

## THE TRANSITION FROM SOVIETISM: TODAY'S DEPRESSION, TOMORROW'S GROWTH?

A Review of B. Milanovic, *Income, Inequality, and Poverty during the Transition from Planned to Market Economy*, World Bank Regional and Sectoral Studies, International Bank for Reconstruction and Development, Washington, D.C., 1998. United Nations Children's Fund (UNICEF), *Education for all?*, The MONEE Project Regional Monitoring Report No. 5, UNICEF International Child Development Centre, Florence, 1998.

P. Boone, S. Gomulka, and R. Layard, (eds.), *Emerging from Communism: Lessons from Russia, China, and Eastern Europe*, The MIT Press, Cambridge, Mass. and London, 1998.

*To get rich is glorious*: with this lemma, authorities in Deng Xiaoping's China championed the pursuit of economic self-interest. Many in China and elsewhere further supposed that, after Soviet-style socialism, to get rich was inevitable. Unfortunately, however, the transition from socialism in Central and Eastern Europe and the former Union of Soviet Socialist Republics (U.S.S.R.) has been far more painful and protracted than most observers predicted when the Berlin Wall fell in 1989.

As an example of the economic turmoil in the region, consider the Russian economy in October, 1998. Russia's banks, heavily invested in currency speculation and short-term government bonds, collapsed with the August 17 devaluation of the ruble. Russia's financial crisis sent a shock wave through all of the former Soviet republics, but especially the Ukraine and Kazakhstan, and caused, according to one newspaper report, a "return to the Stone Age," in Belarus.<sup>1</sup> Russian inflation reached a monthly rate of 38 percent in September.<sup>2</sup> A resurgent Russian Communist Party called for a general strike October 7 (though it failed to mobilize the 40 million it had sought).<sup>3</sup> Having signed with the International Monetary Fund an "historic" July agreement to receive U.S.\$22.6 million in aid over 18 months, Russia unilaterally froze servicing of its domestic debt; in the October crisis the Fund adopted a sceptical posture while awaiting a "credible economic program."<sup>4</sup> The most dramatic news, however, was the looming spectre of famine as Russia headed into the winter of 1998–1999, to be assuaged, if at all, with massive food aid from the West.<sup>5</sup>

<sup>1</sup>Marie Jégo, "L'onde de choc provoquée par la chute du rouble," *Le Monde*, October 22, 1998.

<sup>2</sup>François Bonnet, "Le poker menteur du gouvernement russe," *Le Monde*, October 7, 1998.

<sup>3</sup>François Bonnet, "Les communistes russes tentent d'exploiter le mécontentement populaire," *Le Monde*, October 8, 1998, and "Les Russes ont boudé la journée de protestation du 7 octobre," *Le Monde*, October 9, 1998.

<sup>4</sup>Babette Stern, "Le Fonds monétaire international a adopté une attitude de fermeté faute d'obtenir un programme économique crédible," *Le Monde*, October 14, 1998.

<sup>5</sup>François Bonnet, "Moscou veut négocier à très bas prix des importations massives de nourriture," *Le Monde*, October 29, 1998.

October, 1998 may have been extreme, but it was not unique. During a prolonged economic depression, punctuated by months of crisis, the immediate issue is the depression's impact on economic well-being and its proximate causes. Accordingly, the three books reviewed here attempt to understand recent economic performance in Central and Eastern Europe and the former U.S.S.R. There is also a longer-term issue, however. How has the depression and policy-makers' response to it conditioned the future path of growth and development in the transition economies? What kind of future growth can these economies look forward to? Will they ever be "gloriously rich?"

#### THE IMPACT ON ECONOMIC WELL-BEING: INCOME, INEQUALITY, POVERTY

The abrupt declines witnessed recently in Russia and its neighbours raise immediate concerns about absolute income levels, inequality, and poverty. Branko Milanovic's new study for the World Bank, *Income, Inequality, and Poverty during the Transition from Planned to Market Economy*, brings together data on eighteen transition economies of Central and Eastern Europe and the former Soviet Union.<sup>6</sup> In terms of income, inequality, and poverty, Milanovic's comprehensive account of the experience of the transition economies tells us exactly what we expect to learn: income dropped, inequality widened, and poverty increased. The book's principal conclusions, then, fall into two categories: things we might have suspected, and things we might not have known.

##### *What We Might Have Suspected*

*Income.* Milanovic's conclusion regarding income is telegraphed by the cover art of the book, which shows a superimposed time graph of U.S. Gross Domestic Product (GDP) during the Great Depression, and Russia's during the transition. The U.S. series shows an up-tick after four years, as we all know; even after seven years, Russia's does not. Milanovic frequently refers to the "post-Communist Great Depression," and his data support the choice of terminology. Every one of the 18 countries in his sample experienced at least three consecutive years of declining GDP; Moldova, Russia, and Ukraine each experienced seven or more. In the Eastern European countries, GDP stood at 80 percent of its 1987 level in 1996; in the republics of the former Soviet Union, GDP had by then recovered only 60 percent of its 1987 value.

*Inequality.* The Gini coefficient calculated on the basis of gross income (from household-budget surveys), rose from 0.24 to 0.33 between the 1980s and the mid-1990s, from well under to just over the OECD mean. The increase was sharp—three times as fast as the increase in the U.S. income Gini during the same period. There was furthermore an international dispersion of Ginis where there had been uniformity before. Milanovic delineates three groups: countries with virtually no

<sup>6</sup>The sample countries are Belarus, Bulgaria, Czech Republic, Estonia, Hungary, Kazakhstan, Kyrgyz Republic, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Slovakia, Slovenia, Turkmenistan, Ukraine, and Uzbekistan. Countries that experienced significant armed conflict (Armenia, Azerbaijan, Bosnia, Croatia, Georgia, Macedonia, Tajikistan, and Yugoslavia) are excluded from the analysis for sound reasons; despite the conflict in Chechnya, Russia is included because of its importance.

change in inequality (e.g. Hungary, Slovakia, Slovenia); those with very slight increases that kept them below the OECD mean (e.g. Czech Republic, Poland); and those with a dramatic increase in inequality (e.g. Russia, Ukraine).

*Poverty.* The combination of a rapid plunge in income, and a commensurately rapid increase in income inequality is a textbook recipe for a jump in poverty levels, and Milanovic's chapter on poverty begins with an exceptionally clear exposition of this process. The phenomenon is particularly acute in the high-inequality countries of the former U.S.S.R., where drops in real national income of one-third to one-half, combined with sharper losses to the bottom four quintiles of the income distribution, have produced the dramatic poverty levels that loom behind the newspaper headlines of October, 1998.

Milanovic constructs an absolute poverty line for all eighteen countries of US\$4 per capita per day, computed with purchasing power parity dollars drawn from the 1993 round of the International Comparison Project. The four-dollar figure is roughly equivalent to the "social-minimum" income levels computed by many Eastern European governments to measure the incidence of poverty. Milanovic acknowledges that this is a relatively high poverty line, compared to, for example, the World Bank poverty line of US\$2 a day in Latin America. In a European context, however, this poverty line is rather low, compared, for example, to a poverty line of 50 percent of the median after-tax income in Spain (which in purchasing-power-parity dollars was just under 12 dollars a day in 1990).<sup>7</sup>

Using the four-dollar poverty line, there has been a huge increase in poverty: from 14 million poor, or 4 percent of the population before transition, to 168 million, or 45 percent of the population, in the mid-1990s. These massive changes are quite robust even to sizeable measurement error. Thus, using macroeconomic rather than household-budget-survey data, Milanovic finds that the number of poor is 147 million rather than 168 million. Sometimes the sensitivity of the measure to a particular data type is considerable: in eight countries where both income and expenditure data are available from household-budget surveys, the use of expenditure data rather than income data reduces the increase in the number of the poor by one-third. Even so, if this proportion were similar for the whole sample, the number of post-Communist poor would still be nearly 100 million (or nearly a third of the population in the sample countries).

### *What We Might Not Have Known*

*Income.* Readers of this Review will be familiar with the historical tendency of socialist national-income accounting to overstate production (by padding production reports, and understating inflation); national-income statistics in the transition phase, meanwhile, tend to understate production by undercounting the output of the burgeoning informal sector.<sup>8</sup> Even so, the drop in output across these economies, like the increase in poverty, is robust to measurement errors.

<sup>7</sup>My thanks to Lynn Lethbridge for having computed this number from the Luxembourg Income Study dataset.

<sup>8</sup>Bloem, Cotterell, and Gigantes (1998) review the application of the 1993 System of National Accounts to the transition economies. They assert that inaccurate reporting is a problem today not only because of spotty coverage of the emerging private sector, but also because of difficulties in recording transactions and stocks of government-owned enterprises, and valuation of output. The tendency in the latter two areas is still to overestimate output in the old fashion.

*Inequality.* Incomes have declined for wage-earners, pensioners, and farmers in all countries, but pensioners everywhere have suffered proportionately lower declines than wage-earners, who, in turn, have suffered proportionately lower declines than farmers. These results do not contradict reports that pensioners' incomes are woefully insufficient. Milanovic's numbers, calculated using real purchasing-power-parity dollars, underline that pensioners' incomes were insufficient in many countries at the onset of transition, but the proportional drop was larger for workers' households.<sup>9</sup>

*Poverty.* The message of Milanovic's analysis of poverty during transition is "broad but shallow." The poverty shortfall (the percentage by which the average poor person's income falls below US\$4 a day) is about 30 percent in Eastern Europe and about 40 percent in the former U.S.S.R. (The latter figure is similar to the poverty shortfall in Latin America, with a poverty line of only US\$2.)

Milanovic is of two minds about the future trajectory of poverty. On the one hand, he notes that with unchanged Ginis and constant 5 percent growth rates of real GDP per capita (heroic assumptions, both), many of these economies will not have headcount indices of poverty under 10 percent for many years. Thus his book concludes with the pessimistic prognosis that "poverty appears to be here to stay in transition economies." On the other hand, he is elsewhere optimistic about the prospects for eliminating transition-economy poverty. Since the poverty is shallow, and because there is little difference between the poor and non-poor in terms of human capital and other characteristics, he hopes for a symmetrically swift movement out of poverty when incomes rise again one day. He candidly admits that the evidence from Poland and Estonia—two economies that have had sustained growth in the latter part of the study period—is not encouraging. In both countries, the poverty shortfall has increased even with the resumption of per capita income growth.

Much of Milanovic's analysis is based on household budget surveys fielded both before and after the end of communism. An appendix discusses their characteristics, shortcomings, and likely biases. There are problems of representativeness of the samples, changes in the samples before and after transition, and changes in the accuracy of responses. Milanovic writes that the accuracy of survey responses has fallen because of greater participation in the informal sector and the quasi-official "grey economy," and subsequent unwillingness to truthfully report incomes from those sources. This complicates comparisons before and after transition. If current money incomes are more heavily under-reported than money incomes under socialism, for example, poverty increases are overstated.

Rose and McAllister (1996), however, have argued that under Sovietism, households relied on a variety of non-market activities (such as membership in the Communist Party) to sustain their welfare. It is unlikely that survey respondents accurately reported all income (especially in-kind income, or queue-jumping privileges in settings of pervasive rationing) on household surveys in the socialist period. Their econometric evidence suggests that money income is a *better* proxy for

<sup>9</sup>In Latvia, for example, a pensioner's real household income in 1987 was 59 percent of a worker's household income; by 1993, the Latvian worker's household earned 54 percent of its 1987 income, while the pensioner's household earned 34 percent of the 1987 worker's household.

household welfare in 1994 than in 1992, and that more semi-illicit economic activity occurred at the earlier date; that is, incomes may be understated, roughly speaking, in the pre-transition period—which implies that Milanovic’s poverty increases are *under*-stated. Moreover, pre-transition income data understate inequalities in command over resources. If post-transition income data better reflect inequality, then Milanovic’s estimated increases in inequality are overstated.

#### THE IMPACT ON ECONOMIC WELL-BEING: EDUCATION

The United Nations Children’s Fund (UNICEF) report *Education for all?* examines the changes in education in the transition economies of Central and Eastern Europe and the former Soviet Union, through the lens of the 1990 Convention on the Rights of the Child, to which each of the transition economies is a signatory.

The socialist education system could boast many remarkable achievements, particularly in the realm of access. Poorer Soviet republics in Central Asia achieved enrollment and literacy rates well above countries with higher per capita GDPs like Algeria, Brazil, Chile, and Malaysia. Most countries had achieved virtual parity in the education of boys and girls at all levels of the system. Nevertheless, *Education for all?* points out less well-known shortcomings of socialist performance in education. First, enrollment rates were not universal at the pre-school level, as has frequently been presumed. Eighty percent of pre-school-aged children attended kindergartens (including those provided by enterprises for their workers’ children) in Central Europe; 60 percent in the Baltics and the European U.S.S.R.; and only 40 percent in the Central Asian republics. [These achievements are nevertheless internationally impressive: the gross enrollment ratio for pre-primary school children in Canada, for example, was 64.2 percent in 1996 (UNESCO, 1998).] Second, access to post-compulsory education showed the same pattern of social differentiation as Western market economies: university students were more likely to come from professional rather than manual-labour family backgrounds, and from urban rather than rural areas. Finally, socialist education emphasized what UNICEF calls “factology,” or rote learning, rather than the instruction of problem-solving skills.

Since the onset of transition, enrollment ratios have fallen. In Eastern Europe and the European former Soviet republics, enrollment ratios are falling at the pre-school and post-compulsory levels. In Central Europe there has been little change, while in the Caucasus and Central Asia, enrollment ratios are falling at all levels. Furthermore, sketchy evidence suggests a widening of pre-existing tendencies toward inequality (based on region, family background, income) in access to education.

The share of GDP devoted to education spending in most transition countries was slightly higher than the OECD average in 1993. Nevertheless, education appears to be a luxury (in the sense that its share of spending falls as income falls) in most countries: education’s GDP share has fallen everywhere but in Kazakhstan, Romania, Poland, Lithuania, Czech Republic, Slovenia, and Latvia. (Roughly ten percent of the region’s population lives in these countries.) The share of public expenditure devoted to education has been stable during the

transition (and again, lies in the range of OECD economies), suggesting that the problem of education's falling GDP share derives from falling levels of public expenditures generally. (This in turn may be caused by difficulties in collecting tax revenue.)

What matters more than the expenditure shares of education, arguably, is changes in the absolute amount of education spending, or in spending per pupil: what has happened to the aggregate amount of resources devoted to education? With the exception of increases in spending in Romania, Poland, and Slovenia, absolute expenditures have fallen by more than one-third in Russia and other European former Soviet republics, and over three-quarters in the Caucasian and Central Asian republics for which data are available. Sketchy evidence on the quality of education is not conclusive, but neither is it encouraging: school structures have decayed, and some schools cannot be heated during winter, textbooks are in short supply, and often of poor quality. Teacher morale is declining for these reasons, and because many are forced to work second jobs.

As UNICEF points out, the educational sector can play a role in the constitution of civil society, as well as creating individuals' human capital. Examples include early-childhood development programs, integration of children with mental or physical disabilities in regular schools, local decision-making about curriculum reform, after-school supervision, and using schools as a site for the delivery of health and nutrition programs. In an environment of shrinking resources and increasing inequality of access, schools' record in these arenas has been uneven at best.

#### THE PROXIMATE CAUSES OF THE POST-COMMUNIST DEPRESSION

The Milanovic and UNICEF books do not tell us why. Boone, Gomulka, and Layard attempt to explain what went wrong in the transition process and why it happened differently in China. These are essays in persuasion, not comprehensive statistical overviews like the studies by Milanovic and UNICEF. In particular, some of the essays are largely based on the experience of one or two non-representative countries (usually Poland). Nevertheless, the book exhibits an admirable division of labour, such that a set of vitally important topics—output, inflation, privatization, bank reform, unemployment, China—are suitably well-explored. Furthermore, the essays on Eastern Europe and the former U.S.S.R. provide a comprehensive explanation of the causes of the depth and duration of the post-Communist depression.

Their story goes something like this. Rapid price liberalization both eliminated excessive real aggregate demand (in the process of transforming sellers' markets into buyers' markets) and caused, via changes in costs, a massive supply shock; as a result, output fell precipitously. A baleful alliance of "old elites and rent seekers" lobbied successfully for excessive credit issues, creating long-lived inflation beyond the initial jump in prices caused by liberalization. The massive increase in unemployment was driven more by the aggregate recessionary shock than by restructuring of firms. There are high rates of hidden long-term underemployment (in the form of over-manning in both public and privatized enterprises, and sporadic employment in the informal economy) and hidden

long-term unemployment (in the form of discouraged workers who have exhausted available benefits and have dropped out of the labour force). Unable to follow Western models of privatization that rely on ample domestic saving and well-functioning capital markets, governments pursued a “mass privatization” that transferred ownership to insiders (workers and managers). Public or private ownership matters less to firm performance than the hardness of budget constraints. The *de novo* private sector has exhibited the greatest growth in employment and output.

Stanislaw Gomulka’s paper on output introduces Kornai’s notion of the “transformational recession,” caused by the change in system, and not by errors of policy. Gomulka concurs with Kornai’s concept, adding that if indeed governments were powerless to influence the depth of the output drop, policy did affect its time profile. The proximate causes were: sharp changes in relative prices; the elimination of excess aggregate demand; the collapse of captive export markets; and the collapse of a pattern of government spending, notably in armaments.

Peter Boone and Jakob Hørder analyse inflation, and distinguish two waves: the first price jump, associated with a monetary overhang; and subsequent inflation, caused by interest-group pressures in the manner of Becker (1983). Boone and Hørder discredit the argument that governments may have looked to seigniorage as the only viable means of public finance; they deem observed levels of seigniorage—33 percent of GDP in Russia and 35 percent in Ukraine in 1992, for example—“obscene.” Furthermore, the economic crisis did not justify this mode of public finance, given that proceeds of the inflation tax were not applied to areas of greatest social need. Subsequently inflation has declined in most countries, a trend Boone and Hørder attribute to the development of financial markets (which allow some people the means to avoid the inflation tax), and the terms of conditional assistance from the IMF and other agencies. (One suspects that the latter reason is substantially more important in a context where few have access to financial markets.)

Saul Estrin explains the factors that led to the adoption of “mass privatization” mechanisms. He reviews standard contract-theoretic arguments that point to the superior efficiency of private ownership relative to state ownership. Furthermore, Estrin suggests that ownership of enterprises by outsiders (that is, neither workers nor managers) is the best form of privatization, since outsiders are less likely to be part of the old regime, and thus can better assure de-politicization of production. Insider-owned firms predominate. Over-manning was still endemic in these enterprises as late as 1993, according to a survey of Polish managers. On the basis of some World Bank datasets from Poland and Russia, Estrin is forced to admit that outsider-owned privatized firms have not fared as well as the *de novo* private firms.

Sweder van Wijnbergen argues that firms’ creditor banks are a natural agent of firm-restructuring, since they have better information and incentives than most bureaucrats, if not superior experience. Van Wijnbergen’s is the most conceptual and least historically-based chapter in the book, given that no transition economies followed the bank-centred path toward restructuring he promotes. (His views were only partially reflected in Poland’s experience with conciliation, and were undermined by recalcitrant officials at the Ministry of Privatization.)

Richard Jackman looks at employment and unemployment and shows that privatized and *de novo* private firms hire labour from public enterprises, not from the pool of the unemployed. The degree to which insider-controlled firms, whether public or private, reduce employment of redundant labour is a function of whether or not they continue to receive subsidies. It is also a function of the generosity of unemployment benefits. Where the regime is generous (as in Romania and Poland), insider- and employee-controlled firms lay off workers; where the regime is stingy (Russia and other former Soviet republics), firms maintain workers and receive state subsidies. Jackman argues that in the former group of countries, the soft budget constraint has been shifted from firms to the social-welfare system. Jackman's analysis points to a highly productive role for unemployment insurance in economic transition: generous unemployment insurance speeds restructuring of the factor mix in privatized firms controlled by insiders.

A big question lurking in the background is, "What about China?" How is it that the People's Republic of China has thus far successfully navigated the waters of transition? Even more maddening to Western Cold Warriors, the Chinese reaped these gains without dismantling the authoritarian state or relinquishing belligerence to the West. What happened in China that the post-Soviet economies failed to emulate?

Chenggang Xu and Juzhong Zhuang believe that part of the answer lies in the decentralized nature of the Chinese state-owned enterprise (SOE) sector, relative to the Soviet model. Chinese SOEs are largely controlled by regional governments, rather than by the central state. This makes it easier to evaluate enterprise performance: it is a simpler matter to compare performance of steel producers in two provinces or counties, for example, than to compare the performance of the sole "steel ministry" with that of, say, the "textile ministry." Xu and Zhuang also assert that this decentralization facilitates competition, even if there might be some loss associated with foregone scale economies. Curiously, the other contributors to *Emerging from Communism* have not drawn this distinction in industrial organization. Leijonhufvud and Rühl (1997), for example, point out that the Gosplan industrial legacy in Russia is a series of bilateral monopolies: each enterprise, formerly part of a vertically-integrated industry, sells to a single buyer and buys from a single supplier. When this is the case, decentralization yields an industrial sector that is only as strong as its weakest link. More generally, the inherited capital stock precludes effective competition.

Wing Thye Woo's chapter on Chinese growth takes issue with the conventional wisdom that vindicates gradual transition. This "*ex post* reasoning" of Western economists who work on China argues that China bumbled its way, through incremental experimentation, to the optimal transition path. Woo rebuts that the "dual-track" liberalization method pursued by China is the outcome not of experimentation but of political struggle between Deng Xiaoping's pragmatists, and a coalition of central planners and Maoists. Woo argues that China's spectacular growth is not exceptional: it is based on the transfer of low-productivity labour out of agriculture into dynamic non-state firms (especially township-village enterprises, or TVEs) producing labour-intensive exports in the rural sector and coastal cities. China thus mirrors the general East and Southeast Asian experience; indeed, this is the fundamental model of structural change in development



economics (Lewis, 1954; Ranis and Fei, 1961). Woo disagrees with other economists about total-factor-productivity (TFP) growth in Chinese SOEs—there is a rather lengthy excursus on competing estimates—but asserts that TFP growth in SOEs is lower than in the non-state sector, and entertains the possibility of “... some Chinese SOEs producing undesired goods more efficiently” (p. 174). He also reports that better-trained and educated managers often increase performance of decentralized SOEs in order to better plunder their profits and strip their assets.<sup>10</sup> Indeed, there is little Central and Eastern Europe and the former Soviet Union can learn from China’s experience save that state-owned enterprises must be privatized with due haste. (The chapters on China in *Emerging from Communism* do not address the oft-made argument that China, unlike the former Soviet bloc, has succeeded so far by pursuing economic liberalization in the absence of political liberalization: *perestroika* without *glasnost*. Thus they do not consider the extent to which that path will continue to be feasible.)

The appropriate role of privatization is among the most interesting themes in *Emerging from Communism*. Two conclusions can be drawn from the evidence the book presents: first, many analysts conflate privatization and the hard budget constraint; second, dynamism in output and employment growth in all these economies comes not from the state-owned nor the privatized sector, but rather from the *de novo* sector.

Xu and Zhuang report that subsidies to loss-making Chinese SOEs continue to be large (though declining as a share of government fiscal revenue). More surprising, perhaps, is that the budget constraint is not necessarily harder for the insider-controlled firms that dominate the post-mass-privatization landscape in Central and Eastern Europe and the former U.S.S.R. Jackman suggests that reluctance to lay off labour in insider-controlled privatized firms is encouraged by continued subsidies in the former Soviet republics generally, and in Romania and the Czech Republic. Over-manning, the story goes, delays restructuring in the privatized sector.

Over-manning, however, need not slow the absorption of labour into the *de novo* private sector. Jackman writes that the *de novo* firms draw workers already employed in privatized or public firms. Many of the latter enterprises have not paid workers for months.<sup>11</sup> Few obstacles stand in the way of a worker in a privatized firm, with a marginal product barely above zero and no paycheque, if a new private firm offers him or her a job. As the *de novo* sector’s share of output grows in this way, the economy as a whole shifts toward a more efficient allocation of resources without layoffs.<sup>12</sup>

<sup>10</sup>This is, incidentally, similar to the message of Chinese economist He Qinglian, whose technical economic tome *Zhongguo de xianjing (China’s pitfall)*, became a surprise best-seller in a lightly expurgated Beijing edition in January, 1998. (An uncensored version was later published in Hong Kong.) Her book is reviewed by Liu and Link (1998), who write that He Qinglian shows “how the new flexibility given to managers of state enterprises has in many cases led them not toward market efficiency but instead toward sacrificing efficiency for their own selfish interests and those of the higher officials who protect them.” He Qinglian describes the SOE manager as a “semi-owner,” who keeps the profits that result from his decisions, and transfers the losses to the state.

<sup>11</sup>François Bonnet, “Les mineurs oubliés de Vorkouta,” *Le Monde*, November 24, 1998.

<sup>12</sup>Gang, Lunati, and O’Connor (1998) point out that the absence of a social-safety net de-linked from enterprises lies behind the notorious magnitude of redundant labour employed in Chinese state-owned enterprises.

Furthermore, outsider-ownership does not necessarily indicate greater distancing from the state than insider control. Estrin presents results of a 1993 World Bank survey of Russian enterprises. While outsider-owned firms indeed sell less to the state, they do not receive significantly less aid than insider-controlled privatized firms. It is the hard budget constraint, and not privatization *qua* privatization, that will propel managers and owners to reorient firms to the new productive structure of the economy. The evidence clearly shows that privatization *per se* does not guarantee hard budget constraints.

It is the *de novo* private sector (and its Chinese cousin, the TVE sector) that has exhibited the greatest dynamism in the private economy. In both the post-Soviet and Chinese cases, the new private sector arose in the interstices of the state economy, and in response to changes in the policy environment. Gomulka contemplates whether or not gradual liberalization might have given capital and labour more time to adjust to the new profile of output, but concludes from the Polish experience that rapid price liberalization was probably better given that it allowed the development of the *de novo* private sector. One could provisionally conclude that private dynamism indeed resulted from privatization, but indirectly, through its creation of incentives for a new private sector.

#### LOOKING TOWARD THE FUTURE: WHAT KIND OF GROWTH?

The books reviewed here paint a gloomy picture of economic well-being during the transition from socialism in Central and Eastern Europe and the former Soviet Union. The authors of *Emerging from Communism* argue that a “transformational recession” was necessary for the restructuring of the productive plant: enterprises had to change their output mix, technology, distribution channels, and managerial style. Even in the most successful cases like Poland and Slovenia, this adjustment has been purchased at a high price in lost output. Fischer, Sahay, and Végh (1996) conclude that a recession of two years’ duration is required at a minimum. However, many countries have paid for this transformation with much more than two years’ growth, and paid additionally with increases in inequality and declines in education.

During crises like the depression gripping the transition economies, it is natural to concentrate on immediate issues of declining average incomes and concomitant increases in poverty. However, one can also wonder about the longer-term growth path that these economies will one day follow. Whatever their structural weaknesses, the Soviet-era economies had two salient assets: (i) low levels of income inequality and (ii) high levels of human capital, equitably distributed. Economic analysis suggests that both initial conditions would foster high rates of economic growth. The books by Milanovic and UNICEF reviewed here show that the post-Communist depression has significantly damaged both growth-promoting assets. What will be the long-term impact of this economic dislocation?

A new empirically-driven literature has conclusively shown that there is a strong negative association between initial levels of inequality and subsequent growth of per capita income. Bénabou’s (1996) exhaustive synthesis and extension

of this literature outlines three mechanisms linking inequality and low growth.<sup>13</sup> First, high inequality may increase the pressure for redistributive taxation (by reducing the income of the median voter, for example), which in turn lowers investment. In a second variant, credit constraints reduce investment (especially in human capital) by the poor; redistribution (e.g. land reform, public schooling) can increase growth given that the marginal product of investment is higher among the poor. In the third stream of models, inequality increases various kinds of social conflict, which, in turn reduces the security of property rights; this depresses investment and growth.<sup>14</sup>

All of these mechanisms linking inequality and low growth are plausible in the post-Sovietist societies. Furthermore, the UNICEF report summarizes econometric analysis for nine transition economies that finds evidence of a growing earnings premium to education; in a context where access to education is becoming more stratified, this will tend to *widen* income inequality in the future. The dramatic rise in inequality and the weakening of the provision of education that have occurred during the post-Communist depression might thus impose a severe growth penalty when these economies begin to grow.

How severe a penalty? As a crude approximation, I combine the extensive income-distribution data presented by Milanovic with parameter estimates from two well-known papers in this literature. Persson and Tabellini (1994) use the before-tax income share of the top quintile as a measure of inequality.<sup>15</sup> Alesina and Rodrik (1994), with different data, use the Gini coefficient calculated on the basis of income to measure inequality.<sup>16</sup> In Table 1, I use the parameter estimates of Persson and Tabellini and Alesina and Rodrik to compute the growth penalty of increased inequality in the transition economies.

As Milanovic points out, Table 1 shows remarkable uniformity of income equality across countries before transition, and significant dispersion afterward. The coefficient of variation of the pre-transition income share of the top quintile was 4.6 among the sample countries, and 15.2 afterwards. The coefficient of variation of the income Gini was 9.7 before transition, and 26.8 afterwards. It is interesting that these growth penalties, crudely computed, are remarkably similar using the two measures. In both cases, the observed increase in inequality is

<sup>13</sup>See also the survey by Bardhan, Bowles, and Gintis (1999), and Osberg's (1995) discussion of the change in conventional wisdom regarding the equity-efficiency trade-off.

<sup>14</sup>A fourth mechanism, that inequality reduces growth-promoting trust, will be considered below.

<sup>15</sup>Persson and Tabellini use data on nine industrialized countries, split into twenty-year intervals treated as separate observations. I use their "larger sample" specification, with interpolated values for some regressors. In a cross-country growth regression, the coefficient on the top fifth's income share is -6.1. Thus in Table 1, I have computed the income share of the top quintile before and after transition, using data from Milanovic's Appendix A2; I multiply the change by Persson and Tabellini's parameter estimate to yield a growth penalty. Perotti (1994) elaborates on Persson and Tabellini by estimating a simultaneous-equation model of investment and transfers; he finds that greater equality increases transfers, and transfers increase investment, both of which results are contrary to expectations.

<sup>16</sup>Alesina and Rodrik use data from a cross-section of 50 to 70 countries (depending on the specification), for 1960-85. In their "high-quality-sample" specification, the coefficient on the Gini is -5.7. In Table 1, I opt for the estimated coefficient from the least-squares regression using the largest sample, which is -3.6. Using data from Milanovic's Appendix A4, I calculate the change in the Gini coefficient before and after transition, and multiply the change by the Alesina-Rodrik growth penalty.

TABLE 1  
THE GROWTH PENALTY OF INCREASED INEQUALITY

Country	Years	Top 20% Income Share			Income Gini Coefficient		
		Pre	Post	Growth Penalty	Pre	Post	Growth Penalty
Belarus	1988/1995	33.1	37.3	-0.3	22.8	28.4	-0.2
Bulgaria	1989/1993	34.0	41.8	-0.5	23.3	34.3	-0.4
Czech Republic	1988/1993	31.6	37.4	-0.4	19.4	26.6	-0.3
Estonia	1988/1995	32.7	41.9	-0.6	23.0	35.4	-0.4
Hungary	1987/1993	32.4	33.4	-0.1	21.0	22.6	-0.1
Kazakhstan	1988/1993	35.1	40.4	-0.3	25.7	32.7	-0.3
Kyrgyz Republic	1988/1993	36.0	56.1	-1.2	26.0	55.3	-1.1
Latvia	1988/1995	32.7	39.4	-0.4	22.5	31.0	-0.3
Lithuania	1988/1994	32.9	43.9	-0.7	22.5	37.3	-0.5
Moldova	1988/1993	34.2	43.1	-0.5	24.1	36.5	-0.4
Poland	1987/1993	35.3	36.9	-0.1	25.6	28.4	-0.1
Romania	1989/1994	33.4	37.5	-0.2	23.3	28.6	-0.2
Russia	1988/1993	33.6	53.7	-1.2	23.8	48.0	-0.9
Slovak Republic	1988/1993	31.4	30.8	0.0	19.5	18.3	0.0
Slovenia	1987/1993	34.0	35.2	-0.1	21.5	25.1	-0.1
Turkmenistan	1988/1993	36.3	42.8	-0.4	26.4	35.8	-0.3
Ukraine	1988/1995	33.5	47.9	-0.9	23.3	47.4	-0.9
Uzbekistan	1989/1993	37.2	40.7	-0.2	28.2	33.3	-0.2
<i>Mean</i>		33.9	41.1	-0.4	23.4	33.6	-0.4
<i>Coeff. of variation (%)</i>		4.6	15.2		9.7	26.8	

expected to reduce the growth rate of the economies by four-tenths of a percentage point on average. The penalty is largest in the Kyrgyz Republic, Russia, and Ukraine, and smallest in Hungary, Poland, Slovak Republic, and Slovenia.

As an illustration of the order of magnitude of this growth penalty, compare Russia and one of the poorest European Community nations, Portugal. Russia's 1997 per capita income, in 1997 purchasing-power-parity dollars, was \$4,190; Portugal's, \$13,480 (World Bank, 1998). Today, then, per capita Russian income is 30 percent of per capita Portuguese income. If Portugal's income per capita were to grow at a rate of 2 percent per year, and Russia's at a rate of 5 percent (a benchmark used by Milanovic), then the average Russian would earn 63 percent of the average Portuguese after 25 years. If, however, Russia's growth rate is adjusted for the inequality penalty in Table 1, the average Russian's income would be only 47 percent of the average Portuguese income after a quarter century. These figures are extremely approximate. However, note that this exercise requires Russian inequality to remain *unchanged* over the next 25 years, while the UNICEF report points to an economy with widening inequality built into its dynamic performance.<sup>17</sup>

#### SOCIAL CAPITAL AND SOCIAL COHESION

As well, several studies have shown that social capital (a complex of institutions, relationships, networks, and norms) contributes positively to economic

<sup>17</sup>Note too, that the aforementioned work by Rose and McAllister (1996) suggests that the increase in inequality is probably smaller in Russia than that calculated by Milanovic, and the growth penalty thus lower.

growth.<sup>18</sup> Knack and Keefer (1997) show that “trust”—defined as the proportion of survey respondents who say that “most people can be trusted”—is strongly associated with higher per capita income growth in a cross-country regression for 29 market economies. Moreover, they show that the level of trust is strongly and negatively associated with income inequality.<sup>19</sup> What has been the impact of the post-Communist depression on social cohesion? Civil society in the former socialist countries, like the productive plant, has been subjected to a severe restructuring. Some argue that civil society did not exist at all under Sovietism. How will widening income inequality affect incipient cohesion?<sup>20</sup> How will changes in the provision of education contribute to the incentives to invest in social capital? This channel from inequality and human-capital accumulation via social capital will affect growth in addition to the direct effects summarized in Table 1.

Schools can be a powerful source of social-capital accumulation. The UNICEF report, as noted above, found that the ability of schools to be an agent of social cohesion is especially weak in an environment of shrinking resources for education. UNICEF is tentatively optimistic, however, that greater decentralization of school governance will give local communities greater opportunities to develop social capital and foster rather than suppress the rights of ethnic minorities. There are nevertheless reasons to be pessimistic. In some countries, like Hungary, decentralization of school governance is more properly termed “deconcentration” by the UNICEF report: local offices of the federal government assume control. Moreover, the example of regions where minorities have lost educational rights relative to the socialist phase, or where minorities have effectively seceded from the federal educational system—Albanians in Kosovo, or Russians in Transdniestr, for example—are not encouraging indicators of national-level cohesion.

Richard Layard’s introduction to *Emerging from Communism* is entitled “Why So Much Pain?” These three books raise many questions for those concerned with the future fortunes of those people still weathering the economic pain of transition. Perhaps some of the economic dislocations of the transformational recession were unavoidable. It is much less clear that the associated increases in inequality (however poorly measured) observed in most countries were also necessary. More generally, as growth begins in these economies, economists and others must assess whether the post-Communist depression has set in place unfavourable conditions for investment in human and social capital, investments that might otherwise have fostered more buoyant and equitable growth.

Jeff Dayton-Johnson  
*Dalhousie University*

<sup>18</sup>See the World Bank’s social capital website for a series of definitions and a bibliography: <http://worldbank.org/poverty/scapital>.

<sup>19</sup>The coefficient on trust in Knack and Keefer’s growth equation is 0.082; the coefficient on the Gini term in their trust equation is  $-0.453$ . We could mechanically multiply the two coefficients and say that a one percentage-point increase in the Gini coefficient reduces growth, through its effect on trust, by 0.37 percentage points.

<sup>20</sup>Večerník (1995) reports that a majority of survey respondents in the Czech Republic, Hungary, Poland, and the Slovak Republic view income differences as illegitimate and unfair.

## REFERENCES

- Alesina, A. and D. Rodrik, Distributive Politics and Economic Growth, *Quarterly Journal of Economics*, 109, 465–90, 1994.
- Bardhan, P., H. Gintis, and S. Bowles, Wealth Inequality, Wealth Constraints, and Economic Performance, in A. Atkinson and F. Bourguignon, (eds.), *Handbook of Income Distribution*, Elsevier, Amsterdam, 1999.
- Becker, G. S., The Theory of Competition Among Pressure Groups for Political Influence, *Quarterly Journal of Economics*, 93, 372–400, 1983.
- Bénabou, R., Inequality and Growth, *NBER Macroeconomics Annual*, 11, 11–74, 1996.
- Bloem, A. M., P. Cotterell, and T. Gigantes, National Accounts in Transition Countries: Balancing the Biases?, *Review of Income and Wealth*, Series 44, 1–24, 1998.
- Fischer, S., R. Sahay, and C. A. Végh, Economics in Transition: The Beginnings of Growth, *American Economic Review (Papers and Proceedings)*, 86, 229–33, 1996.
- Gang, F., M. R. Lunati, and D. O'Connor, Labour Market Aspects of State Enterprise Reform in China, Technical Paper No. 141, OECD Development Centre, 1998.
- Knack, S. and P. Keefer, Does Social Capital Have an Economic Payoff? A Cross-Country Investigation, *Quarterly Journal of Economics*, 112, 1251–352, 1997.
- Leijonhufvud, A. and C. Rühl, Russian Dilemmas, *American Economic Review (Papers and Proceedings)*, 87, 344–8, 1997.
- Lewis, W. A., Economic Development with Unlimited Supplies of Labour, *Manchester School of Economic and Social Studies*, 22, 139–91, 1954.
- Liu, B. and P. Link, A Great Leap Backward? Review of He Qinglian, *Zhongguo de xianjing*, *New York Review of Books*, October 8, 1998.
- Osberg, L., The Equity/Efficiency Trade-Off in Retrospect, Department of Economics Working Paper 95–04, Dalhousie University, 1995.
- Perotti, R., Income Distribution and Investment, *European Economic Review*, 38, 827–35, 1994.
- Persson, T. and G. Tabellini, Is Inequality Harmful for Growth? *American Economic Review*, 84, 600–21, 1994.
- Ranis, G. and J. C. H. Fei, A Theory of Economic Development, *American Economic Review*, 51, 533–65, 1961.
- Rose, R. and I. McAllister, Is Money the Measure of Welfare in Russia? *Review of Income and Wealth*, Series 42, 75–90, 1996.
- UNESCO, World Education Indicators, 1998. (Available at <http://unesco.org>)
- Večerník, J., Incomes in East-Central Europe: Distributions, Patterns and Perceptions, Luxembourg Income Study Working Paper No. 129, 1995.
- World Bank, World Development Indicators, 1998. (Available at <http://worldbank.org/html/extdr/data.htm>)