms of reaching a particular higher level of GDP in 2005.

The severity of the 1990s recession in the transitional countries, however, is not necessarily correlated with the degree of application of a policy of "shock therapy" in the sense of deliberately promoting a recession to weed out the weaker and promote the stronger economic enterprises. Not all of these countries pursued shock therapy. Where it was proclaimed or attempted, it took different forms, and assumed differing degrees of severity. John Marangos (2003) argues that no country adopted shock therapy in strict terms.[10] The 1990s recessions in Uzbekistan, Hungary and Poland were very similar in scale. Uzbekistan and Hungary claimed to avoid such a policy, whereas Poland claimed to embrace shock therapy and some commentators regard it as a classic case of its application. The hypotheses to be tested here concern the degree of recession, rather than the declaration or use of any particular economic policy.

Note that most of the above groups of hypotheses concern institutions. In several cases (such as property rights and democracy) legal institutions are involved, but it must be emphasized that all viable legal institutions depend on customs and habits, rooted in the practices of the people. Otherwise, legal declarations cannot be adequately enforced. In other cases the institutions involved are largely or entirely informal, involving customs and habits, without any expression at the formal level of law. For example, habits of thought or behavior concerning religion or ethnic identity are generally of this informal institutional character.[11]

Statistical Tests

All regressions are limited by the quality of the data. Most publishers of the relevant datasets acknowledge the difficulties of measurement involved, and the difficulties, for example, of distinguishing between the *de jure* and the *de facto* realities. With this caveat in mind, the aim of the regressions was to test explanations of medium and long-term trends in economic growth, related to underlying and slowly changing institutional factors. The timing and depth of the 1990s recessions comes in only as a possible determinant of subsequent growth achievements, not as a factor to be explained. Accordingly, time-series regressions, or pooled data regressions with data for several years are inappropriate for this study. Furthermore, the data available do not cover all the years from 1989 to 2005. A time-series aspect would also raise the difficult question of estimating the inevitable time lags between the institutional and GDP variables. Given that institutional features are difficult to measure and temporal changes are especially contestable, the regressions focused instead on the medium and longer term.

It is only with data that extends for some time after the 1990s recession that medium and long-term trends begin to become discernable. For all the countries involved, there is only one fluctuation in growth performance. After reaching the nadir of its 1990s recession, every country enjoyed positive subsequent growth up to 2005. Accordingly, the 2005 GDP figure represents a suitable benchmark of growth achievement, as remote as possible from the disturbing effects of the 1990s recessions.

A regression might attempt to establish the statistically significant determinants of the 2005 level of GDP per capita (*GDP2005*, as in Table 1). The problem here is that the distribution of 2005 GDP levels per capita is bimodal and far from normally distributed. In the sample, sixteen countries have 2005 GDP levels per capita of less than $2,100, and nine have levels more than $4,200, with only two in between. With a value of over $10,000, Slovenia is a clear outlier.

By contrast, the growth rates of GDP per capita from 1989 to 2005 (*GROWTH* in Table 1) show a distribution more suitable for standard regression analysis. Accordingly, regressions were performed to establish the statistically significant determinants of the average annual growth rate in the period.[12]

At first, all of the aforementioned variables were tried together. Then, the least significant variable was eliminated and the regression was done again. This procedure was repeated until all independent variables were significant at the five percent level.

Importantly, none of the variables in group (a) above, concerning property rights, corruption and economic freedom proves significant. However, *RECESS* in group (e), indicating the severity of the recession, proves significant.

In group (b) only the Polity IV index of democracy for 2000 (named *DEMOC*) is significant. But its coefficient has a negative sign. In group (c), only the Fearon (2003) index of ethnic fractionalization (*ETHNICFR*) prove significant. Fearon's (2003) index of cultural fractionalization is insignificant.

In group (d), *CATHPROT* prove insignificant, whereas *WESTCHR* and *YRSCOMM* are both significant. The variables in group (e) relating to the timing or severity of the recession are insignificant. *GDP1989* is also insignificant. The complete regression, with all remaining significant values, is as follows:

$$\underset{(0.861)}{GROWTH = -1.263} + \underset{\substack{(0.477)\\ *}}{1.711}WESTCHR - \underset{\substack{(1.035)\\ **}}{4.478}ETHNICFR - \underset{\substack{(0.062)\\ **}}{0.306}DEMOC + \underset{\substack{(0.010)\\ **}}{0.067}RECESS$$

R^2 = 84.9%, adjusted R^2 = 82.2%

Notes: Number of observations: 27. Method of estimation: ordinary least squares. Standard errors in parentheses. Levels of significance (two-tailed test): * 1% ** 0.1%.

Regression 1: Determinants of 1989-2005 GDP Growth – All 27 Countries

This regression emphasizes the negative effects of ethnic fractionalization, democracy, and the 1990s recessions on economic performance in the 1989-2005 period. Growth rates are positively assisted by inclusion in the zone of Western Christendom. More specifically, the positive coefficient of *RECESS* suggests that recessions of lower severity (and higher values of *RECESS)* would correlate with higher 1989-2005 growth rates. This undermines the thesis that recessions eventually lead to a more dynamic economy. The fact that 2005 is ten or more years after the deepest point of the recession in most of the countries in the sample, gives more credence to the idea that the net effect of the recessions has been negative. If there were positive benefits in terms of weeding out inefficient firms, then it would be expected that they would be apparent within ten years.

However, there is a possible problem with outliers. Georgia, Moldova, and Serbia and Montenegro have the lowest growth rates in the period. If the condition is imposed that all growth rates must be within two standard deviations of the mean of the remaining sample, then these three countries must be eliminated.[13] Regressions were performed with the remaining 24 countries, again with *GROWTH* as the dependent variable. The first regression was with a slightly smaller selection of independent variables, including *WESTCHR, CATHPROT, ETHNICFR, YRSCOMM, DEMOC, RECESS* and indices of conflict, cultural fractionalization, property rights and economic freedom. Again, the least significant variables were eliminated, one by one. The complete regression, with all remaining significant variables, is as follows:

$$\underset{(0.782)}{GROWTH = -0.902} + \underset{\substack{(0.449)\\ *}}{1.370WESTCHR} - \underset{\substack{(0.959)\\ **}}{3.955ETHNICFR} - \underset{\substack{(0.063)\\ *}}{0.230DEMOC} + \underset{\substack{(0.010)\\ **}}{0.055RECESS}$$

R^2 = 79.3%, adjusted R^2 = 74.9%

Notes: Number of observations: 24. Method of estimation: ordinary least squares. Standard errors in parentheses. Levels of significance (two-tailed test): * 1%, ** 0.1%.

Regression 2: Determinants of 1989-2005 GDP Growth – 24 Countries

The remaining significant variables in the second regression are the same as those in the first.[14] This second regression confirms the statistical insignificance of the indices of property rights and economic freedom in determining 1989-2005 growth rates. The correlations between the four key independent variables are shown in Table 2.

Table 2. Correlations Between the Four Key Independent Variables – All 27 Countries

	WESTCHR	*ETHNICFR*	*DEMOC*	*RECESS*
WESTCHR	1			
ETHNICFR	-0.218	1		
DEMOC	0.654	-0.378	1	
RECESS	0.500	-0.375	0.424	1

Note that the correlations between *DEMOC* and *WESTCHR*, and between *RECESS* and *WESTCHR* are 0.5 or above. The highest correlation, between *DEMOC* and *WESTCHR*, plausibly suggests that *WESTCHR* may be a causal factor in determining the level of democracy. Clearly, the higher degrees of correlation between these three variables means that the results have to be interpreted with caution.

The greatest concern would be the relatively high degree of correlation between *WESTCHR* and *DEMOC*. These two variables were each excluded in turn, otherwise with the same procedure and sample of 24 observations as in regression 2. The two regressions (unreported here) confirmed similarly negative effects for *ETHNICFR* and positive coefficients for the *RECESS* variable. If *WESTCHR* is excluded, then *CATHPROT* understandably becomes significant, with a positive coefficient (*CATHPROT* is less correlated with *DEMOC* than *WESTCHR*). If *DEMOC* is excluded, then *AUTOC* index of autocracy becomes significant with a positive coefficient (*AUTOC* is less correlated with *WESTCHR* than *DEMOC*). Adjusted R^2 values in these regressions are 71.2 and 71.5 percent respectively.

A final regression was performed with *GDP1989* as the dependent variable, with all relevant and pre-1989 variables as independent, namely *WESTCHR*, *CATHPROT*, *ETHNICFR*, *YRSCOMM*, *OTTOMAN* and *MUSLIM*. Of these, only

WESTCHR remained statistically significant. The results for this regression are as follows:

$$GDP1989 = 1529 + 3452 WESTCHR$$
$$\underset{**}{(237.2)} \quad \underset{**}{(410.9)}$$

R^2 = 73.8 percent, adjusted R^2 = 72.8 percent

Notes: Number of observations: 27. Method of estimation: ordinary least squares. Standard errors in parentheses. Levels of significance (two-tailed test): * 1%, ** 0.1%.

Regression 3: Determinants of 1989 GDP Levels – All 27 Countries

Interpreting this result, the "civilizational fundamentals" captured by *WESTCHR* must have partly determined a baseline in the early twentieth century, upon which growth during the communist period was superimposed. Accordingly *WESTCHR* is significant in explaining both 1989 GDP and subsequent growth.

Note the relatively high levels of R^2 in all the above regressions. While some interpretative caution is appropriate, for reasons given above, the results are nevertheless of some importance. There is strong evidence to indicate the general significance of underlying factors such as *WESTCHR* and *ETHNICFR* in determining economic performance. The evidence is also against the idea that recessions eventually lead to greater overall economic output. The analysis also indicates that democracy has not yet emerged as an overall positive factor in promoting economic growth.

Discussion

The Institutional Legacy of Western Christendom

In discussing the institutional legacy of Western Christendom, as captured here by the *WESTCHR* variable, Winiecki (2004) and others emphasize the degree of division and decentralization of authority in Catholic and Protestant regimes from the feudal period to the sixteenth century, giving enhanced scope for economic innovation and entrepreneurship. The more open societies of Western Christendom would have been more conducive to the spread of Enlightenment values of individual rights and equality under the law. As Deepak Lal (1998, 95-7) elaborates, while the Latin branch of Christianity separated Papal authority from the authority of kings, the Eastern branch did not draw a clear line between church and state in an autocratic context with limited countervailing power in society as a whole. The Orthodox Church provided religious foundations for an autocratic Russian state and limited the influence of ideas and practices from Western Europe.

Consider also the impact of Islamic institutions in the transitional countries in South-East Europe and central Asia. Timur Kuran (2004) argues that after an early period of economic and innovative dynamism, economic institutions in the Muslim world eventually ossified and stifled innovation. By the seventeenth century, Islamic institutions were less effective in protecting property rights, facilitating trade, supporting enterprise and encouraging capital investment. Kuran upholds that this negative legacy has persisted to this day.

It is possible that the relative contribution of Western "civilizational fundamentals" was undermined by the period of communist rule. Nevertheless, their influence persisted and the differences endured. We lack a sufficiently detailed account of the nature of these fundamentals, an explanation how they survived during the communist period, and why they did not spread to communist countries outside the former zone of Western Christendom. To survive, these norms must be replicated in social practice, and not merely in ideology. They must be ingrained in the habits and conceptions of the people and sustained by other institutions. Such habits of thought and practice may have been sustained by involvement in the Catholic or Protestant churches. However, the variable denoting the percentage of Catholics or Protestants (*CATHPROT)* generally proved insignificant. It is possible that the insignificance of the *CATHPROT* variable could result from its focus on nominal and recent religious allegiance, rather than historically ingrained practices or institutions.

An alternative institutional explanation is that the significance of the *WESTCHR* variable reflects the legacy of a relatively pluralist set of institutions in civil society, providing some countervailing sources of influence or power. Relevant in this case is the existence and popular influence of relatively autonomous institutions including the church, rather than indicators of nominal religious participation or allegiance. Although all communist countries placed severe restrictions on the formation and functioning of independent social organizations, they managed to retain a small but significant degree of autonomy in this western zone, due to the legacy of their institutional history. Limited elements of a relatively autonomous civil society persisted within the churches, trade unions, social clubs, and peasant organizations. These factors became most evident in the Polish upheaval in 1980, led by the trade union organization *Solidarity* and powered by the relatively autonomous and internationally connected Catholic Church. Similar institutional elements existed elsewhere in the western zone, without necessarily being manifest in open revolt.

The development of such institutions requires a history with a state that is not too strong as to crush such plural developments, but strong enough to protect some rights of organization. To a significant degree, the countries in the zone of Western Christendom benefited from this historical legacy, due to the nature of their previous state structures, during the nineteenth century or during their political independence in the interwar period. Other countries that were independent between the wars, in the southern Balkans, were restrained by the past legacy of Ottoman rule and the existence of less autonomous institutions.

Ethnic Fractionalization

We now consider the remaining variables that proved significant in the first two regressions, starting with ethnic fractionalization (*ETHNICFR)*. Fearon's (2003) definition of an ethnic group is complicated, and involves features such as perception of common descent, recognition of the importance of membership of the group, sharing and acknowledging common cultural and institutional features such as language or religion, and sharing a common history. Ethnicity by this definition is much more a cultural than racial category. Fearon established a global list of 822 ethnic groups. Ethnic fractionalization is defined, as with other authors, as the probability that two individuals selected at random from a country will be from different ethnic groups.

Several recent studies underline the significance of ethnic fragmentation in the analyses of economic development (Alesina, Baquir and Easterly 1999; Easterly and Levine 1997; Fedderke and Klitgaard 1998; La Porta *et al.*, 1999; Lian and O'Neal 1997). Janet Landa (1994) and others argue that when property rights and contract law are underdeveloped, people often tend to rely on markers of ethnicity and ethnically based cultural norms to establish necessary mechanisms of enforcement and levels of trust. Mechanisms such as individual reputation within communities and clans, which can help in the enforcement of contracts and property rights (Grief 1993; Ostrom 1990; Ouchi 1980), have often depended on signs of group membership such as dress or religious rite.

However, economically embedded ethnic fractionalization can hinder the growth of general, abstract laws and rules, which apply to everyone. The development of a modern market economy requires the observance of general, abstract, impersonal laws and rules: these name no individual or group and are implemented irrespective of ethnicity, creed or class (Hayek 1960). Similarly, the vital emergence of a rational mentality, emphasized by Max Weber (1930) in his account of the rise of modern capitalism, requires its embodiment in institutions operating under impersonal and general rules. The globalization of markets has not undermined the role or significance of nation states (Mann 1997).

The building of modern nation states is in part a process of overcoming the negative economic effects of ethnic fractionalization. In his theory of nationalism, Ernest Gellner (1983; 1998) argues that ethnic and linguistic homogeneity facilitates economic modernization and mass education, and reduces ethnically-based internal conflict. Modern nation states embody nationally based systems of law and government that can surpass ethnically-based enforcements of contracts and rights (Pagano 2003). Likewise, William Easterly (2001) emphasizes the importance of government and other institutions in mitigating the problems typically associated with ethnic fractionalization. The development of an effective national state administration reduces the economic and political significance of ethnic fractionalization and enlarges the scope for exchange and markets. However, none of the former Soviet Bloc countries considered here has ever achieved a degree of cultural cohesion under a nation state, comparable to that in Britain, France or the United States for example.

But an apparent anomaly emerges. In the transitional economies, *ETHNICFR* is highly significant in explaining 2005 GDP per capita but insignificant in explaining 1989 levels. Developments after 1989 somehow allowed longstanding ethnic divisions in these countries to engender such negative economic effects. In the more ethnically diverse countries, the immediate price of economic liberalization in the 1990s was the reinforcement of ethnic divisions and an eruption of ethnic strife.

At least two important questions emerge here. First, why were ethnic divisions reinforced rather than eroded after 1989? Second, why did ethnic fractionalization emerge as a significant negative factor inhibiting economic growth after 1989, but does not seem to be as important in explaining relative economic performance under communism?

In answer to the first question, the obvious factor is the collapse of the communist regime and its capacity to subdue ethnic conflicts. Ethnic divisions existed in all of these countries under communism, but they were subdued by a combination of ideology and repression that ended after the collapse of the Soviet Bloc (Khazanov 1995). Events after 1989 also plunged societies that had been stagnant and relatively stable for decades, into years of uncertainty, adversity, recession, unemployment and economic dislocation. In such severe crises, when the state no longer acts as the guarantor of employment and subsistence, people understandably fell back for survival on family and personal connections that had endured under the communist regime. Furthermore, in the absence of provisions according to a central plan, people had to exchange goods or services in order to obtain an income. A rudimentary market economy developed, but state powers to enforce contracts and protect property rights had been greatly diminished by the weakening and dislocation of the state apparatus. The conditions emerged where such powers of enforcement and protection had to devolve upon social groups and networks, in a manner similar to that which Landa (1994) associates with underdeveloped economies. In an ethnically divided society, family and personal connections are likely to assume an ethnic character.

Having given reasons why ethnic divisions became more visible, we also need to explain why they had greater deleterious effects in the transition period than under communism. My suggestion is that the development of a modern market economy requires conditions that were neither vital nor prominent under communism, and these factors were insufficiently developed after 1989.

A modern market economy involves technology and institutions that are dynamic, innovative and knowledge-based. Although the Soviet Union had achieved high growth rates during its industrialization in the 1930s, by the 1970s all the countries of the Soviet Bloc had slipped into a period of relative technological and economic stagnation. In a stagnant society, people carry on doing what they have done before, using social networks of an ethnic or non-ethnic character. By contrast, in a dynamic and innovating economy, social structures and networks have to be frequently modified, and economically ingrained ethnic divisions may prove a barrier to this modification. Economic competition and trade become more extensive, leading to potential conflicts over scarce resources.

Furthermore, in agrarian and earlier industrial economies, work is action-centered, and to a large degree it may be monitored by observation rather than verbal communication. By contrast, a modern, knowledge-intensive economy involves a relatively greater use of semantic and intellective skills (Zuboff 1988). Clearly, the more an economy relies on the communication and absorption of knowledge, the more it relies on a common language and a common set of cultural understandings

(Gellner 1983; 1998). Linguistic and ethnic divisions can inhibit their development. Overall, an insular and planned economy can drift along without innovation and with limited communication of knowledge. But their absence during a move into competitive world markets, driven by rapid innovation and extensive communication, spells nothing short of economic collapse.[15]

Another factor necessary for this transition that was largely lacking during the communist period, is what John Litwack (1991) describes as "economic legality." This signifies a reliance on general, transparent, and effective legal rules for the pursuit of economic activity. Such rules inhibit discrimination and nepotism, and provide broader access to opportunities. The development of economic legality was thwarted under communism for several reasons. One was congenital to the Soviet-type system. Generally, the buying and selling of goods and services was highly limited under the law, with exceptions such as rights given to peasants to sell all or part of their produce in some instances. However, the system of central planning could not work without resorting to some black market trading. This illegal activity was partly tolerated because it provided an essential means to obtain a missing spare part or essential input, without recourse to the tardy, unreliable and overloaded planning bureaucracy. A whole social stratum of fixers, known in Russian as *tolkachi*, provided such illegal services, often while retaining another official job (Bergson 1964; Nove 1961; 1983). Consequently, the defiance of economic legality was an essential and commonplace aspect of economic activity under communism. Economic illegality was an unavoidable consequence of the attempt to replace most commodity markets by a comprehensive system of economic planning.

At the same time, breaking the law by engaging in black market trading carried the risk of victimization by the legal authorities. Hence it was especially important to trust one's partners in trade. Ordinary problems were typically solved by having recourse to friends and reliable acquaintances. Consequently, these societies were permeated by partially illegal networks of reciprocal help relationships (Ledeneva 1998). It was not possible to succeed in management or business without continually breaking the law and relying on these personal contracts for missing items or services. People succeeded by building up longstanding personal networks based on the careful establishment of reputation and trust, and by operating in defiance of some legal rules.

Under the communist regimes, informal economic networks often spanned and surpassed ethnic divisions. But since 1989, political crises and severe economic recessions have forced many to rely more on deeply-rooted, ethnically-based ties. This has inhibited the establishment of a market system with clear and general rules of the game, and sustained the nepotism or personal favors. Ethnic and other nepotistic networks are also the basis of the contemporary mafias that actively disrupt attempts to establish economic legality.

Let us sum up this argument concerning ethnic fractionalization. Communism fostered informal ethnic and other networks, but was able to subdue and surpass social divisions to some degree, by a combination of ideology and repression. The collapse of the communist regimes removed repressive and ideological constraints on both mafia- and ethnic-based economic activity. The political and economic crises of the 1990s further exacerbated ethnic and other divisions. The move to a modern market economy required conditions that were underdeveloped under communism, and their further development was inhibited by ethnic fractionalization. In contrast to the congenital economic illegality found within communist societies, modern market economies rely on the development and enforcement of legal systems enforcing general rules and impersonal norms, to enhance trade and economic cooperation across the whole society. Ethnic divisions inhibited their development and enforcement. Furthermore, ingrained ethnic divisions can limit innovation, communication and labor mobility, all of which are important for a modern and dynamic market economy. In such circumstances, the degree of ethnic fractionalization can act as an important brake on economic recovery.

Democratic Institutions

The democracy index (*DEMOC*) focuses on manifestations of democracy, particularly elections contested by multiple political parties. Full democracy requires more than this, and its principles must be ingrained in the habits of thought of the population, as well as codified in law. Other institutional factors that are also important for a democratic system, such as civil liberties and the rule of law, are purportedly expressed by other indices, but all of these proved insignificant in the regressions. Hence it has to be borne in mind that the regression result concerns only one facet of a democratic system, albeit an essential one.

Sharing a period of one-party rule, lasting from 40 to 74 years, the transitional economies all lacked a recent experience of democracy, in a broad or narrow sense. Furthermore, prior to communism, several of these countries, including all those in the pre-1917 Russian Empire, never experienced democracy proper. For others, from Bulgaria to the Baltics, the experience of democracy was brief and prior to 1941. Generally, democracy emerged after 1989 in these countries as largely a novelty. Democracy, like markets and contracts, requires the existence and acceptance of general rules of operation. The legacy of ingrained illegality under communism inhibited the enforcement of general political, as well as general economic, laws and rules. Democracy also requires a sense of national identity and citizenship, which is constrained by ethnic fractionalization. Hence the above argument concerning ethnic fractionalization also helps to explain the negative influence of the democracy index (*DEMOC*) on economic growth.

In general, democracy can have positive and negative economic effects. On the positive side, it can help build up legitimacy and consensus concerning the operation of general rules that empower and regulate economic activity. It can help resolve disputes and reduce violent conflict, by providing a mechanism of adjudication and legitimation. Furthermore, it is a means of removing a failing or unpopular government. On the negative side, it can be a mechanism by which interest groups capture the powers and resources of the state and use them for their own ends, rather than for the benefit of the whole society. This mixed balance sheet of the general economic costs and benefits of democracy is consistent with the wider evidence in other countries relating democracy to economic growth, which is somewhat ambiguous and inconclusive (De Haan and Siermann 1996; Fidrmuc 2003; Knack and Keefer 1995; Tavares and Wacziarg 2001).

The positive effects of democracy take some time to develop. Decisions of an electorate to remove an economically inefficient government are more likely to be sound with extensive experience of democratic mechanisms and appreciation of the workings of a democratic system. Legitimacy and consensus cannot be built up in a few years. For democratic institutions to help resolve disputes, general rules of the democratic game have to be established, recognized and accepted. Checks and balances have to emerge, involving appeals to national interests, rights and values. Acceptance of such general rules in Western countries has typically emerged as a result of the establishment of nation states, with a degree of linguistic and cultural homogeneity. The transitional economies, as noted above, have a limited historical legacy of national statehood and citizenship.

Largely consistent with the argument here, Barry Weingast (2005) establishes an analysis where different types of equilibria are possible within a constitutional framework. A "symmetric equilibrium" occurs when governments are sustained and kept in check by a broad and inclusive coalition of diverse interest groups, with the result that the government tends to serve more general interests, rather than concentrating on the interests of particular ethnic or other groups. An "asymmetric equilibrium" occurs when a government derives its support from a narrower set of interest groups that "preys on the rest of society" (2005, 94). Weingast argues that most developing countries today are locked in asymmetric equilibria, in which governments respect the rights of their supporters and violate the rights of others. These countries have great difficulties protecting individual civil and property rights. The evidence of this present study suggests that these problems are also present in the transitional economies, particularly in those with higher levels of ethnic fractionalization.

Overall, in the transitional economies, the negative economic effects of democratically contested elections have dominated the positive. Democracy has in some cases been used as a manipulative tool of powerful networks and oligarchs. These negative effects were further exacerbated by the extent of ethnic fractionalization, where democracy sometimes became a means by which one ethnic group would enhance its power over another. With underdeveloped national rules of the game, democracy was unable to defuse ethnic conflicts. The negative correlation between the democracy index and economic performance is consistent with this argument.

Conclusion

The econometric analysis indicates that prominent indices of property rights, corruption, economic freedom, tax incidence and civil liberties are statistically insignificant in explaining the 1989-2005 performances of the transitional economies. This suggests that these indices are imperfect, or that these factors themselves are causally of lesser importance.[16] The evidence here also indicates that the severe recessions experienced in the 1990s had a negative rather than positive effect on overall growth in the 1989-2005 period.

The analysis here complements that of Vladimir Popov (2000), who showed that over 60 percent of the differences in the economic performance of the transitional countries were explained by uneven initial conditions. After controlling for these non-policy factors, the impact of economic liberalization becomes insignificant. The policy debate between shock therapy and gradualism centered on the speed of transition; which turns out to be a secondary issue. The related policy focus on economic liberalization and macroeconomic stabilization also sometimes overlooked the importance of strong over-arching institutions. Without these, economic liberalization cannot deliver economic growth.

The statistically significant variables identified in the present study include the degree of ethnic fractionalization and an index of democracy, both of which were negatively correlated with GDP or GDP growth. Both 1989 GDP and 1989-2005 GDP growth were enhanced by membership of what has been described as the zone of Western Christendom, which excludes predominantly Orthodox or Muslim countries and points to the influence of institutional factors from as early as the sixteenth century.

Given these results, it is important to explain why ethnic fractionalization was a major inhibition on post-1989 economic performance, while it was statistically insignificant in explaining 1989 GDP levels per capita. The explanation here focuses on why ethnic divisions became more visible after 1989, and why they had more deleterious effects.

The collapse of the communist regimes took the lid off social forces of dissent and division, and removed constraints on both mafia- and ethnic-based economic activity. The crises of the 1990s further exacerbated social divisions. Furthermore, these emerging market economies required circumstances that were underdeveloped under communism, and further thwarted by ethnic rivalry. In contrast to the widespread economic illegality within communist societies, modern market economies rely on legal systems enforcing general rules to enhance trade and economic cooperation across the whole society. Such rules and laws have to surpass ethnic labels. Furthermore, economically ingrained ethnic divisions constrain innovation, communication and labor mobility. Consequently, the degree of ethnic fractionalization has had a greater inhibitive effect on economic performance after 1989.

The negative effect of the democracy index on economic growth is explained by the limited previous experience of democratic governance, the corresponding underdevelopment of a democratic culture based on national identity, citizenship and consensus, and the use of democratic mechanisms by sectional interest groups to capture power and resources. In a young democratic system, such negative effects of democracy are likely to overwhelm the positive benefits, which take time to emerge.

Among discussions of the institutional preconditions for a transition to a market economy, a prevalent focus is on such factors as the establishment of secure property rights and civil liberties, and the minimization of corruption. Importantly, all these factors proved to be insignificant in the present statistical analysis of the causes of economic growth. This suggests that the measures of these characteristics in the standard datasets are defective, or that such factors are of lesser importance among the institutional foundations for economic development. Clearly this raises vital questions for further research. In the meantime, the present analysis establishes different problems and priorities.

The key problem identified here is the limited historical and cultural legacy of nationhood. Even in cases where national sentiment and self-identification is pronounced, such as Poland, the modern historical experience of national independence and integration amounts to a few decades, rather than centuries. There is nothing in these countries comparable to the integrative and nation-building experiences in Britain, France and the United States. Consequently, sufficient consensual and cultural materials for the institutional and legal foundations of a modern market economy, based on general legal rules within the framework of a nation state, are lacking. The analysis here points to the need for capable national state machines, which enforce general rules of the economic game, reap positive benefits for democracy, help resolve internal conflicts and overcome the negative economic legacy of ethnic divisions.

Indeed, an expression of a mature nation state is the widespread assumption by its citizens of a national identity rather than one based on a particular ethnic subdivision. Relying on reported self-identifications of ethnic identity, ethnic fractionalization is an endogenous rather than a fixed variable (Leeson 2005). Hence a low index of ethnic fractionalization may in part be an expression of a degree of success in establishing the institutions and self-consciousness of nationhood.

Other studies have also pointed to the importance of effective national institutions to protect property, individual rights and the mechanisms of a market system (Ellman 1997; Grogan and Moers 2001; Popov 2002). Their importance is confirmed by the empirical analysis in this paper. Also the analysis here goes further, by stressing not only longstanding institutional factors, but also the role of the nation state in overcoming the negative economic effects of ethnic fractionalization. For a modern market economy to emerge, trade and property rights have to surpass ethnic and other networks, and operate more fully through the enforced general rules of an effective national state administration and impartial legal system.

Notes

1. The author is very grateful to Ha-Joon Chang, William Easterly, Michael Ellman, Jane Hardy, Anthony Kasozi, Ivan Katchanovski, Thorbjørn Knudsen, Tony Lawson, Peter Leeson, Ugo Pagano, Stephen Parsons, two anonymous referees, and several others for helpful discussions and comments. The first version of this paper, with data up to 2004, was presented at a workshop at the University of Hertfordshire on June 23, 2005.
2. Andrei Shleifer and Daniel Treisman (2005) argue that the Russian data for the 1989-1991 years are

especially unreliable and the drop in output was considerably less than the EBRD estimates. Their argument that Russia has become a normal capitalist country contrasts with the analysis of Antonio Sánchez-Andrés and José March-Poquet (2002) that markets are incompletely established.

3. In Europe: Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, FYR Macedonia, Hungary, Latvia, Lithuania, Moldova, Poland, Romania, Russian Federation, Serbia and Montenegro, Slovakia, Slovenia, and Ukraine. In Central Asia: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. East Germany (DDR) is excluded from this study because of its subsequent unification with West Germany.
4. Most of the data for independent variables that turned out to be insignificant are excluded from Table 1. These excluded data are in the public domain.
5. Data for years close as possible to the year 2000 were taken from http://www.transparency.org, http://www.freedomhouse.org and http://www.heritage.org. Subsequently, data for similar variables for 1998 were taken from Katchanovski (2000) and tried as substitutes. All these variables proved to be insignificant.
6. Produced by the Integrated Network for Societal Conflict Research (INSCR) and the Center for International Development and Conflict Management (CIDCM) of the University of Maryland, http://www.cidcm.umd.edu/inscr/polity.
7. Anders Åslund, Peter Boone and Simon Johnson (1996) also examine the negative effect of armed conflict on economic performance in the transitional countries. The index of conflict used here was the logarithm of the estimated number of 1990-2004 war deaths per capita. Estimates of war fatalities were derived from http://users.erols.com/mwhite28/warstats.htm.
8. Namely Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, and Slovenia. Estonia and Latvia are the only countries in this group with predominantly Protestant traditions, the remainder being chiefly Catholic.
9. However, the chosen numerical figures for YRSCOMM are at best a rough guide, given that communist rule was interrupted in several regions by the Civil War of 1917-1921 and Nazi invasion during 1941-1945.
10. Every government that attempted to implement such a policy lost power after its first term, and subsequent governments implemented more gradualist strategies (Marangos, 2004).
11. See Hodgson (2006) for a discussion of the formal and informal aspects of institutions, and the distinction between legal and other institutions.
12. As in the present study, a number of other authors take overall post-1989 growth as the main measure of post-1989 performance. Against this, it might be suggested that the average growth rate in the years after the 1990s recession should be taken as the dependent variable in the analysis. However, rapid growth after a severe downturn can often be a reflection of the severity of the recession itself, rather than long-lasting investment or deep-seated increases in productivity. For this reason the GROWTH variable is retained.
13. Of course, the rationale for excluding these low-growth outliers is that regression analysis presumes a normal distribution. The reasons for their low growth are not immediately obvious, particularly when the measure of militant internal conflict proves insignificant when they are included in the full sample.
14. Notably, the excluded countries of Georgia, Moldova, and Serbia all experienced ethnic conflicts in the 1990s. The fact that *ETHNICFR* remains highly significant after the exclusion of these three countries from the sample underlines the statistical significance of this variable.
15. We may mention modern China here, although a full discussion is clearly beyond the scope of the present article. China's economic dynamism is unsurpassed among countries nominally under communist rule. Much more than any of the former Soviet Bloc countries considered here, China has a very long history as a singular state. Its modern state has retained a strong regulatory role, even after the abandonment of comprehensive central planning. Despite regional language differences, a relatively high degree of ethnic and cultural homogeneity exists in its core lowland zone, this area being dominated by a single ethnic group, the Han.
16. Using his own survey data from Russia, Timothy Frye (2004) finds that elements of property rights enforcement are closely connected with investment. Not only does this raise the possibility of using alternative indicators of property rights but also it provides an important analysis of the factors behind their enforcement. Frye's evidence suggests that the problem may lie in the standard indicators of property rights, rather than property rights *per se*.

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