

Appendix 1. Ordinal indicators of Institutional Change

Governance and Enterprise Restructuring (ER_ST); = 1: Soft budget constraints (lax credit and subsidy policies weakening financial discipline at the enterprise level); few other reforms to promote corporate governance; =2: Moderately tight credit and subsidy policy but weak enforcement of bankruptcy legislation and little action taken to strengthen competition and corporate governance; = 3: Significant and sustained actions to harden budget constraints and to promote corporate governance effectively (e.g. through privatisation combined with tight credit and subsidy policies and/or enforcement of bankruptcy legislation); =4: Substantial improvement in corporate governance, for example, an account of an active corporate control market; significant new investment and at the enterprise level; = 4+: Standards and performance typical of advanced industrial economies: effective corporate control exercised through domestic financial institutions and markets, fostering market-driven restructuring.

Competition policy (COMP_POL); =1: No competition legislation or institutions; = 2: Competition policy legislation and institutions set up: some reduction of entry restrictions or enforcement action on dominant firms; = 3: Some enforcement actions to reduce abuse of market power and to promote a competitive environment, including break-ups of dominant conglomerates; substantial reduction of entry restrictions; = 4: Significant enforcement actions to reduce abuse of market power and to promote a competitiveness environment; =4+: Standards and performance typical of advanced industrial economies: effective enforcement of competition policy; unrestricted entry to most markets.

Banking Reform and Interest Rate Liberalisation (BR_I); =1: Little progress beyond establishment of a two-tier system; = 2: Significant liberalisation of interest rates and credit allocation; limited use of directed credit or interest rate ceilings; = 3: Substantial progress in establishment of bank solvency and of a framework for prudential supervision and regulation; full interest rate liberalisation with little preferential access to cheap refinancing; significant lending to private enterprises and significant presence of private banks; =4: Significant movement of banking laws and regulations towards BIS standards; well-functioning banking competition and effective prudential supervision; significant term lending to private enterprises; substantial financial deepening; =4+: Standards and performance norms of advanced industrial economies; full convergence of banking laws and regulations with BIS standards; provision of full set of competitive banking services.

Securities markets and non-bank financial institutions (S_NB); =1: Little progress; =2: Formation of securities exchanges, market-makers and brokers; some trading in government paper and/or securities; rudimentary legal and regulatory framework for the issuance and trading of securities; =3: Substantial issuance of securities by private enterprise; establishment of independent share registries, secure clearance and settlement procedures, and some protection of minority shareholders; emergence of non-bank financial institutions (e.g. investment funds, private insurance and pension funds, leasing companies) and associated regulatory framework; =4: Securities laws and regulations approaching IOSCO standards; substantial market liquidity and capitalisation; well-functioning non-bank financial institutions and effective regulation; =4+: Standards and performance norms of advanced industrial economies; full convergence of securities laws and regulations with IOSCO standards; fully developed non-bank intermediation.

Legal Transition Indicators (OLE). Since 1995 the EBRD has conducted a survey

that measures and assesses the progress achieved to date in legal reforms in transition economies. Through the use of the Legal Indicator Survey, an indicator of extensiveness and an indicator of effectiveness of a number of commercial laws and financial regulations have been developed. The overall score used in this paper is the average (rounded down) of the scores given for the extensiveness and effectiveness indicators. As with the other indicators, scores range from 1 to 4+ where 1 refers to a situation where few changes took place and 4+ refers to a situation where legal rules are similar to those of industrialised countries. For a complete and detailed definition of the legal indicators we refer to EBRD (1999) pg 43-48.

Appendix 2

Table A2.1 Initial Conditions: Variables and Definitions

1. GDP_PC - GDP per capita in 1989, at PPP exchange rates; pre-transition growth, where pre-transition refers to 1985-89 in CEE and 1987-91 in the FSU;
2. RICH - a dummy for wealth in natural resources (ranging from 0 to 2);
3. URBAN - the share of the population living in urban areas;
4. LOCAT - the distance between the country's capital and the EU (Brussels);
5. MARMEM - the years a country lived under central planning;
6. STATE a dummy for state capacity, set equal to 2 in all established nation states, 1 in all dominant states in a federation (Russia, the Czech Republic and former Yugoslavia) and 0 for all new CIS states and the Slovak Republic;
7. ETHNIC=2 (1) (0) if > 95% (75-90%) (other) of the population belonging to the dominant ethnic group;
8. REL1=1 if the dominant religious affiliation is "Western Christianity", 0 else;
9. REL2=1 if the dominant religious affiliation is "eastern or orthodox christianity", 0 else.

Appendix 3. Causes of Institutional Change

1. ysIBD - no. of years since the start of transition in which a country had less than 30% inflation and a budget deficit below 5% of GDP, divided by the length of transition in each country;
2. ysSCP - years since small scale privatisation started;

3. ysPL - years with price liberalisation. Number of years in which a country had achieved at least a 3- on price liberalisation.

The price liberalisation index (PL) is scored as follows. 1= Most prices formally controlled by the government; 2= Price controls for several importance product categories; state procurement at non-market prices remains substantial; 3= Substantial progress on price liberalisation: state procurement at non-market prices largely phased out; 4= Comprehensive price liberalisation; utility prices which reflects economic costs; 4+= Standards and performance typical of advanced industrial economies; comprehensive price liberalisation; efficiency-enhancing regulation of utility pricing.

4. ave_POL - the average score for the two political factors: civil liberties and political reform; Civil Liberties =1 (high) 7 (low); Political Reform =1 (high) 7 (low). Source: Freedom House;
5. EMSIN - the share of employment in industry, agriculture and services, all relative to market economy benchmarks, composite index;
6. ysMS - years with macroeconomic stabilisation the number of years since the start of a formal stabilisation programme (e.g. 1990 for Poland, 1995 for Russia);
7. EXSHE - exports to EU as a share of total exports;
8. PUBE GDP - government expenditure to GDP.