Transition Economies: Performance and Challenges

By: Jan Svejnar

William Davidson Working Paper Number 415 December 2001 **Transition Economies: Performance and Challenges**

Jan Svejnar

Forthcoming in: The Journal of Economic Perspectives

Jan Svejnar is Executive Director of The William Davidson Institute and Everett E. Berg Professor of Business Administration and Professor of Economics at the University of Michigan, Ann Arbor, Michigan. He is also Chair of the Executive and Supervisory Committee, CERGE-EI, Prague, Czech Republic.

.

Abstract

In this paper, I assess the strategies and outcomes of the first dozen years of the transition from plan to market, and outline of the principal challenges faced by these economies. My overall assessment is that the performance during the first twelve years of the transition has been poor. While important structural transformations have taken place, the relative gap in per capita income between these countries and the advanced economies has widened. A major problem was clearly the initial recession that set these countries back relative to the advanced economies. Transition countries further east have on average performed worse than their more western counterparts. However, geography does not provide a complete explanation -- policies do matter. All transition countries carried out quickly what I term Type I reforms -- macroeconomic stabilization, price liberalization, reduction of direct subsidies, breakup of trusts, state-owned enterprises and the monobank system, removal of barriers to the creation of new firms, carrying out small-scale privatization, and introduction of a social safety net -- which all transition economies carried out quickly. However, they differed in Type II reforms: large-scale privatization, further (in-depth) development of a commercial banking sector and effective tax system, labor market regulations and institutions related to the social safety net, and establishment and enforcement of a marketoriented legal system and accompanying institutions. The reform of greatest importance seems to be that countries that placed emphasis on the development of a functioning legal framework and corporate governance of firms have performed better than those that did not. Evidence also suggests that large-scale privatization can be handled in a variety of ways, or even delayed, as long as the state-owned firms face the discipline of needing to earn their way without government bailouts and as long as new firms appear through new creation, breakups of old firms, and foreign investment.

The collapse of the Soviet political and economic system in the late 1980s, epitomized by the fall of the Berlin Wall in November 1989, culminated a dramatic economic slowdown experienced by the Soviet bloc countries over the preceding three decades. The resulting transition from central planning to a market economy has been difficult. The performance of the transition economies has fallen short of expectations for several reasons: advanced western economies did unusually well in the 1990s, which raised the bar for perceptions of economic success; the economic problems associated with the transition were widely underestimated; and policymakers made a number of questionable choices. Nevertheless, progress has been made in a number of dimensions.

In this paper, I provide an overall assessment of the strategies and outcomes of the first dozen years of the transition, as well as an outline of the principal challenges faced by these economies. In presenting data and examples, I focus primarily on comparing the experience of the five central European countries -- Czech Republic, Hungary, Poland, Slovakia, and Slovenia – with the experience of Russia. The five central European countries have a combined population of over 65 million people and were the first to launch the transition. Russia, with its population of 145 million, is the principal country of the former Soviet Union and now of the Commonwealth of Independent States (CIS), which is made up of countries that were formerly republics of the Soviet Union, but it has had a very difficult experience with transition. I will also make a number of references to three other groups: the three Baltic countries of Estonia, Latvia and Lithuania, with a combined population of 7.5 million, that became part of the Soviet Union only at the outset of World War II and in the 1990s staged a relatively fast transition; the Balkan or southeast European countries of Albania, Bulgaria and Romania, combined population 34

million, that have not been affected by war or other conflicts; and Ukraine as the second largest economy of the former Soviet Union and now CIS, with its population of 50 million. I will not discuss except in passing the many smaller countries of the CIS: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, and Uzbekistan. I also will not focus on the countries of the former Yugoslavia, since their formative experiences of the 1990s involve war and civil strife rather than economic transition.

The Soviet-style centrally planned system was relatively well suited to mobilizing resources for expanding existing productive activities during World War II and the postwar reconstruction, although it also suppressed human rights and imposed great human suffering. The Soviet bloc countries achieved a 4.5 percent annual growth rate in per capita GNP during the 1950s, exceeding the 3.7 percent rate of growth of a comparison group of market economies (Gregory and Stuart, 1997). However, the rigidities of the command economy made it much less suitable for invention, innovation and efficient allocation of resources, resulting in a long-term slowdown in the entire Soviet bloc since about 1960. While the comparison group of market economies averaged rates of growth of GNP per capita of 4.5 percent in the 1960s, 2.8 percent in the 1970s and 2 percent in the 1980s, the growth of per capita GNP of the Soviet bloc countries is estimated to have fallen to 3.6 percent in the 1960s, 2.8 percent in the 1970s, and 0.8 percent in the 1980s.

The fall of communism created expectations that the centrally planned economies would generate rapid economic growth and gradually catch up with middle income

⁻

¹ In Gregory and Stuart (1997), the Soviet bloc includes all the states of the Soviet Union plus Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, and Romania. The market economies in the sample include Austria, Belgium, Canada, Denmark, France, Greece, India, Italy, Japan, Netherlands, Norway, Spain, Sweden, Turkey, United Kingdom, the United States, and West Germany.

developed countries as they moved to a market system. These expectations were tempered by anxiety over (presumably temporary) high rates of inflation that were being observed in Poland and in disintegrating Yugoslavia the late 1980s, and by the knowledge that transition would not happen overnight.

Strategies for Transition

The policymakers in the former Soviet bloc formulated transition strategies that focused on macroeconomic stabilization and microeconomic restructuring, along with institutional and political reforms. The implementation of these strategies varied across countries in speed and specifics. A major debate took place about the merits of fast or "big bang" reform vs. gradual reform. But as it turned out, almost all the transition governments plunged ahead in rapid "big bang" style with what I will call Type I reforms. However, significant policy differences ensued in what I shall term Type II reforms, which only some governments carried out.²

Type I reforms typically focused on macro stabilization, price liberalization and dismantling of the institutions of the communist system. The macroeconomic strategy emphasized restrictive fiscal and monetary policies, wage controls, and in most cases also a fixed exchange rate. The micro strategy was to move quickly towards price liberalization, although a number of key prices like those of energy, housing and basic consumption goods often remained controlled along with wages and exchange rates. The institution governing the Soviet bloc trading area, the Council for Mutual Economic

Assistance (CMEA), was abolished and most countries opened up rapidly to international trade, thus inducing a more efficient allocation of resources based on world market prices. Most countries also quickly reduced direct subsidies to trusts and state-owned enterprises, and allowed them to restructure or even break up. They removed barriers to the creation of new firms and banks and carried out small-scale privatizations. Moreover, early on most governments broke up the "monobank" system, whereby a single state bank (or a system of tightly knit but nominally independent banks) functioned as a country's central bank as well as a nationwide commercial and investment bank, and allowed the creation of new and independent banks. A final feature was the introduction of some elements of a social safety net. These changes caused a sizable reallocation of labor away from the state-run firms, some of which went to the new private firms and some of which ended up in nonemployment. The Type I reforms proved relatively sustainable and were associated with improving economic performance in central Europe (except the Czech Republic) and in the Baltic countries, whereas they were much less successful in Russia, the other countries of the Commonwealth of Independent States, and the Balkans.

Type II reforms involved the development and enforcement of laws, regulations and institutions that would ensure a successful market-oriented economy. These reforms include: the privatization of large and medium-sized enterprises; establishment and enforcement of a market-oriented legal system and accompanying institutions; further indepth development of a viable commercial banking sector and the appropriate regulatory

² The "big bang" vs. gradualism debate is also relevant in comparing the former Soviet bloc to China. China proceeded gradually even with respect to Type I reforms and it also avoided the initial recession experienced by all transition economies.

infrastructure; labor market regulations; and institutions related to public unemployment and retirement systems.

The differences in the ability of transition governments to carry out Type I and Type II reforms seemed to turn on two factors: their ability to collect taxes with which to finance public programs and their ability to minimize corruption and rent-seeking behavior. Type I reforms generally seek to cut off subsidies and to reduce centrally planned regulation. Since many transition governments had great difficulty in setting up a reliable tax system, cutting off subsidies and reducing the scope of government was almost forced upon them. However, Type II reforms emphasize that transition requires not only the withering away of an omnipresent dictatorial state, but also a creation of a reliable state apparatus that provides a level playing field for the market economy. Type II reforms require that government have some resources, at least enough to enforce market-friendly laws and to avoid being dominated or captured by special interests.

While the full range of differences across countries in Type II reforms are difficult to capture, it is possible to give some sense of the differences across several areas: privatization, banking reform, labor and social institutions, and a market-oriented legal system.

Remarkable differences exist across the transition economies in the strategy of privatizing large and medium-sized firms. Poland and Slovenia moved slowly in privatizing state-owned enterprises, relying instead on "commercialization," where firms remained state-owned but were run by somewhat independent appointed supervisory boards rather than directly by the state, and on the creation of new private firms. Estonia and Hungary proceeded assiduously and surprisingly effectively with privatization of

individual state-owned enterprises by selling them one-by-one to outside owners. This method of privatization was originally viewed by many strategists as being too slow. Yet it provided much-needed managerial skills and external funds for investment in the privatized firms, it generated government revenue and effective corporate governance, and it turned out to be relatively fast when carried out by determined governments. Russia and Ukraine opted for rapid mass privatization and relied primarily on subsidized management-employee buyouts of firms. This method had the advantage of speed, but it has led to poor corporate governance in that existing management usually was not able or willing to improve efficiency. The method also did not generate new investment funds and skills, and it provided little revenue for the government. Finally, the Czech Republic, Lithuania and to a lesser extent Slovakia carried out equal-access voucher privatization, whereby a majority of shares of most firms were distributed to citizens at large. While this approach may have been most fair and one of the best in terms of speed, it did not generate new investment funds, nor did it bring revenue to the government. Instead, it resulted in dispersed ownership of shares and, together with a weak legal framework, it resulted in poor corporate governance. The poor corporate governance often permitted managers or majority shareholders to appropriate profit or even assets of the firms ("tunnel") at the expense of minority shareholders.

In the development of a banking system, virtually all countries rapidly abolished the monobank system as part of Type I reforms. Some countries, such as Russia, allowed spontaneous growth of new banks from the bottom up, resulting in the creation of hundreds of banks virtually overnight. In central and eastern Europe, the process was much more government-controlled, but even there dozens of small banks rapidly emerged

in countries like Czech Republic and Poland. While the banking systems differed in various ways, they shared some discouraging patterns. Many of the small banks quickly collapsed. In most countries, large banks started the transition with a sizable portfolio of non-performing enterprise loans and, upon restructuring, they rapidly accumulated new non-performing loans. The large banks survived primarily because they were "too large to fail" and governments bailed them out. The need for repeated bailouts of banks has in the late 1990s led Hungary, Czech Republic and Poland to privatize virtually all domestic banks to large western banks. Central Europe has thus become a laboratory for observing several attempts to introduce competitive western banking system with virtually no local banks.

The transition countries differed in the nature and speed of the development of labor and social regulations and institutions. By the end of 1991, all the central and east European countries developed relatively well-functioning unemployment compensation and social security benefit schemes, with the originally generous benefits becoming somewhat more modest over time (Ham, Svejnar and Terrell, 1998). In Russia and the other countries of the Commonwealth of Independent States, the official benefits were low to start with and decreased dramatically in real terms over time -- and even the low official benefits were often not paid.

Virtually no transition country succeeded in rapidly developing a legal system and institutions that would be highly conducive to the preservation of private property and to the functioning of a market economy, although some countries did much better than others. This lack of a market-oriented legal structure appears to have been the Achilles heel of the first dozen years of transition. Many policymakers underestimated the

importance of a well-functioning legal system or believed too readily that free markets would take care of any major problems. In addition, many newly rich individuals and groups in the transition economies -- especially those who have contributed to the corruption of public officials -- did not desire a strong legal system. The countries that have made the greatest progress in limiting corruption and establishing a functioning legal framework and institutions are the central European and Baltic countries, with the partial exception of the Czech Republic and Slovakia. In recent years, an important impetus for carrying out legal and institutional reforms in many of these countries has been the need to develop a system that conforms to that of the European Union as a prerequisite for accession to the EU.

Performance of the Transition Economies Since 1989

The transition economies have not performed as well as many had expected. Economic performance has also varied widely across the transition countries, with the central European countries of Poland, Slovenia, Hungary, Slovakia, and the Czech Republic generally performing better than the Baltic states of Estonia, Latvia and Lithuania and the Balkan state of Bulgaria and Romania, which in turn performed better than Russia, Ukraine, and other countries in the Commonwealth of Independent States.

Gross Domestic Product

Calculating the evolution of GDP is difficult in the transition economies. Instead of GDP, the communist countries used "gross material product" to measure the size of

their economies, a measure which ignored the production of services. Moreover, the communist economies were characterized by prices that did not reflect scarcity and consumer demand, thus making market valuations difficult. The dramatic growth in the number of small firms during the transition was not well-captured in the official statistics – to say nothing of the course of the underground economy in these countries both before and during the transition. National statistical offices and the international institutions have devoted significant resources to estimating GDP for the late 1980s, and tracing out GDP accurately thereafter, but the early data obviously have to be interpreted with caution (Filer and Hanousek, 2000, this issue; Brada, King and Kutan, 2000).

With the above caveats in mind, one may interpret the growth performance since 1989 as having been mildly to significantly disappointing in central Europe, and poor to disastrous in eastern Europe and the Commonwealth of Independent States. Figure 1 provides GDP data for an illustrative set of countries. All of the transition economies experienced large declines in output at the start of the transition. The decline varied from 13 to 25 percent in central European and eastern Europe; over 40 percent in the Baltic countries; and as much as 45 percent or more in Russia and even more in many of the other nations of the CIS, like the drop of almost 65 percent in Ukraine. While the central and east European countries reversed the decline after 3-4 years, in Russia and most of the CIS no turnaround was visible through most of the 1990s. Russia, for instance, suffered a continuous decline in GDP until 1996, showed signs of growth in 1997, but then went into another 5 percent decline during its 1998 financial crisis.

All central European countries except for the Czech Republic have generated sustained economic growth since the early to mid-1990s. However, only in Poland has

the rate of growth been sufficient to start closing the relative income gap with the advanced OECD economies back towards its initial 1989 level. By 2001, every transition economy had an even larger relative income gap with the advanced economies than had existed in 1989.

What is the magnitude of the income gap? At 1999 exchange rates, GDP per capita ranged from \$620 in Ukraine to \$1,250 in Russia, \$4,070 in Poland, \$5,200 in the Czech Republic, and \$10,000 in Slovenia (EBRD, 2000). Comparable figures for the United States, the 15 European Union countries and Japan were \$33,900, \$22,560 and \$32,600, respectively. The gap between the poor and rich countries is of course reduced when calculated in terms of purchasing power parity, but nonetheless, for most transition economies the enormous absolute and relative income gaps will take decades to close. Note that since these figures refer to almost one decade after price liberalization, they do not suffer from mis-measurement of inflation, as may have been the case in the early transition.

The depth and length of the early transition depression was unexpected. A number of explanations have been offered: tight macroeconomic policies (Bhaduri et al., 1993; Rosati, 1994); a credit crunch stemming from the reduction of state subsidies to firms and rise in real interest rates (Calvo and Coricelli, 1992); disorganization among suppliers, producers and consumers associated with the collapse of central planning (Blanchard and Kremer, 1997; Roland and Verdier, 1999); a switch from a controlled to uncontrolled monopolistic structure in these economies (Li, 1999; Blanchard, 1997); difficulties of sectoral shifts in the presence of labor market imperfections (Atkeson and Kehoe, 1996); and the dissolution in 1990 of the Council for Mutual Economic Assistance (CMEA),

which governed trade relations across the Soviet-bloc nations. While each explanation contains a grain of truth, none is in itself completely convincing. All countries have gone through the decline, yet cross-country differences in initial conditions and the nature of reform are substantial enough to make one question the universal applicability of any single explanation. No explanation has strong empirical support across the board.

What factors account for the persistent growth in Poland, Hungary, Slovakia, and Slovenia since the early to mid-1990s, as compared to the recession experienced in the second half of the 1990s by the Czech Republic, Bulgaria and Romania, and the continuous decline in Russia and the other CIS countries? Again, no single explanation suffices. Geography alone does not explain the outcomes as the western-most country, Czech Republic, did much worse in the second half of the 1990s than countries further east such as Hungary, Poland and Slovakia. In fact, the evolution of Czech GDP in the second half of the 1990s resembles that of Bulgaria and Romania.

The extent to which countries pursued a combination of key Type II reforms provides some explanatory power. The four leading transition economies shown in Figure 1 -- Poland, Slovenia, Hungary, and Slovakia -- have pursued a relatively complete set of reforms, including maintaining relatively clear property rights and corporate governance. For example, Hungary and to a lesser extent Slovakia privatized most state-owned enterprises in a way that assigned clear property rights to the new owners. Poland and Slovenia proceeded slower with privatization, but both countries exposed the state-owned enterprises to competition and a risk of financial failure. In all four economies there was also substantial creation of new private firms that contributed to growth.

Other countries have carried out much more limited Type II reforms. The Czech Republic is notable because it was similar to the four leading economies but it grossly neglected the need to establish a functioning legal framework and corporate governance of firms and banks. The privatization experience of the Czech Republic, Russia and Ukraine also suggests that mass privatization in the absence of a functioning legal system has strong negative effects on performance. The situation in Russia and other CIS economies has been further aggravated by the political and economic disintegration of the Soviet Union, including attempted coups, a greater presence of organized crime, and the spread of aggressive rent seeking and corruption.

Inflation

A number of the transition economies experienced high or hyperinflation as the communist system disintegrated. Poland, Slovenia, Albania, Bulgaria and Romania all experienced at least one year from 1990 to 1993 when consumer price inflation exceeded 200 percent; Estonia, Latvia and Lithuania all had one year with inflation around 1000 percent; and Russia, Ukraine, and Kazakhstan experienced at least one year when inflation was above 2000 percent. Sometimes these bouts of inflation arose after lifting price controls; in other cases, the inflation grew out of financial sector crises. However, by the later part of the 1990s, Type I reforms had shown that they could reduce inflation rates with speed and effectiveness.

The first column of Table 1 shows rates of inflation for a selected group of transition countries. The first group of countries are in central Europe; the second set represent the southern part of eastern Europe (Balkan countries); the third set represent

the northern part of eastern Europe (Baltic countries), the fourth set represent Russia and other countries in the Commonwealth of Independent States; and the final panel offers some comparisons from the western European economies and the United States. By 2001, inflation rates in many transition economies were in single digits. Even countries that experienced very high rates of inflation during the 1990s -- Russia, Ukraine, Kazakhstan, and Bulgaria, for example -- had inflation rates in the range of 9 to 35 percent by 2001. This outcome is important because annual inflation of 40 percent or less does not seem to have a major negative impact on economic growth and consumer welfare (Bruno and Easterly 1995, Fischer, Sahay and Vegh, 1996).

Exchange Rates and Current Account

Most transition economies devalued their currency as a means of export promotion and adopted a fixed exchange rate as part of macroeconomic stabilization. They also significantly reoriented their foreign trade away from the old CMEA arrangements and toward market economies. However, as domestic inflation exceeded world inflation in the 1990s, the fixed exchange rates often became overvalued, leading in some cases to substantial current account deficits. For instance, Russia, Albania, Kazakhstan, and Bulgaria all had at least one year between 1990 and 1993 when the current account deficit was -10 percent or greater. Most countries responded by devaluing their currencies again and adopting more flexible exchange rate regimes, although Bulgaria, Estonia and Lithuania have fixed their exchange rate through currency boards as a means of long-term economic stabilization.

The second column of Table 1 shows that central and eastern Europe now have current account deficits of moderate size, which would be expected for countries that are seeking to attract a net inflow of foreign investment capital. However, Russia and the other economies of the Commonwealth of Independent States are often significant exporters of natural resources and are experiencing a net outflow of investment funds, as shown by their current account surpluses.

External Debt and Financial Crises

A number of transition countries started the 1990s with high foreign indebtedness. In Bulgaria, Hungary, and Poland, external debt exceeded 50 percent of GDP in 1990. In Russia, external debt in 1990 was a whopping 148 percent of GDP. Other transition economies, such as Romania, Slovenia, Czech Republic, and Slovakia, had conservative regimes where foreign debt was less than 20 percent of GDP in 1990.

These different initial conditions greatly affected the subsequent performance of these countries. For instance, high-debt Poland succeeded in renegotiating its debt, while high-debt Hungary serviced its debt in full. The Hungarian approach imposed a heavy fiscal burden and induced a number of policies, including the revenue-oriented form of large-scale privatization.

By the mid-1990s, most of the highly indebted countries reduced their debt relative to GDP, while a number of the less indebted countries raised theirs. But since about 1996, foreign indebtedness appears to have risen in the relatively more indebted countries, especially Hungary and Russia. Indeed, Russia defaulted on its sovereign debt in 1998. Interestingly, while the Russian financial crisis had a major impact on the CIS

countries that still have close trading relations with Russia, it had relatively little impact on the countries of central and eastern Europe or on the Baltic nations, which had already reoriented most of their trade and commercial relations to western Europe.

The third column of Table 1 shows external debt as a share of GDP in 2000. All the countries in the table have external debt in excess of 25 percent of GDP, but leaving aside Bulgaria, none have external debt higher than 70 percent of GDP. This is in line with a number of other developing and some developed countries. Unless accompanied by other destabilizing factors, such as a high proportion of short-term debt that may suddenly not be refinanced as investor sentiment shifts (as was the case in Russia), this level of debt is not especially alarming.

Budget and Taxes

Since under communism the government owned almost everything, taxes and expenditures were transfers among centrally determined activities. The principal taxes were a tax on turnover (inputs plus output), along with other taxes on enterprises and payroll taxes. Tax rates changed often; indeed in some countries, tax liabilities seemed more a matter of negotiation than a requirement (Tanzi and Tsibournes, 2000). Since most taxes were collected at the enterprise level, many citizens were unaware of the heavy tax burden in the communist economies and thus have resented the explicit taxes that have been introduced during the transition.

As the transition unfolded, governments had to develop new fiscal institutions for collecting taxes. This institutional development was one of the hardest Type II reforms to achieve. While tax collection has been relatively effective in central and eastern Europe,

Russia and some other countries of the Commonwealth of Independent States have faced significant declines in tax revenue as many producers have been operating through barter and accumulating tax arrears. At the same time, the governments have been facing numerous public expenditures, including infrastructure and the new social safety net. The relative inability of Russia and the CIS nations to collect taxes is one reason why their social safety nets have been much weaker than those in central and eastern Europe.

Many the transition economies, especially those in central and eastern Europe, have higher tax rates than other countries at a similar level of GDP per capita. The highest tax burdens -- 35 to 42 percent of GDP -- are found in central Europe among the most advanced economic reformers, who rely primarily on the payroll tax, value-added tax and personal income tax to finance government programs (Tanzi and Tsiboures, 2000). The relatively high ratios of taxes to GDP in transition economies have not prevented governments of many of these countries from running budget deficits. Thus, Albania, Bulgaria, Czech Republic, Hungary, Lithuania, Kazakhstan, Russia, Slovakia, and Ukraine have in a number of years had annual budget deficits in excess of 5 percent of GDP. The fourth column of Table 1 shows government budget balance as a share of GDP in 2001.

The patterns in public revenues and expenditures reflect local factors as well as the mixed advice that the transition economies received from western countries and institutions. The International Monetary Fund and the World Bank have generally advised the transition economies to aim for balanced government budgets, or to run only small budget deficits, while increasing the size of the private sector and reducing the role of the government. The European Union also placed emphasis on low budget deficits and

imposed a 3 percent upper bound on the size of the deficit relative to GDP as a precondition for entry into the Union. However, the European Union also requires that countries applying for EU membership adopt a number of relatively costly social programs and structural measures, which places upward pressure on government expenditures.

An especially problematic aspect of the public finances in many transition economies is the increasing strain from the pension system. The countries of central and eastern Europe entered the transition with publicly-funded pension systems, almost universal coverage of the population, low retirement ages (on average 60 for men and 55 for women), a high and growing ratio of retirees to workers, high payroll tax contribution levels, and high levels of promised benefits relative to recently earned pre-retirement wages (World Bank, 1994; Svejnar, 1997). Moreover, most of these systems practice a perverse redistribution of benefits from lower-income workers to higher-income workers. The promises of these systems, which are largely pay-as-you-go, are not sustainable. Several countries, including Hungary, Poland, Latvia and Kazakhstan, have already moved to raise the retirement age and to supplement the public retirement system by a multi-pillar public/private retirement system with a funded component. Russia and other CIS countries face less of a public sector burden with regard to retirement costs, because the level of government-promised retirement benefits is lower.

Given the fiscal pressure under which most of the transition economies operate, it is interesting to note that their governments have collected very little revenue from privatization (Tanzi and Tsiboures, 2000). The average in central and eastern Europe, as well as in the former Soviet Union, was only about 5 percent of GDP. Hungary, which

was most revenue-oriented in its privatization, generated a total of about 14 percent of GDP, which is still a very modest figure when spread over several years.

Privatization and Creation of New Firms

In the early 1990s, most transition economies rapidly privatized small enterprises as part of their Type I reforms. This small-scale privatization was done mostly through local auctions. It was instrumental in creating small and medium-sized enterprises in countries where most firms were, by ideological and practical design, either large or very large. Casual evidence suggests that this shift in ownership increased efficiency and quality of production.

Parallel developments were the breakups of state-owned enterprises (which contributed to the growth in the number of firms), restructuring of firms and management, and increased competition. Breakups of small, average and somewhat above-average size appear to have increased efficiency of both the remaining master enterprises and the spun-off units (Lizal, Singer and Svejnar, 2001). Some of the broken-up firms were then privatized.

A large number of new (mostly small) firms were founded. These firms filled niches in demand and started to compete with existing state-owned enterprises and with imports. The growth of new firms has varied across countries. In general, it proceeded faster and smoother in central Europe than in eastern Europe and the Commonwealth of Independent States. Gomulka (1994) and others attribute much of the success of the Polish economy to the rising production in the new firms.

Finally, in most countries, the majority of private assets were generated through large-scale privatization, which differed in its method across countries. What is remarkable, however, is how quickly most countries generated private ownership, irrespective of the particular privatization methods used. In 1990, the private sector had perhaps 20-25 percent of GDP in Hungary and Poland, but typically only 5-10 percent of GDP in other transition economies. But these figures increased very quickly. As early as 1994, the private sector was more than 30 percent of GDP in all of the transition economies and represented half or more of GDP in many countries, including Russia. The fifth column of Table 1 shows that by 2000 the private sector share of GDP was at or above 60 percent in all of the transition economies except Slovenia and in most of them it constituted 70-80 percent.

The effect of privatization on economic performance is surprisingly hard to determine. At the country level, some of the fastest growing economies (Poland, Slovenia, and also China) have been among the slowest to privatize. In a cross-country econometric study, Sachs, Zinnes and Eilat (2000) find that privatization does not by itself increase GDP growth, but they find a positive effect when privatization is accompanied by in-depth institutional reforms. Four recent surveys make assessments that range from finding no systematically significant effect of privatization on performance (Bevan, Estrin and Schaffer, 1999), to concluding cautiously that privatization improves firm performance (Megginson and Netter, 2001), to being fairly confident that privatization tends to improve performance (Shirley and Walsh, 2000; Djankov and Murrell, 2000). Clearly, the results are not yet conclusive. Many of the microeconometric studies suffer from serious problems: small and unrepresentative

samples of firms; misreported or mismeasured data; limited controls for other major shocks that occurred at the same time as privatization; a short period of observations after privatization; and above all, not controlling adequately for selectivity bias. Selectivity bias is likely to be a particularly serious problem since better performing firms tend to be privatized first (Gupta, Ham and Svejnar, 2001). Thus, comparing the post-privatization performance of privatized firms to the performance of the remaining state-owned firms without controlling for selectivity bias, as many studies do, will erroneously attribute the superior performance of the privatized firms to privatization.

Domestic and Foreign Investment

The communist countries, like the east Asian tigers, were known for high rates of investment, often exceeding 30 percent of GDP. The investment rates slowed down to about 30 percent in the 1980s in a number of countries as governments yielded to public pressure for more consumer goods. The investment rates declined further to about 20 percent of GDP in the 1990s in a number of transition economies (EBRD, 1996), although countries such as the Czech and Slovak Republics maintained relatively high levels of investment. Unfortunately, much of this investment appears to have been allocated inefficiently -- by the monobank system through the 1980s and by the inexperienced and often politicized or corrupt commercial banks in the 1990s (Lizal and Svejnar, 2002). Indeed, trends in foreign direct investment may provide a better measure of the attractiveness of investment in the transition economies than domestic investment figures.

As Figure 2 shows, until 1997 Hungary was the only transition economy receiving a significant flow of foreign direct investment. Analysts usually attribute this success to the fact that Hungary was more hospitable to and had well-defined rules and regulations for foreign direct investment since the early 1980s. But starting in 1998, major foreign investments went to the Czech Republic, Poland and Slovakia. However, many countries of eastern Europe remain, along with Russia, rather unattractive to foreign direct investment. The rate of foreign direct investment appears to increase with several factors: the proximity of the perceived date of accession of a given country to the European Union; the desirability of the country's political, economic and legal environment; and the availability of attractive privatization projects in the country.

Employment Adjustment, Wage Setting and Unemployment

State-owned enterprises in all the transition economies rapidly decreased employment and/or real wages in the early 1990s (Svejnar, 1999). In central Europe, the greatest initial reduction in industrial employment occurred in Hungary (over 20 percent), followed by Slovakia (over 13 percent), Poland (over 10 percent), and the Czech Republic (9 percent). The downward adjustment in industrial wages proceeded in reverse order and amounted to 24 percent in the Czech Republic, 21 percent in Slovakia and 1 percent in Poland. Hungarian real wages in industry actually rose by 17 percent (Basu, Estrin and Svejnar, 2000). In Russia and the rest of CIS, the adjustment brought a mixture of wage and employment adjustment (Desai and Idson, 2000) and the wage decline was more pronounced than in central and eastern Europe (Boeri and Terrell, this issue). As Basu, Estrin and Svejnar (1997, 2000) show, labor demand elasticities with respect to

output and wages were significant in the more marketized pre-transition economies, and they rose rapidly in central Europe as transition was launched. Depending on the institutional setting in a given country, the sharp decline in output at the start of the transition was hence absorbed more by employment or wage decreases.

Figure 3 shows that in most transition economies, the employment decline reached 15-30 percent in the 1990s. A continuous decline is observed in Russia, Slovakia and Romania; an L-shape pattern detected in Bulgaria, Hungary and Slovenia; a U-shape pattern in Poland; and a sideways S-shape pattern in the Czech Republic. When combined with the GDP data in Figure 1, the employment data suggest that restructuring in the transition economies involved an initial decline in labor productivity as output fell faster than employment and a subsequent rise in productivity as output and labor stopped declining. But a note of caution is in order here. With production shifting from large to small firms, the decline in employment (and output) may be less pronounced than suggested by the official data, since small firms are harder to capture in official statistics.

Unemployment was unknown before the transition, but it emerged rapidly in central and east European countries, except for the Czech Republic. Within two years after the start of the transition, the unemployment rate rose into double digits in most economies of central and eastern Europe. By 1993, for example, the unemployment rate reached 16 percent in Bulgaria and Poland, 12 percent in Hungary and Slovakia, 10 percent in Romania, 9 percent in Slovenia, but only 3.5 percent in the Czech Republic. The high unemployment rates reflected high rates of inflow into unemployment as firms laid off workers, and relatively low outflow rates as the unemployed found it hard to find new jobs. The Czech labor market was an ideal model of a transition labor market,

characterized by high inflows as well as outflows, with unemployment representing a transitory state between old and new jobs (Ham, Svejnar and Terrell, 1998, 1999, Svejnar 1999, and Boeri, 2000). Unemployment rose more slowly in the Commonwealth of Independent States and the Baltic countries, as firms were slower to lay off workers and used wage declines and arrears as devices to hold on to workers. In 1993, for example, unemployment in Russia and Estonia still hovered near 6 percent.

Over time, the patterns of unemployment have shown considerable differentiation. The Czech Republic was the only central European country to enter recession in the second half of the 1990s and its unemployment rate correspondingly rose to 8 percent. The fast-growing economies of Poland, Hungary, Slovenia, and to a lesser extent Slovakia managed to reduce their unemployment rates in the late 1990s.

Conversely, the Commonwealth of Independent States and the Baltic countries experienced gradual increases in unemployment as their transition proceeded. By 1997, unemployment rates in Russia and Estonia were near 10 percent. By 1999-2000, the unemployment rate rose again in Bulgaria, the Czech Republic, Poland, Slovakia and Slovenia. It stabilized in countries such as Hungary, Romania and Russia. As may be seen in column 6 of Table 1, with the exception of Hungary, Slovenia and Romania, transition economies in 2000 had relatively high unemployment rates that are at least as high, and often significantly exceed, those observed in the European Union.

While real wages in central and eastern Europe have increased by about 15-20 percent after their initial 25 percent decline in the 1989-91 period, in Russia and a number of other CIS countries real wages declined until 1993 and stagnated or increased

only moderately thereafter (Svejnar, 1999; EBRD, 2000). The trajectory of real incomes has thus been very different in the more and less advanced transition economies.

The reduction in employment in the old state-owned firms, rise in unemployment and establishment of new firms have brought about considerable destruction and creation of jobs, as well as mobility of labor. Contrary to the main models of the transition process, Jurajda and Terrell (2001) show that job creation in new firms is not necessarily tightly linked to job destruction in the old firms since many new jobs have been created even in economies (such as the Czech Republic) that experienced low rates of job destruction. Sabirianova (2000) provides a related structural insight, namely that much of the labor mobility consisted of occupational rather than geographic change, with individuals moving from one occupation to another within regions, as jobs in old occupations were destroyed and opportunities in new occupations were created.

Compared to the U.S. labor market, where individuals move more geographically than occupationally, the transition has led to more occupational rather than geographic mobility.

Data on income distribution, expressed in the form of Gini coefficients, are summarized in Table 2.³ The communist countries had highly egalitarian income distributions. In central and east Europe, the Gini coefficients ranged from 20 in Czechoslovakia and Slovenia to 25 in Poland in the late 1980s. The 1988 Ukrainian Gini coefficient of 23 (based on survey data) and the 1991 Russian coefficient of 26 based on the registry wage data of the Russian Statistical Office (Goskomstat) suggest that income distribution was relatively egalitarian in the former Soviet Union as well. However,

inequality increased during the 1990s, with the Gini coefficient reaching 26-34 in central and east Europe, 30 in Ukraine and 40 in Russia. These coefficients bring inequality in the transition economies into the range spanned by capitalist economies from the relatively egalitarian Sweden to the relatively inegalitarian United States, and in line with developing countries such as India. However, while the central and east European data seem to reflect reality, the Russian and Ukrainian data may well understate the extent of inequality. In particular, the Goskomstat data are based on wages that firms are supposed to be paying to workers, but many Russian firms have not been paying contractual wages (Desai and Idson, 2000). In Table 2, a second row for Russia and Ukraine shows inequality based on survey data from the Russian Longitudinal Monitoring of households. These data suggest that income inequality in Russia and Ukraine has reached much higher levels – a Gini coefficient of 47-50 – which resembles the level of inequality found in developing economies with the most inegalitarian distribution of income, like Brazil. The relatively egalitarian structure of income distribution in central and eastern European countries has been brought about by their social safety nets, which rolled back inequality that would have been brought about by market forces alone (Garner and Terrell, 1998). Conversely, the Russian social safety net has been regressive -- it has made the distribution of income more unequal than it would have been without it (Commander, Tolstopiatenko and Yemtsov, 1999).

Life Expectancy

³ The Gini coefficient varies from 0 to 100, with 0 representing a perfectly egalitarian distribution of income (every individual or household receiving the same income) and 100 denoting the most inegalitarian distribution (one person or household receiving all income).

A number of social indicators suggest that average living standards improved during the transition in central Europe, improved slightly in the Baltic countries, remained about the same or declined slightly in the Balkan countries not involved in wars, and declined in the CIS. The data on life expectancy presented in Table 3 show this pattern. For comparison, between 1989 and 1999, life expectancy at birth increased by about two years from 75 to 76.9 years in the United States and from 76.5 to 78.5 years in France. During the same period, life expectancy increased by one to three years in most central European countries; increased slightly in the Baltic countries; declined slightly in Albania, Bulgaria and Romania; and declined by 2.5 years in Russia, over three years in Ukraine and almost four years in Kazakhstan. The decline in life expectancy in Russia, Ukraine and Kazakhstan during the transition hence represents a major break from increasing life expectancies in the past. Disaggregated data indicate that the decline in life expectancy in the CIS countries is largely due to the early deaths of middle aged males, who are presumably more exposed to stress and resort to heavy alcohol consumption.

Fertility

Fertility data in Table 3 indicate that the number of births per woman declined dramatically in virtually all the transition economies in the 1990s, as compared to the counterpart numbers in western countries and to the trend in the 1980s. As of 1989, the transition and western countries had similar ranges of fertility rates, from 1.5 in Slovenia to 2.2 in Romania among the transition countries, and from 1.4 in Germany to 2.0 in the United States. In the 1990s, fertility rates decline modestly in western Europe and rise slightly in the United States. In contrast, in Russia and Ukraine the fertility rates

plummeted from about 2 to 1.3. The rate of decline is substantial in all the other transition economies.

Marriage and Divorce Rates

As may be seen from Table 4, marriage rates have been declining over time in most western as well as transition economies. Moreover, marriage rates in continental European countries have traditionally been lower than in the United Kingdom and United States. But the rate of decline in marriage rates accelerated in most transition economies. In 1989, marriage rates in the Soviet republics and the Czech part of Czechoslovakia were in a range of 8 to 10 percent. By 2000, these transition economies recorded marriage rates of 3.3 to 6 percent.

Conversely, the data in Table 4 indicate that the propensity to divorce does not seem to have been much affected by the transition. Indeed, while divorce rates rise in western European countries in the 1990s, they declined in many transition economies, including Bulgaria, Estonia, Latvia, Kazakhstan, Russia, and Ukraine.

Hence, while one might expect that the psychological stress and economic hardship of the transition would result in increased breakups of families, on the whole this has not been the case. The transition appears to have had a strong negative effect on marriage formation and fertility, but it has not destroyed existing marriages.

Attitudes

People's attitudes toward the transition provide interesting information that complements the evidence on behavior. Table 5 presents several key findings from a

1999 study carried out by Public Opinion Research Center (1999) on national random samples of 1,018 individuals in the Czech Republic, 1,523 individuals in Hungary and 1,111 individuals in Poland. These three countries are the most advanced transition economies. They have succeeded in joining OECD and NATO, and are among the five front-runners for admission to the European Union. However, the findings reflect quite negative attitudes toward the benefits of the transition during the 1989-99 decade.

In all three countries the majority of individuals feel that it was worthwhile to change the political and economic system, with the largest majority (67 percent) being found in Poland where the political revolts in the 1980s were the strongest and the GDP growth in the 1990s the fastest. However, in each country many more people believed that the losses from transition exceeded the gains than the reverse. Similarly, in each country more respondents feel that their "material conditions of living are now a little worse" than the reverse. The attitudinal survey hence provides a sobering assessment of how people in the most advanced transition economies feel about the benefits and costs of the transition. It is likely that the sentiment in the more poorly performing countries is even more pessimistic.

Assessment

The performance of the former Soviet bloc economies during the first twelve years of the transition has been poor. While many important structural transformations have taken place, the relative gap in per capita income between these countries and the advanced economies has widened. A major problem for the transition economies was

clearly the initial recession that set them back relative to the advanced economies. In Russia, Ukraine and other CIS countries, this depression lasted almost a decade. Transition countries further east have on average performed worse than their more western counterparts, which suggests that geography-related initial conditions have been important in the transition process. The central European countries, located most to the west among the transition economies, have historically shared the same alphabet and religions, had similar educational and bureaucratic systems, and intensively traded and otherwise interacted with countries in western Europe. They, together with the Balkan countries, were under the Soviet system for only four decades, as compared to five decades in the case of the Baltic countries and seven decades in the countries of the Commonwealth of Independent States. Finally, the countries of central Europe were the first to aspire and be encouraged to prepare for entry to the European Union. The physical proximity and historical belongingness to Europe hence seems to have provided an important advantage for the "western" transition economies in moving from the Sovietstyle system to a democratic and market-oriented system. However, the fact that the western-most transition economy, Czech Republic, has performed worse than others since the mid 1990s indicates that geography does not provide a complete explanation and that policies do matter.⁴

1

⁴ An interesting counterfactual approach to assessing the validity of initial conditions versus policies as explanations is to ask how an aggressive effort by western countries would have affected the transition. For example, consider East Germany, which received enormous capital inflows from West Germany (\$80-100 billion annually) to build modern infrastructure and by absorption into a united Germany received a modern legal and institutional infrastructure. However, West Germany also feared a flood of businesses to low-wage East Germany, and a flood of East Germans coming west for higher wages and welfare benefits. It thus passed a set of rules that raised labor cost per worker in eastern Germany from about 10 percent of the western German level to about 80 percent. This dramatic jump in labor cost, combined with relatively low labor productivity, made firms in eastern Germany retrench and forced many of them out of existence. Since the early 1990s open and disguised unemployment in eastern Germany has been at about twice the level of unemployment in the central European transition economies. Any substantial western plan to assist

Interestingly, the initial conditions had little impact on whether the countries carried out Type I reforms -- macroeconomic stabilization, price liberalization, reduction of direct subsidies, breakup of trusts, state-owned enterprises and the monobank system, removal of barriers to the creation of new firms, carrying out small-scale privatization, and introduction of a social safety net -- which all transition economies carried out quickly. However, they did affect Type II reforms: large-scale privatization, further (indepth) development of a commercial banking sector and effective tax system, labor market regulations and institutions related to the social safety net, and establishment and enforcement of a market-oriented legal system and accompanying institutions. The reform of greatest importance seems to be that countries that placed emphasis on the development of a functioning legal framework and corporate governance of firms, like Hungary, Poland and Slovenia, have performed better than those that did not, like the Czech Republic, Russia and Ukraine. On a related note, evidence suggests that largescale privatization can be handled in a variety of ways, or even delayed, as long as the state-owned firms face the discipline of needing to earn their way without government bailouts and as long as new firms appear through new creation, breakups of old firms, and foreign investment.

When Will the Transition be Over?

transition countries would have offered lower subsidies and created less legal and institutional reform than occurred in East Germany, although the effects of such financial subsidies, institutional reforms and market access could nonetheless have been substantial. But such a plan might also have involved restrictions on labor leaving the transition economies or demands that expensive social programs be enacted. Likely

results would be a faster rise in living standards for the employed, higher unemployment rate and more unequal income distribution in transition economies. The overall effect on economic growth and other performance indicators would depend on which effects dominated.

31

Since transition is a process, it is natural to ask when it is likely to be completed.

The answer depends on how one defines the terminal point. A number of analysts are on record on this issue and their definitions differ considerably.

Janos Kornai (1999) views the end of transition as a situation in which the communist parties have lost monopoly political power, the private sector accounts for the majority of GDP, and the market is the dominant coordinator of economic activities. According to this sensible definition, rooted in a radical shift in political power and a fundamental structural change in the economy, the transition is in most countries over -- and has been so for the last five years.

From a different angle, Alan Gelb (1999) sees the end of transition as a state when the problems and the policy issues confronted by today's "transition countries" resemble those faced by other countries at similar levels of development. This definition relies on notions of economic development and also makes good sense. Based on this definition, one may also argue that the transition is over. The fact that private sector analysts such as Morgan Stanley and publications such as *The Economist* increasingly place advanced transition countries into the general category of "emerging market economies" also supports this point of view.

But whatever the logic of these arguments, most citizens of the transition countries do not feel that they have accomplished the transition. I believe that this is because most have been implicitly equating the transition with a process that will make them partners with the relatively advanced countries in the world in general, and with western Europe in particular. Taking this aspect into account, I would define the end of transition as a state when these economies replace central planning by a functioning

William Davidson Institute Working Paper 415

market system and when they generate rapid and sustainable rates of economic growth that enable them to interact with the more advanced market economies without major forms of protection. Estonia, Poland, Czech Republic, Hungary, Slovenia, and possibly Slovakia will presumably reach this stage in a few years when they fully enter the European Union. Others have a much longer way to go.

Acknowledgements

First drafts of all the papers in this symposium were originally presented at a Journal of Economic Perspectives conference at CERGE-EI, Prague, Czech Republic, on March 24, 2001, with funding from the Andrew W. Mellon Foundation. The present paper benefited from comments by Brad De Long, Saul Estrin, Jan Hanousek, Evzen Kocenda, Alan Krueger, Sergei Slobodyan, Timothy Taylor, Katherine Terrell, Michael Waldman, and a number of participants at the symposium. I would especially like to thank Cristina Negrut for her valuable assistance with preparing the tables and figures for this paper. The author's research benefited from the National Science Foundation Grant No. SES 0111783, ACE grant P98-1129-R and ACE grant P98-1008-R.

References

Atkeson, A and P.J. Kehoe, "Social Insurance and Transition," *International Economic Review*, Vol. 37, 1996, 377-402.

Basu, Swati, Saul Estrin and Jan Svejnar (1997), "Employment and wage behaviour of industrial enterprises in transition economies: The cases of Poland and Czechoslovakia," *Economics of Transition*, 5(2), 271-187.

Basu, Swati, Saul Estrin and Jan Svejnar (2000), "Employment and Wages in Enterprises under Communism and in Transition: Evidence from Central Europe and Russia," *The William Davidson Institute Working Papers*, No.114b (1995, revised 2000).

Bevan, Alan, Saul Estrin and Mark Schaffer, "Determinants of Enterprise Performance during Transition" *Centre for Economic Reform and Transformation (CERT) Working Paper* 99/03, January1999.

Bhaduri, A., K. Kaski and F. Levcik, "Transition from the Command to the Market System: What Went Wrong and What to do for Now?" mimeo, Vienna Institute for Comparative Economic Studies, 1993.

Blanchard, Olivier J., *The Economics of Post-Communist Transition*, Oxford: Clarendon Press, 1997.

Blanchard, O. and M. Kremer, "Disorganization," *Quarterly Journal of Economics*, 1997, Vol.112(4), 1091-1126.

Boeri, Tito, Structural Change, Welfare Systems and Labor Allocation, Oxford: Oxford University Press 2000.

Brada, Josef C., Arthur E. King and Ali M. Kutan, "Inflation bias and productivity shocks in transition economies: The case of the Czech Republic," *Economic Systems*, 24(2), 2000, 119-138.

Bruno, Michael and William Easterly, "Inflation Crises and Long-Run Growth," NBER Working Paper No. 5209, 1995.

Calvo, Guilermo A. and Fabrizio Coricelli, "Capital Market Imperfections and Output Response in Previously Centrally Planned Economies," in Caprio G., Folkerts-Landau D. and Lane T. (Eds.) *Building Sound Finance in Emerging Market Economies*, Washington, D.C., IMF, 1992.

William Davidson Institute Working Paper 415

Commander, Simon, Andrei Tolstopiatenko and Ruslan Yemtsov, "Channels of redistribution: Inequality and poverty in the Russian transition," *Economics of Transition*, 7(1), 1999, 411-465.

Desai, Padma and Todd Idson, Work without Wages: Russia's Nonpayment Crisis, Cambridge, MA: MIT Press, 2000.

Djankov, Simeon and Peter Murrell, "Enterprise Restructuring in Transition: A Quantitative Survey," Working Paper, University of Maryland, College Park, MD.

EBRD, *Transition Report*, London: European Bank for Reconstruction and Development, 1996 - 2001.

Filer, Randall K. and Jan Hanousek, "Output changes and inflationary bias in transition," *Economic Systems*, 24(3), 2000, 285-294.

Fischer, Stanley, Ratna Sahay and Carlos Vegh, "Stabilization and Growth in Transition Economies; The Early Experience," *Journal of Economic Perspectives*, 10(2), 45-66, Spring 1996.

Garner, Thesia and Katherine Terrell, "A Gini Decompositon Analysis of Inequality in the Czech and Slovak Republics During the Transition," *The Economics of Transition*, 1998, Vol. 6, No. 1, 23-46.

Gelb, Alan, "The End of Transition?" Chapter 2 in Annette Brown (ed.) *When is Transition Over?* Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 1999.

Gomulka, "Obstacles to recovery in Transition Economies," in P. Aghion and N. Stern (eds.), Obstacles to Enterprise Restructuring in Transition, 1994, EBRD Working Paper, No 16.

Gregory, Paul and Robert Stuart, *Comparative Economic Systems*, Boston: Houghton-Mifflin, 6th edition, 1997.

Gupta, Nandini, John Ham and Jan Svejnar, "Priorities and Sequencing in Privatization: Theory and Evidence from the Czech Republic," Working Paper No. 323, The William Davidson Institute, May 2000 (revised September 2001).

Ham, John, Jan Svejnar and Katherine Terrell, "Women's Unemployment During the Transition: Evidence from Czech and Slovak Micro Data," *Economics of Transition*, 1999, Vol.7, No. 1, 47-78.

Ham, John, Jan Svejnar and Katherine Terrell, "Unemployment and the Social Safety Net During Transitions to a Market Economy: Evidence from the Czech and Slovak Republics, *American Economic Review*, December 1998, Vol. 88, No. 5, pp. 1117-1142.

Jurajda, Stepan and Katherine Terrell, "Optimal Speed of Transition: Micro Evidence from the Czech Republic and Estonia," Working Paper No. 355, William Davidson Institute, Revised 2001.

Kornai, Janos, "Reforming the Welfare State in Postsocialist Economies," Chapter 6 in Annette Brown (ed.) *When is Transition Over?* Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 1999.

Li, Wei, "A Tale of Two Reforms," RAND *Journal or Economics*, Vol. 30 (1) 1999, 120-136.

Lizal, Lubomir, Miroslav Singer and Jan Svejnar, "Enterprise Break-ups and Performance During the Transition From Plan to Market," *The Review of Economics and Statistics*, 2001, Vol. 83 (1) 92-99.

Lizal, Lubomir and Jan Svejnar, "Investment, Credit Rationing and the Soft Budget Constraint: Evidence from Czech Panel Data, forthcoming in *The Review of Economics and Statistics*, 2002.

Megginson, William and Jeffrey Netter, "From State to Market: A Survey of Empirical Studies on Privatization," *Journal of Economic Literature*, Vol. 39, No. 2, pp. Vol. 39, No. 2, June 2001.

Public Opinion Research Center, "Was it Worthwhile? The Czechs, Hungarians and Poles on the Changes of the Last Decade," Warsaw, Poland, November 1999. http://www.cbos.pl/ENGLISH/cbos_en.htm

Roland, Gerard and T. Verdier, "Transition and the Output Fall," *Economics of Transition*, 1999, Vol. 7 (1), pp.1-28.

Rosati, Dariusz, "Output Decline During Transition from Plan to Market," *Economics of Transition*, 1994, Vol., 2 (4) 419-442.

Sabirianova, Klara, "The Great Human Capital Reallocation: An Empirical Analysis of Occupational Mobility in Transitional Russia," Working Paper No. 309, The William Davidson Institute, October 2000.

Sachs, Jeffrey, Clifford Zinnes and Yair Eilat, "The Gains from Privatization in Transition Economies: Is Change of Ownership Enough?" CAER II Discussion Paper 63, Harvard Institute for International Development, Cambridge, MA.

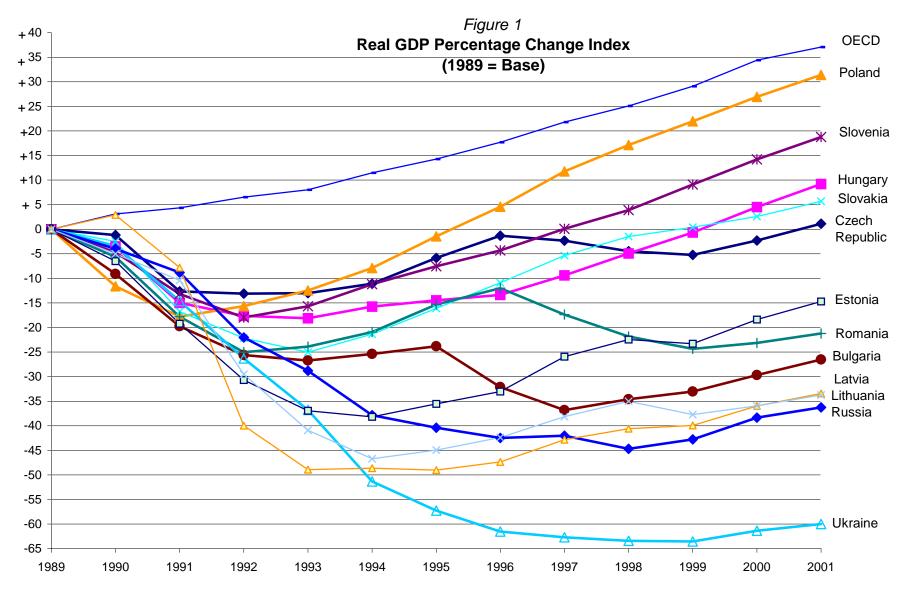
Shirley, Mary and Patrick Walsh, "Public versus Private Ownership: The Current State of the Debate," The World Bank, Washington, DC, 2000.

William Davidson Institute Working Paper 415

Svejnar, Jan, "Pensions in the Former Soviet Bloc: Problems and Solutions," in Council on Foreign Relations, <i>The Coming Global Pension Crisis</i> , New York, 1977.
, "Labor Markets in the Transitional Central and East European Economies," Chapter 42 in Orley Ashenfelter and David Card (eds.), <i>Handbook of Labor Economics</i> , North Holland, Vol. 3B, 1999.

Tanzi, Vito and George Tsiboures, "Fiscal Reform over Ten Years of Transition," IMF Working Paper WP/00/113, 2000.

World Bank, Averting the Old Age Crisis, New York: Oxford University Press, 1994.

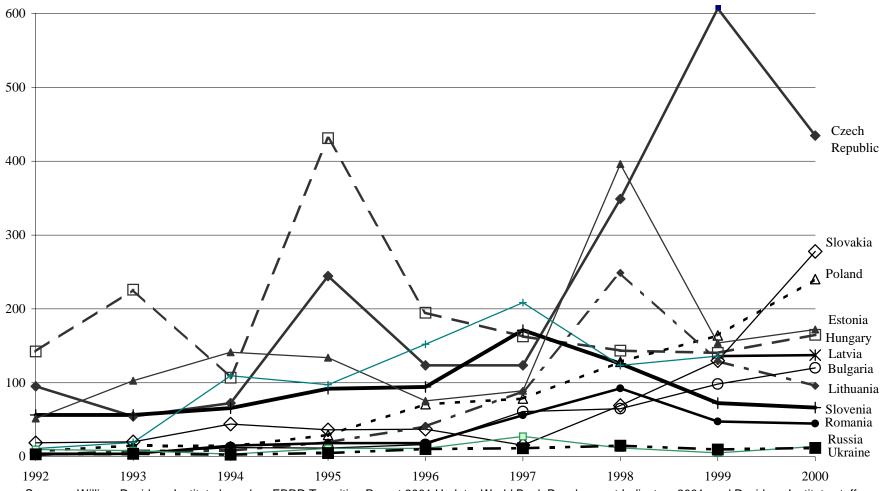


Sources: William Davidson Institute based on OECD Economic Outlook Vol. 69 July 2001, EBRD Transition Report 2001 Update, and Davidson Institute staff calculations.

Figure 2

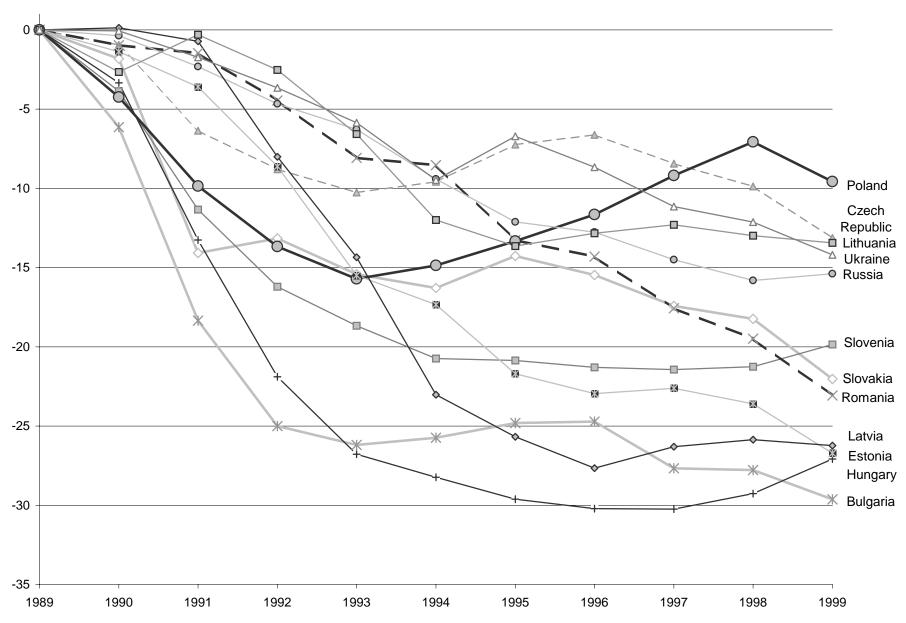
Foreign Direct Investment Per Capita

(net inflows in US Dollars recorded in the balance of payments, per capita)



Sources: William Davidson Institute based on EBRD Transition Report 2001 Update, World Bank Development Indicators 2001, and Davidson Institute staff calculations.

Figure 3
Employment Index (1989=Base)



Source: William Davidson Institute based on UN Economic Commission for Europe, Statistical Division.

Table 1

	Consumer Price Inflation	Current Account Balance	External Debt	Government Budget Balance	Private Sector Share of GDP	Unemployment
	(annual percentage change) 2001	(as % of GDP) 2001	(as % of GDP) 2000	(as % of GDP) 2001	(in per cent, mid-year) 2000	(percent) 2000
	(1)	(2)	(3)	(4)	(5)	(6)
Czech Republic	4.6	-5.1	46.5	-9.2	80	8.9
Hungary	9.4	-5.4	67.8	-3.5	80	6.5
Poland	6.6	-6.0	42.8	-3.0	70	16.1
Slovak Republic	7.1	-3.8	53.5	-4.0	75	18.6
Slovenia	7.7	-3.0	33.4	-1.3	55	7.0
Estonia	6.2	-7.7	63.0	-0.5	75	13.7
Latvia	3.3	-7.1	66.2	-2.0	65	14.3
Lithuania	2.0	-6.4	43.8	-1.4	70	16.1
Albania	4.0	-6.3	29.1	-9.2	75	17.1
Bulgaria	8.0	-5.2	86.0	-1.5	70	16.2
Romania	35.0	-3.9	27.8	-4.0	60	7.2
Kazakhstan	8.7	2.0	67.6	-1.5	60	6.3
Russia	22.4	10.2	62.0	0.0	70	10.0
Ukraine	16.0	1.4	33.2	-3.0	60	4.2
EU	1.8	-0.4	na	-0.2	na	8.2
United States	2.6	-4.2	na	1.5	na	4.0

Notes: Data for 2000 are estimates and 2001 are projections

Sources: (1)-(5) William Davidson Institute based on EBRD Transition Report various issues, IMF World Economic Outlook May 2001, OECD Economic Outlook Vol. 69 July 2001, UN Transition At A Glance 2001, World Bank World Development Indicators 2001, and EIU-Datastream. (6) William Davidson Institute based on ILO(2000), World Bank (2001), EBRD various issues, and OECD (2001) based on labor force surveys. Russian data from Sabirianova & Earle 2001 using LFS figures, reported in Goskomstat (2000c), Goskomstat (1999a), and OECD (2000). Kazahkstan value for 1999. Unless otherwise indicated, the data are generally annual averages of monthly, quarterly, or semi-annual data. See the following website for full source information: http://www.wdi.bus.umich.edu

Table 2 Income Inequality (Gini Coefficients)

	Late 1980s		Early 1	1990s	Late 1990s		
	Year	Gini	Year	Gini	Year	Gini	
Czech Republic	1988	20.0	1992	23.0	1996	26.0	
Hungary	1987	24.4	1992	26.0	1998	25.3	
Poland	1987	25.0	1993	29.8	1998	32.7	
Slovak Republic	1988	19.5	1993	21.5	1996	26.3	
Slovenia	1987	19.8	1993	24.1	1996	26.1	
Estonia	1987-90	0.24	1993-94	0.35	1996-99	0.37	
Latvia	1987-90	0.24	1995	0.31	1996-99	0.32	
Lithuania	1987-90	0.23	1993-94	0.33	1996-99	0.34	
Bulgaria	1989	21.7	1993	33.3	1997	34.1	
Romania	1989	23.3	1994	28.6	1997	30.5	
Russia ^a	1991	26.0	1993	39.8	2000	39.9	
Russia ^b	1992	54.3	1994	45.5	1996	51.8	
Ukraine ^a	•••	na	1996	33.4	1999	30.0	
Ukraine ^b	1988	23.3	1995	47.0		na	

Notes: a) based on Goskomstat data; b) based on survey data.

Sources: William Davidson Institute based on various sources and Davidson Institute staff calculations. See the following website for full source information: http://www.wdi.bus.umich.edu.

Gini =
$$\frac{\sum_{j=1}^{n} \sum_{i=1}^{n} \left| y_i - y_j \right|}{2n^2 \overline{y}}$$
, where y_i is income of person i, y-bar is mean income, and n is the number of persons.

Table 3

	Life Expectancy at Birth		Marriage Rates		Fertility rate			Divorce Rate				
	(total years)		(per '000 inhabitants)		(total births per woman)			(per '000 inhabitants)				
		(1)		(2)		(3)			(4)			
	1980	1989	1999	1980	1989	2000	1980	1989	1999	1980	1989	2000
Czech Republic	70.26	71.66	74.62	7.6	8.6	4.3	2.07	1.87	1.17	2.6	3.0	3.1
Hungary	69.51	69.50	70.62	7.5	6.3	4.6	1.91	1.78	1.32	2.6	2.4	2.6
Poland	70.10	71.04	73.19	8.6	6.8	3.6	2.28	2.08	1.40	1.1	1.2	1.2
Slovak Republic	70.41	71.03	72.70	7.9	7.6	5.0	2.31	2.08	1.37	1.3	1.6	1.6
Slovenia	70.28	72.65	75.06	6.5	4.9	3.7	2.08	1.52	1.24	1.2	1.1	1.1
Estonia	69.08	70.09	70.59	8.8	8.1	3.5	2.02	2.21	1.23	4.1	3.8	3.2
Latvia	69.13	70.13	69.82	9.8	9.0	3.3	2.00	2.05	1.11	5.0	4.2	2.5
Lithuania	70.70	71.49	72.11	9.2	9.4	5.0	1.97	1.98	1.35	3.2	3.3	3.3
Albania	69.33	72.48	72.08				3.62	3.00	2.40			
Bulgaria	71.36	71.77	71.07	7.9	7.0	4.0	2.05	1.90	1.13	1.5	1.4	1.2
Romania	69.09	69.53	69.47	8.2	7.7	5.9	2.43	2.20	1.32	1.5	1.6	1.9
Kazakhstan	66.62	68.29	64.83		10.0	6.0	2.90	2.82	2.00		2.8	2.2
Russia	67.11	69.28	65.85	10.6	9.4	5.0	1.88	2.01	1.25	4.2	4.0	3.1
Ukraine	69.19	70.54	67.30	9.3	9.5	6.0	1.99	1.99	1.30		3.7	3.5
France	74.25	76.50	78.51	6.2	5.0	4.9	1.95	1.79	1.77	1.5	1.9	2.0
Germany	72.63		76.99	6.3		5.4	1.44	1.42	1.35	1.8	2.0	2.4
United Kindgom	73.78		77.25	14.8	14.0	10.6	1.89	1.80	1.71	2.8	2.9	3.2
United States	73.66	75.02	76.91	10.5	9.7	8.5	1.84	2.01	2.06	5.2	4.7	4.6

Sources: William Davidson Institute based on the World Bank World Development Indicators 2001, and the Global Market Information Database.

Table: 4 Attitudes Toward Transition

Question	Country	Responses			
From a temporal perspective, do you think that it was worthwhile to change the political and economic system?	The Czech Republic Hungary Poland	Yes 55% 46% 67%	No 32% 40% 24%	Difficult to say 13% 14% 12%	
Have the changes taking place in your country since 1989 brought people more losses than gains?		More gains than losses	The same	More losses than gains	Difficult to say
	The Czech Republic	23%	42%	31%	4%
	Hungary	15%	28%	45%	12%
	Poland	24%	30%	37%	8%
Please compare your present situation with the situation before 1989 and say whether:		A little better	Neither better nor worse	A little worse	Difficult to say
The opportunities of having an impact on the political life in the country are now:	The Czech Republic	20%	37%	20%	23%
	Hungary	41%	29%	14%	16%
	Poland	30%	44%	14%	12%
Material conditions of living are now:	The Czech Republic	30%	29%	33%	8%
	Hungary	12%	16%	66%	6%
	Poland	25%	19%	46%	10%
Your life is now generally:	The Czech Republic	35%	30%	29%	6%
	Hungary	18%	27%	49%	6%
	Poland	28%	23%	40%	9%

Source: Public Opinion Research Center (1999)

DAVIDSON INSTITUTE WORKING PAPER SERIES - Most Recent PapersThe entire Working Paper Series may be downloaded free of charge at: www.wdi.bus.umich.edu

CURRENT AS OF 12/13/01

Publication	Authors	Date
No. 415 Forthcoming in: The Journal of Economic Perspectives,	Jan Svejnar	Dec. 2001
"Transition Economies: Performance and Challenges," 16(2) Feb. 2002.		
No. 414 Forthcoming in: <i>The Journal of Economic Perspectives</i> , "The	Erik Berglof and Patrick Bolton	Dec. 2001
Great Divide and Beyond: Financial Architecture in Transition," 16(2)		
Feb. 2002.		
No. 413 Forthcoming in: <i>The Journal of Economic Perspectives</i> , "The	Gérard Roland	Dec. 2001
Political Economy of Transition," 16(2) Feb. 2002.		
No. 412: The Response of Consumption in Russian Households to	Steven Stillman	Oct. 2001
Economic Shocks		
No. 411: Mark-ups in Hungarian Corporate Sector	László Halpern and Gábor Kőrösi	Aug. 2001
No. 410: Economic Development, Legality, and the Transplant Effect	Daniel Berkowitz, Katarina	Sept. 2001
	Pistor, Jean-Francois Richard	-
No. 409: Development Strategy, Viability, and Economic Convergence	Justin Yifu Lin	Oct. 2001
No. 408: Labor Supply, Informal Economy and Russian Transition	Maxim Bouev	May 2001
No. 407: Corporate Governance in China: Then and Now	Cindy Schipani and Liu Junhai	Nov. 2001
No. 406: Entrepreneurship and Post-Socialist Growth	Daniel Berkowitz and David N.	Oct. 2001
The root Emilipronouncing what I now soothing of the	DeJong	000.2001
No. 405 Forthcoming in: European Economic Review, "Policy Reform	Daniel Berkowitz and David N.	Oct. 2001
and Growth in Post-Soviet Russia."	DeJong	
No. 404: Social Policies and Structures: Institutional Frictions and Traps	Jiří Večerník	Nov. 2001
in the Czech Republic after 1989		
No. 403: Investment, Efficiency, and Credit Rationing: Evidence from	Mathilde Maurel	Nov. 2001
Hungarian Panel Data		1101.2001
No. 402: Subduing High Inflation in Romania. How to Better Monetary	Daniel Daianu and Radu	Aug. 2001
and Exchange Rate Mechanisms?	Vranceanu	
No. 401: The Gender Wage Gap in Bulgaria: A Semiparametric	Dean Jolliffe	July 2001
Estimation of Discrimination		
No. 400: Do External Auditors Perform a Corporate Governance Role in	Joseph P. H. Fan and T.J. Wong	Oct. 2001
Emerging Markets? Evidence from East Asia		
No. 399: Financial Conditions and Investment during the Transition:	Lubomír Lízal and Jan Svejnar	Oct. 2001
Evidence from Czech Firms	and an artificial straight	
No. 398: Accessible Pareto-Improvements: Using Market Information to	Michael Mandler	May 2001
Reform Inefficiencies		
No. 397: The Making of an Integrated National Grain Market in China	Wubiao Zhou	Oct. 2001
No. 396: Corruption and Resource Allocation: Evidence from China	Wei Li	June 2001
No. 395: Government Shareholding and the Value of China's Modern	Lihui Tian	Apr. 2001
Firms		-r
No. 394: Labor Hoarding in Russia: Where Does it Come from?	Rouslan Koumakhov and Boris	June 2000
	Najman	2000
No. 393: Ownership Structure, Corporate Governance, And Firm Value:	Michael Lemmon and Karl Lins	Apr. 2001
Evidence from the East Asian Financial Crisis		1.171. 2001
No. 392: Marshall and Labour Demand in Russia: Going Back to Basics	Jozef Konings and Hartmut	Aug. 2001
2 chang back to busies	Lehmann	2001
No. 391: Economic Transition and Elections in Poland	John E. Jackson, Jacek Klich, and	June 2001
1.0.071. 250Hollie Transmon and Dioenons in Folding	Krystyna Poznańska	34110 2001
No. 390: Effects of Bank Insolvency and Strategic Uncertainty on	Christa Hainz	Aug. 2001
Corporate Restructuring in Transition Economies		1146. 2001
No. 389: Mark-Up Pricing In Bulgarian Manufacturing	Rumen Dobrinsky, Boyko	June 2001
The second of thems in submining	Nikolov, and Nikolay Markov	34110 2001
	THEORY, and THROTAL IVIAINOV	1