

Economic and Political Context 2

The 26 former Communist nations are extraordinarily diverse.¹ Progress toward democratization and a market economy is very difficult and depends on a variety of political, economic, and social factors. These countries are following similar paths, but they differ in the emphasis given the elements of economic and political reform, and in the success achieved. Efforts to assist them must be based on a realistic understanding of their individual problems and assets. This chapter provides background for the nonspecialist reader. It begins with a brief overview of the economic and political trends in the eight Central and Eastern European countries that are the main focus of this study. The chapter next summarizes some basic demographic characteristics of all 26 nations that formed the former Soviet Union and its satellites.

The remainder of the chapter describes the eight countries in more detail. Brief statistics characterizing gross national or domestic product per capita, major industrial activities, and natural resources are provided. History, energy, and environmental status are briefly sketched. Further detail is provided on the economic and political reforms summarized at the beginning of the chapter. Each country description ends with probable near and longer term outlooks for further reforms.

¹ This chapter was written in December 1992 and is a snapshot of a region undergoing great change where even the number of countries that may emerge is uncertain. For example, the 26 nations mentioned in the body of the text became 27 as of Jan. 1, 1993 with the division of Czechoslovakia into the Czech Republic and Slovakia.



Interior of the GUM department store in Moscow.

OVERVIEW OF REFORMS TO DATE²

I Economic Reforms

Prior to the collapse of Communist party (CP) rule in 1989, Poland and Hungary, in rather different ways, had adopted reforms that reduced the authority of central planning, provided some pricing flexibility, and modified policies regarding the role of monopolies in domestic and foreign trade, and the practice of full or nearly full employment (but with large underemployment). Czechoslovak reform efforts were very modest. The Baltics³ introduced some measures of economic reform several years before they achieved independence in 1991. Russia passed legislation decentralizing the economy (within the confines of the U. S. S. R.) and reducing state subsidies during 1990 and 1991 before the Soviet collapse. Ukraine was slow to initiate reforms, concentrating instead on issues of autonomy and independence.

Broad economic reform began in earnest in January 1990 in the Central European countries; late 1991 in the Baltics; January 1992 in Russia; and is just beginning in Ukraine. Thus far, the elements of reform in each country are similar. They include: demonopolization, decentralization, price liberalization, elimination of subsidies, privatization of industry and agriculture, currency stabilization and convertibility, search for foreign investment, and modifications to the banking, insurance, and legal systems to support these changes.

The process of transformation is not complete and will not proceed smoothly. Some policies can be adopted quickly; others may be adopted only after long negotiation; still others may not be adopted at all. The breadth and depth of the reforms planned in each country differ, as does the commitment and stability of the political

leadership and the resilience of the population. The pace of reform within each country will continue to be influenced by a variety of internal and external factors.

Each country began the transition from a command to a market economy after a period of grave economic difficulty. Production levels have declined in recent years, and most countries had substantial foreign debt requiring payments that could not be made, as well as an adverse balance of trade. Numerous industrial strikes indicated popular discontent. None of the countries had a convertible currency, and all were hard-currency poor.

Instituting market incentives was widely recognized to be the key to economic wellbeing, but the transition threatened years of hardship and declining standards of living until the new system could produce results. Policymakers in some countries chose to move forward rapidly with reforms despite the threat, believing that a slower path would bog down and ultimately doom the process. But rapid transformation is likely to engender backlash, demands to slow the pace, and opposition to additional reform. Some countries have adopted a slower pace on the assumption that it will cause less hardship and reduce concerted opposition.

The breadth of change needed to accomplish economic transformation guaranteed that the reformers would confront vested interests from the old system at every turn. Not only are the reformers faced with opposition from those who stand to lose; they are also faced with resistance to new ways of operating from both individuals with clout and from groups within the population at large.

Table 2-1 lists the elements in the transition to a market economy and summarizes the progress in each country. The ratings in the table are based on when each reform was announced, when

² The discussions of economic and political reforms in this section and in the country profiles at the end of the chapter &W heavily on J. S. Zacek, *The Economic and Political Context*, contract report prepared for the Office of Technology Assessment, Dec. 1992.

³ Because of the similarities in their efforts at reform, Estonia, Latvia, and Lithuania are grouped together as "the Baltics" in this section.

Table 2-I—Movement Toward a Market Economy

Reform	Country					
	Poland	Hungary	CzSl. *	Russia	Baltics	Ukraine
Freeing wholesale prices	H	H	H	M	H	M
Freeing retail prices	H	H	H	H	H	M
Encourage domestic investment (including voucher system)	M	M	H	M	M	L
Auctions to sell state property	NA	M	H	L	L	L
Privatization of small businesses	H	H	H	M-L	H	L
Privatization of large enterprises	L	L	M	L	L	L
End state subsidies	H	H	M	M	H	L
Encourage foreign investment (favorable legal climate)	M	H	H	L	M	L
Restitution of property	M	M	M		M	
Ceiling on wages	H	M	M	M	M	M
“Safety net” for unemployed	H-M	H-M	H-M	M-L	M	NA
Reform tax system	M	M	M	L	M	L
Old (CP) management takeovers of enterprises	H	NA	L	H	L	M
Encourage employee takeovers of enterprises	M	L	L	L	L	NA
Reform banking system	M	H	H	L	M	L
Loans to private sector from banks	L	L	L	L	M	L
Reorient trade from CMEA (or among former Soviet republics)	M	H	H	L	M	L
Favorable trade balance	M	H	M	L	M	L
Foreign debt management	3	3	1	3	1	3
Bankruptcy laws in effect	L	M	M	L	L	L
Demonopolization laws in effect	M	M	H	L	M	L
Interenterprise (state-owned) debt	3	3	2	3	3	3
IMF membership and assistance	H	H	H	H	H	L
Currency convertibility	H	H	H	L	H	L

KEY: H - rapid movement; M - moderate movement; L - slow movement, if at all. NA - no information; 1- not a problem; 2- moderate problem; 3- big problem.

•The Czech and Slovak republics are moving towards reform at different speeds, and the ratings are composite. Generally, Slovakia is privatizing more slowly with a greater state role in economic affairs than the Czech Republic.

NOTE: The ratings reflect whether and how fast reforms were announced, relevant legislation adopted, and judgments on the degree of implementation.

SOURCE: J. S. Zacek, “The Economic and Political Context,” contract report prepared for the Office of Technology Assessment, December 1992.

relevant legislation was adopted, and judgment on the amount of implementation so far achieved. It should be noted that thus far, parliamentary support for passage of transition-related legislation has been far easier than its implementation. It is difficult to determine how widespread implementation has been and how much opposition has been encountered.

Two financial problems—the existence and size of foreign debt, and the size of the debt that state-owned enterprises owe one another—are also listed in the table. While not aspects of reform per se, they are critical to the reform process.

Several elements tended to be adopted frost. One was freeing prices in both the wholesale and retail sectors so that they reflect costs of production as well as supply and demand. Freeing prices from artificially low levels was directly related to removing state subsidies on goods, which had kept prices low. In some instances, especially in the consumer sector, policymakers have been reluctant to eliminate state subsidies quickly because of the personal financial dislocations that would result.

Price increases triggered inflation, severe and prolonged in some instances, more carefully controlled through limiting the money supply in others. Initially, price increases were coupled with a ceiling on wages. The wage ceiling limited inflation, but increased hardship.

Freeing wholesale prices affected industrial production markedly. Enterprise directors, used to buying materials at established prices, found that the real costs of doing business were far greater than under the old controlled price system. Unless they could raise the price of their goods, they would operate in deficit, necessitating borrowing to pay suppliers and distributors. If the deficits continued, the loans could not be repaid. One solution is restructuring the enterprise for increased efficiency, but thus far there has been substantial resistance to restructuring.

In general, the table shows that there have been marked similarities in the reform elements each



Joanne Sedor

Apartment house in Moscow.

country legislated during its initial phase of transition to marketization.

Political Reforms

Each of the countries moved quickly to hold competitive elections for the legislature. Political parties have been formed and consolidated, and many have begun to establish roots within the electorate and are building long-term support and stability.

The rule of law has been reestablished (or established) and state constitutions are being rewritten. In most cases, judicial systems are being strengthened and the legal structure revamped. Civil rights guarantees have been estab-

lished in principle although they remain to be tested in practice. Protection of private property is being established in law and in practice, although there is still a mind set that favors limits on private ownership (as well as limits on private sector profit-making). Citizen participation in building a democratic order is also developing, more rapidly in some countries than others. Most of these reforms are in process and need time to take root. They are essential to strengthening the economic transformation and ensuring its chances of success.

1 Likely Outcomes

The political leadership in each country has adopted many of the same strategies to move from centrally planned toward market-based economies. In some cases, prior reforms had loosened the hold of central planners on economic decisionmaking, production, distribution, and supply networks. The post-Communist leaders knew that undertaking economic transformation at a time when their economies were in decline would likely cause further decline and more unemployment, inflation, and other hardships. They were willing to risk these outcomes because there was considerable agreement within the polity and among leadership elites that the old economic system could not be made to work. There was also general belief that restructuring to a market economy was incompatible with central planning, requiring simultaneous movement to more democratic government, pluralism, and competition.

While opposition to reform has come from a variety of sources, including (but not limited to) the old communist bureaucracies still entrenched in the ministries and other organizations and in control of most state-owned enterprises, not all of the old directors and managers want to return to past ways of doing business. Many of them have become the new entrepreneurs, drawing on some of the skills they had developed under the old system in order to get things done and meet output requirements. However, under the old system,

they did not need to attend to efficiency and conservation of resources as capitalist managers oriented to profit must. They relied on props (bank credits, interenterprise debt) in order to cover financial losses, and they generally were not pressured to restructure and operate more effectively. Nor was there much incentive to modernize and adapt to new technologies (many of which were not available). These elements are now essential under the new economic conditions, including the need to become competitive internationally.

To summarize probable outcomes on a country basis, Poland, the Czech Republic, and Hungary, as well as the Baltics, are likely to create and sustain market economies within the next 5 to 10 years. On the way, they all face difficulties in implementing reforms, will experience slow periods, and will sometimes be guided by electoral returns. They are also likely to sustain and strengthen democratic institutions, broadly defined. Slovakia is likely to move more slowly.

Russia and Ukraine are problematic. Both are likely to retain a strong state presence in the economy and at best develop a mixed public/private system. Russia faces internal opposition from several ethnic minorities as well as proposals for economic and political autonomy from Siberia. While it is unlikely that Russia will disintegrate, it is certainly possible that an authoritarian political system will be established to ensure that the country remains intact. Ukraine also faces difficulty in maintaining and preserving a national state and possible military, economic, and territorial disputes with Russia. It is likely to retain a significant government role in the economy to ensure a basic level of economic performance. To meet these needs, the government may seek greater stability through establishment of authoritarian rule.

With respect to energy use, governments in these countries must take the lead in prodding both public and private businesses to adopt energy efficiency measures if these are to occur. Elimination of subsidies and imposition of taxes

Figure 2-1-Central and Eastern Europe



SOURCE: Office of Technology Assessment, 1993

would encourage efficient usage and conservation. Because of the initial costs involved, financial credits will be needed. Foreign assistance, including technical assistance (linked to progress in privatization) is probably indispensable in the initial stages of improving energy efficiency.

DEMOGRAPHIC CHARACTERISTICS

The 26 countries that were once part of the former Soviet Union (FSU) and its satellite

nations are listed in table 2-2. A map of the region is shown in figure 2-1.

Differences among these countries arise from their history, and the great size of the region. Until boundaries stabilized with the formation of the Union of Soviet Socialist Republics in 1922, Russia had been annexing territory at the rate of 18,250 square miles per year for four centuries.⁴ The result was a union stretching across 11 time zones with more than 100 different nationalities

⁴G. J. Demko, J. Agel, and E. Bee, *Why In the World: Adventures in Geography* (New York, NY: Doubleday, 1992), pp. 101-102.

Table 2-2—Major Demographic and Ethnic Characteristics in the Republics of the Former Soviet Union and Eastern Europe

Region or Country	x2	Population *		% Lbr in Agr	% Urban	Nationality (%)				
		<15&>65	Total			Titular	Russian	Other major	Other	
<i>FSU</i>										
Russian Republic	301	23/10	149.3	13	74	82	same	Tatar	4	14
<i>Baltics</i>										
Estonia	365	NA	1.6	6	71	62	30	Ukrainian	3	5
Latvia	630	21/12	2.7	NA	71	52	34	Belarus	5	9
Lithuania	158	23/11	3.7	9	69	80	9	Polish	7	4
<i>Western Europe</i>										
Belarus	217	23/10	10.3	10	67	78	13	Polish	4	5
Ukraine	1,151	22/12	52.1	8	68	73	22	Jewish	1	4
Moldova	88	28/8	4.4	16	48	64	13	Ukrainian	14	9
<i>(Trans)Caucasus</i>										
Georgia	80	25/9	5.5	NA	56	70	6	Armenian	8	16
Armenia	40	30/5	3.5	10	68	93	2	Azeri	3	1
Azerbaijan	36	33/5	7.1	13	53	83	6	Armenian	6	5
<i>Central Asia</i>										
Turkmenistan	26	41/4	3.9	18	45	72	9	Uzbek	9	10
Uzbekistan	25	41/4	21.3	15	40	71	8	Tajik	5	16
Tajikistan	22	43/4	5.5	16	31	62	8	Uzbek	24	6
Kyrgyzstan	31	37/5	4.5	13	38	52	21	Uzbek	13	14
Kazakhstan	50	32/6	16.9	7	58	40	38	German	6	10
EASTERN EUROPE I										
<i>East Central Europe I</i>										
Poland	187	25/10	38.4	29	61	98		German	1	1
Czechoslovakia	347	23/12	15.7	12	76	63		Slovak	32	5
Hungary	NA	20/14	10.3	19	63	97		German	?	2
<i>Southeastern Europe</i>										
Romania	578	23/11	23.2	28	54	89		Hungarian	8	3
Bulgaria	NA	20/13	8.9	20	68	85		Trukish	9	6
Albania	36	33/5	3.3	60	36	90		Greck	8	2
<i>Former Yugoslavia</i>										
Bosnia-Hercegovia I	90	28/6	4.2	NA	36					
Croatia	1,386	21/12	4.6	NA	51					
Macedonia	70	29/7	1.9	NA	54					
Slovenia	267	23/11	1.9	NA	49					
Yugoslav Repub.	131	24/9	10	NA	47					
UNITED STATES	89	22/13	255.6	3	75					

UNITED STATES: 1% Amer. Indian/Native Alaskan, 3% Asian, 12% Black

•“x2” - the number of years for the population to double; “<15&>65” - the O/. of the population that is less than 15 years old & is greater than 65 years; “Total” = total population, mid 1992 estimate, in millions.

SOURCES: Population and % Urban data from Population Reference Bureau, 1992 World Population Data Sheet (Washington, DC: Population Reference Bureau, 1992); FSUNationality data from Directorate of Intelligence, Central intelligence Agency, "The States of the Former Soviet Union: An Updated Overview," Report OSE 92-10017, September 1992. FSU % Labor in Agriculture (1990) data calculated from table 1.1. in The World Bank, "Statistical Handbook; States of the Former USSR," (Washington, DC: The World Bank, 1992). Eastern Europe Nationality and % Labor in Agriculture data from Central Intelligence Agency, "Atlas of Eastern Europe," Report 90-10002, August 1990. U. S. % Labor in Agriculture and racial data from U.S. Bureau of the Census, "Statistical Abstract of the United States: 1992, Washington, DC, 1992.

16 | Energy Efficiency Technologies for Central and Eastern Europe

speaking different languages and rooted in vastly different cultures. The addition of the Baltic states in 1940 and later, the Central European satellites, increased diversity still further.

Of the 26, Russia is by far the largest, more than 6 times larger than the next largest republic, Kazakhstan, and about twice the size of the United States. Russia also has the most people, with almost 150 million. The total population of all 26 nations is more than 400 million, considerably more than the U.S. population of 256 million.

Table 2-2 shows basic demographic and ethnic characteristics of the FSU and its former satellites. Major differences are apparent, especially among regions. Four of the Central Asian countries, along with nearby Armenia and Azerbaijan, double their populations in 20 to 40 years, rates typical of developing countries in Africa, the Middle East, and Asia (see column 2, labeled "x2" meaning years to double, in table 2-2). Ukraine and Croatia, on the other hand, have highly stable populations, with more than 1,000 years projected as the time needed for their populations to double.

The proportion of the population that is young (less than 15 years) or old (more than 65 years) and hence not counted as part of the labor force typically reflects population growth characteristics, and these countries are no exception. As expected from their high growth rates, the Central Asian countries have populations heavily skewed towards youth. About 40 percent of their populations are less than 15 years old, and the proportion of older people is small, about 5 percent, compared to the developed world where around 20 percent are less than 15 and 12 percent are older than 65. Central Asian population characteristics spell both promise for labor and productivity, and trouble if jobs are not available and expectations not met, especially without the leavening influence of more older people in the population.



Helene Kirwan-Taylor

Suzdal, a village in Russia.

The percentage of the labor force employed in the agricultural sector (see column 5 in table 2-2) ranges from 2 to 20 times that seen in the United States. These numbers are partly a consequence of the inefficiencies of the Soviet system of collectivized farming. As farming is modernized, large numbers of people will swell the ranks of the unemployed if provisions are not made to ensure that they have useful work.

The FSU overemphasized industry, especially heavy industry, at the expense of the service sectors. In Russia, industry accounted for 53 percent of Soviet output compared to 23 percent in the United States. Conversely, services account for about 50 percent of U.S. output but only 15 to 20 percent of Russian output.

Most of the 26 countries are less urbanized than the United States, some substantially so. The Russian Republic and Czechoslovakia most closely approximate U.S. levels of urbanization. With the exception of Kazakhstan, the Central Asian nations are among the most rural.

Educational levels are high in many of the countries. In the FSU as a whole, 13 percent of women and 15 percent of men have at least some postsecondary education; percentages that exceed

³J. Sachs, *Economic Reform of Socialist Countries: Lessons and Prospects*, Ernest Sturc Memorial Lecture, SAIS, Nov. 5, 1992.

those in most European countries.⁶ Many in the workforce are technically trained and thus can provide the human resource base needed to support progress towards a more energy-efficient economy in the region.

The right half of Table 2-2 shows some of the ethnic characteristics of the 26 nations. All have significant ethnic diversity, which in several countries has led to problems. The former Yugoslavia, shown in the pie chart, has so far separated into five countries along ethnic lines. Czechoslovakia was about two-thirds Czech and one-third Slovak, and divided accordingly. In other countries a single titular nationality predominates, but even small minorities, as in Azerbaijan, Armenia, and Georgia have led to major unrest.

Noteworthy is the large Russian minority in many of the republics of the Former Soviet Union. With the exception of Armenia, Russian nationals comprise more than 5 percent of the population and in half the republics, they account for more than 10 percent. In three of the republics, Estonia, Kazakhstan, and Latvia, about a third of the population is Russian nationals. Highly skilled Russians were long sent to the republics as part of

Soviet policy. This can be seen in the over-representation of Russians in more highly paid job sectors such as transport and industry in Latvia and Estonia whereas native workers are over-represented in the lower paying sectors.⁷ In some industries in Central Asia, Russians constitute nearly all of the skilled workforce.⁸

In many republics, the status of Russian nationals, once the elite, collapsed with the collapse of the Soviet Union as republics began establishing independent national identities. The Baltic nations, for example, beginning with Lithuania in 1988, have each designated the native tongue as their official language, and in subsequent laws required knowledge of that language as one condition of citizenship for those who were not citizens before the forcible annexation of these republics by the U.S.S.R. in 1940.⁹ If the response of Russian nationals to their changed status is a significant exodus (as appears to be happening in Central Asia¹⁰), their departure will have a particularly adverse effect on the skilled labor force, which in turn could affect how fast energy infrastructure can be upgraded and made more efficient.

⁶ See table 16.5 in World Resources Institute in collaboration with The UN Environment Programme and The UN Development Programme, *World Resources 1992-1993* (New York, NY: Oxford University Press, 1992), pp. 254-255.

⁷ Library of Congress, *Estonia: An Economic Profile* (Washington, DC: Library of Congress, 1992), p. 4; Library of Congress, *Latvia: An Economic Profile* (Washington DC: Library of Congress, 1992), p. 5.

⁸ Special Correspondent in Dushanbe, "Tajikistan in Trouble," *The Economist*, vol. 324, No. 7770, Aug. 1, 1992, p. 31; Special Correspondent in Dushanbe, "Russian Sahibs Go Home," *The Economist*, vol. 324, No. 7771, Aug. 8, 1992, p. 30. The author points out that one sector of the economy in Kazakhstan where Russian workers predominate is maintenance and manufacturing weapons.

⁹ V. Bite, *Estonia: Basic Facts*, CRS Report for Congress 92-223 F, June 30, 1992, p. CRS-2; *Latvia: Basic Facts*, CRS Report for Congress 92-242 F, Mar. 2, 1992, p. CRS-2; *Lithuania: Basic Facts*, CRS Report for Congress, Aug. 6, 1992, p. CRS-2.

¹⁰ Special Correspondent in Dushanbe, "Russian Sahibs Go Home," *The Economist*, vol. 324, No. 7771, Aug. 8, 1992, pp. 29-30.

COUNTRY PROFILES¹¹

| Poland

1989 GNP/capita \$US4,500

Industrial activities: iron and steel production, extractive industries, chemicals, textiles, consumer goods, metallurgy

Natural resources: hard and brown coal, lead, zinc, large copper deposits

HISTORY

Poland has a history of occupation by its neighbors, including Austrians, Germans, and Russians, which obscured its very existence during the 19th century. Poland enjoyed a single brief and rocky period of independence, from 1918 to 1939, between the two World Wars. Soviet liberation of Poland after WWII was followed by Soviet domination.

The workers' union, Solidarity, formed in the 1970s, forced the Communist government to increase freedoms in the late 1980s after the end of martial law. In 1989, Poland became the first non-Communist-led country in the Warsaw Pact. Poland has strongly embraced democratic reforms and today is governed by a president, a prime minister, and two houses of parliament whose members are freely elected.

ENERGY

Poland has large coal reserves. Hard coal supplied about 65 percent and soft coal about 13 percent of primary energy consumption. The



balance comes from oil (13 percent) and natural gas (9 percent).¹² Almost all of Polish oil is imported, in the past overwhelmingly from the former Soviet Union. Behind coal, natural gas is Poland's second largest domestic source of energy. This source has been little tapped because of lack of investment capital and limited incentives for exploration and development. Poland's reserves of high-quality hard coal have been a major source of exports, hard currency, and labor demand. In 1987, about 11 percent of the workforce was employed by the coal mining industry.¹³

ENVIRONMENT

Poland's history of coal use underlies its severely stressed environment. Its rivers have

¹¹ Agencies that compile statistics such as those cited at the beginning of each profile generally do so separately for the countries within the FSU and those that were Eastern European satellites. The statistics for the countries profiled here reflect this separation and thus are not always comparable across all countries. The sources for the introductory statistics are as follows: The World Bank, Statistical Handbook: *States of the Former USSR* (Washington, DC: The World Bank, 1992) for these statistics for The Baltics, Russia, and Ukraine—1990 GDP/capita, industrial activities, natural resources; Central Intelligence Agency, *Atlas of Eastern Europe* (Washington, DC: Central Intelligence Agency, August 1990) for the 1989 GNP/capita in Poland, Czechoslovakia, and Hungary; *The American Academic Encyclopedia*, online edition (Danbury, CT: Grolier Electronic Publishing, updated four times yearly) for these statistics for Poland, Czechoslovakia, and Hungary—industrial activities and natural resources. For more detail on the History of each country see, for example, *The Academic American Encyclopedia* (Electronic Version) (Danbury, CT: Grolier, Inc., 1991). Except where otherwise referenced, the material on *Economic unpolitical Reforms* is drawn from J.S. Zacek, footnote 2.

¹² S. Pasierb, "Energy Efficiency Investment Opportunities in Poland," executive briefing, The Polish Foundation for Energy Efficiency (FEWE) and Batelle, Pacific Northwest Laboratories, January 1993.

¹³ U.S. Congress, Committee on Energy and Natural Resources, *Energy Profiles of Czechoslovakia, Hungary and Poland, and Their Emerging Free-Market Economies*, S. Prt 102-34, June 1991, pp. 43,48.

extremely high concentrations of toxic chemicals.¹⁴ Coal mining has degraded and increased the salinity of agricultural land. Air pollution poses the greatest risk to human health in Poland, because of the high levels of particulate emissions associated with industry and generation of electricity. The Lenin Steelworks, 10 miles from Krakow, exemplifies the consequences of environmentally insensitive industrial practices.¹⁵

ECONOMIC AND POLITICAL REFORMS

Poland was the first post-Communist country to undertake broad economic and political reforms. Reforms began in 1989 and economic “shock therapy” began the following year with the introduction of macroeconomic reform, price liberalization, privatization of industry, removal of state subsidies, construction of a social safety net, and mobilization of international financial support.¹⁶ Wage increases were restricted to control inflation. Restitution is being made to those who had valid claims against Communist expropriation.

Progress toward privatization has been difficult for a variety of reasons, including disagreement within the government on how to proceed.¹⁷ In an attempt to begin privatization at the local level, citizens were encouraged to buy into enterprises owned by local governments. This did not work, partly because local government had difficulty calculating what an enterprise was “worth” and the cost of buying into it. Moreover, both capital and entrepreneurs willing to risk buying into state-owned businesses were in short supply.

What has worked, in part, has been illegal takeovers by managers of the businesses they ran (“spontaneous privatization”) apparently without penalty. However, this practice ended by 1991. Other attempts to privatize include encouraging workers to buy into their workplaces at low cost, and distributing free vouchers to all citizens so they can buy into medium- and large-scale enterprises.¹⁸

Much of the privatization that has occurred to date has been through creation of new businesses. Poland needs to devise a better plan for privatizing medium- and large-scale enterprises. Foreign investors have not been interested in these enterprises because of their generally poor financial condition, outmoded technology, and old physical plant. Progress is being made in creating legal structures for broad private ownership; this should attract foreign investors who now may be reluctant to invest in a country where legal recourse is vague at best.

A second wave of reform focused on banking reform and limiting credit and tax exemptions to insolvent state enterprises. Neither has been easily implemented. New emphasis was put on foreign trade and on reorienting trade toward the West. But the push for more exports resulted in considerable opposition from management, workers’ councils, and trade unions. Despite establishment of 80 private banks by September 1991, 95 percent of bank credits were granted to state enterprises. Virtually none were granted to newly established private businesses.¹⁹

¹⁴ M. Glenny, *The Rebirth of History* (London, UK: Penguin Books, 1990), p. 71.

¹⁵ W. Echickson, *Lighting the Night, Revolution in Eastern Europe* (New York, NY: William Morrow and Co., 1990).

¹⁶ J. D. Sachs, *Economic Reforms of Socialist Countries: Lessons & Prospects*, The Ernst Sturc Memorial Lecture, Paul H. Nitze School of Advanced International Studies, Washington DC, Nov. 5, 1992.

¹⁷ William U. Chandler, Senior Scientist, Battelle, Pacific Northwest Laboratories, personal communication, January 14, 1993.

¹⁸ *Report on Eastern Europe*, March 22, 1991, pp. 11-13.

¹⁹ *Report on Eastern Europe*, Sept. 27, 1991, p. 25.

Benefits of the reforms to date include reducing inflation from 250 percent in 1990 to 60 percent in 1991²⁰, stabilizing the currency with an accompanying increase in international trade, and shifts in the supplies of consumer goods from shortages to surpluses. On the down side, the economy is in severe recession. A drop in the Gross Domestic Product of 12 percent in 1990 was followed by a 7 percent drop in 1991. Unemployment was approaching 13 percent in July 1992. Living standards are estimated to have fallen 40 percent between January 1990 and August 1992.²¹

In the October 1991 parliamentary elections, the behavior of the electorate (low voter turnout, few votes cast for the most recent prime minister, and strong support for the renamed Communist Party, which received the second highest number of votes) suggested that enthusiasm for reforms had waned. Accordingly, Poland's new government sought to slow the pace and breadth of economic reform. Yet, parliament refused to approve the government program that proposed financial assistance to failing state enterprises (estimated at 40 percent of the total), lower taxes and interest rates to stimulate production, and guaranteed prices for agricultural goods.²² By the fall of 1992, in the wake of a number of industrial strikes, some higher wage settlements were negotiated, fueling inflation. Implementation of bankruptcy laws and breaking up monopolies seem to have stalled during 1992.

Poland's parliamentary system has suffered from a proliferation of parties. The current cabinet is composed of seven parties and has faced continual challenges maintaining a coalition. President Lech Walesa, elected by direct vote in December 1990, has sought additional authority in his effort to establish a stable government.

Both parliament and the presidency are committed to transformation to a market economy. The transformation will be aided by regulations of the International Monetary Fund (IMF), which limit the deficit in the annual state budget to 5 percent.

During the current period of high unemployment, the social safety net that has been created will need extending. The strain on the precarious state budget may be so great that foreign assistance will be needed.

NEAR- AND LONG-TERM EXPECTATIONS

Many of the elements of a democratic system and a market-based economy have been introduced very rapidly. A period of consolidation in the near term is likely in order to lock in the reforms. The economy will continue to move toward marketization, but in a mixed public/private form until large state-owned enterprises are privatized or, if failing, shut down in an orderly fashion. Poland will make the transition successfully, probably over a longer time than anticipated. Continued economic difficulties will test the fragile democratic structures and could lead to a more authoritarian system until the economic transformation has been largely completed, and perhaps thereafter.

Poland does not face the internal ethnic strife of some of its neighbors. While there are potential border disputes (stemming from World War II settlements), these are likely to be quiescent in the near term. If borders are revised elsewhere in Eastern Europe, the changes could trigger German demands on Poland's western border. Poland in turn could press Ukraine to return some land ceded to it in 1945.

²⁰ S. Pasierb, "Energy Efficiency Investment Opportunities in Poland," Executive Briefing, The Polish Foundation for Energy Efficiency (FEWE) and Batelle, Pacific Northwest Laboratories, January 1993.

²¹ J. Kim and F. Miko, *Poland, Czechoslovakia, and Hungary: Recent Developments*, Congressional Research service issue Brief IB92051, Aug. 10, 1992, p. CRS-8.

²² Radio Free Europe/Radio Liberty Research Report, March 13, 1992, p. 45.

I Czechoslovakia (Czech and Slovak Federal Republic, CSFR)

1989 GNP/capita: \$US8,000²³

Industrial activities: heavy industry, mining, manufacturing, construction

Natural resources: limited; brown coal, uranium, lead, copper, iron

HISTORY

With the collapse of the Austro-Hungarian Empire in 1918, the Czechs of Bohemia were united with Slovaks to form Czechoslovakia. Strong nationalist sentiments prevented union into a single people and set the stage for partition of the country. In 1938-39, Hungary and Germany annexed some lands; the remainder were made into puppet states controlled by Nazi Germany. With the end of WWII, Czechoslovakia re-emerged as a nation. A Communist coup occurred in February 1948, and shortly thereafter the country became a Soviet satellite. The short-lived “Prague Spring” of 1968 ended with Soviet intervention. Czechoslovakia remained a Soviet satellite until the peaceful fall of Communism, the so-called “velvet revolution” in November, 1989.²⁴ Czech and Slovak nationalist sentiments are strong; a peaceful resolution was implemented on January 1, 1993 by division of the country into separate Czech and Slovak nations.

ENERGY

Nearly all needs for oil and natural gas are supplied by pipelines from the FSU; less than 2 percent and 5 percent respectively are domestically produced.²⁵ Coal reserves are extensive and are the source of more than half the country’s



electricity (brown coal; the smaller deposits of hard coal are used in the iron and steel industry).²⁶ Nuclear and hydroelectric power are also important to electricity generation, contributing 18 percent and 22 percent respectively, with six more reactors under construction (presently the total is eight operating reactors). Electric generating capacity supported modest export of electricity in 1991.²⁷

ENVIRONMENT

Substantial air pollution, including SO₂, CO, NOX, and heavy metals, arises from burning coal (especially brown coal) to generate electricity. Power plants and industrial facilities are concentrated along the northern border with Germany, and increases in infant mortality rates, decreases in life expectancy, and other health problems have been reported. Air pollution in Czechoslovakia contributes significantly to degradation of Central European soil, water, and forests, which has focused international attention on the problem.²⁸

²³ While the GNP/Capita figure for Czechoslovakia is almost twice that given for Poland, this does not mean the standard of living in Czechoslovakia is twice that in Poland because the values are confounded by exchange rate variations and other problems associated with data collection. William U. Chandler, Senior Scientist, *Batelle, Pacific Northwest Laboratories*, personal communication Jan. 14, 1993.

²⁴ J. Kim and F. Miko, *Poland, Czechoslovakia, and Hungary: Recent Developments*, Congressional Research Service Issue Brief IB9205 1, Aug. 10, 1992, p. CRS-10.

²⁵ U.S. Department of Energy, *US Industrial Briefing Book: US Electric Power Technologies conference, Czechoslovakia, July 1992*.

²⁶ Royal Dutch Shell Group, *The Shell Briefing Service, Energy in the Soviet Union and Eastern Europe*, London, 1991, p. 9.

²⁷ U.S. Department of Energy, Op. cit.

²⁸ Ibid.

ECONOMIC AND POLITICAL REFORMS

Czechoslovakia was slower to start economic reform than Poland and Hungary, but then embarked on a strong program in 1991. Like the other two, Czechoslovakia's program includes macroeconomic stabilization, privatization, liberalizing prices, and currency convertibility and has had the same near-term consequences of price increases, unemployment, and productivity declines.²⁹ Successes include establishment of a convertible currency, the koruna; privatization of more than half of all small businesses in 1991; and reorientation of trade to the west. Germany has surpassed the FSU as the largest export market. Consequences have been greater for Slovaks than Czechs (e.g., an unemployment rate of 12 percent compared to 5 percent in Czech areas at the end of 1991), largely because of closure of plants to manufacture arms, which were disproportionately located in Slovakia.³⁰

Demonopolization legislation was one of the first steps towards reform undertaken in Czechoslovakia. By late 1990, small businesses were being auctioned and entrepreneurs were encouraged to start their own businesses (although legal and financial support had not yet been put in place). Unemployment payments and mandatory training for laid-off workers were legislated,³¹ both federal and republic governments were to provide some of the funding, and state and privatized businesses the remainder.

Reformers counted heavily on a voucher system to encourage citizens to support and participate in privatization. Voucher holders have been urged to buy into mutual investment funds, which have bought shares in state-owned enterprises. Data are not yet available on the extent to which this process has been implemented.

Because Czechoslovakia is a federal system, much of the authority to implement legislation

pertinent to economic transformation devolved to the Czech and Slovak republics. While the major public policies regarding marketization were drawn up at the federal level, it largely remains for the republics to implement them. Slovakia has experienced greater economic dislocation, higher inflation, and higher levels of unemployment than the Czech republic. Slovak leaders have called for a slowing of reforms. Their government has taken a more central role in the economy than in the Czech republic.

The June 1990 parliamentary elections created the basis for a democratic system. A second round of elections (again both at the federal and republic levels) was held in June 1992. The results led to the Slovak desire for independence, and the Czech republic agreed.

NEAR-TERM EXPECTATIONS

In the near term, Czech economic transformation is likely to continue. Economic dislocations have been less severe than elsewhere, and the 1992 elections indicated wide support for continued reform. Encouragement of foreign investment will likely increase. Foreign trade will move towards the central Danube and the west.

Economic relations between the two republics may remain collaborative, based on past practice of operating as a single economic unit. The two republics will not erect customs barriers, as stipulated by the European Community (EC) as a condition for its recognition of both countries as associate members in the Community. Czech trade may draw away from Slovakia as the Czech republic increasingly orients to the west. Slovakia is likely to maintain more traditional trading relationships.

Slovakia will move more slowly toward marketization than its Czech neighbor, and the government will play a more substantial role in the

²⁹ J. Kim and F. Miko, *Poland, Czechoslovakia, and Hungary: Recent Developments*, Congressional Research Service Issue Brief IB9205 1, Aug. 10, 1992, p. CRS-2.

³⁰ *Ibid.*, pp. 11-12.

³¹ *Report on Eastern Europe*, July 5, 1991, p. 8.

Slovak economy. The country will likely focus substantial attention on building an independent state; policies of building national identity may run counter to the country's economic interests.

LONG-TERM EXPECTATIONS

The Czech republic is likely to succeed in its transition to a market economy and will strengthen its democratic political structure as well. German economic influence followed by domination is a distinct possibility. Czech political leaders currently perceive this possibility to be a consequence of both geographic proximity and the need for foreign capital during the transition period rather than a threat.

Slovakia may believe its economic interests are tied to closer relations with the Czech republic and may seek to develop them. Czechs are likely to agree, but continued public/private ownership within the Slovak economy may make close collaboration difficult. Slovakia may also face difficulties with its large (12 percent) Hungarian minority if it is not attentive to minority rights. Hungary may choose to press the Slovak government for better treatment of Hungarians or, potentially, for border revisions. If Slovakia feels its independence is threatened, it may permit a more authoritative political system.

| Hungary

1989 GNP/capita: \$US6,000

Industrial activities: manufacturing, construction, engineering, pharmaceuticals, chemicals

Natural resources: limited; some bauxite, coal, iron, uranium, oil, and natural gas

HISTORY³²

Hungary traces its beginning to the migration of the Magyar people from Western Asia in the ninth century. It was a battleground between Turks and Austrians for 200 years, eventually becoming part of the Austro-Hungarian monar-



chy in the 19th century. After the monarchy was defeated with Germany in World War I, Hungary lost well over half its territory. World War II brought complex relationships with Nazi Germany and the beginning of Soviet control. In the 4 years beginning in 1945, elections changed from free to a single slate of Communists or CP sympathizers; by 1949 control was complete. In 1956, a student demonstration sparked a revolution that required Soviet intervention to quell. Attempts at economic reform (see below) initiated in the 70s and 80s stimulated attempts at political reform that accelerated in the late 80s as the Communist Party was increasingly under attack. Free multiparty elections were held in March 1990 and Communism was defeated. Political fragmentation from myriad small parties was prevented by a requirement that a party receive at least 4 percent of the popular vote, a criterion agreed on in pre-election discussions. Other supporting actions gave Hungary a stable political framework within which to develop a market economy.

ENERGY

Domestic production of crude oil and natural gas supplies about 40 percent of primary energy needs. About half of domestically generated electricity (and a third of total supplies) comes

³² Sources for the History and Economy sections are: J. Zacek, footnote 2; I. T. Berend, "Hungary: Eastern Europe's Hope?" *Current History*, vol. 91, No. 568, pp. 381-384; Central Intelligence Agency, *World Factbook 1991* (Washington DC: Central Intelligence Agency, 1991); *The Encyclopedia Americana: International Edition* (Danbury, CT: Grolier, Inc., 1986).

from the Paks nuclear power station located south of Budapest, a station considered one of the region's most safe and efficient. About a quarter of electricity is imported. The balance depends almost entirely on thermal generation using coal, oil and gas, especially coal. Hydro supplies a tiny fraction (less than 1 percent).³³

ENVIRONMENT

Environmental degradation in Hungary is great, largely due to many years of generating electricity from indigenous high-sulfur (brown) coal.

ECONOMIC AND POLITICAL REFORMS

As in political reform, Hungary's approach to economic reform has been more gradual and methodical than in the other satellite nations. The country's economy was healthier than the economies of Poland and Czechoslovakia when reforms began in earnest. Changes dating back to 1968 reduced central planning, began marketization of the agricultural sector, and moved the economy towards decentralization, market pricing, and privatization. By the mid 1980s, private or semiprivate firms primarily in agriculture, services, and construction produced about a third of the GNP. Small-scale privatization has been brisk, but medium- and large-scale enterprises remain largely state owned.³⁴ By 1992, the National Bank of Hungary had been granted autonomy from state control; it is to supervise the commercial banking system and accelerate loan availability to privatizing and privatized businesses. Besides a slower approach to privatization, there has also been greater reliance on foreign investment in Hungary. Unemployment has leveled off at 6 to 7 percent. There is a limited social safety net, but an estimated 30 percent of the population lives at or near poverty levels because of continued inflation and low wages.³⁵ Other problems are outmoded capital plant, a

GNP that declined by 1 percent in 1989 and about 6 percent in 1990, and foreign debt that has doubled (to more than \$20 billion) since 1985.

Hungary's political system has been quite stable since the free elections for parliament in the spring of 1990. The ruling coalition has retained power, and there has been a single prime minister since the elections. Thus far, the prime minister and cabinet have directed the legislative agenda, and efforts to create a strong presidency have not emerged.

NEAR- AND LONG-TERM EXPECTATIONS

In the near term, Hungary is likely to continue its measured pace toward a market economy. Once the reprivatization claims have been settled (restitution), the State Property Agency will turn its attention to new privatizations. More favorable tax laws for private ownership as well as bank credits should encourage greater domestic investment, and the country should continue to attract foreign investors.

Parliamentary elections are scheduled for 1994. The Hungarian Socialist Party (formerly the CP) will probably do better than the 10 percent of the vote it received in 1990. The main opposition party, the Alliance of Free Democrats, may fare better too, because of popular dissatisfaction with continued decline in living standards. The Democratic Forum, leader of the current coalition, may be held responsible for present difficulties. The Alliance initially favored a more rapid approach to marketization and has been critical of the cumbersome reprivatization process.

Hungary's small size geographically and demographically (10.6 million people) may make the transition process less difficult than in larger countries. Hungary's minority populations are not likely to present major internal strife. The country stated concern for Hungarians living

³³ Nuclear Engineering International, *Datafile Hungary*, vol. 37, No. 452, pp. 50, 51.

³⁴ Radio Free Europe/Radio Liberty Research Report, Jan. 24, 1992, p. 43.

³⁵ *Business Eastern Europe*, Aug. 3, 1992, p. 380.

elsewhere (Slovakia and Romania) could result in boundary disputes.

In the longer term, Hungary will manage the economic transition successfully. If parliament develops a more focused approach to consideration of legislation, an authoritarian system maybe avoided.

| The Baltics (Estonia (E), Latvia (La), and Lithuania (Li))

1990 GDP/capita (current rubles): 5,039 (E), 4,542 (La), 3,561 (Li)

Industrial activities: fish & fish products, textiles, furniture (E); machinery, food products, textiles, chemicals (La); machinery and parts, processed foods, light industrial products (e.g., textiles, apparel, furniture, household appliances) (Li)

Natural resources: limited-timber, oil shale, limestone (E); peat, dolomite, limestone, gypsum, amber, gravel, sand (La); agricultural land, forests (Li)

HISTORY³⁶

In the last several hundred years, the autonomy of the three Baltic countries of Estonia, Latvia, and Lithuania has been compromised by invading Germans, Poles, Swedes, and Russians. In 1918 the Baltics achieved independence, only to lose it under forcible annexation by the U.S.S.R. in 1940. Fifty years later, Lithuania was the first of the three to declare independence from the Soviet Union, on Mar. 11, 1990. Estonia and Latvia followed on Aug. 20 and 21, 1991 during the Soviet coup attempt that began Aug. 19, 1991. Shortly thereafter the international community recognized all three as independent countries. (U.S. recognition came on Sept. 2, 1991.) Each of the three countries is now governed by a parliament (the Supreme Council) for legislative func-



tions and by a Prime Minister and set of departmental ministers for executive functions.

ENERGY

Of the three, only Estonia has a significant energy resource, oil shale, which supplies most of its energy needs. Latvia meets some of its energy needs with hydroelectric power; plants on the Daugava River generate a third of the country's electric power. Most of Latvia's energy comes from Estonia and other countries. Some oil and natural gas deposits occur in Lithuania, but the country meets most of its energy needs by importing these fuels and from its large nuclear power generator near Ignalina.

ENVIRONMENT

Soviet economic policies brought pollution of Baltic air, water, and soil. Although the Baltic countries took action in the 1980s to limit further damage, a great deal of expensive and difficult environmental cleanup remains to be done.³⁷

³⁶ For this and the following text on the Baltics, see V. Bite, *Estonia: Basic Facts*, *Latvia: Basic Facts*, and *Lithuania: Basic Facts*, CRS Reports for Congress 92-223 F (June 30, 1992), 92-242 F (Mar. 2, 1992), and 92-313 F (Aug. 6, 1992) respectively. Also *The American Academic Encyclopedia*, online edition (Danbury, CT: Grolier Electronic Publishing, updated four times yearly), and Library of Congress, *Estonia: An Economic Profile*, and *Latvia: An Economic Profile*, July 1992 and August 1992, respectively.

³⁷ V. Bite, *The Baltic States: U.S. Policy Concerns*, CRS Issue Brief IB90075, Sept. 29, 1992, p. CRS-8.

ECONOMIC AND POLITICAL REFORM

GDP/capita is greatest in Estonia, least in Lithuania. The countries have limited natural resources; Estonia is the most resource rich and most industrialized. All were heavily integrated into the Soviet economy which supplied raw materials and provided markets for goods. The disintegration of the Soviet Union has disrupted the supply of raw materials with consequent loss in economic production and in the standard of living.

Until recently, all continued to use the ruble as currency. In June, 1992, Estonia became the first of the Baltics to establish its own currency, the kroon.

While there are differences in the manner and speed with which the three have set about creating market economies, common patterns emerge. All moved quickly to strengthen and broaden earlier reforms that had been partially put in place (freeing prices, ending state subsidies) before independence. Many of the same strategies employed elsewhere have been followed in the Baltics.

Privatization of small businesses and services has proceeded steadily. Outside the small business and service sectors, privatization has been slow to occur, in part because restitution claims are being processed slowly. Estonia has had some success encouraging foreign investment; the other two republics were initially reluctant to permit 100 percent foreign ownership, but they now do. Bank credit decisions still favor state-owned businesses. Foreign trade is being successfully reoriented toward Finland, Sweden, and Germany, although the Baltics are still tied to nearby Russia for raw materials and for sale of some finished goods. Estonia's new currency is based on the German mark, and the other two are scheduled to introduce their own currencies, which will not be based on the ruble either. The

three currencies will be stabilized by the International Monetary Fund and partially backed by gold. Lithuania has introduced a voucher system to stimulate privatization of medium- and large-scale enterprises, and Latvia plans to do the same (although implementation needs to be worked out).³⁸

Politically, democratic systems are being restored. Competitive parliamentary elections were held in spring 1990 and many non-Communists were elected to office. Both Estonia and Lithuania held a second round of elections in fall, 1992. Right of center parties formed the new governing coalition in Estonia, continuing support of the reforms. In Lithuania, the governing coalition, led by former Communists, is committed to reform but at a slower pace. Political parties have become more organized and parties are building support within the electorate. Other democratic reforms are being put in place.

NEAR- AND LONG-TERM EXPECTATIONS

In the near term, the Baltics are likely to strengthen democratic institutions. They will continue the marketization process, but probably more slowly (certainly in Lithuania). They will establish currency convertibility, will continue to reorient their trade towards the west, and will probably apply for EC associate status.³⁹ The Baltics are likely to create a customs union and work collaboratively to bolster their economies.

Estonia and Latvia have large Russian minority populations and are likely to treat these populations carefully, as the Russian government has expressed concern over their treatment. Russian troop withdrawals have been halted and economic sanctions could be imposed.

In the longer term, the Baltics are likely to reestablish themselves as independent, democratic, market-based countries whose place in Europe is secure. They will be EC associate

³⁸ *Business Eastern Europe*, July 27, 1992, p. 367.

³⁹ There is a 10-year agreement between the Economic Community and its associate members. In the first 5 years, the EC reduces its tariffs on nonagricultural goods. Associates follow suit in the second 5 years.

members and will seek regular membership. They will continue trade relations with Russia and other ex-Soviet countries. The Russians who opt to remain in Estonia and Latvia (and most will) will have satisfied citizenship requirements. Latvia's lengthy residence requirement for non-Latvians prior to citizenship may be revised downward. If an authoritarian Russian regime emerges, it will likely try to extend its political and economic influence over the Baltics, which could limit the options of these nations.

| Russian Republic

1990 GDP/capita (current rubles): 4,224

Industrial activities: oil, natural gas, machinery, chemicals

Natural resources: coal, oil, natural gas, diamonds, gold, phosphorites, potassium salts, uranium

HISTORY⁴⁰

200 years of Mongol rule over a collection of principalities that partially overlapped what is Russia today ended when the prince of the principality of Moscow declared himself Tsar (ruler) of all Russia in 1481. Successive tsars expanded the empire until the overthrow of Nicholas II in 1917. Shortly thereafter, the Bolsheviks consolidated power and forcibly reincorporated into the new U.S.S.R. the nations of the former Russian empire (such as Georgia and Ukraine) that had enjoyed a brief period of independence after the Tsar's demise. A succession of leaders; Lenin, Stalin, Krushchev, and Brezhnev between 1917 and 1982, established and refined Communist rule but were unable to correct increasing economic problems. Mikhail Gorbachev was the last to attempt economic reform within the structure of the Communist Party. The U.S.S.R. came to an end in December 1991 and its 15 republics, including Russia, have



since sought and received international recognition of their independence.

ENERGY

Russia is the world's largest producer of oil, primarily in Western Siberia, with export to Eastern Europe mainly by pipeline and to Western Europe via tankers. Russia contains the world's largest reserves of natural gas, with production also concentrated in Western Siberia. Gas is exported to Europe by pipeline. Russia also has coal reserves and produced more than half of all Soviet coal.⁴¹

ENVIRONMENT

Radioactive waste, including radioactive pollution of ground water, is one of many environmental problems in Russia.⁴² High levels of air, water, and soil pollution occur in many regions. Many coastal waters are highly polluted, including those of the White, Barents, and Kara Seas, the Pacific and Arctic Oceans, and the Gulf of Finland. Agricultural and industrial pollutants have eliminated nearly all fish in the Sea of Azov and the fish in the Caspian Sea are similarly threatened.⁴³

⁴⁰ See J. Nichol, *Russian Federation: Basic Facts*, CRS Report for Congress 92-137 F, Feb. 6, 1992.

⁴¹ U.S. Department of Energy, Energy Information Administration, *EIA Analysis Brief: The Former Soviet Republics*.

⁴² M. Feshbach and A. Friendly, Jr., *Ecocide in the USSR: Health and Nature Under Siege* (New York, NY: Basic Books, 1992), pp. 175-176.

⁴³ R. A. Mnatsakanian, *Environmental Legacy of the Former Soviet Republics*, Center for Human Ecology, Institute of Ecology and Resource Management, University of Edinburgh, 1992.

ECONOMIC AND POLITICAL REFORMS

In 1991 GDP fell by 17 percent and consumer prices rose 140 percent, precipitating the collapse of the Soviet economy and the end of the U.S.S.R. The transition to a market economy and to building a democratic political system is proving much more difficult in Russia than in the countries just reviewed (with the exception of Slovakia). Part of the problem is that Russia has not fully committed to political reform, and this in turn has limited economic reform. Many of the CP apparatchiks remain in positions of power politically and economically and would like to slow the pace of reform, if not return to the old status quo. Nonetheless, President Yeltsin initiated an economic reform program in the fall of 1991 and intensified it in January 1992. Recent (December 1992) Yeltsin setbacks with the Congress of Peoples' Deputies have dimmed prospects for Yeltsin's programs.⁴⁴

Economic czar Yegor Gaidar (former Minister of Finance and acting Prime Minister) sought to implement a form of 'shock therapy' similar to Poland's, with many of the same elements. Less than widespread commitment to a program of rapid change has helped limit the effectiveness of 'shock therapy' in Russia. The battle over the speed of reform is tied to issues of political structure: will Russia preserve and strengthen its current strong presidency or will parliament become the dominant institution in political affairs? Most of the relevant statutes promoting rapid economic transformation have been issued as executive decrees rather than emerging from parliamentary processes.

Russia has received IMF approval for its reform plans, although its current budget deficit is

beyond IMF-established limits; adjustments will be needed before additional loans are forthcoming. Russia has substantial foreign debt (inherited from the U.S.S.R.), and the debt service needs to be renegotiated and rescheduled.⁴⁵

Thus far, privatization outside the service and retail trade sectors has scarcely begun. There is limited domestic capital available, and the government has not decided whether it wants to encourage substantial foreign investment and how best to do so. (100 percent foreign ownership is still prohibited.⁴⁶) The State Property Agency, granted extensive authority as the key agency for privatization, was charged in July 1992 with acting as creditor for state enterprises with significant debt. The size of interenterprise debt is estimated at 3.3 trillion rubles.⁴⁷

Gaidar's reform package called for creation of a social safety net to provide a cushion against severe economic dislocations, but there is little evidence that much funding has been provided. The voucher system has been announced, but mutual investment funds have not yet been set up nor have state enterprises been organized as joint stock companies.⁴⁸ Overall, there was little new or different in the Gaidar plans from what has been proposed and adopted in the countries surveyed above.

What is different is the sheer size of Russia geographically and demographically, the extent of opposition to 'shock therapy' reform on both the central and local levels (although some localities have moved toward privatization faster than the central government), and the anti-Russian hostility of small ethnic groups that comprise the Russian Federation (including several republics that refused to sign the Treaty of

⁴⁴ See S. D. Goldman, *Russia*, CRS Issue Brief, IB92089, Aug. 3, 1992; and J. D. Sachs, *Economic Reforms of Socialist Countries: Lessons & Prospects*, The Ernst Sturc Memorial Lecture, Paul H. Nitze School of Advanced International Studies, Washington DC, Nov. 5, 1992.

⁴⁵ Keith Bradsher, 'Turmoil in Europe; Talks on Rescheduling Moscow's Debt Pit U.S. and Russia Against Germany,' *The New York Times*, Sept. 21, 1992, p. A9.

⁴⁶ 'What's New In Your Industry CIS,' *Business Eastern Europe*, Sept. 14, 1992, p. 450.

⁴⁷ *Foreign Broadcast Information Service*, Nov. 14, 1992, p. 12.

⁴⁸ Celestine Bohlen, 'Citizens of Russia To Be Given share of State's Wealth,' *The New York Times*, Oct. 1, 1992, p. A1.

Federation and claim independence). There is also a notable lack of the supervisory authority that the central government wished to establish over the provinces and localities but has been unable to achieve.

Russian reformers have introduced many reform elements without taking time to devise appropriate implementation strategies. There is less consensus for reform than in the other countries discussed in this section, with the exception of Ukraine (see below). No East European leader found it necessary to request or receive emergency powers, as Yeltsin did. Granted by parliament for one year, these powers ended in December 1992. It seems unlikely that parliament will agree to extend them, in light of the institutional struggle between it and the presidency.

NEAR AND LONG-TERM EXPECTATIONS

In the near term, Russia is likely to slow the pace of transformation. Civic Union, an umbrella organization of groups of industrialists, trade unions, and several political parties, favors a slower approach but not a reversal of reforms. One component, the Union of Industrialists and Entrepreneurs, has called for greater financial support for state enterprises and reinstatement of some price controls at this phase of the transition.⁴⁹ Directors and managers at the enterprise level are pressing for a slowdown as well. The military industrialists, who oppose conversion of military factories to civilian use, support the go-slow approach at best. So do the professional military who prospered under the old system.

The reform leadership will continue to contend with right wing Russian nationalist groups, dissatisfied ethnic minorities, regional pressures for autonomy in a newly decentralized system (in Siberia, in particular, with its vast resources), and opposition from the old Communist-controlled bureaucracies that still operate within the ministries, the banking system, the state-owned sector,

and elsewhere. All of these will act as brakes on the reform process.

Political strife is likely to hamper economic reforms whatever is the outcome of the current crisis. Yeltsin may remain for the immediate period but has declared that he will not be a candidate for election when his term is up (but he could change his mind). The future course of establishing a functioning democracy will be affected greatly by Yeltsin's successor. Thus far, implementation of democratic reforms has been limited: local elections have been postponed, independent newspapers find it difficult to obtain newsprint, and substantial self-censorship is still practiced. Political parties are still in formation and are not yet grounded in the electorate. Reforms in the legal structure and judicial system are just getting underway. With continued economic difficulties in addition to the special problems cited above, a reversion to authoritarian rule is a distinct possibility.

At best, Russia will establish some form of mixed economy in the near term, some private, some cooperative, and a majority still state-owned. Unless Russia can attract substantial foreign assistance directly tied to privatization, modify its legal and tax framework to support privatization, and create a climate favorable for foreign investment, the capital needed to privatize and modernize its industrial plants will not be available.

In the longer term, a limited democracy at best is likely to emerge. The desire to keep the country together and to continue as a significant power in Europe and Asia will encourage strong central leadership. That leadership will need military support and may not be tolerant of organized opposition. The tradition of a strong state role in the economy (which was a feature of 19th century Russia as well as the Communist experience) may carry on. Russia is likely to continue to have a mixed public/private economy and may well not

⁴⁹ Celestine Bohlen, "Sliding Ruble Seen As Omen of Another Price Explosion," *The New York Times*, Sept. 5, 1992, p. 3.



establish predominately private ownership in the industrial sector.

| Ukraine

1990 GDP/capita (current rubles): 3,177

Industrial activities: heavy industry, food processing

Natural resources: agricultural land, bitumen, hard coal, natural gas, oil, iron ore, manganese, uranium

HISTORY⁵⁰

With its declaration of independence on Aug. 24, 1991, and ratification of that declaration in a referendum approved by a 90 percent majority on December 1, 1991, Ukraine became a sovereign nation for the first time in centuries. Previously it was partitioned in various ways by Poland and Russia and by Russia and the Hapsburg Empire. There was also a period of occupation by the Nazis beginning in 1941. Soviet occupation under Stalin was particularly brutal; a Soviet-engineered famine when Ukraine resisted collectivization of agriculture killed millions in 1932-33.

Besides ratifying independence in December, voters elected a president, former Communist leader Leonid Kravchuk. The Ukrainian Supreme Soviet (parliament) was formed after competitive elections in 1990.

Major disagreements exist between Ukraine and the Russian republic. One concerns control of nuclear weapons. Ukraine, Russia, Kazakhstan, and Belarus are the four republics that were sites of nuclear weapons in the former Soviet Union and remain sites of such weapons today. Another disagreement is the disposition of the Black Sea fleet. A third is the Crimea where two-thirds of the population is Russian and where support for independence dropped to 54 percent in the December vote.

ENERGY

The largest coal producing area in the FSU is the Donets Basin in Ukraine. Nonetheless, natural gas is the most widely used energy source in the country, accounting for 41 percent of total energy consumption in 1991 (compared to 31 percent for coal). Domestic gas production lags consumption and gas is imported, typically from Russia and Turkmenistan.⁵² Nuclear energy is also important, and was the basis of 25 percent of total electric power generation in Ukraine in 1991. Oil needs are heavily dependent on imports; in 1991, less than 10 percent of oil required was domestically produced.⁵³

ENVIRONMENT

Ukraine has severe environmental problems. One such is radioactive contamination. Chernobyl left 180 tons of radioactive fuel encased in

⁵⁰ See s. Woehrel, *Ukraine: Basic Facts*, CRS Report for Congress, 92-138 F, May 14, 1992; *Ukraine*, CRS Issue Brief, IB92072, July 24, 1992; and *The American Academic Encyclopedia*, online edition (Danbury, CT: Grolier Electronic Publishing, updated four times yearly).

⁵¹ Energy Information Administration, *EIA Analysis Brief: The Former Soviet Republics*, Sept. 1991.

⁵² I. Yukhnovskiy, "What Are We-Rich or Poor? On the Question of Reorganizing the Structure of Production in Ukraine," *Vercherniy Kiyev, Kiev, Ukraine*, May 19, 1992, pp. 3-4.

⁵³ US Department of Energy, *US Industrial Briefing Book: US Electric Power Technologies Conference*, "Ukraine," July 1992.

concrete walls up to 59 feet thick, as well as at least 50,560 square miles contaminated with Cesium-137.⁵⁴ The major rivers carry raw sewage, agricultural chemical runoff, and industrial waste to cities such as Odessa and on to the Black Sea, which is in danger of eutrophication.⁵⁵ The level of air pollution from factories in part of southeastern Ukraine has been described as “catastrophic.”⁵⁶

ECONOMIC AND POLITICAL REFORMS

Of the FSU, Ukraine’s economic potential is second only to Russia. Ukraine accounted for 16 percent of the total GNP of the Soviet Union in 1991, and is rich in both mineral and agricultural resources. Steel production and coal mining are major industries and the manufacturing base is well-developed and diversified, producing machinery, industrial equipment, and chemicals. Often referred to as the breadbasket of the FSU, Ukraine produces quantities of grain and sugar beets.

A coupon currency system, somewhat parallel to the ruble, was introduced in January 1992. There is disagreement on how rapidly to proceed on economic reform, with rival plans under consideration; progress so far is slow.

Price controls have been lifted only partially and privatization legislation is not yet in place. Russian officials have urged Ukraine to lift price controls because cheaper Ukrainian goods are being sold in Russia, while Russian goods are left unsold on shop shelves.⁵⁷ Ukraine plans to lift price controls slowly. The country has begun to seek foreign investment, having put some tax incentives and registration regulations in place, but successes are limited. Most of the reform elements described earlier have not yet been legislated or, if legislated, have barely gotten under way. Ukraine has not yet produced a

marketization plan and a state budget satisfactory to the IMF and is not yet eligible for assistance through that organization. Clearly, Ukraine’s leaders have chosen a slow pace to economic transformation.

Politically, a partial democratic structure has been put in place. The current parliament was elected in spring 1990 and still has a number of ex-Communists in it. Both the current and previous prime ministers are ex-Communists who held important positions prior to 1992. President Leonid Kravchuk, elected by direct popular vote in December 1991, was second secretary of the Ukrainian CP until he resigned his membership after the August 1991 coup attempt. He joined the movement for national independence in 1991. Despite the country’s measured approach to reforms, parliament recently secured the resignation of a prime minister because the pace of economic reform under his guidance was too slow at the same time that the economy was continuing to deteriorate.⁵⁸

Ukraine wants to avoid return to Russian domination and seeks to align itself with the Central European countries considered here. To avoid provoking Russia, Ukraine has been careful thus far to attend to the concerns of its 20 percent Russian minority.

NEAR- AND LONG-TERM EXPECTATIONS

In the near term, Ukraine is likely to target a mixed public/private economy, with the state continuing to have a major role. The pace of reform is likely to remain slow, IMF membership will be granted once a satisfactory budget is in place and assistance will be forthcoming. Ukraine will continue to seek foreign assistance and will create the necessary legal and financial frame-

⁵⁴ M. Feshbach and A. Friendly, Jr., *Ecocide in the USSR: Health and Nature Under Siege* (New York, NY: Basic Books, 1992), pp. 146-7.

⁵⁵ *Ibid.*, pp. 124-125.

⁵⁶ *Ibid.*, p. 93.

⁵⁷ *Business Eastern Europe*, Sept. 28, 1992, p. 474.

⁵⁸ Special Correspondent, “Arms Maker Is Named Premier By Ukraine,” *The New York Times*, Oct. 14, 1992, p. A7.

work to attract foreign capital, which in turn may help to speed up the reform process.

Relations with Russia could deteriorate over military issues (the Black Sea Fleet, which the two nations agreed to control jointly in 1992; Ukrainian reluctance to hand over nuclear weapons to Russia; the size of the Ukrainian military) and territorial issues (the autonomy of Crimea and Russian insistence on its return; Crimea was ceded to Ukraine in 1954 by the Soviet government without Russian government approval). There will be economic difficulties between the two (insistence on payment for imports with hard currency only, possible creation of tariff barriers, unwillingness to supply needed resources, including Ukrainian agricultural goods). While these

disputes are not likely to degenerate into military confrontations, they may strengthen the case for a strong executive and pave the way for authoritarian rather than democratic rule in the interests of national security.

Over the long term, political transformation to democracy will likely remain incomplete because of belief that a strong central government and strong executive is essential to preserve independence. Economic transformation to a market economy is also likely to remain limited as the government will maintain a strong presence in the economy and at best will support a mixed public/private ownership system.