

Globethics Repository



Lessons from transition economies

This page was generated automatically upon download from the Globethics Repository. More information on Globethics see <https://www.globethics.net>. Data and content policy of Globethics Repository see <https://repository.globethics.net/pages/policy>.

Item Type	Preprint
Authors	Popov, Vladimir
Publisher	UNRISD
Rights	With permission of the license/copyright holder
Download date	2026-11-01 00:50:55
Link to Item	http://hdl.handle.net/20.500.12424/179278



The **United Nations Research Institute for Social Development (UNRISD)** is an autonomous agency engaging in multidisciplinary research on the social dimensions of contemporary problems affecting development. Its work is guided by the conviction that, for effective development policies to be formulated, an understanding of the social and political context is crucial. The Institute attempts to provide governments, development agencies, grassroots organizations and scholars with a better understanding of how development policies and processes of economic, social and environmental change affect different social groups. Working through an extensive network of national research centres, UNRISD aims to promote original research and strengthen research capacity in developing countries.

Current research programmes include: Civil Society and Social Movements; Democracy, Governance and Human Rights; Identities, Conflict and Cohesion; Social Policy and Development; and Technology, Business and Society.

A list of the Institute's free and priced publications can be obtained by contacting the Reference Centre.

UNRISD, Palais des Nations
1211 Geneva 10, Switzerland

Tel: (41 22) 9173020
Fax: (41 22) 9170650
E-mail: info@unrisd.org
Web: <http://www.unrisd.org>

Copyright © United Nations Research Institute for Social Development.

This is not a formal UNRISD publication. The responsibility for opinions expressed in signed studies rests solely with their author(s), and availability on the UNRISD Web site (<http://www.unrisd.org>) does not constitute an endorsement by UNRISD of the opinions expressed in them.

Lessons from Transition Economies: Strong Institutions Are More Important than The Speed of Reforms¹

Vladimir POPOV

Draft paper prepared for the discussion at the UNRISD meeting on
“**The Need to Rethink Development Economics**”,
7-8 September 2001,
Cape Town, South Africa.

Introduction

Ten years ago, on the eve of transition, economic discussion in the profession was dominated by the debate between shock therapists, who advocated radical reforms and rapid transformation, and gradualists, justifying a more cautious and piecemeal approach to reforms. Shock therapists pointed out to the example of East European countries and Baltic states – fast liberalizers and successful stabilizers, that experienced a recovery after 2 to 3 years fall in output, while their CIS counterparts were doing much worse. Gradualists cited the example of China, arguing that the lack of recession and high growth rates is the direct result of the step by step approach to economic transformation. Shock therapists were arguing that “one cannot cross the abyss in two jumps”, that rapid liberalization allows to avoid painful and costly period, when the old centrally planned economy (CPE) is not working already, while the new market one is not working yet. As time passed, there appeared statistics that allowed to test the predictions of theories. Quite a number of studies were undertaken with the intention to prove that fast liberalization and macro-stabilization pays off and finally leads to better performance (Sachs, 1996; De Melo, Denizer, and Gelb, 1996; Fisher, Sahay, Vegh, 1996; Aslund, Boone, Johnson, 1996; Breton, Gros, and Vandille, 1997; Fisher, Sahay, 2000). To prove the point, the authors tried to regress output changes during transition on liberalization indices developed by De Melo et al. (1996) and by EBRD (published in its Transition Reports), on inflation and different measures of initial conditions. The conventional wisdom was probably summarized in the 1996 World Development Report From Plan to Market, which basically stated that differences in economic performance were associated mostly with "good and bad" policies, in particular with the progress in liberalization and macroeconomic stabilization: countries that are more successful than others in introducing market reforms and bringing down inflation were believed to

¹This paper is based on my article in *Comparative Economic Studies* Vol. 42, No. 1, Spring 2000, pp. 1-57.

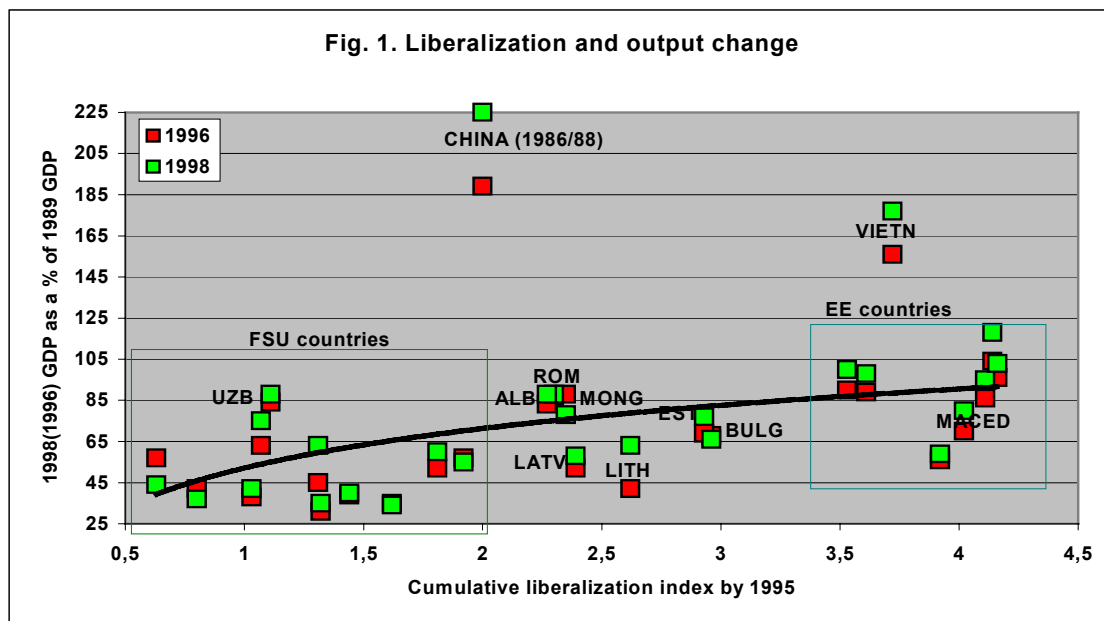
have better chances to limit the reduction of output and to quickly recover from the transformational recession. “Consistent policies, combining liberalization of markets, trade, and new business entry with reasonable price stability, can achieve a great deal even in countries lacking clear property rights and strong market institutions” – was one of the major conclusions of the WDR 1996 (p. 142). The conclusion did not withstand the test of time, since by now most economists would probably agree that because liberalization was carried out without strong market institutions it led to the extraordinary output collapse in CIS states. Liberalization may be important, but the devil is in details, which often do not fit into the generalizations and make straightforward explanations look trivial.

Take the example of Vietnam and China - two countries that shared a lot of similarities in initial conditions and achieved basically the same results (immediate growth of output without transformational recession) despite different reform strategies. While Chinese reforms are normally treated as a classical example of gradualism, Vietnamese reformers introduced Polish style shock therapy treatment (instant deregulation of most prices and introduction of convertibility of dong) even before Poland did, in 1989, and still managed to avoid the reduction of output.²

Or, take the example of the differing performance of the former Soviet Union (FSU) states. The champions of liberalization and stabilization in the region are definitely Baltic states (cumulative liberalization index by 1995 - 2.4-2.9), whereas Uzbekistan (with the same index of 1.1) is commonly perceived to be one of the worst procrastinators. However in Uzbekistan the reduction of output in 1990-95 totaled only 18% and the economy started to grow again in 1996, while in the Baltics output fell in the early 1990s by 36-60% and even in 1996, two years after the bottom of the recession was reached, was still 31% to 58% below the pre-recession maximum.

At a first glance, there seems to be a positive relationship between liberalization and performance (fig.1), but a more careful consideration reveals that the link is just the result of sharp difference in the magnitude of the recession in EE countries, as a group, and FSU states, also as a group (fig.1). Within these groups there is no correlation whatsoever.

² While Vietnamese industry, excluding constantly and rapidly growing oil production, experienced some downturn in 1989-90 (-6% in 1989 and 0% in 1990) agricultural growth remained strong, so that GDP growth rates virtually did not fall (5-6% a year).



Overall, attempts to link differences in output changes during transition to the cumulative liberalization index and to macro stabilization (rates of inflation) have not yielded any impressive results: it turned out that dummies, such as membership in the ruble zone (i.e. FSU) and war destruction, are much more important explanatory variables than either the liberalization index or inflation (Åslund, Boone, Johnson, 1996). Other studies that tried to take into account a number of initial conditions (repressed inflation -monetary overhang before deregulation of prices, trade dependence, black market exchange rate premium, number of years under central planning, urbanization, overindustrialization, and per capita income) found that in some cases liberalization becomes insignificant as well (De Melo, Denizler, Gelb and Tenev, 1997, p. 25; Heybey, Murrel, 1999; Popov, 2000).

This implies that there is still no good explanation even for the basic stylized facts, such as the ability of China and Vietnam to avoid the recession completely, or such as the markedly greater magnitude of the recession in FSU as compared to East European (EE) countries, not to speak about differing performance of countries belonging to the same geographical region.

This paper starts by separating the transformational recession (the deviation of actual output from potential) from the process of economic growth (recovery from the transformational recession). It is argued that the former (the collapse of output during transition) can be best explained as adverse supply shock caused mostly by a change in relative prices after their deregulation due to distortions in industrial structure and trade patterns accumulated during the period of central planning, and by the collapse of state institutions during transition period, while the speed of liberalization does not seem to play a major role. The latter process (recovery) should be treated as a normal growth process: it could be modeled by using conventional production functions and in the long run may demonstrate the ability to capitalize on liberalization by increasing factor efficiency (Shmelev and Popov 1989; Popov, 1998a, 1999).

Non-policy factors: distortions in industrial structure and trade patterns

In the first approximation, the transformational recession is basically a supply-side phenomenon, a structural adjustment process resulting from the need to overcome disproportions inherited from the centrally planned economy (CPE) - high militarization, overindustrialization and underdevelopment of the service sector, "under-openness" of the economy, the perverse structure of trade among former Soviet republics and among socialist countries. The greater the magnitude of these distortions inherited from the centrally planned economies, the more pronounced the reduction of GDP during the transformational recession.

The supply-side explanation implies that the reallocation of resources (restructuring) due to market imperfections is associated with the temporary loss of output. Thus, the decline in the production of non-competitive enterprises and industries is not offset immediately by an increase in the production of competitive industries and enterprises due to barriers to capital and labor flows such as poorly developed banking system and securities markets, uncertain property rights, the lack of easily enforceable and commonly accepted bankruptcy and liquidation procedures, the underdevelopment of land market, housing market and labor market infrastructure, and so on.

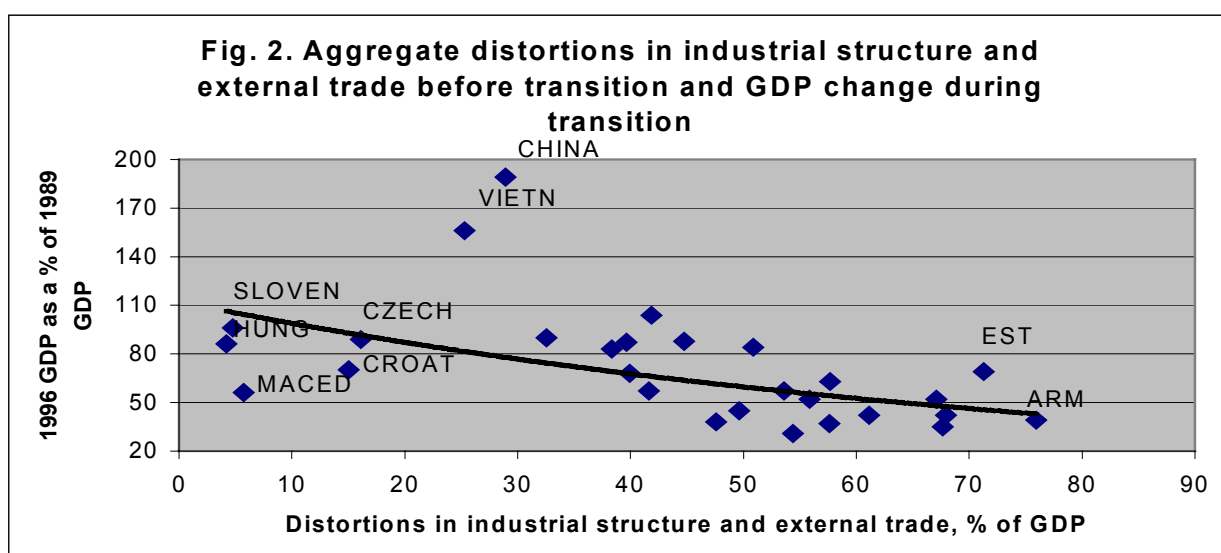
Attempts to separate non-policy from policy factors by running multiple regressions produce some statistically satisfactory and economically meaningful results.³ Though there is a relationship between the magnitude of output decline on the one hand and the liberalization index and inflation on the other ($R^2 = 65\%$), it weakens greatly or even disappears completely once variables that characterize objective conditions are factored in. It is noteworthy that nearly 70% of the variations in the magnitude of the decline of output may be explained by only two dummy variables (both significant at the 1% level) that account for membership in the FSU and for wars. It is even more remarkable that the addition of liberalization variable to the equation does not seem to make any difference: the correlation coefficient does not increase when liberalization is taken into consideration; to make matters worse, the coefficient of the liberalization index is not statistically significant and has the unexpected sign: the greater the liberalization, the larger the decline of output. Inflation variable is always significant and has the predicted (negative) sign, but this cannot be considered as an important finding: the link between macroeconomic stabilization and economic growth was demonstrated more than once for a much greater group of countries (see, for instance: Bruno, 1995; Bruno and Easterly, 1995).

These results suggest that the usual argument linking the better performance of EE, especially the Central European countries (as compared to the FSU, especially the CIS countries), to better economic policies (greater liberalization) does not necessarily hold. Indeed, the identification and decomposition of the "FSU effect" may be carried out more effectively by bringing into the equation not policy variables, but non-policy factors, such as the relative magnitude of the distortions in trade and industrial structure.

³ More detailed description of the data and regressions is in Popov (2000).

To avoid the multicollinearity problem, an aggregate indicator of distortions was constructed (summing up all the distortions mentioned above, since they are expressed as a % of GDP). There is a fairly strong correlation between aggregate distortions in industrial and trade structure before transition and the subsequent performance during transition, as measured by the GDP change (fig. 2). Among countries with minor aggregate distortions (less than 30% of GDP) are three former Yugoslav republics (Slovenia, Croatia, Macedonia), the Czech and Slovak republics, Hungary, China and Vietnam. All these countries, with the exception of war-affected Macedonia, are doing better than most other transition economies. On the other hand, among countries with most distorted economies (aggregate distortions of over 50% of GDP) we find all the former Soviet republics, except Russia (where aggregate distortions amounted to only 39% of GDP). In fact, aggregate distortions alone may explain 32% of output variations during transition and about 50% of variations if the economies affected by war are excluded. Taking into account the other two non-policy factors characterizing the initial conditions, we obtain statistically sound and robust results: over 60% of the variations in performance may be explained by (1) the advantages of backwardness, (2) aggregate distortions, and (3) the war dummy variable.

The addition of the FSU dummy to the equation leads to the absorption of the aggregate distortions variable (the FSU dummy thus plays the role of a proxy for distortions), while the impact of the level of economic development and war remains statistically significant. Adding inflation as an explanatory variable allows to improve the results, but the inclusion of liberalization index only deteriorates T-statistics and does not increase the explanatory power of the regression at all. To put it differently, the observed differences in performance may be explained *mostly* by the unequal initial conditions, while the role of traditional "good policy" factors appears to be quite limited.



Such an interpretation suggests, among other things, that recent research aimed at providing some empirical evidence for the conventional wisdom (greater liberalization and stabilization lead to better performance) may not

reach this goal by demonstrating that countries, which are more advanced in liberalization and in fighting inflation are doing better than others. Once the pre-transition initial conditions are taken into account, it turns out that conventionally monitored policy factors, such as the degree of liberalization and the rates of inflation, do not really explain much. Differences in economic performance in post-communist countries during transition appear to be associated predominantly not with chosen reform paths, but with the magnitude of initial distortions in industrial structure and trade patterns, and with the initial level of economic development.

This is not to say that government policy in general does not affect performance, but to admit that conventional understanding of the policy factors (progress in liberalization and macroeconomic stabilization) is not enough to account for all of them. It may well be that most important policy factors that affect performance are not associated, despite popular beliefs, with the speed of liberalization and macro-stabilization. Rather, these are the policy measures aimed at preserving and/or creating strong and efficient institutions.

Policy factors: institutions, rule of law and democracy

The decline of the institutional capabilities contributed a great deal to Russia's and CIS poor economic performance. If regression equations that account for initial conditions only are used to predict economic performance (GDP change), it turns out that China and Vietnam did much better than expected, EE and Baltic states on average did not so good, but still a bit better than expected, whereas most CIS states did much worse than expected. Exceptions within CIS prove the rule: Uzbekistan and Belarus, i.e. exactly those countries that are not only known for proceeding with slow reforms, but are also believed to have the strongest state institutions among all CIS states.⁴ Ukrainian example, on the other hand, proves that it is not the speed of reforms *per se* that really matters: being a procrastinator, it did nevertheless worse than expected due arguably to the poor institutional capabilities (trust in political institutions in Ukraine is markedly lower than in Belarus).

The efficiency of state and non-state institutions is not easily measurable. In most FSU and Balkan countries the collapse of the institutions is observable in the dramatic increase of the share of the shadow economy; in the decline of government revenues as a proportion of GDP; in the inability of the state to deliver basic public goods and appropriate regulatory framework; in the accumulation of tax, trade, wage and bank arrears; in the demonetization, "dollarization" and "barterization" of the economy, as measured by high and growing money velocity, and in the decline of bank financing as a proportion of GDP; in poor enforcement of property rights, bankruptcies, contracts and law and order in general; in increased crime rates; etc. Most of the mentioned phenomena may be defined quantitatively with a remarkable result that China and Vietnam are closer in this respect to EE countries than to CIS. However, the construction of the aggregate index of the efficiency of

⁴ The decline in government revenues as a % of GDP in these countries was less pronounced than elsewhere in CIS.

institutions is problematic because the rationale for choosing weights is not clear.

One possible general measure is the trust of businesses and individuals in various institutions - here FSU states rank much lower than East European countries in all available surveys. In the global survey of firms in 69 countries on the credibility of the state institutions, CIS had the lowest credibility, below that of Sub-Saharan Africa (World Bank, 1997a, pp. 5, 35). Especially striking was the gap between EE and CIS countries: differences in credibility index between South and Southeast Asia and EE were less pronounced than differences between Sub-Sahara Africa and CIS.

Another good proxy for measuring institutional capacity of the state is the financial strength of the government - the share of state revenues in GDP. Though much have been said about "big government" and too high taxes in former socialist countries, by now it is rather obvious that the downsizing of the government that occurred in most CIS states during transition went too far. This argument has nothing to do with the long-term considerations of the optimal size of the government in transition economies – it is true that in most of them government revenues and expenditure as a share of GDP are still higher than in countries with comparable GDP per capita. But whatever the long term optimal level of government spending should be, the drastic reduction of such spending (by 50% and more in real terms) cannot lead to anything else but institutional collapse.

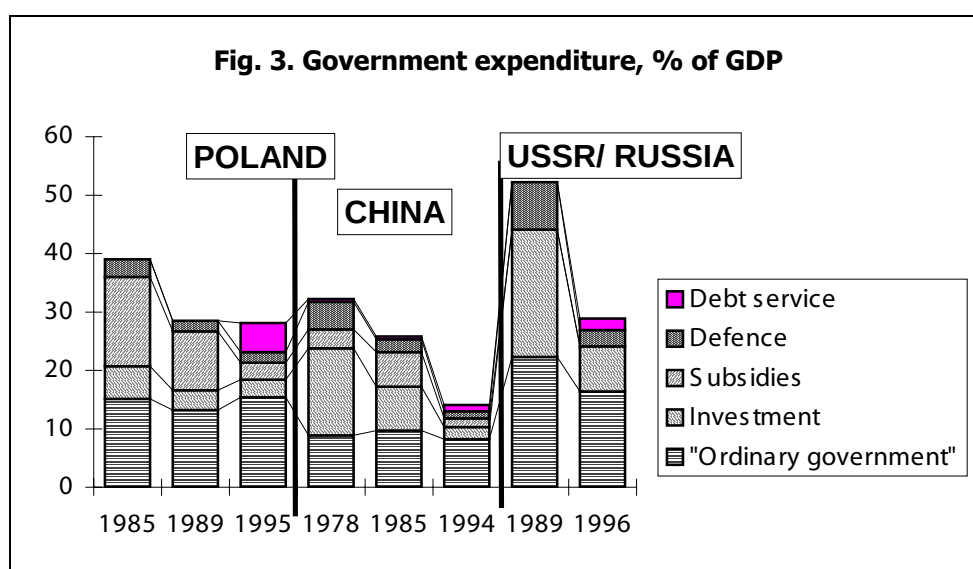
Before transition in former socialist states not only government regulations were pervasive, but also the financial power of the state was roughly the same as in European countries (government revenues and expenditure amounted to about 50% of GDP). This allowed the state to provide the bulk of public goods and extensive social transfers. During transition tax revenues as a proportion of GDP decreased markedly in most countries. However, Central European countries and Estonia managed to arrest the decline, while Russia (together with Lithuania, Latvia, and several Southeast Europe and Central Asian states) experienced the greatest reduction. In Vietnam the share of government revenues in GDP grew by 1.5 times in 1989-93. Chinese government revenues as a percentage of GDP fell by over 2 times since the late 1970s, but it looks more like a conscious policy choice rather than a spontaneous process (authoritarian regimes have always better powers to collect tax revenues, if they choose to do so, as did all governments in the CPE's before the transition).

In most CIS states the reduction of the government expenditure occurred in the worst possible way - it proceeded without any coherent plan and did not involve the reassessment of government commitments. Instead of shutting down completely some government programs and concentrating limited resources on the other with an aim to raise their efficiency, the government kept all programs half-alive, half-financed, and barely working.

This led to the slow decay of public education, health care, infrastructure, law and order institutions, fundamental R&D, etc. Virtually all services provided by the government - from collecting custom duties to regulating street traffic - are currently the symbol of notorious economic inefficiency. There were numerous cases of government failure which further undermined the credibility of the state since many government activities in providing

public goods were slowly dying and were only partly replaced by private and semi-private businesses.

Three major patterns of change in the share of government expenditure in GDP⁵, which generally coincide with the three major archetypes of institutional developments, and even broader - with three most typical distinct "models" of transition, are shown in fig. 3. Under **strong authoritarian regimes** (China) cuts in government expenditure occurred at the expense of defense, subsidies and budgetary financed investment, while expenditure for "ordinary government" as a percentage of GDP remained largely unchanged (Naughton, 1997); under **strong democratic regimes** (Poland) budgetary expenditure, including those for "ordinary government", declined only in the pre-transition period, but increased during transition itself; finally, under **weak democratic regimes** (Russia) the reduction of the general level of government expenditure led not only to the decline in the financing of defense, investment and subsidies, but to the downsizing of "ordinary government", which undermined and in many instances even led to the collapse of the institutional capacities of the state.



While in China total budgetary expenditure and that for "ordinary government" are much lower than in Russia and Poland, they were sufficient to preserve the functioning institutions since the financing of social security from the government budget was traditionally low. In Russia, however, though expenditure for ordinary government seem to be not that much lower than in Poland, the pace of their reduction during transition exceeded that of GDP: to put it differently, given the various patterns of GDP dynamics, while in Poland "ordinary government" financing grew by about one third in real terms in 1989-95/6 (and while in China it nearly doubled), in Russia it fell by about 3 times! The Russian pattern of institutional decay proved to be

⁵ Data for China (World Bank, 1996b), Russia (Goskomstat) and Poland (Rocznik Statystyczny 1990, Warszawa; and data from Institut Finansow provided by G. Kolodko) do not include off-budget funds, which are very substantial in all three countries and are used mostly for social security purposes. Defense expenditure are from official statistics, i.e. lower than Western estimates, which is likely to lead to overstatement of spending for investment and subsidies at the expense of defense outlays. For USSR/Russia investment and subsidies are shown together.

extremely detrimental for investment, and for general economic performance.

After adding the decline in government revenues variable to the ones that characterize initial conditions (level of development and distortions) and external environment (war dummy variable), the explanatory power of the regression increases to 75% with the excellent T-statistics (28 observations). And it is quite remarkable that the inclusion of liberalization variables at this point does not improve regression statistics. Factoring in inflation allows to improve the explanatory power to 85%. The correlation coefficient rises further up to 92%, if other indicators of the institutional capacities, such as the share of shadow economy, are added, though the number of observations in this case is only 17 because of the lack of data (table 1).

There was only one group of transition economies, where the share of state revenues in GDP remained relatively stable during transition – Central European countries. Outside Central Europe there were only 4 countries where the share of government revenues in GDP did not fall markedly – Belarus, Estonia, Uzbekistan, Vietnam. The first 3 are also the top 3 performers in the FSU region, whereas Vietnam's performance is second to only that of China. It is noteworthy that Belarus and Uzbekistan, commonly perceived as procrastinators, nevertheless show better results than most more advanced reformers. On the other hand, this is the alternative explanation of the Estonian success in economic transformation as compared to most CIS states and even to neighboring Baltic states: the usual interpretation focusing on the progress in liberalization may overlook the impact of strong institutions.

It is precisely this strong institutional framework that should be held responsible for both - for the success of gradual reforms in China and shock therapy in Vietnam, where strong authoritarian regimes were preserved and CPE institutions were not dismantled before new market institutions were created; and for the relative success of radical reforms in East European, especially in Central European countries, where strong democratic regimes and new market institutions emerged quickly. And it is precisely the collapse of strong state and institutions that started in the USSR in the late 1980s and continued in the successor states in the 1990s that explains the extreme length, if not the extreme depth of the FSU transformational recession.

Table 1. Regression of change in GDP on non-policy and policy-related factors (all coefficients are significant at 5% level except those in brackets)

Dependent variable = log (1996 GDP as a % of 1989 GDP)

For China - all indicators are for the period of 1979-86 or similar

Equations, Number of Observations / Variables	1, N=28	2, N=28	3, N=28	4, N=28	5, N=17	6, N=17
Constant	5.23	4.96	5.55	5.71	5.91	6.07
Distortions, % of GDP ^a	-.01	-.01	-.01	-.01	-.00	-.00
1987 PPP GDP per capita, % of the US level	-.01	-.02	-.01	-.01	-.02	-.01
War dummy ^b	-.63	-.58	-.40	-.40	0.26 ^c	0.27 ^c
Decline in government revenues as a % of GDP from 1989-91 to 1993-96	-.01	-.01	-.01	-.01		
Liberalization index		(.07)		(-0.4)		(-.05)
Log (Inflation, % a year, 1990-95, geometric average)			-.12	-.14	-.12	-.14
Shadow economy as a % of GDP in 1994					-.02	-.02
Adjusted R ² , %	75	75	85	84	92	91

^aCumulative measure of distortions as a % of GDP equal to the sum of defense expenditure (minus 3% regarded as the 'normal' level), deviations in industrial structure and trade openness from the 'normal' level, the share of heavily distorted trade (among the FSU republics) and lightly distorted trade (with socialist countries) taken with a 33% weight (see Appendix for details).

^bEquals 1 for Armenia, Azerbaijan, Croatia, Georgia, Macedonia, and Tajikistan and 0 for all other countries.

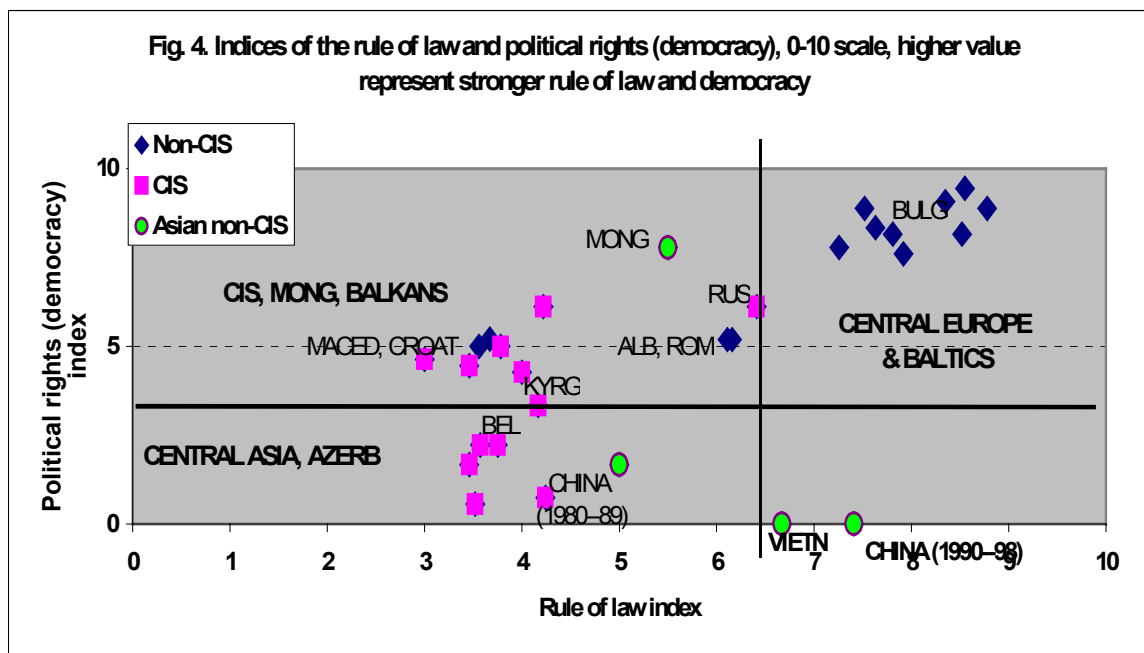
^cSignificant at 8% level.

To put it differently, Gorbachev reforms of 1985-91 failed not because they were gradual, but due to the weakening of the state institutional capacity leading to the inability of the government to control the flow of events. Similarly, Yeltsin reforms in Russia, as well as economic reforms in most other FSU states, were so costly not because of the shock therapy, but due to the collapse of the institutions needed to enforce law and order and carry out manageable transition.

To sum up, there is enough evidence that differing performance during transition, after factoring in initial conditions and external environment, depends mostly on the strength of institutions and not so much on the progress in liberalization *per se*.

Finally, there is a difficult question what leads to the institutional collapse and can it be prevented. Using the terminology of political science, it is appropriate to distinguish between strong authoritarian regimes (China, Vietnam, Uzbekistan), strong democratic regimes (Central European countries) and weak democratic regimes (most FSU and Balkan states – fig. 4). The former two are politically liberal or liberalizing, i. e. protect individual rights, including those of property and contracts, and create a framework of law and administration, while the latter regimes, though democratic, are politically not so liberal since they lack strong institutions and the ability to enforce law and order (Zakaria, 1997). This gives rise to

the phenomenon of “illiberal democracies” - countries, where competitive elections are introduced before the rule of law is established. While European countries in the XIX century and East Asian countries recently moved from first establishing the rule of law to gradually introducing democratic elections (Hong Kong is the most obvious example of the rule of law without democracy), in Latin America, Africa, and now in CIS countries democratic political systems were introduced in societies without the firm rule of law.

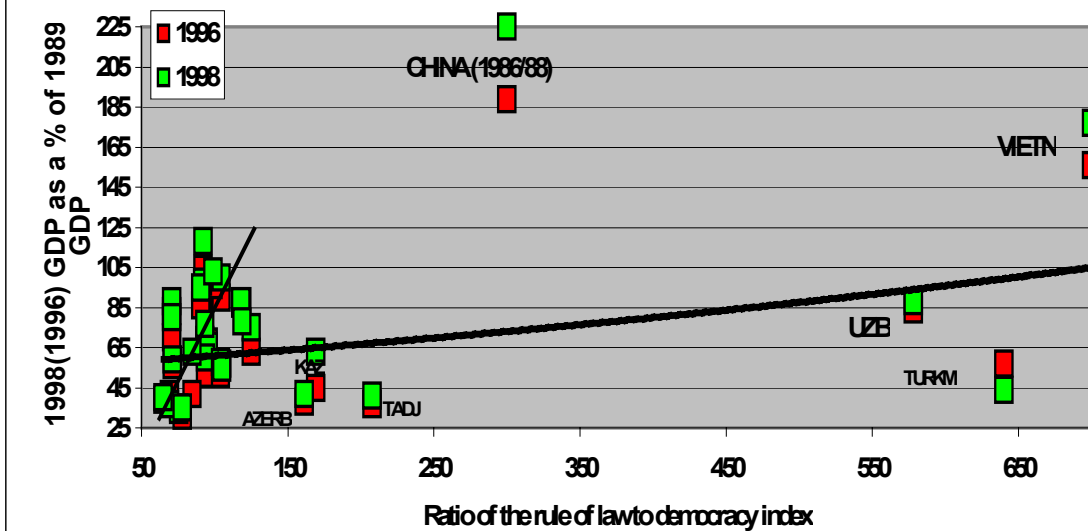


Authoritarian regimes (including communist), while gradually building property rights and institutions, were filling the vacuum in the rule of law via authoritarian means. After democratization occurred and illiberal democracies emerged, they found themselves deprived of old authoritarian instruments to ensure law and order, but without the newly developed democratic mechanisms needed to guarantee property rights, contracts and law and order in general (upper left quadrant in fig. 4). No surprise, this had a devastating impact on investment climate and output⁶.

As fig. 5 suggests, there is a clear relationship between the ratio of rule of law index on the eve of transition to democratization index, on the one hand, and economic performance during transition, on the other, although the positive correlation for authoritarian countries is apparently different from that for democracies. To put it differently, democratization without strong rule of law, whether one likes it or not, usually leads to the collapse of output. There is a price to pay for early democratization, i.e. introduction of competitive elections of government under the conditions when the major

⁶ The **democracy** index is taken from Freedom House (<http://www.freedomhouse.org/rankings.pdf>), but inverted and calibrated, so that complete democracy coincides with 100%, whereas complete authoritarianism with 0%. The rule of law index is taken from (Campos, 1999) and for China, Vietnam and Mongolia – from International Country Risk Guide, 1984 to 1998, and calibrated, so that 100% corresponds to the highest possible rule of law.

Fig 5. Ratio of the rule of law to democracy index and output change



liberal rights (personal freedom and safety, property, contracts, fair trial in court, etc.) are not well established.

If the rule of law and democracy indices are included into the basic regression equation, they have predicted signs (positive impact of the rule of law and negative impact of democracy) and statistically significant (table 2, equation 1), which is consistent with the results obtained for larger sample of countries. The best explanatory power, however, is exhibited by the index that is computed as the ratio of the rule of law index to democracy index: nearly 80% of all variations in output can be explained by only three factors – pre-transition distortions, inflation, and rule-of-law-to-democracy index (table 2, equation 2). If liberalization variable is added, it turns out to be not statistically significant and does not improve the goodness of fit (equation 3). At the same time, the ratio of the rule of law to democracy index and the decline in government revenues are not substitutes, but rather complement each other in characterizing the process of the institutional decay. These two variables are not correlated and improve the goodness of fit, when included together in the same regression, to 88% (equation 5) - better result than in regressions with either one of these variables. The liberalization index, when added to the same equation, only deteriorates the goodness of fit, is not statistically significant, and has the “wrong” sign.

Table 2. Regression of change in GDP in 1989-96 on initial conditions, policy factors, and rule of law and democracy indices (all coefficients are significant at 9% level except those in brackets)

Dependent variable = log (1996 GDP as a % of 1989 GDP)

For China - all indicators are for the period of 1989-96 or similar

Equations, Number of Observations / Variables	1, N=28	2, N=28	3, N=28	4, N=28	5, N=28	6, N=28
Constant	5.33	5.26	5.26	5.40	5.41	5.50
Distortions, % of GDP ^a	-.004	-.004	(-.003)	-.006	-.007	-.007
1987 PPP GDP per capita, % of the US level				-.007	-.009	-.008
War dummy ^b				-.19	-.36	-.37
Decline in government revenues as a % of GDP from 1989-91 to 1993-96					-.011	-.011
Liberalization index			(.015)			(- .018)
Log (Inflation, % a year, 1990-95, Geometric average)	-.19	-.20	-.20	-.17	-.13	-.14
Rule of law index, average for 1989-97, %	.(007) ^c					
Democracy index, average for 1990-98, %	-.007					
Ratio of the rule of law to democracy index		.088	.090	.060	.048	.046
Adjusted R ² , %	76	79	79	82	88	87

^aCumulative measure of distortions as a % of GDP equal to the sum of defense expenditure (minus 3% regarded as the 'normal' level), deviations in industrial structure and trade openness from the 'normal' level, the share of heavily distorted trade (among the FSU republics) and lightly distorted trade (with socialist countries) taken with a 33% weight (see Appendix for details).

^bEquals 1 for Armenia, Azerbaijan, Croatia, Georgia, Macedonia, and Tajikistan and 0 for all other countries.

^cSignificant at 14% level.

Concluding remarks

Differences in performance during transition depend strongly on the initial conditions, in particular, on the pre-transition levels of GDP per capita and distortions in industrial structure and external trade patterns. The higher the distortions (militarization, overindustrialization, "under-openness" of the economy and the share of perverted trade flows), the worse is the performance as measured by the GDP change. And the higher was GDP per capita before transition, the greater were distortions embodied in fixed capital stock, the more difficult it was to overcome these distortions to achieve growth.

By focusing on liberalization and macroeconomic stabilization as key policy variables in transition economies the conventional wisdom overlooked the impact of strong institutions. Accounting for uneven initial conditions sheds new light on the relative importance of various policy factors. Macroeconomic stability continues to matter a great deal - the inclusion of the inflation variable improves the coefficient of correlation from 63 to 78%, but liberalization index does not appear to be important - the coefficient is not statistically significant and in most cases has unexpected sign. On the contrary, changes in the institutional capabilities of the state have dramatic impact on performance.

In a sense, the importance of preserving strong institutional capacity of the state for ensuring good performance may be considered as the main finding of this paper with strong policy implication. After allowing for differing initial conditions, it turns out that the fall in output in transition economies was associated mostly with poor business environment, resulting from institutional collapse. Liberalization alone, when it is not complemented with strong institutions, can not ensure good performance. Moreover, the process of the collapse of output in transition economies is best described by the supply side recession model, where the key determinants are initial conditions and the strength of institutions, while the impact of liberalization is hardly noticeable. It follows that the debate about the speed of the liberalization (shock therapy versus gradualism) was to a large extent misfocused, whereas the crucial importance of strong institutions for good performance was overlooked.

Institutional capacities in turn, depend to a large extent on the combination of the rule of law and democracy: the data seem to suggest that both - authoritarian and democratic regimes with the strong rule of law can deliver efficient institutions, whereas under the weak rule of law authoritarian regimes do a better job in maintaining efficient institutions than democracies. To put it in a shorter form, the record of illiberal democracies in ensuring institutional capacities is the worst, which predictably has a devastating impact on output.

References

- Åslund, Anders, Boone, Peter, and Johnson, Simon (1996), "How to Stabilize: Lessons from Post-communist Countries". *Brookings Papers Econom. Activity*, 1: p.217-313.
- Breton, Paul, Gros, Daniel and Vandille, Guy (1997), "Output Decline and Recovery in the Transition Economies: Causes and Social Consequences". - *Economics of Transition*, Vol. 5 (1): pp. 113-130.
- Bruno, Michael, and Easterly, William (1995), *Inflation Crisis and Long-Run Growth*. Unpublished. World Bank.
- Bruno, Michael (1995), "Does Inflation Really Lower Growth?" - *Finance & Development*, (September).
- Campos, Nauro F. (1999), "Context is Everything: Measuring Institutional Change in Transition Economies", Prague, (August).
- De Melo, Martha, Deniz Cevdet, Gelb, Alan, and Tenev, Stoyan (1997), "Circumstance and Choice: The Role of Initial Conditions and Policies in Transitions Economies". The World Bank. International Financial Corporation, (October).
- De Melo, Martha, Deniz Cevdet, and Gelb, Alan (1996), "Patterns of Transition From Plan to Market". *World Bank Econom. Review*, 3: pp.397-424.
- Fisher, Stanley, Sahay, Ratna, Vegh, Carlos, A. (1996), "Stabilization and Growth in the Transition Economies: The Early Experience". – *Journal of Economic Perspectives*, 10 (2): pp. 45-66.
- Fisher, Stanley, Sahay, Ratna (2000), "The transition economies After Ten Years", SSRN Working Paper, (February) .
- Heybey, Berta and Murrell, Peter (1999), The Relationship between Economic Growth and the Speed of Liberalization During Transition. – *Journal of Policy Reform*, 3 (2).
- Kornai, Janos (1994), "Transformational Recession: The Main Causes" in *Journal of Comparative Economics*, 1: pp.39-63.
- Naughton, Barry (1997), "Economic Reform in China. Macroeconomic and Overall Performance" in *The System Transformation of the Transition Economies: Europe, Asia and North Korea*. Ed. by D. Lee. Yonsei University Press, Seoul.
- Popov, V. (1998a), "Investment in Transition Economies: Factors of Change and Implications for Performance" in *Journal of East-West Business* , Vol. 4, No. 1/2: pp.47-98.
- Popov, V. (1998b), "Will Russia Achieve Fast Economic Growth?" in *Communist Economies and Economic Transformation*, No. 4.

Popov, Vladimir (1999), "Investment, Restructuring and Performance in Transition Economies" in *Post-Communist Economies*, No.3.

Popov, V. (2000), "Shock Therapy versus Gradualism: The End of the Debate (Explaining the Magnitude of the Transformational Recession)" in *Comparative Economic Studies*, Spring, 2000, No. 1, Vol. 42: pp. 1-57.

Shmelev, Nickolai, and Popov, Vladimir (1990), *The Turning Point: Revitalizing the Soviet Economy*, New York, Doubleday.

World Bank (1996), *World Development Report 1996: From Plan to Market*, NY: Oxford University Press.

World Bank (1997), *World Development Report 1997: The State in A Changing World*, NY: Oxford University Press.

Zakharina, F (1997), "The Rise of Illiberal Democracies" in *Foreign Affairs*, Vol. 76, No. 6, (November/December): pp. 22-43.