

**Notes on Sources and Analysis for**

Normal Countries: The East 25 Years After Communism

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**Note that many of the statistical claims are documented in the STATA files provided. Please review the do-files for more information about the construction of the statistics.**

**p.92:** “The worst thing about communism,” quipped the Polish newspaper editor and anticommunist dissident Adam Michnik, “is what comes after.”

**Source:** Tony Judt, *Postwar: A History of Europe Since 1945*, New York: Penguin, 2006, p.665.

**p.92:** “Much has changed since the postcommunist countries—the 15 successor states of the Soviet Union, the 14 formerly communist states of eastern Europe, and the former Soviet satellite Mongolia—shook off Marxist tyrannies a generation ago.”

**Note:** We focus on the countries of Eastern Europe and the former Soviet Union plus Mongolia. All these underwent both political and economic transitions after 1989, replacing central planning with markets and communist dictatorship with something else. For simplicity, we refer to these as the “postcommunist countries.” We do not include China or Vietnam, which, while embracing capitalism, retained communist political regimes; the unreconstructed communist states of Cuba and North Korea; or the successors to Marxist regimes in less developed African countries.

**p.93:** “In the Soviet Union, the military consumed up to 25 percent of gdp in the late 1980s, compared with under six percent in the United States.”

**Source:** World Bank, *World Development Indicators*, July 2014, gives a figure of 23 percent of GDP for Russia’s military expenditure in 1990, citing the Stockholm International Peace Research Institute, and 5.6 percent of GDP for the US in 1988, followed by lower figures in subsequent years; Åslund (2012, p.75) gives the estimate of one quarter of GDP for Soviet military spending.

**p.93:** “By 1986, Soviet factories had produced a stock of 45,000 nuclear warheads.”

**Source:** R.S. Norris and H.M. Kristensen, “Global nuclear weapons inventories, 1945-2010,” *Bulletin of the Atomic Scientists*, 2010, 66(4): 77-83.

**p.94:** “To get an apartment in the 1980s, applicants in Bulgaria had to wait up to 20 years, and those in Poland, up to 30 years; a quarter of the people filling the Soviet waiting lists were already pensioners.”

**Sources:** János Kornai, *The Socialist System: The Political Economy of Communism*, Princeton, NJ: Princeton University Press, 1992, pp.234; Bertrand Renaud, “The Housing System of the Former Soviet Union: Why Do the Soviets Need Housing Markets?” *Housing Policy Debate*, 1992, 3:877-99, at p.889.

**p.94:** “Car buyers in East Germany had to place their orders 15 years in advance.”

**Source:** Kornai (1992, p.236).

**p.94:** “In Romania, the dictator Nicolae Ceausescu put all citizens on a low-calorie diet in the early 1980s to save money for repaying the country’s foreign debt. He limited lighting to one 40-watt bulb per room, heating in public buildings to 57 degrees Fahrenheit, and television programming to two tedious hours a day.”

**Sources:** Gale Stokes, *The Walls Came Tumbling Down: The Collapse of Communism in Eastern Europe*, New York: Oxford University Press, 1993, p.158; Jill Massino, “From Black Caviar to Blackouts: Gender, Consumption, and Lifestyle in Ceausescu’s Romania,” in Paulina Bren and Mary

Neuburger, eds., *Communism Unwrapped: Consumption in Cold War Eastern Europe*, New York: Oxford University Press, 2012, pp.226-47.

**p.94:** “With just eight percent of the world’s population, the Soviet Union and other Eastern-bloc countries won 48 percent of the medals at the 1988 Seoul Olympics and boasted 53 of the world’s 100 top chess players that year.”

**Sources:** Calculated from [www.olympic.org/seoul-1988-summer-olympics](http://www.olympic.org/seoul-1988-summer-olympics), population from World Bank, *World Development Indicators*, July 2014; chess ratings at <http://fidelists.blogspot.com/2008/03/january-1988-fide-rating-list.html>.

**p.94:** “To Vaclav Havel, the Czech Republic’s dissident turned president, the system was a “monstrously huge, noisy, and stinking machine.””

**Source:** Vaclav Havel, “The Art of the Impossible,” (first speech as President of Czechoslovakia), translated in *The Spectator*, 27 January, 1990, pp.11-13.

**p.94:** “Years after leaving power, Mikhail Gorbachev, the last Soviet president, characterized the economy he once oversaw as “voracious” and “resource-squandering.””

**Source:** Quoted in Vladimir Mau and Irina Starodubrovskaya, *The Challenge of Revolution: Contemporary Russia in Historical Perspective*, New York: Oxford University Press, 2001, p.181.

**p.94:** “In 1989, inflation hit 640 percent in Poland and 2,700 percent in Yugoslavia.”

**Source:** Fabrizio Coricelli and Roberto Rezende Rocha, “Stabilization Programs in Eastern Europe: A Comparative Analysis of the Polish and Yugoslav Programs of 1990,” Washington, DC: World Bank, 1991, pp.6, 22.

**p.94:** “By 1991, when the Soviet Union disintegrated, its output was falling by 15 percent a year.”

**Source:** Anders Åslund, “Russia’s Economic Transformation,” in Michael Alexeev and Shlomo Weber, eds., *The Oxford Handbook of the Russian Economy*, New York: Oxford University Press, 2013, pp.86-101, at p.90.

**p.94:** “By 2011, they averaged 7.0 on the index of economic freedom compiled annually by the Fraser Institute, a Canadian research group, compared with the global mean of 6.8. The most fully reformed of the pack, Estonia, ranked right between Denmark and the United States.”

**Source:** James Gwartney, Robert Lawson, and Joshua Hall, “2013 Economic Freedom Dataset,” published in *Economic Freedom of the World: 2013 Annual Report*, Fraser Institute, 2013, [www.freetheworld.com/datasets\\_efw.html](http://www.freetheworld.com/datasets_efw.html).

**pp.94-5:** “In most places, state-owned industrial dinosaurs gave way to private firms, which began to account for a greater share of gdp. The median share of private-sector output in the postcommunist countries now stands at 70 percent.”

**Source:** Figure as of 2010, European Bank for Reconstruction and Development, *EBRD Structural Change Indicators*, accessed August 2014, at <http://www.ebrd.com/pages/research/economics/data/macro.shtml>.

**p.95:** “Heavy industry shrank, and, on average, services grew from 36 percent to 58 percent of national output between 1990 and 2012. In no other region of the world has international trade expanded as fast, with the average volume of imports and exports together soaring from 75 percent to 114 percent of gdp.”

**Source:** World Bank, *World Development Indicators*, July 2014.

**p.95:** “After decades spent trading largely with one another, the postcommunist states swiftly reoriented themselves toward foreign markets in Europe and elsewhere. By 2012, the share of exports they sent to the eu had grown—to a median value of 69 percent for the eastern European countries and 47 percent for the former Soviet republics.”

**Sources:** Various. See Table 1 at end of these notes.

**pp.95-6:** “In 1990, for instance, household consumption in most noncommunist countries represented more than 60 percent of gdp. But in Russia, this measure stood at less than one-third of gdp, and in Azerbaijan, it fell below one-quarter.”

**Source:** Figures from the Penn World Tables (PWT), version 8.0, variable csh\_c (share of household consumption at current PPPs).

**p.96:** “Much of the economic slump recorded in the early years of the postcommunist transition—half of it, by some estimates—reflected cuts in fictitious output or worthless investments.”

**Source:** See discussion in Åslund (2012, pp.70-77).

**p.96:** “Despite the initial contraction, the median postcommunist country in terms of growth (Uzbekistan) expanded slightly faster between 1990 and 2011 than the median country elsewhere in the world (Norway). Whereas Norway’s gdp per capita grew by 45 percent between these years, Uzbekistan’s rose by 47 percent. Bosnia, where national income increased by more than 450 percent, had the world’s third-highest growth rate over that period. Albania came in 16th, expanding by 134 percent, and Poland placed 20th, at 119 percent. All three outpaced such traditional growth engines as Hong Kong and Singapore.”

**Sources:** Penn World Tables (PWT) version 8.0 for GDP, and World Bank, *World Development Indicators*, July 2014 for population.

**Note:** For making comparisons between countries in a given year, we use estimates of GDP or consumption expenditure adjusted for purchasing power parity (PPP). To compare growth rates over time, the appropriate metric is GDP per capita in constant local currency units, from the national accounts; changes in PPP-adjusted figures would include changes in countries’ relative prices mixed in with changes in real output. We use the series rgdpna (real GDP at constant 2005 national prices, in million 2005 US dollars, from PWT 8.0), and divide by the population data from the World Bank, *World Development Indicators* (WDI), July 2014, to generate real per capita GDP. We use Penn World Tables for income and consumption as its coverage for the postcommunist countries is more complete. For population data, however, we use WDI because the PWT series appears to be quite inaccurate. For instance, its figure for China’s population in 2011, 1.324 billion, is about 16 million lower than the Chinese census of November 2010 reported (and population was growing, not falling);

<http://web.archive.org/web/20131108022004/>

[http://www.stats.gov.cn/english/newsandcommingevents/t20110428\\_402722244.htm](http://www.stats.gov.cn/english/newsandcommingevents/t20110428_402722244.htm)). The WDI figure was much closer. For India, PWT 8.0 gives a population of 1.241 billion for 2011, 31 million more than in the 2011 Indian Census, which gives 1.210 billion ([http://www.censusindia.gov.in/2011-prov-results/paper2-vol2/prov\\_results\\_paper2\\_indiavol2.html](http://www.censusindia.gov.in/2011-prov-results/paper2-vol2/prov_results_paper2_indiavol2.html)). Again, the WDI figure, 1.221 billion, is much closer. Such

data choices affect the conclusions only slightly. The estimated change in GDP per capita between 1990 and 2011 is: 45 percent (postcommunist) and 46 percent (others) using the PWT 8.0 data on both GDP and population, and 47 percent (postcommunist) and 43 percent (others) using the WDI data on both. Using the WDI data, one can calculate the medians for growth in 1990-2012: 50 percent (postcommunist) and 45 percent (others). None of these support the view that the postcommunist countries have underperformed significantly relative to others.

**p.96:** “From 1990 to 2011, household consumption per capita in the postcommunist countries grew, on average, by 88 percent, compared with an average increase of 56 percent elsewhere in the world. In Poland, household consumption grew by 146 percent, a rise that equaled South Korea’s. In Russia, the level increased by more than 100 percent.”

**Source:** Penn World Tables (PWT) version 8.0 for GDP and household consumption share, and World Bank, *World Development Indicators*, July 2014 for population.

**p.96:** “Between 1993 and 2011, the average number of passenger cars climbed from one for every ten people to one for every four. In Lithuania, Poland, and Slovenia, there are now more cars per person than in the United Kingdom.”

**Source:** Data from UN Economic Committee for Europe, Transport Division, (<http://w3.unece.org/pxweb/Dialog/Saveshow.asp?lang=1>), supplemented for recent years in some countries from WDI, plus figures for Tajikistan from Tajik state statistical agency. In place of 2011, final reading is for 2010 for Kyrgyzstan, 2009 for Canada, and 2008 for Turkmenistan.

**p.96:** “By 2013, the region’s cell-phone subscriptions per person, at 1.24, had overtaken the rate in the West. The postcommunist world now boasts a higher percentage of Internet users—54 percent of the population in the average country—than any other region except North America and western Europe.”

**Source:** World Bank, *World Development Indicators*, July 2014.

**p.96:** “The citizens of the postcommunist states also travel more than ever before; they made almost 170 million foreign tourist trips in 2012.”

**Source:** World Bank, *World Development Indicators*, July 2014.

**p.97:** “since 1991, living space per person has expanded by 99 percent in the Czech Republic, 85 percent in Armenia, and 39 percent in Russia.”

**Sources:** Various; see Table 2 at the end.

**p.97:** “Thanks to mass housing-privatization programs, rates of homeownership have surged to some of the highest worldwide.”

**Sources:** Various; see Table 3 at the end.

**p.97:** “In seven of the nine former Soviet republics that publish relevant statistics, consumption of fruits and vegetables has shot up. Ukrainians, for instance, ate 58 percent more vegetables and 47 percent more fruit in 2011 than they did 20 years earlier.”

**Sources:** Various; see Table 4 at the end.

**p.97:** “The Czech Republic, Hungary, Poland, Slovakia, and Slovenia experienced what medical researchers described in 2008 in the *European Journal of Epidemiology* as “probably the most rapid decrease in coronary heart disease ever observed” after consumers began substituting vegetable oils for animal fats.”

**Source:** Witold Zatonski, Hannia Campos, and Walter Willett, “Rapid declines in coronary heart disease mortality in Eastern Europe are associated with increased consumption of oils rich in alpha-linolenic acid,” *European Journal of Epidemiology*, 2008(23): 3–10, at p.6.

**p.97:** “University enrollment rates, already high, climbed even further after 1989, rising by an average of 33 percent by 2012. Also, by 2012, in the postcommunist countries, the average share of secondary-school graduates who chose to continue their studies was higher than the corresponding percentage in Switzerland.”

**Source:** World Bank, *World Development Indicators*, July 2014.

**p.97:** “Although the rates of both poverty and income inequality often increased early in the transition, these rates are now lower in the postcommunist states than in other economies with comparable income levels.”

**Sources:** World Bank, *World Development Indicators*, July 2014; Frederick Solt, “Standardizing the World Income Inequality Database,” *Social Science Quarterly*, 2009, 90(2): 231-242. SWIID Version 4.0, September 2013.

**Note:** Poverty data are percent poor under the national poverty rate from WDI; we use the average of available years between 2009 and 2013. Gini index is the estimated Gini index of inequality in equalized household disposable income, from the SWIID database, using the average of available years between 2008 and 2012.

**p.97:** “Communism left behind a forest of smokestacks, but since 1990, the 11 postcommunist countries that joined the EU have slashed their emissions of carbon monoxide, nitrogen oxides, and sulfur oxides by more than half.”

**Sources:** European Environment Agency, *European Union Emission Inventory Report, 1990-2012, 2014*, (<http://www.eea.europa.eu/publications/Irtap-2014>). See Table 5 at end.

**p.97:** “Even as their economies grew, 12 post-Soviet republics cut the release of harmful pollutants from stationary sources into the atmosphere by an average of 66 percent between 1991 and 2012.”

**Sources:** Various sources, see Table 6 at end.

**p.97:** “On average, life expectancy in the postcommunist states rose from 69 years in 1990 to 73 years in 2012. Even in Russia, long portrayed as a demographic disaster zone, life expectancy now stands at slightly over 70 years—higher than it has ever been.”

**Sources:** World Bank, *World Development Indicators*, July 2014; Rosstat, *Rossiisky Statisticheskyy Yezhegodnik* 2013.

**pp.97-8:** “Infant mortality, already low, fell faster in the postcommunist countries in percentage terms than in any other region between 1990 and 2012.”

**Source:** World Bank, *World Development Indicators*, July 2014.

**p.98:** “Average alcohol consumption inched downward, too, from 2.1 gallons of pure alcohol a year in 1990 to 2.0 gallons in 2010. There have been exceptions: drinking rates rose in Russia and the Baltic states. But even Russia’s 2010 average of 2.9 gallons was lower than that of Austria, France, Germany, or Ireland.”

**Sources:** World Health Organization, Global Information System on Alcohol and Health, <http://www.who.int/gho/alcohol/en/>, accessed August 2014.

**Note:** Data for recorded alcohol consumption in liters of pure alcohol consumed per year per person aged 15 and over, 1990 to 2010 except for Moldova and Turkmenistan (1992-2010) and Macedonia, Tajikistan, and Uzbekistan (1992-2009).

**p.98:** “Using the most common measure of political regimes, the Polity index, compiled by the Center for Systemic Peace, we placed countries on a scale from zero (for pure dictatorships) to 100 (for the strongest form of democracy). In 1988, the Eastern-bloc states ranked between five (Albania) and 40 (Hungary), averaging a score of 20, which was close to the ratings of Egypt and Iran. Given their levels of economic development, the communist countries stood out as abnormally authoritarian. After the revolutions of 1989–91, the regional average shot up, reaching a score of 76 in 2013. Today, the average postcommunist country is exactly as free as one would expect it to be, given its income. Six receive the top score, on par with Germany and the United States.”

**Source:** Polity IV, 2013 update, <http://www.systemicpeace.org/polityproject.html>.

**Note:** We treat the individual republics of the USSR, Yugoslavia, and Czechoslovakia as independent units; using the three countries as single observations would yield a median of -7 on the -10 to +10 scale.

**pp.98-9:** “But the rates of bribery reported by citizens of the postcommunist countries on anonymous surveys paint a different picture. These rates, although high, are typical for countries. Polls conducted between 2010 and 2013 by the watchdog group Transparency International showed that fewer people reported paying bribes in the average postcommunist state (23 percent) than in other countries (28 percent).”

**Source:** Transparency International, <http://www.transparency.org/gcb2013>.

**p.99:** “Notwithstanding the wars in the former Yugoslavia, Chechnya, and now Ukraine, the postcommunist countries were no more likely than similarly developed states to experience conflicts or civil wars during the past 25 years. Nor did they report higher rates of deaths in wars or guerrilla violence, either in absolute numbers or per capita.”

**Sources:** Correlates of War project, <http://www.correlatesofwar.org/datasets.htm>; World Bank, *World Development Indicators*, July 2014, for data on deaths.

**p.99:** “whereas the Soviet Union’s defense expenditure once reached 25 percent of gdp, none of its successor states, including Russia, spends more than five percent today. Even as their alliance disintegrated, the former Warsaw Pact states managed to shed one million troops.”

**Source:** World Bank, *World Development Indicators*, July 2014, citing the Stockholm International Peace Research Institute.

**p.99:** “In the 1990s, most of the postcommunist countries suffered years of rising prices and joblessness. Still, by 2012, inflation had stabilized almost everywhere; the median inflation rate in the postcommunist economies actually dropped below the global median. And although unemployment remains several percentage points higher in the transition countries than in comparable states, it has declined since its peak level around 2000.”

**Source:** World Bank, *World Development Indicators*, July 2014.

**Note:** Unemployment figures are “modeled ILO estimates”.

**p.99:** “On average, 81 percent of people polled in the postcommunist countries reported being either “very” or “quite” happy, compared with 84 percent worldwide. For their income levels, these countries are no longer particularly depressed”

**Source:** World Values Survey, <http://www.worldvaluessurvey.org/WVSONline.jsp>.

**p.99:** “even though their residents do express unusual dissatisfaction with their jobs, governments, and educational and health-care systems.”

**Source:** Gallup World Poll, as in *Human Development Report* 2014 dataset, various years between 2007 and 2012.

**p.99:** “Suicide rates, still relatively high, have fallen substantially since the end of communism.”

**Source:** World Health Organization database.

**Note:** Age adjusted standardized death rate per 100,000 from intentional self-harm, all ages, both sexes.

**p.100:** ““Gradualist policies lead to less pain in the short run, greater social and political stability, and faster growth in the long [run],” the economist Joseph Stiglitz argued in his 2002 book *Globalization and Its Discontents*. “In the race between the tortoise and the hare, it appears that the tortoise has won again.””

**Source:** Joseph Stiglitz, *Globalization and Its Discontents*, New York: Norton, 2002, p.188.

**p.100:** “To measure the pace of reform, we drew on indicators developed by the European Bank for Reconstruction and Development, adjusting them to assign each country an annual score between zero and 100, based on how closely it resembled a free-market economy. We labeled those that rose more than 40 points in their first three years of transition “radical reformers.” Nine states met this benchmark: the Czech Republic, Estonia, Hungary, Kyrgyzstan, Latvia, Lithuania, Poland, Russia, and Slovakia.”

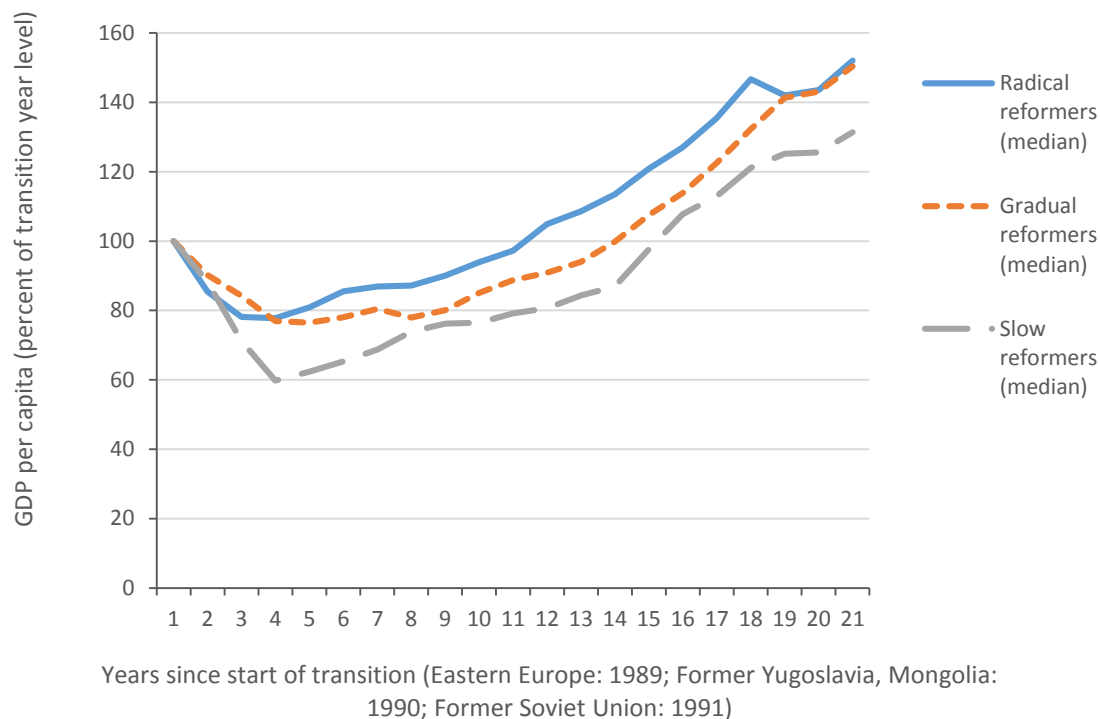
**Source:** EBRD Transition Indicators, <http://www.ebrd.com/pages/research/economics/data/macro.shtml>.

**pp.100-01:** “Comparing the economic performance of these three groups reveals that quicker and more thorough reforms entailed less, not more, economic pain. To be fair, at the outset of their transition, many countries in the radical group did experience a slightly greater fall in output than the gradual reformers did. But after three years, the radicals surged ahead, far outpacing the gradualists. Meanwhile, slow reformers fared the worst and continue to trail behind the other two groups today.

**Note:** Please see Figure 1 below.



Figure 1: GDP per capita during the transition  
(transition year = 100)



**Sources:** GDP per capita is an index based on GDP in constant local currency units (Penn World Tables, 8.0) and population from *World Development Indicators* (July 2014); reform speed from EBRD Transition Indicators, as described in the text.

If we add up the “total loss before recovery”—that is, the area between the horizontal 100-percent line and each curve—the loss for the gradualists is about 40 percent greater—and that for the slow reformers about 140 percent greater—than that for the radical reformers (each measured relative to initial output). Had the median gradual reformer performed as well as the median radical reformer over these 21 years, it would have generated additional output equal to 1.4 times its transition year output.

**p.101:** “Compared with those countries that eagerly embraced free markets, the gradualists took longer to recover their previous levels of household consumption and to stabilize inflation. And insofar as one can tell from the available statistics, unemployment hit the slow reformers, such as Armenia and Macedonia, harder than the rest of the transition states.”

**Sources:** Our calculations, using inflation data from World Bank, *World Development Indicators*, July 2014, and data on household final consumption per capita constructed using Penn World Tables (PWT) version 8.0 for GDP and household consumption share, and World Bank, *World Development Indicators*, July 2014 for population (see previous notes). Data on unemployment from World Bank, *World Development Indicators*, July 2014.

**Note:** Unemployment data are: “unemployment, total (% of total labor force) (modeled ILO estimate).” Armenia’s unemployment rate was above 18 percent and Macedonia’s was above 30 percent throughout the entire period from 1991 to 2012.

**p.101:** “Taking into account the starting point of every country, the more wealthy, democratic, and economically liberal its noncommunist neighbors were, the more wealthy, democratic, and economically liberal it would ultimately become. This convergence manifested itself in more subtle ways as well—for instance, in rates of college enrollment, levels of alcohol consumption, and even life expectancy.”

**Note:** Data are from the sources described above. The “normal countries analysis” STATA do-file contains code to run the regressions that provide evidence for these claims.

**p.102:** “Ten years ago, we argued in this magazine that Russia had become “a normal country,” whose economic and political flaws mirrored those of other states at similar levels of development.”

**Source:** Andrei Shleifer and Daniel Treisman, “A Normal Country,” *Foreign Affairs*, Vol. 83, No. 2 (March–April 2004), pp. 20–38.

**p.102:** “Russia’s gdp per capita has increased another 39 percent since 2004, and its Internet penetration has quadrupled, overtaking that of Greece.”

**Sources:** Penn World Tables (8.0) for GDP data (Real GDP at constant 2005 national prices (in mil. 2005 US\$)); World Bank, *World Development Indicators*, July 2014, for population data; World Bank, *World Development Indicators*, July 2014, for internet users.

**Note:** Internet users per 100 people in Russia was 13 in 2004, 61 in 2013, compared to 60 in Greece that year.

**p.102:** “For a country with Russia’s national income, the predicted Polity score in 2013 was 76 on the 100-point scale. Russia’s actual score was 70, on par with Sri Lanka and Venezuela.”

**Note:** based on regression of Polity2 on lagged log of GDP per capita.

**p.102:** “(Its annual income from oil and gas amounts to about \$3,000 per citizen, compared with \$34,000 for Kuwait.)”

**Source:** Michael L. Ross, 2011-04, “Replication data for: Oil and Gas Production and Value, 1932-2009”, <http://thedata.harvard.edu/dvn/dv/mlross>.

**Table 1: Destination of Exports of Post-Communist Countries**

	EU		Other (current or former) Soviet republics		CMEA (or former members)	
	1990	2012	1990	2012	1990	2012
<i>Soviet republics</i>						
Armenia	1	39	97	30		
Azerbaijan	2	47	92	8		
Belarus	2	38	92	62		
Kazakhstan	2	50	89	14		
Kyrgyz	1	3	97	59		
Moldova	1	47	93	45		
Russia	7	47	68	18		
Tajikistan	4	4	82	20		
Turkmenistan	1		96			
Ukraine	4	25	83	39		
Uzbekistan	2		89	54		
Estonia	0	58	98	29		
Georgia	2	15	91	53.6		
Latvia	1	69	97	44.5		
Lithuania	1	61	94	47.3		
<i>median</i>		47				
<i>Eastern Europe+Mongolia</i>						
Albania		76			46.3 <sup>d</sup>	2
Bosnia	38 <sup>a</sup>	58			29.9 <sup>d</sup>	
Bulgaria		58			53	21 <sup>e</sup>
Croatia	38 <sup>a</sup>	58			29.9 <sup>d</sup>	
Czech Republic	26.5 <sup>b</sup>	81			37	25
Hungary	32.2 <sup>b</sup>	76			41 <sup>d</sup>	30
Macedonia	38 <sup>a</sup>	63			29.9 <sup>d</sup>	
Mongolia		6				
Poland	47.2 <sup>b</sup>	75			41 <sup>d</sup>	26
Romania	33.8 <sup>c</sup>	70			25	22
Serbia	38 <sup>a</sup>	58			29.9 <sup>d</sup>	
Slovak Republic	26.5 <sup>b</sup>	84			37	36
Slovenia	38 <sup>a</sup>	69			29.9 <sup>d</sup>	
<i>median</i>		69				

**Sources and Notes:**

**Column 1:** For Soviet Union calculated from Michalopoulos, Constantine and David G. Tarr, 1994, *Trade in the New Independent States*, Washington, DC: World Bank, pp.2, 239, and column 3. <sup>a</sup> figure for Yugoslavia in 1988, from OECD, *Economic Surveys: Yugoslavia 1990*, Paris: OECD, 1990, p.101. <sup>b</sup> Rodrik, Dani. "Foreign Trade in Eastern Europe's Transition: Early Results," in Olivier Blanchard, Kenneth Froot, Jeffrey Sachs, eds., *Transition in Eastern Europe*, Vol. 2, Cambridge, MA: NBER, 1994, pp.319-56: figures for Czech and Slovak republics are both for Czechoslovakia. <sup>c</sup> figure for 1991, from Romanian Statistical Agency.

**Column 2:** World Trade Organization, *Country Profiles*, at <http://stat.wto.org/CountryProfile/>, accessed August 2014.

**Column 3:** Kaminski, Bartlomiej, Zhen Kun Wang, and L. Alan Winters. 1996. *Foreign Trade in the Transition: The International Environment and Domestic Policy*, Washington, DC: World Bank.

**Column 4:** Statistical Committee of the Commonwealth of Independent States, *Vneshniaia torgovlia stran Sodruzhestva Nezavisimykh Gosudarstv (statisticheskii' sbornik). [External Trade of the Countries of the Commonwealth of Independent States (statistical abstract)]*, 2013.

**Columns 5-6:** Uvalic, Milica. 2005. *Trade Liberalization in Southeast Europe: Recent Trends and Some Policy Implications*, University of Perugia, paper, p.4; information from statistical agencies of Albania, Bulgaria, Czech Republic, Slovak Republic, Hungary, Poland, Romania, accessed August 2014. Figures for Czech and Slovak Republics in 1990 are for Czechoslovakia and those of Yugoslav republics are for Yugoslavia. <sup>d</sup> for 1989, <sup>e</sup> for 2011.

**Table 2: Housing Space Per Capita, square meters per person) 1991-2011**

	1991	2011	Change, percent
Azerbaijan	12	17.8	48
Armenia	15	27.8	85
Belarus	18	25	39
Georgia	18	23	28
Kazakhstan	14	18.7	34
Kyrgyzstan	12	14.5	21
Moldova	18	22.4	24
Russia	16.5	23	39
Tajikistan	9.5	8.8	-7
Ukraine	18	23.5	31
Uzbekistan	12	15	25
Czech Republic	16.6	33	99
Romania	11.6 <sup>a</sup>	25	116

**Sources:** Statistical Committee of the Commonwealth of Independent States, *15 let Sodruzhestva Nezavisimykh Gosudarstv (1991-2005) [15 years of the Commonwealth of Independent States (1991-2005)]*, 2006; Statistical Committee of the Commonwealth of Independent States, *Statistika SNG: Statistichesky byulleten*, 2012 (10, October). Wolfgang Amann, *Housing review on 23 countries in the Europe and Central Asia region*. Vienna: Habitat for Humanity, 2013, p.22. Michelle Norris and Patrick Shiels, *Regular National Report on Housing Developments in EU Countries*, Dublin: Government of Ireland, Department of the Environment, 2004, pp.28, 69.

**Notes:** a 1992.

**Table 3: Percent of housing owned by occupant, 2012**

Armenia	99.6
Kyrgyzstan	98.3
Moldova	97.4
Tajikistan	97.2
Romania	96.6
Kazakhstan <sup>a</sup>	96.4
Azerbaijan	94.2
Ukraine	93.5
Lithuania	91.9
Hungary	90.5
Slovakia	90.4
Croatia	89.5
Belarus	87.9
Bulgaria	87.4
Russia	87
Poland	82.4
Estonia	82.2
Latvia	81.5
Czech Republic	80.4
Slovenia	76.2
<i>Median postcommunist</i>	90.45

*Other countries*

Norway	84.8
Malta	81.8
Spain	78.9
Iceland	77.3
Greece	75.9
Portugal	74.5
Italy	74.1
Finland	73.9
Cyprus	73.2
Belgium	72.3
Luxembourg	70.8
Sweden	70.1
Ireland	69.6
Netherlands	67.5
Turkey <sup>b</sup>	67.3
United Kingdom	66.7
USA <sup>b</sup>	66.1
Denmark	64.3
France	63.7
Austria	57.5
Germany	53.3
Switzerland	43.8

**Sources:** Eurostat; Rosstat, *Zhilishchnoe khoziai'stvo v Rossii*, 2013(1): 277; European Mortgage Federation, *Hypostat 2013*, November 2013, p.101 (<http://www.hypo.org/Content/default.asp?PageID=524>).

**Notes:** <sup>a</sup> 2011, <sup>b</sup> 2010

**Table 4: Consumption of vegetables and fruits per person, kg**

	Vegetables (and melons)			fruits		
	1991	2011	Change, pct.	1991	2011	Change, pct.
Azerbaijan	65	165	154	50	75	50
Armenia	145	288	99	62	76	23
Belarus	79	144	82	35	58	66
Kazakhstan	63	195	210	19	48	153
Kyrgyzstan	73	150	105	18	29	61
Moldova	113	115	2	79	43	-46
Russia	86	106	23	35	60	71
Tajikistan	83	72.8	-12	27	40	48
Ukraine	103	163	58	36	53	47
Hungary	83 <sup>a</sup>	112 <sup>b</sup>	35	72 <sup>a</sup>	83 <sup>b</sup>	15

**Sources:** Statistical Committee of the Commonwealth of Independent States, *Statistika SNG: Statistichesky byulleten*, 2012 (12, December 31). Statistical Committee of the Commonwealth of Independent States, *15 let Sodruzhestva Nezavisimyykh Gosudarstv (1991-2005) [15 years of the Commonwealth of Independent States (1991-2005)]*, 2006. Statistical office of Tajikistan. M Szeitz-Szabó, L. Biró, and Gy. Biró, "Nutritional and Vital Statistical Features of the Hungarian Population: A Review About the Past 25 Years," *Acta Alimentaria* 2012, 41(2): 277-91. <sup>a</sup> 1990 <sup>b</sup> 2005.

**Table 5: Change in level of emissions, postcommunist EU members, 1990-2012**

	Nitrogen oxides	Sulphur oxides	Carbon monoxide
Bulgaria	-50	-70	-61
Croatia	-38	-85	-51
Czech Republic	-72	-92	-67
Estonia	-56	-85	-28
Hungary	-51	-96	-69
Latvia	-58	-83	-58
Lithuania	-58	-87	-59
Poland	-36	-73	-62
Romania	-51	-70	-17
Slovakia	-64	-89	-57
Slovenia	-26	-95	-53
<i>mean</i>	<i>-51</i>	<i>-84</i>	<i>-53</i>

Source: European Union Emission Inventory Report, 1990-2012, European Environment Agency, 2014, <http://www.eea.europa.eu/publications/lrtap-2014>.

**Table 6: Emission of Harmful Pollutants Into the Air From Stationary Sources, thousand tonnes**

	1991	2012	change, percent
Azerbaijan	1919	227	-88
Armenia	269	117	-57
Belarus	1153	433	-62
Georgia	300	21	-93
Kazakhstan	4278	2384	-44
Kyrgyzstan	161	37	-77
Moldova	342	15	-96
Russia	31,802	19,630	-38
Tajikistan	101	39	-61
Ukraine	8775	4335	-51
Latvia	131	39	-70
Lithuania	152 <sup>a</sup>	65	-57
Mean			-66

Sources: Statistical Committee of the Commonwealth of Independent States, *15 let Sodruzhestva Nezavisimyykh Gosudarstv (1991-2005) [15 years of the Commonwealth of Independent States (1991-2005)]*, 2006, Statistical Committee of the Commonwealth of Independent States, *Naselenie i usloviya zhizni v stranakh Sodruzhestva Nezavisimyykh Gosudarstv. Population, employment and living conditions in the countries of the Commonwealth of Independent States.*, 2013(1). Statistical Agency of Lithuania (<http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize1>), Statistical Agency of Latvia ([http://data.csb.gov.lv/pxweb/en/vide/vid\\_e\\_ikgad\\_vid\\_e/V10020.px/table/tableViewLayout1/?rxid=a79839fe-11ba-4ecd-8cc3-4035692c5fc8](http://data.csb.gov.lv/pxweb/en/vide/vid_e_ikgad_vid_e/V10020.px/table/tableViewLayout1/?rxid=a79839fe-11ba-4ecd-8cc3-4035692c5fc8)).

Notes: <sup>a</sup> 1995.