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Seminar on Central - Eastern European Agriculture

# CZECHOSLOVAK AGRICULTURE

## BACKGROUND READING MATERIALS

June 12, 1991

ERS Seminar on Central-Eastern European Agriculture

Economic Research Service
U.S. Department of Agriculture

CZECHOSLOVAK AGRICULTURE: BACKGROUND MATERIAL



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1. Maps

2. Richard F. Nyrop, Foreign Area Studies - The American University, Czechoslovakia: A Country Study. April 1981. (excerpts)

3. American Embassy-Prague, "Economic Trends Report: Czechoslovakia." April 1991.

4. World Bank, Czechoslovakia: Transition to a Market Economy. December 13, 1991. (summary and excerpts)

5. Karel Dyba and Jan Svejnar. "Economic Developments and Prospects in Czechoslovakia, Yugoslavia, and Germany." American Economic Review. May, 1991.

6. Peter Martin. "Czechoslovakia: An Economic Strategy for 1991-1992." Radio Free Europe/Radio Liberty Report on Eastern Europe. Vol. 2, No. 20. May 17, 1991.

7. Susan Z. Weil. Czechoslovakia. (Privatization Update). May 1991.

8. Vladimir Benacek. "Financial Institutions in a Transient Economy: Czechoslovakia in 1991." Paper presented at a conference in Prague on "The Transition to a Market Economy -- Institutional Aspects." March 1991.

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10. Robert Deutsch. "Czechoslovakia." The Food Revolution in the Soviet Union and Eastern Europe. 1986. (excerpt)

11. Robert Cummings. "Agricultural Performance and Prospects in Czechoslovakia Through the Eighties." JEC. East European Economies: Slow Growth in the 1980's. Volume 3, 1986.

12. Hajda, Joseph. "Principal Characteristics of Agricultural Policy Trends in Czechoslovakia." Chapter 8. The Future of Agriculture in the Soviet Union and Eastern Europe: The 1976-80 Five Year Plans, edited by Roy D. Laird, Joseph Hadja, and Betty A. Laird. 1982.

13. Labor Employed in Agriculture as a Percentage of All Labor in the Economy - Central and East European Countries. 1982.

These items are supplied as background information to assist U.S.D.A. programs of technical assistance. For additional or updated copies, contact:

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Economic Research Service
U.S. Department of Agriculture
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# Maps

1. Central and Eastern Europe
2. Czechoslovakia


1:15,000,000
0 100 200 Kilometers
0 100 200 Miles
North Sea
Baltic Sea
MOSCOW
Soviet Union
East Germany
EAST BERLIN
Berlin
West Germany
Rhine
BONN
Elbe
Poland
Vistula
WARSAW
Oder
PRAGUE
Czechoslovakia
Danube
VIENNA
Austria
BUDAPEST
Hungary
Romania
BELGRADE
Yugoslavia
BUCHAREST
Black Sea
Bulgaria
SOFIA
TIRANE
Albania
ANKARA
Greece
Turkey
ATHENS
Mediterranean Sea


Scale 1:3,900,000
0 25 50 75 100 Kilometers
0 25 50 75 100 Miles
CZECH REPUBLIC
SLOVAK REPUBLIC
Poland
East Germany
West Germany
Austria
Hungary
Soviet Union
Romania
It.
Prague
PRAHA
Bratislava
BRATISLAVA
Vienna
Budapest
SEVEROČESKÝ
ZÁPADOČESKÝ
STŘEDOČESKÝ
VÝCHODOČESKÝ
JIHOČESKÝ
JIHOMORAVSKÝ
SEVEROMORAVSKÝ
ZÁPADOSLOVENSKÝ
STŘEDOSLOVENSKÝ
VÝCHODOSLOVENSKÝ
Halle
Leipzig
Riesa
Cottbus
Görlitz
Dresden
Gera
Chemnitz (Karl-Marx-Stadt)
Plauen
Děčín
Liberec
Jablonec
Ústí nad Labem
Most
Chomutov
Mladá Boleslav
Hradec Králové
Kladno
Karlovy Vary
Cheb
Kolín
Pardubice
Plzeň
Klatovy
Tábor
Jihlava
Třebíč
Brno
České Budějovice
Znojmo
Gmünd
Břeclav
Hollabrunn
Prostějov
Olomouc
Přerov
Gottwaldov
Ostrava
Opava
Krnov
Frýdek Místek
Český Těšín
Cieszyn
Bielsko-Biała
Žilina
Dubnica nad Váhom
Martin
Ružomberok
Svit
Poprad
Bardejov
Prešov
Humenné
Košice
Michalovce
Čierna nad Tisou
Trenčín
Partizánske
Banská Bystrica
Rožňava
Zvolen
Trnava
Nitra
Lučenec
Nové Zámky
Komárno
Uzhgorod
Mukachevo
Chop
Záhony
Sátoraljaújhely
Miskolc
Salgótarján
Nyíregyháza
Debrecen
Satu Mare
Oradea
Szolnok
Vác
Győr
Tatabánya
Székesfehérvár
Veszprém
Dunaújváros
Sopron
Szombathely
Neusiedler See
Wiener Neustadt
Sankt Pölten
Linz
Wels
Steyr
Liezen
Leoben
Knittelfeld
Graz
Salzburg
Kitzbühel
Sankt Johann
Passau
Deggendorf
Regensburg
Landshut
Leszno
Lubin
Legnica
Jelenia Góra
Wałbrzych
Wrocław
Kłodzko
Broumov
Opole
Kalisz
Sieradz
Łódź
Piotrków Trybunalski
Tomaszów Mazowiecki
Częstochowa
Bytom
Katowice
Gliwice
Kraków
Radom
Kielce
Ostrowiec Świętokrzyski
Puławy
Lublin
Zamość
Tarnobrzeg
Rzeszów
Tarnów
Nowy Sącz
Krosno
Przemyśl
Elbe
Spree
Oder
Warta
Vistula
San
Dnestr
Vltava
Danube
Inn
Salzach
Enns
Mur
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Richard F. Nyrop, Foreign Area Studies - The American University, Czechoslovakia: A Country Study. April 1981. (excerpts)

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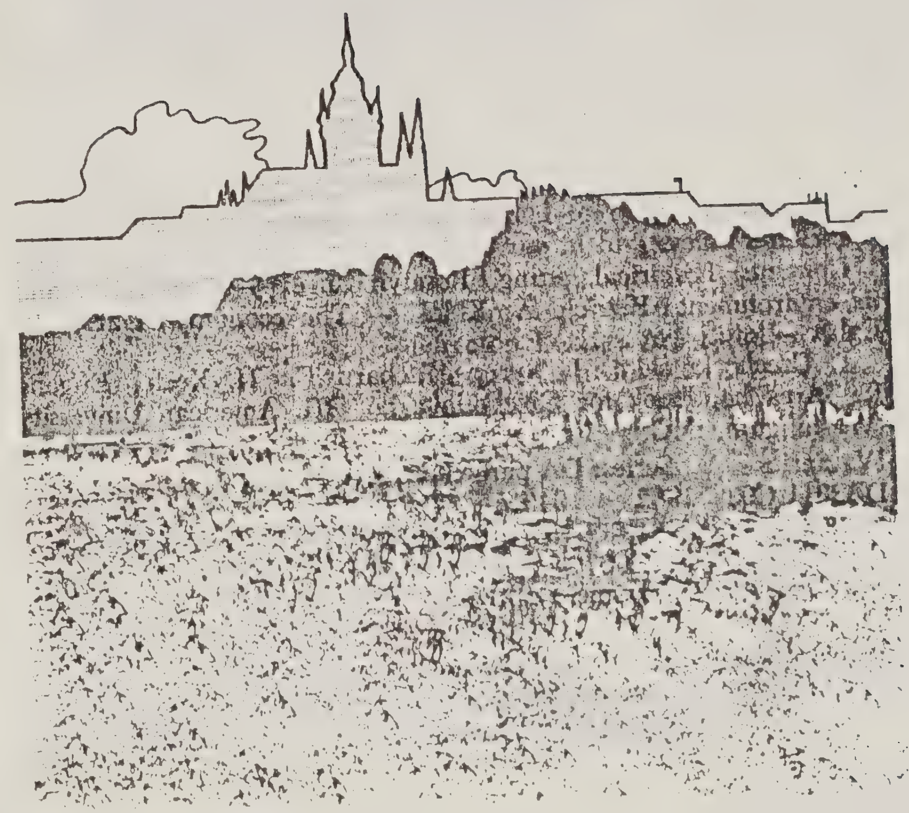
# Czechoslovakia
## a country study

Foreign Area Studies
The American University
Edited by
Richard F. Nyrop
Research Completed
April 1981



# Country Profile


## Country

**Formal Name:** Czechoslovak Socialist Republic.

**Short Form:** Czechoslovakia.

**Term for Citizens:** Czechoslovak(s).

**Capital:** Prague.

## Geography

**Size:** Approximately 127,870 square kilometers.

**Topography:** Generally irregular terrain. Western area part of north-central European uplands, including natural basin centered on Prague. Eastern region made up of northern reaches of Carpathian Mountains and Danube Basin lands.

**Climate:** Predominantly continental but varies from moderate temperatures of Western Europe to more severe weather systems that affect Eastern Europe and Western Soviet Union.

## Society

**Population:** Estimated at between 15.3 million and 15.4 million in January 1981.

**Education and Literacy:** Education free at all levels and compulsory from ages seven to fifteen. Vast majority of population literate. Highly developed system of apprenticeship training and vocational schools supplements general secondary schools and institutions of higher education.

**Health:** Free health care available to all citizens. National health planning emphasizes preventive medicine; factory and local health care centers supplement hospitals and inpatient institutions. Substantial improvement in rural health care in 1960s and 1970s.

**Language:** Czech and Slovak recognized as official languages; both mutually intelligible.

**Ethnic Groups:** Czechs represented roughly 64 percent of the population (December 31, 1978) and Slovaks 30 percent. Hungarians, Ukrainians, Poles, Germans, and Gypsies the principal minority groups.

**Religion:** Religious freedom constitutionally guaranteed but limited in practice. Major religious organizations operate under government restrictions. Reliable information on religious affiliation during post-World War II era lacking, but principal denominations are: Roman Catholic Church (membership estimated at 10.5 million), Czechoslovak Hussite Church (400,000), Slovak Evangelical Church (400,000), Evangelical Church of Czech Brethren (265,000), and Greek Catholic (Uniate Catholic) Church (180,000).

## Economy

**Gross National Product (GNP):** Estimated US$76 billion in 1979. Per capita GNP US$5,020. Growth slowing in last half of 1970s. GNP increased an estimated 0.7 percent in 1979; little if any improvement in 1980. Economy centrally planned with command links controlled by communist party, similar to Soviet Union.

**Energy and Mining:** Country energy short, relying on imported crude oil and gas from Soviet Union and domestic brown coal. Energy constraints probable in 1980s. Large metallurgical branches but dependent on imports for iron and nonferrous ores.

**Industry:** Extractive and manufacturing industries dominate sector. Major branches include machinery, chemicals, food processing, metallurgy, and textiles. In 1979 production of pig iron 8.6 million tons, crude steel 14.8 million tons, and cement 10.3 million tons. Industry wasteful of energy, materials, and labor and slow to upgrade technology, but country source of high-quality machinery and arms for other communist countries.

**Agriculture:** Minor sector but supplied bulk of food needs. Dependent on large imports of grains (largely for livestock feed) in years of adverse weather. Meat production constrained by shortage of feed but high per capita consumption of meat.

**Exports:** Estimated US$13.9 billion in 1979, of which 51 percent machinery, 28 percent fuels and materials, 17 percent manufactured consumer goods, and 4 percent agricultural products. In 1979 Soviet Union received 34 percent of exports, Eastern Europe 29 percent, Western industrial countries (largely Western Europe) 20 percent, and developing nations 9 percent.

**Imports:** Estimated US$14.4 billion in 1979, of which 47 percent fuels and materials, 36 percent machinery, 10 percent agricultural products, and 7 percent manufactured consumer goods. In 1979 Soviet Union provided 36 percent of imports, Eastern Europe 31 percent, Western industrial nations 23 percent, and developing countries 5 percent. Soviet Union key supplier of energy and raw materials.

**Exchange Rate:** Official, or commercial, rate 5.32Kčs per US$1 in 1980; tourist, or noncommercial, rate 9.75Kčs per US$1 (for value of the koruna—Kčs—see Glossary). Neither rate reflected purchasing power.

**Fiscal Year:** Calendar year.

**Fiscal Policy:** State almost exclusive owner of means of production. Revenues from state enterprises primary source of revenues followed by turnover tax. Large budget expenditures on social programs, subsidies, and investments. Budget usually balanced or small surplus.

## Transportation and Communications

**Railroads:** In 1978 total of 13,186 kilometers (km), of which 12,881 km standard gauge (1.43 m), 112 km broad gauge (1.5 m), and 193 km narrow gauge; 2,807 km double tracked and 2,718 km electrified. Track and beds suffered from inadequate maintenance.

**Roads:** In 1978 total of 73,677 km, of which 60,157 km paved and 13,520 km graveled. Roads poorly maintained.

**Inland Waterways:** 483 km in Czechoslovak territory.

**Pipelines:** 1,448 km for crude oil, 861 km for refined products, and 6,000 km for natural gas. Network linked domestic oil and gas fields to refineries, and pipelines also linked to large international lines bringing Soviet crude oil and gas to border.

**Freight:** In 1979 nearly three-fourths of long-distance freight carried by rail, of which about one-third coal and another one-fifth international transit traffic. Truck transport accounted for 22 percent and inland waterways for 4 percent of freight traffic.

[illegible] 15.1 million and 15.4 million in [illegible]

[illegible] Education free at all levels and compulsory [illegible] vast majority of population literate. [illegible] on-the-job training, and vocational [illegible] schools and institutions of [illegible]

[illegible] available to all citizens. National health [illegible] preventive medicine; factory and local health [illegible] clinics and inpatient institutions. Sub- [illegible] care in 1960s and 1970s

[illegible] Slovak recognized as official languages; both [illegible]

[illegible] represented roughly 65 percent of the population [illegible] and Slovaks 30 percent. Hungarians, [illegible] and Gypsies the principal minority [illegible]

[illegible] constitutionally guaranteed but limited [illegible] organizations operate under government [illegible] on religious affiliation during [illegible] but principal denominations are: [illegible] membership estimated at 10.5 million, [illegible] Slovak [illegible] Church [illegible] Czech Brethren (295,000), and [illegible] Church (180,000)

[illegible] (GNP): Estimated US$70 billion in 1979 [illegible] growth slowing in last half of 1970s, [illegible] estimated 0.7 percent in 1979; little if any [illegible] centrally planned with command [illegible] party, similar to Soviet Union.

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Exports: [illegible] US$14.8 billion in 1979, of which 51 percent [illegible] 25 percent [illegible] major [illegible] trading partner [illegible] Soviet Union [illegible] percent [illegible] Western industrial countries (roughly Western Europe) [illegible] and [illegible]

[illegible] US$14.8 billion [illegible] 15 percent [illegible] Soviet Union provided [illegible] percent of imports, [illegible] Western industrial nations [illegible] percent [illegible] Soviet Union [illegible] supplier of energy and raw [illegible]

[illegible] Official commercial rate [illegible] in 1980 [illegible] in 1980 [illegible] Czechoslovak koruna [illegible] now

Fiscal Year: Calendar year.

Fiscal Policy: [illegible] means of production. [illegible] large budget [illegible] social programs, subsidies and [illegible] usually balanced or small surplus.

## Transportation and Communications

Railroads: In 1978 total 13,180 kilometers (km), of which 12,880 km standard gauge [illegible] 115 km broad gauge [illegible] [illegible] and 2,770 km [illegible]

Roads: In 1979 total of 73,577 km of which 51,157 km paved and [illegible] early maintained.

Inland Waterways: 475 km in [illegible] Danube [illegible]

Pipelines: 1,448 km [illegible] 531 km for refined products, and 6,1[illegible] km for natural gas. Network [illegible] oil and gas fields [illegible] and pipelines [illegible]

[illegible] 1979 nearly three-fourths of [illegible] [illegible]

**Ports:** No seaports; used Gdynia, Gdańsk, and Szczecin in Poland, Rijeka and Koper in Yugoslavia, Hamburg in Federal Republic of Germany (West Germany), and Rostock in German Democratic Republic (East Germany). Czechoslovakia had own fleet and chartered vessels for international cargo. Main river ports Prague, Bratislava, Děčín, and Komárno.

**Telecommunications:** Adequate, modern, automatic system with direct dial connections with many parts of country and most European countries. In 1978 about twenty per 100 inhabitants.

## Government and Politics

**Politics:** Monopoly on politics held by Communist Party of Czechoslovakia (Komunistická strana Československá—KSČ), whose general secretary, Gustáv Husák, also president of Czechoslovakia since 1975. Other parties and organizations exist but function in subordinate roles to KSČ. All political parties, as well as numerous mass organizations, grouped under umbrella of National Front of the Czechoslovak Socialist Republic. Human rights activists severely repressed; in 1981 Soviet Union remained ultimate arbiter in Czechoslovak politics.

**Government:** Government functioned under 1960 Constitution, which was substantially amended in 1968 and to lesser extents in 1970 and 1975. 1968 amendments created federal government structure, although subsequent amendments greatly limited authority of Czech Socialist Republic and Slovak Socialist Republic. Power of federal administration severely limited by "shadow government" within KSČ, which made all important policy decisions.

**Foreign Relations:** Formal diplomatic relations with 122 nations in 1980. Czechoslovakia, along with East Germany, considered strong ally of Soviet Union and deviated from Soviet lead in international affairs in no significant manner. Relations with United States poor in 1981.

**International Agreements and Memberships:** Active participant in Council for Mutual Economic Assistance (Comecon), Warsaw Pact, United Nations and its specialized agencies, and Movement of Nonaligned Nations; signatory of Commission on Security and Cooperation in Europe.

## National Security

**Armed Forces:** Czechoslovak People's Army comprised ground and air and air defense forces, numbering 140,000 and 55,000 respectively at beginning of 1981. Conscripts made up about 72 percent of ground forces and almost 33 percent of air force.

**Military Units:** Five tank divisions and five motorized rifle divisions—three of each considered combat ready—formed nucleus of ground forces in early 1981. Combat support provided by an airborne regiment, two antitank regiments, three surface-to-surface missile brigades, two artillery brigades, and two antiaircraft artillery brigades. Air force's 450 to 500 combat aircraft deployed in ground attack, interceptor, and reconnaissance squadrons. Five Soviet ground divisions and two air divisions stationed in Czechoslovakia; total strength about 70,000.

**Equipment:** Thriving armaments industry produced small arms, heavy weapons, armored vehicles, tanks, and jet aircraft. Some also imported from Soviet Union. Tanks produced under Soviet license; most other armaments of Czechoslovak design.

**Police:** National Security Corps included uniformed police (Public Security) and plainclothes police (State Security); both nationwide and subordinate to Ministry of Interior. Border Guard, deployed on country's frontiers, trained and equipped like a military force but subordinate to Ministry of Interior rather than to Ministry of National Defense.

**Paramilitary:** Part-time People's Militia—about 120,000 strong—received some military training and participated in civil defense.

**Foreign Military Treaties:** Member of Warsaw Pact; also has bilateral defense treaty with Soviet Union.

*Pantomimists in "The Fools" at Balustrades Theater, Prague*

THE CZECHOSLOVAK SOCIALIST REPUBLIC of the early 1980s was a study in contrasts with the Czechoslovak Republic, the multinational East European state formed from the dismantled Austro-Hungarian Empire. Large communities of ethnic minorities, some like the Sudeten Germans with unabashed irredentist leanings, were a defining force in the First Republic's social and political life. Not so in socialist Czechoslovakia. Most Germans were expelled following World War II, and many Ukrainians were gone with the ceding of Subcarpathian Ruthenia to the Soviet Union. The country's ethnic composition conformed to its name in the post-World War II era—Czechoslovakia was predominantly a nation of Czechs and Slovaks with small minorities of Germans, Hungarians, Poles, and Ukrainians.

If Czechoslovakia's ethnic makeup was simplified, the cleavage between Czechs and Slovaks remained a potent social and political force in the country. During the 1950s and 1960s planners had put intensive efforts into redressing the economic balance between the Czech lands and Slovakia. By the early 1970s many of the glaring disparities between the two republics were gone. Social and political differences nonetheless persisted. The Czech and the Slovak experience of the Stalinist era, of the reform movement, and of "normalization" were divergent.

Thirty-odd years of communist party rule had remade the social face of the country. Czechoslovak society of the interwar period was complex. There were large landholders, middling farmers, tenants, landless laborers, and a host of subsidiary specialists (herders, smiths, teachers, clerics, and local officials) in the countryside. The urban scene possessed a similar diversity with several score major capitalists, a substantial industrial proletariat, hundreds of thousands of small-scale manufacturers, an articulate and diverse intelligentsia, shopkeepers, tradesmen, and craftsmen. The social fabric was complex, but the extremes in wealth and poverty typical of so much of eastern Europe of that era were largely absent.

It is ironic, then, that nationalization went further in Czechoslovakia than almost anywhere else in the region. Nationalization touched not only large capitalist enterprises but also the nearly half-million handicraft and small-scale industries. Collectivization brought all but a handful of farms under state control. Private ownership of almost anything, certainly of the means of production, was a residual category in communist Czechoslovakia. No substantial group of private farmers, craftsmen, or small-scale retail services stood as a counterbalance to the state sector, nor did worker-managed enterprises or independent trade unions. Collective farmers, workers, the intelligentsia, a few private farmers and

THE CZECHOSLOVAK SOCIALIST REPUBLIC of the [illegible] 1970s [illegible] contrasts with the Czecho[illegible] Republic, [illegible] multinational East European state formed from the [illegible] Austro-Hungarian empire. Large communities of ethnic minorities [illegible] like [illegible] Germans [illegible] were a [illegible] in the [illegible] numerous social and [illegible] [illegible] Czechoslovakia. Most [illegible] were [illegible] up World War [illegible] and many Ukrainians [illegible] ceding of Subcarpathian Ukraine to the Soviet Union [illegible] country's ethnic makeup continued to [illegible] in the [illegible] World War II era. [illegible] was predominantly a nation of Czechs and Slovaks with small minorities of Germans, Hungarians, Poles, and Ukrainians.

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In mid-1981 Czechoslovakia had been in the throes of normalization since the country's 1968 invasion by Warsaw Pact troops. The invasion was precipitated by the late 1960s reform movement popularly dubbed the "Prague Spring." It was an effort by Czechs and Slovaks to restructure Marxist-Leninist socialism in a way more suitable to their respective historical, cultural, and economic circumstances. Normalization was the official label for the government's efforts to stamp out the remnants of the 1960s "counterrevolutionary" movement. It often seemed an uneasy peace between the ruling communist party and the ruled. The essence of the normalization strategy appeared to be a series of carrot-and-stick measures: far-reaching purges of any intelligentsia who might have been active in the reform era or remotely dissident in the 1970s, coupled with a concerted effort to placate the majority of the populace with relative material prosperity.

## Geography and Population

### Topography and Drainage

The nation's 127,870 square kilometers divide topographically as well as historically into three major areas: Bohemia, Moravia, and Slovakia. Bohemia consists of the five western political divisions (known as regions or *krajs*) with names ending in *český*; Moravia, of the two central political divisions with names ending in *moravský*; and Slovakia, of the three eastern political divisions with names ending in *slovenský* (see fig. 1). The area known as Slovakia is coterminous with the Slovak Socialist Republic; the other seven divisions constitute the Czech Socialist Republic (see Lower Administrative Levels, ch. 4).

The areas of western Bohemia and eastern Slovakia are portions of different mountain and drainage systems. All but a minute fraction of the Bohemian region drains to the North Sea by way of the Elbe River. The hills and low mountains that enclose the area are part of the north-central European uplands that are north of the Danube Basin and extend from southern Belgium, through the central German lands, and into the Moravian regions of Czechoslovakia. These uplands, which are distinct from the Alps to the south and the Carpathians to the east, are known geologically as the Hercynian Massif. Most of the Slovak area drains into the Danube River, and its mountains are part of the Carpathian range that continues eastward and southward into Romania.

The uplands of Moravia are a transition between the Hercynian Massif and the Carpathians and contrast with them in having more nearly north-south ridge lines. Most of Moravia drains southward to the Danube, but the Oder River rises in its northeast area and drains a small portion of the northern region (see fig. 12).



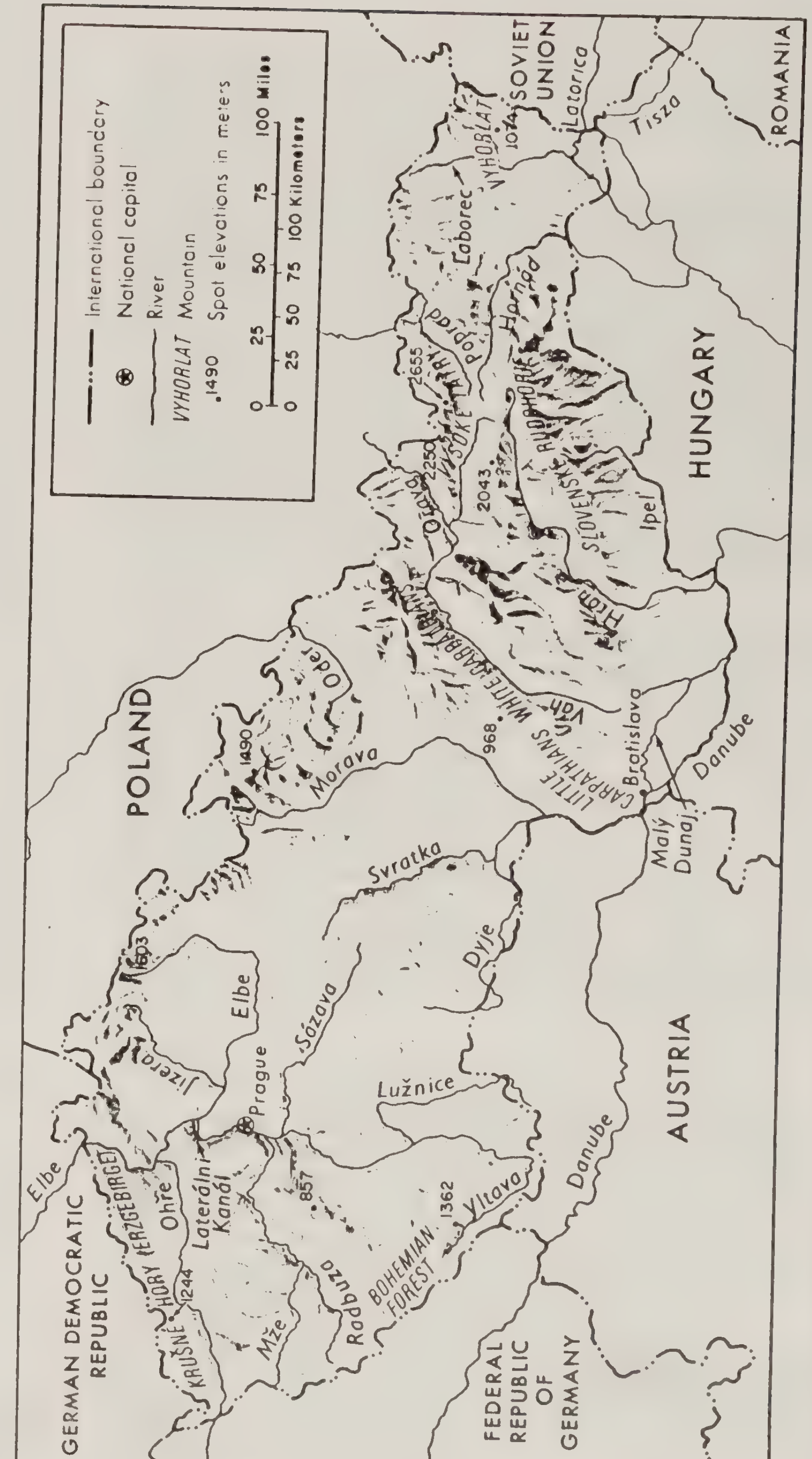



Figure 12. Topography and Drainage

*Bohemia*

Bohemia has a distinct individuality that derives in large measure from its topography. It is ringed with low mountains or high hills that, although less confined to the immediate border area along the southern and southeastern sides, are sufficient to serve as a watershed along almost the entire periphery. Streams flow from all directions toward Prague. These features have fostered local solidarity and a common set of economic interests.

In the northwest the Krušné Hory (Ore Mountains) border on the German Democratic Republic (East Germany) and are known to the Germans as the Erzgebirge; the Sudeten Mountains in the northeast border on Poland in the area that was a part of Germany before World War II. Germans outnumbered Czechs in both of these localities before they were relocated after 1945. The large German population was accounted for, in part, by the fact that the hills—particularly those of the Krušné Hory—were more gentle in the north, promoting German movement into the area, whereas the rugged escarpment in the south inhibited Czech movement outward.

The Český Les (Bohemian Forest), bordering on the Federal Republic of Germany (West Germany), and the Šumava, bordering on West Germany and Austria, are mountain ranges that form the western and southwestern parts of the ring around the Bohemian Basin, and both are about as high as the Krušné Hory in the northwest. Bohemia's mountainous areas differ greatly in population. The northern regions are densely populated, whereas the less hospitable Bohemian Forest and Šumava are among the most sparsely populated areas in the entire country.

The middle lands of the basin are lower, but their features vary widely. There are small lake areas in the middle south region and in the Vltava Basin north of Prague. Some of the western grainlands are gently rolling. By contrast, other places have streams, such as the Vltava River, that have cut deep gorges. This has given a large area southwest of Prague a broken relief pattern that is typical of several other districts.

*Slovakia*

Slovakia's landforms do not make it as distinctive a geographic unit as Bohemia. Its mountains generally run east-west across the land; their various ranges tend to segregate groups of people. Population clusters are most dense in the river valleys; the highest elevations are rugged, have the most severe weather, and are the most sparsely settled. Some of the flatlands in southern Slovakia are poorly drained and support only a few people.

The main mountain ranges are the High Tatras (Vysoké Tatry) and Slovenské Rudohorie, both of which are part of the Carpathians. The High Tatras extend in a narrow ridge along the Polish border and are attractive as a summer resort area. The highest peak in the country, Gerlachovka (also known as Stalinov Štít), which has [illegible] elevation of about 2,655 meters, is in this ridge. Snow persists at the higher elevations well into the summer months and all year long in some sheltered pockets. The tree line is at about 1,500 meters. An ice cap extended into this area during glacial times, leaving pockets that became mountain lakes.

The Slovakian lowlands in the south and southeast that border on Hungary and contain substantial Magyar populations are part of the greater Danube Basin. From a point a few kilometers south of the Slovakian capital of Bratislava, the main channel of the Danube River demarcates the border between Czechoslovakia and Hungary for about 175 kilometers. As it leaves Bratislava, the Danube divides into two channels, the main channel being the Danube proper and the northern channel, the Little Danube (Malý Dunaj). The Little Danube flows eastward to join the Váh River just north of Komárno, where the Váh converges with the main Danube. The land between the Little Danube and the Danube is known as the Great Rye Island (Velký Žitný Ostrov), a marshland maintained for centuries as a hunting preserve for the nobility. Dikes and artificial drainage have made the land cultivable for grain production, but it is still sparsely settled.

*Moravia*

Moravia is a topographic borderland situated between Bohemia and Slovakia. Its southwest-to-northeast ridge lines and lower elevations made it useful as a communication and commercial route from Vienna to the north and northeast during the periods when Austria was dominant in Central Europe.

Central and southern Moravian lowlands are part of the Danube Basin and are similar to the lowlands they join in southern Slovakia. The upland areas are smaller and more broken than those of Bohemia and Slovakia. The northwest hills are soft sandstone and are cut by deep gorges. South of them, but north of Brno, is a karst limestone area with underground streams and caves. These and the other uplands west of the Morava River are associated with the Hercynian Massif. To the east of the river the land is called Carpathian Moravia.

## Climate

The country's central European location is illustrated in the variety of sources from which it derives its climate. Although continental weather systems prevail throughout the country, western regions are frequently under the influence of the maritime weather that predominates in western Europe. Slovakia normally receives its weather from the continental systems dominant in eastern Europe. When the systems to the north are weak, Mediterranean weather may occasionally brush southern parts of the country.

Winters are fairly cold, cloudy, and humid. High humidity and cloud cover tend to be more prevalent in valleys and lower areas. Light rain or snow is frequent. The mountains are snow covered from early November through April, and accumulations are deep in some places. Lower elevations rarely have more than fifteen centimeters of snow cover at a time.

Summers are frequently pleasant. There is heavy rainfall, but it comes in sporadic showers so that there are many warm, dry days with scattered cumulus clouds. Prevailing winds are westerly; they are usually light in summer, except during thunderstorms, and somewhat stronger in winter.

Average temperatures in Prague range between about 1° C in January and about 19° C in July. The average temperature range during the day is low in winter, but summers have warm afternoons and cool evenings. Prague is representative of lowland cities in Bohemia and Moravia, but temperature extremes are greater in eastern parts of the country. Higher elevations, especially those with western exposures, usually have a narrower temperature range but on the average are considerably cooler.

December, January, and February are the coldest months; June, July, and August are the warmest. Spring tends to start late, and autumn may come abruptly in middle or late September. At lower elevations, even in Slovakia, frosts are rare between the end of April and the beginning of October.

Rainfall averages about seventy-one centimeters over the country but varies widely between the plains and upland areas. Parts of western Bohemia receive only forty centimeters; some areas in the High Tatras average two meters. The average in the vicinity of Prague is forty-eight centimeters. Precipitation is less dependable than in other areas of Europe that are more often dominated by maritime weather systems, and droughts sometimes occur.

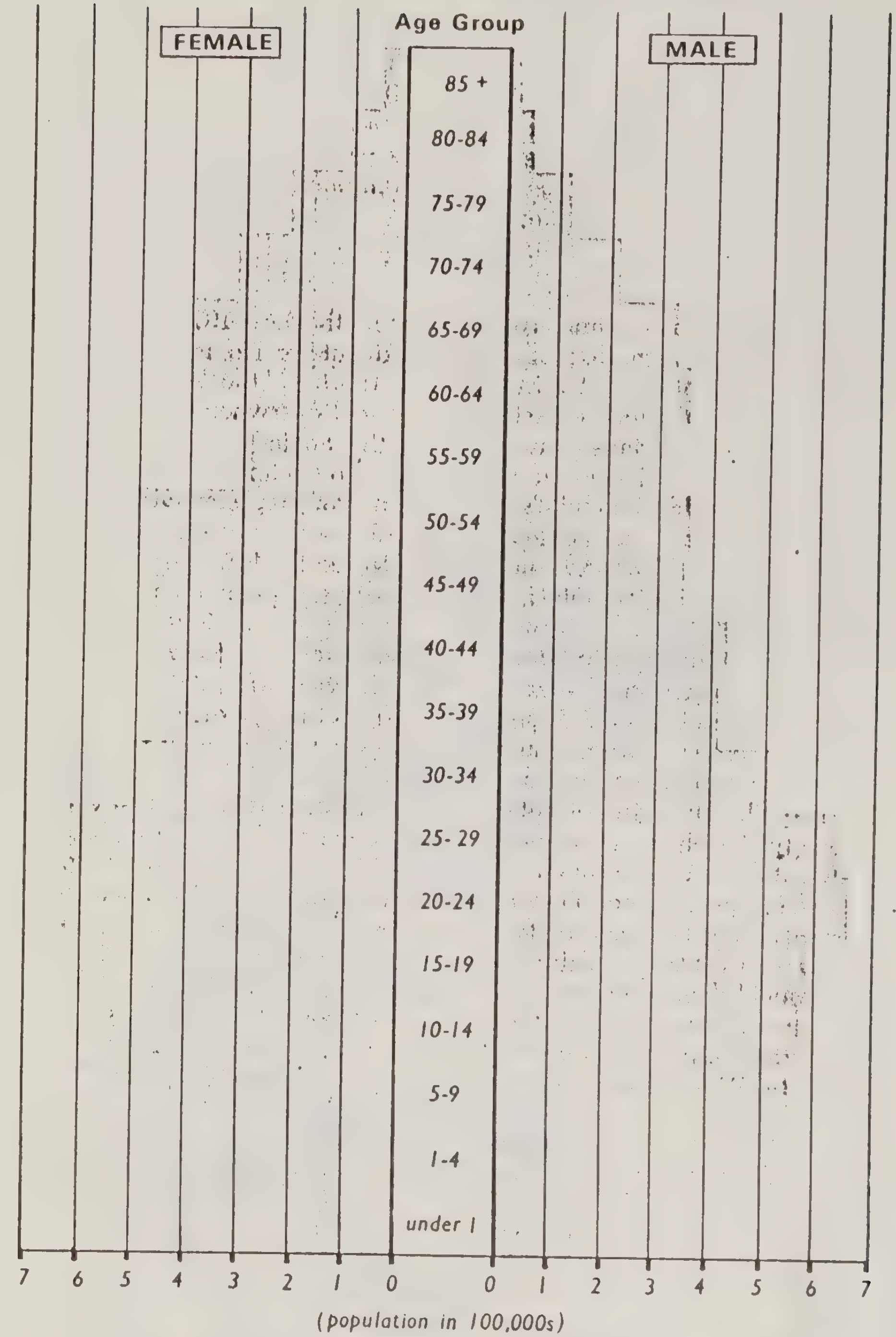
Despite the greater frequency of precipitation during the winter months, only about 15 percent of the total falls during that season. More than twice as much, or about 38 percent, falls in the summer. Spring and autumn figures are about equal. On the average about 24 percent of the total annual precipitation falls in the springtime; 23 percent falls in the autumn.

## Population

Data published by the Czechoslovak government in 1977 showed a population in January 1976 of 14,857,145 and a population growth rate of 0.07 percent a year. A projection of that data indicates that the population in January 1981 was 15,403,112. The United States Bureau of the Census' *World Population 1979* contains figures that are in substantial agreement with the Czechoslovak data. Other United States agencies, however, estimate the January 1981 population at about 15.3 million and its rate of growth at 0.06 percent per annum. In 1977 life expectancy was about seventy years of age. Only about 20 percent of the population was under the age of fifteen, and among the population as a whole there were 105 females for each 100 males (see fig. 13).

In 1981 the population density was approximately 120 persons per square kilometer. The most densely settled geographic region was Moravia, which had about 150 persons per square kilometer. The






Source: Based on information from Czechoslovak Socialist Republic, Federal Office of Statistics, *Statistical Survey of Czechoslovakia, 1977*, Prague, 1977, p. 15.

*Figure 13. Age-Sex Distribution, December 1975*

100 (see fig. 14). The major cities and their estimated populations in 1980 were Prague—1.2 million; Bratislava—375,000; Brno—373,000; Ostrava—325,000; Kosice—201,000; and Plzen—170,000. Czechoslovakia remained essentially a society of small cities and towns, in which about 60 percent of the population was classified as urban dwellers. In ethnic terms there continued to be approximately twice as many Czechs as Slovaks.

## Ethnic Groups

Czechoslovakia's ethnic composition in the late 1970s offered a stark contrast with that of the First Republic. No large German community with irredentist leanings troubled the society. Subcarpathian Ruthenia—wretchedly poor and overwhelmingly Ukrainian and Hungarian—was ceded to the Soviet Union following World War II. Czechs and Slovaks, who comprised about two-thirds of the First Republic's populace in 1930, represented about 94 percent of the total population by 1950—a percentage that remained constant through the late 1970s (see table 2, Appendix A). The aspirations of ethnic minorities were the pivot on which the First Republic's politics turned. Although this was no longer the case in 1980, ethnicity nevertheless continued to be a pervasive, persistent, and integral part of Czechoslovak life. Although the country's ethnic composition is simplified, there remains the basic cleavage between Czechs and Slovaks—each group with a distinct history and divergent aspirations.

The Slovak share of total population increased gradually but steadily. Czechs as a portion of total population declined by about 4 percent from 1950 through 1978, while Slovaks increased by roughly the same percentage. The trends reflected the wide discrepancy in fertility rates between the two republics from the 1950s through the early 1970s. Czech fertility rates lagged behind those of the Slovaks by roughly three-quarters of a percent. The actual numbers were hardly such as to imperil the Czech preponderance, however; in 1978 there were still more than two Czechs for every Slovak. And by the late 1970s the respective fertility rates were nearly equal.

### Czechs

A glance at a map of Central Europe provides one key to understanding Czech culture: the Czech lands—Bohemia and Moravia—lie surrounded by Germanic peoples on three sides. Geography is not exactly destiny for the westernmost of the Slavs, but it is true that the fear of being engulfed by the expansionist Germanic hordes remains a traditional and deep-seated one among the Czechs. Long before Munich and World War II the Germans prompted Czech concern for their cultural and political survival. The Czechs have, through the centuries, tenaciously maintained their cultural identity. Czech-German relations were the backdrop against which the controversies of the Hussite period were played out, and the Hussite



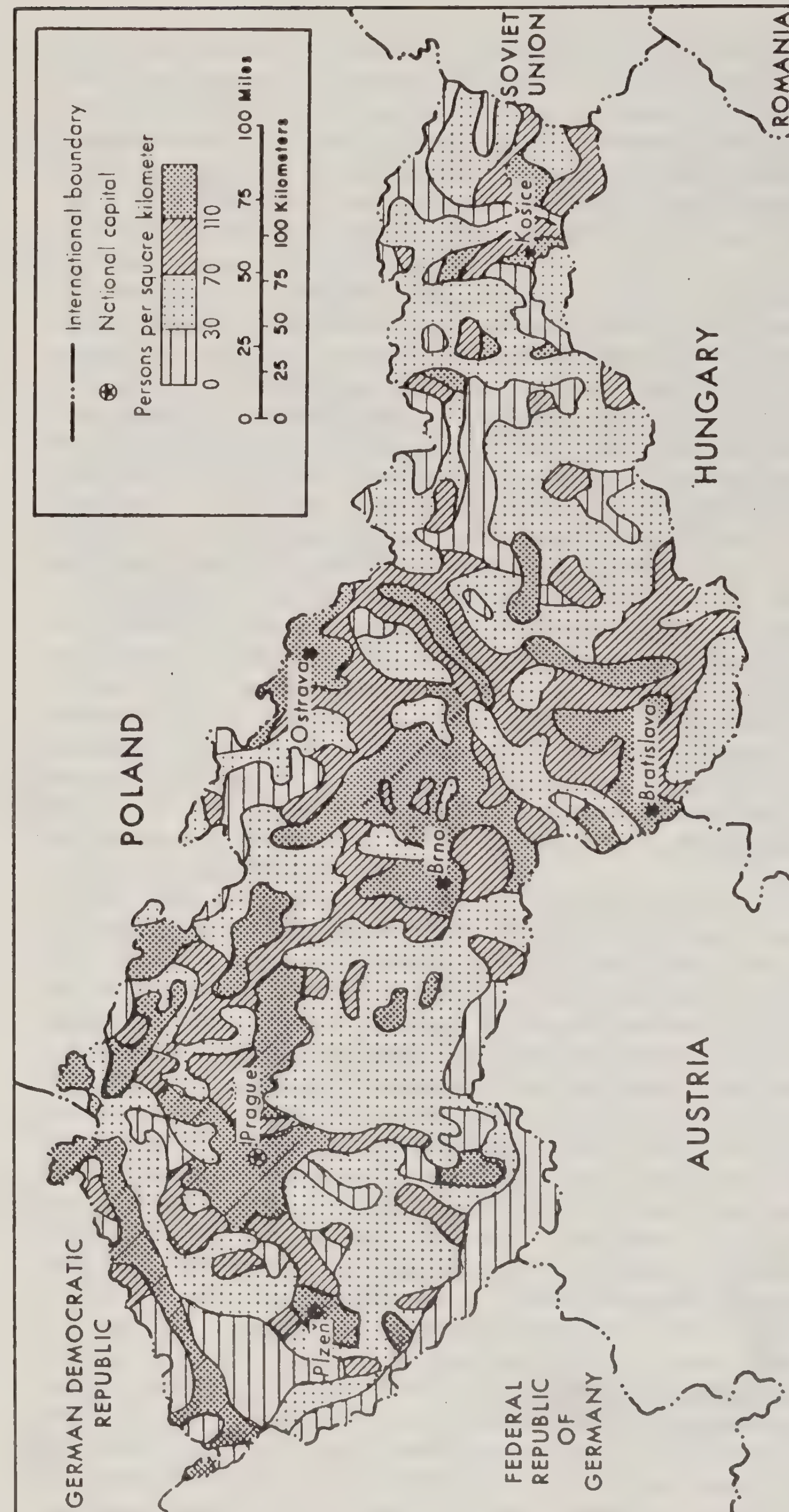



Figure 14. Population Density, Late 1970s

demands focused on the German hegemony in university and ecclesiastical office as much as they concerned theological doctrine (see Hussite Movement, ch. 1). The linguistic border between Czechs and Germans in the mountains surrounding Bohemia tells something of the determination with which Czechs resisted German expansion: since the ninth century that boundary has been fixed within fifty kilometers of its modern location, irrespective of the political fortunes of the two groups.

If the Czechs were Slavs resisting German expansion, it is nonetheless clear that they were as well West European in orientation, western in cultural as well as geographic terms. They have been part of the major intellectual and artistic traditions of Western Europe since the Middle Ages. Czech influence has been formative in movements as diverse as Renaissance music, the Protestant Reformation, structural linguistics, and twentieth-century European literature. A cultural tradition clearly rationalistic, secular, and anticlerical—in part a consequence of the Hussite period and subsequent Austrian efforts to force Roman Catholicism on a reluctant populace—permeates Czech life. Part of Czech self-identity focuses on maintaining the unique blend of Slavic and western that is the Czech heritage.

Czechs possess a predilection for political pluralism and a distinct anti-authoritarian bent. Czechoslovakia was the one East European country to maintain a functioning democracy for the entire interwar period and the only one in which the communist party was never outlawed. In a preinvasion 1968 survey more than 80 percent of those polled favored some form of political pluralism, specifically of "many concepts, proposals, of different parties or groups" rather than "one political line valid for all." Indeed, 68 percent of the Communist Party of Czechoslovakia (Komunistická strana Československá—KSČ) members surveyed favored political pluralism. In a postinvasion survey the First Republic was the most consistent choice as the period in their history the Czechs viewed most positively; two-fifths of all respondents named it as "the most glorious period in Czech history." The Hussite period was the second most favored choice (more than one-third of those surveyed chose it). Three percent thought the period of communist party rule was a "time of advance and development." The party's postinvasion analysis of the errors of the 1960s "counterrevolution" focused specifically on this aspect of Czech world view. Party ideologues decried the prevalence of "petty bourgeois ideology" and especially "social democraticism," which despite more than twenty years of socialist development remained deeply rooted in Czech society.

The Czechs as Slavs beleaguered in a sea of Germans and the subjects of three centuries under Austrian domination constitute one aspect of Czech consciousness. In terms of the dynamics of Czech and Slovak ethnic relations from 1918 through the 1970s, it is significant that Austrian rule was relatively benign. The House of Habsburg was more cosmopolitan at the craft of empire than aggressively German; their empire ("an agglomeration of Habsburg



estates and a club for Habsburg aristocrats" is geographer Roy E.H. Mellor's description) was a hodgepodge of central and east European ethnic groups. German was the lingua franca, but beyond that Germans were not always the sole nor the necessary beneficiaries of Habsburg policies. If, as Tomáš G. Masaryk put it, the Austro-Hungarian Empire was a "prison of nations," it was equally clear that some parts of the prison were distinctly better than others (see Habsburg Rule, 1526–1918, ch. 1).

In comparison with Slovakia or Subcarpathian Ruthenia—both under Magyar domination for centuries—the Czech lands were remarkably favored. Austrians lacked the overweening chauvinism of their Magyar counterparts. On the eve of World War I German was mandatory neither as the language of instruction nor as a second language. Censorship of the Czech press was limited. Czech associations—the basis of the political parties of the First Republic—flourished in the late nineteenth and early twentieth centuries. Cultural organizations, newspapers, and theaters were all commonplace parts of Czech life (see Associations, this ch.).

Czechs were overwhelmingly literate; in 1930 some 97 percent of the population over ten years of age could read and write. There was a substantial middle class that was highly educated and well trained. Czechs had extensive experience in the Austrian bureaucracy—notoriously slow moving but generally honest—and the legislative processes. Their wealth of experience in government was in stark contrast with that of the Slovaks, whom Czechs found overwhelmingly backward ("priest-ridden" was a common description), ready neither to rule themselves nor to accept Czech preponderance in government (see Slovaks, this ch.).

The Czech lands were economically favored as well. The Treaty of Versailles gave the Czechs substantial arable land and two-thirds of the former empire's industry. In the late 1930s—after other powers had spent a decade of frenzied effort developing heavy industry for rearmament—the Czech lands still produced half of Central Europe's pig iron and steel. The Czech consumer goods industry was also well developed. Bohemia's economic advantages proved, it is true, to be a two-edged sword. Much industry was owned by a substantial German minority of dubious loyalty, and this figured in Nazi Germany's designs on the republic (see The Czechoslovak Republic, 1918–38, ch. 1). Nonetheless the Czech lands emerged from World War II as virtually the only European region with a reasonably developed industrial structure unscathed by the conflict.

One ancient commonplace about Czech "national character" is that they are "Svejkian"—a characterization based on the Czech protagonist in Jaroslav Hašek's famous World War I novel, *The Good Soldier Svejk*. Svejk's adventures in the Great War begin with his arrest by the Austrian police in connection with the assassination of the Archduke Ferdinand, heir to the Habsburg throne. (He is confused by the reported murder: "Ferdinand? Really? But which one? The one who used to pick up dog turds? Or that apprentice hairdresser who [illegible] a club for Hitler [illegible] groups after the [illegible] most [illegible] was a [illegible] and [illegible] ethnic [illegible] to the [illegible] but [illegible] was not [illegible] necessary [illegible] put it [illegible] because [illegible] [illegible] [illegible]

[illegible] with Slovakia [illegible] Subcarpathian Ruthenia [illegible] Austria [illegible] centuries—the Czech lands were [illegible] Austria [illegible] the overwhelming chauvinism [illegible] Magyar [illegible] of World War I [illegible] [illegible] history [illegible] league [illegible] situation [illegible] a [illegible] language [illegible] of the [illegible] its best [illegible] [illegible]—the basis of the political parties of the First Republic [illegible] of the late nineteenth and early twentieth centuries. Cultural organizations, newspapers, and theaters were all [illegible] in Czech life (see Associations, this ch. [illegible]).

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[illegible] in university and [illegible] [illegible] technical [illegible] [illegible] The [illegible] barrier between [illegible] [illegible] with [illegible] German [illegible] boundary has been the [illegible] of [illegible] location, irrespective of the [illegible]

[illegible] German [illegible] it is [illegible] as well [illegible] European [illegible] orientation, [illegible] geographic terms. [illegible] [illegible] [illegible] tradition [illegible] Western Europe [illegible] influence has been [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] and [illegible] [illegible] and success of Austria [illegible] [illegible] a [illegible] [illegible] [illegible] [illegible] that of the Czech territory.

[illegible] for political pluralism and a distinct Czechoslovakia [illegible] the First Republic [illegible] democracy for the entire [illegible] which the communist party [illegible] [illegible] survey [illegible] [illegible] percent of [illegible] pluralism [illegible] of different parties or groups [illegible] valid [illegible] Indeed [illegible] percent of [illegible] (Komunistická strana [illegible] favored political [illegible] [illegible] the Czechs [illegible] [illegible] [illegible] [illegible] history. [illegible] period was the [illegible] [illegible] than one-third of those surveyed [illegible] [illegible] the period of communist party rule was a [illegible] and development. The [illegible] [illegible] of the [illegible] focused [illegible] a part of Czech world view. Many [illegible] [illegible] of [illegible] and especially [illegible] [illegible] more than twenty years [illegible] [illegible] deeply rooted in Czech society [illegible] in a sea of Germans and the [illegible] [illegible] dominant in [illegible] [illegible] of the [illegible] of [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] the Hussite [illegible] [illegible] once drank the hair lotion by mistake?") In the conflict between the staid Austrian bureaucracy and military establishment and the apparently slow-witted, literal-minded, and provincial Svejk, the Czech consistently gets the better.

As a characterization of Czech values and behavior it suggests passive acquiescence to whatever regime holds power and recommends a sort of pervasive obtuseness as the safest strategy for political survival. The "Svejkian" means of dealing with the powerful, be they Austrian bureaucrats, Czech communist officials, or Warsaw Pact forces, is the antithesis of armed resistance (see Popular Political Expression, ch. 4). In the midst of massive labor unrest in Poland in late 1980 the Soviets hung fire on the question of armed intervention. Polish workers indicated their readiness to resist in terms unmistakable to an East European: "We are not the Czechs." The Czechs are often criticized for their reluctance to go to the barricades, but the Svejkian strategy is less a matter of capitulation than a peculiarly Czech mix of resistance and survival. On both counts it seems to have been effective. Hitler is reputed to have said that he never trusted the Czechs less than when they were making concessions.

The principal elements in the Czech ethos were played out in their reactions to events of the late 1960s and 1970s. Both the Czech Western orientation and their "Svejkism" were apparent, in different ways, during the Prague Spring of 1968 and the Soviet intervention and its aftermath. In the late 1960s a reform movement that began as an attempt to remedy the economy's rather dismal performance with as little change as possible grew into a full-fledged effort to restructure Marxist socialism. And the call to redress the wrongs of the Stalinist era led to a full-scale reevaluation of the appropriateness of that model in Czechoslovakia. Was a style of socialism developed to suit the Soviet Union (eastern, Slav, autocratically ruled for centuries, primarily agricultural, and industrially undeveloped) and adequate enough in parts of Eastern Europe really compatible with Czech politicoeconomic circumstances and cultural realities? There was a sense that Soviet-style socialism was not *the* orthodox version of Marxism and that the unity of the international revolution of the proletariat notwithstanding, socialist development might allow for differing cultural and political traditions.

The Soviet response was, of course, a matter of history. The Czechs called for some measure of political pluralism, for greater autonomy for the myriad associations and unions formerly central to Czech society and now under control of the KSČ, and for genuine freedom of expression. As a backdrop to questions of realpolitik, there remained the dichotomy between the excessively autocratic Soviets—Russian Slavs long before they were Marxists of any sort—and the Czechs in search of "socialism with a human face." There was little doubt that the Czechs were socialists; polls taken by the Czechoslovak Institute for Public Opinion Research in the late 1960s found them disaffected with many aspects of their government, but only 5 percent favored



a return to capitalism (see Social Groups, this ch.). It was clear that for a people with a pronounced egalitarian bent since the Hussite era, Soviet communism was less than congenial. An anonymous Czech communist party official relates an incident that typifies the gulf between Russian and Czech Slavs. During the 1968 invasion a Soviet military commander asked a Czech official who had ordered that the road signs and street names be removed (a common ploy to slow the advance of the invading troops). The official kept explaining that the people themselves had done it without instructions from anyone. It was an explanation the Soviet officer simply could not credit: the thought of a citizenry acting without orders from someone in authority was beyond imagination.

Czech reformers sought explicitly political changes: greater scope for democratic processes, freedom of expression, and more representative organizations. Because 1968 was, after all, a *Prague* Spring, normalization took concomitantly a greater toll among Czechs than Slovaks. KSČ membership purges, changes in the managerial personnel of factories, and retributions against writers and artists all fell more heavily on the Czechs.

### Slovaks

If Bohemia and Moravia were among the more favored "cells" in the prison of nations, Slovakia's position was far less enviable. Magyar rule systematically excluded Slovaks from the political arena. They were consistently gerrymandered out of parliamentary seats and administrative posts, even in local government. In 1910 (when Czechs could be found throughout the Austrian bureaucracy) Slovaks held only 184 of the 3,683 judicial offices and 164 of the 6,185 civil service positions in Slovakia. Electoral laws reinforced this inequity: Austrian-dominated lands had universal adult male suffrage; those under Magyar rule had limited suffrage and significant educational and age restrictions. Certainly Hungarians, following the establishment of the Dual Monarchy in 1866, were far more aggressively assimilationist than their Austrian counterparts (see Dual Monarchy, ch. 1). Whereas Czech institutions and fraternal associations thrived under the relatively benign tolerance of Austrian rule, the Hungarians closed Slovak gymnasiums, repressed Slovak cultural organizations, made Magyar the official language in 1868, and pursued a course of thoroughgoing "Magyarization."

The contrast between the economy of the Czech lands and that of Slovakia was as dramatic as their differing political heritages. Slovakia was agrarian while the Czech lands were among the most industrialized regions in Europe. But the contrast went beyond that: Czech farmers represented a relatively prosperous, literate, and politically articulate group of middle-income agriculturalists; Slovaks were peasant farmers in tenancy on Magyar estates.

Where Czechs wished to create a Czechoslovak nation, Slovaks sought a federation. The First Republic, with its predominantly

Czech administrative apparatus, hardly responded to Slovak aspirations for autonomy. In the Slovak view Czech domination had simply replaced Hungarian, as Czechs who were unable to find positions in Bohemia or Moravia took over local administrative and educational posts in Slovakia.

Linguistic propinquity and geographic proximity proved not to be an altogether adequate basis for a nation-state. A Lutheran minority of Slovaks—educated and influential in government—were generally sympathetic to the republic; but the Catholic clergy, the rural bourgeoisie, and the peasantry wanted autonomy. The Slovak Republic (1939–45) was the culmination of Slovak discontent with Czech hegemony in the country's affairs (see Slovak Republic, ch. 1). Perhaps one measure of now profoundly important Slovaks continued to regard ethnicity and autonomy was a Slovak writer's call in 1968 for a more positive reappraisal of the Slovak Republic. He acknowledged that, while as a Marxist he found Monsignor Jozef Tiso's "clerico-fascist state" politically abhorrent, it was still "true that the Slovak Republic existed as the national state of the Slovaks, the only one in our history. . . ." Comparable sentiments surfaced periodically throughout the 1970s in letters to *Pravda* [Bratislava], try though the newspaper's editors might to inculcate a "class and concretely historical approach" to the nationality question in their readership.

The cleavage between Czechs and Slovaks persisted as a key element in the reform movement of the 1960s and the retrenchment of the 1970s—a decade that dealt roughly with the aspirations of Czechs and Slovaks alike still found the aspirations themselves to be distinctly different. Ethnicity was significant not simply as a point in an individual's self-identity (as second or third generation Americans might consider themselves Polish or Irish), or as a matter of folklore to be occasionally celebrated with traditional costume and dance but conveniently shelved in favor of more mundane matters the rest of the time. Ethnicity remained integral to the social, political, and economic affairs of the country.

Redressing the socioeconomic balance between the highly industrialized Czech lands and "underdeveloped" Slovakia has been a high priority since 1948. And although East European socialist statistical material is often not all a Western observer might wish, a number of trends are clear. Slovakia made major gains in industrial production in the 1960s and 1970s. In the early 1950s Slovakian industrial production was half that of the Czech lands; by the 1970s it was near parity. Although Slovak planners were quick to note that capital investment continued to lag, it was clear that Slovakia's share of industrial production had grown tremendously. Slovakia's portion of per capita national income rose from slightly more than 60 percent of that of Bohemia and Moravia in 1948 to nearly 80 percent in 1968, and Slovak per capita earning power equaled that of the Czech in 1971.

A general improvement in services, especially health and education, accompanied Slovakia's industrial growth. The number of physicians per capita rose from less than two-thirds that of the Czech lands in 1948 to parity in 1978. The number of students in higher education (per 1,000 inhabitants) increased from 50 to 132 percent that of Bohemia and Moravia from 1948 to 1978 (see Health and Social Welfare, this ch.).



Postwar political developments affected Slovaks less favorably. Party rule in Czechoslovakia took a particular ethnic bent that hardly favored Slovak desires for federation and national autonomy. Prominent Slovak Communists who had played major roles in the 1944 uprising—Gustáv Husák, Valdimír Clementis, and Ladislav Novomeský (pen name Laco Novomeský) among them—were tried and sentenced as "bourgeois nationalists" in the 1950s purges (see Stalinization, ch. 1). Although eventually Czechs too became victims of the purges, Slovaks remained convinced that Prague Stalinists were responsible for the trials. Neither the 1948 nor the 1960 constitution offered much scope for Slovak autonomy. In the 1960s Novomeský echoed the feelings and frustrations of many Slovaks when he commented that they had become "a tolerated race of vice-chairmen and deputy ministers, a second-class minority generously accorded a one-third quota in everything. . . ."

The regime of Antonín Novotný (first secretary of the KSČ, 1953–68) was frequently less than enlightened in its treatment of Slovakia. Novotný himself demanded "intolerant struggle against any nationalism" and suggested that the real solution to Czech-Slovak relations would be mass intermarriage between the two groups. It was a recommendation to deal with ethnic differences by eliminating them, and Slovaks found it all too typical of Prague's attitude toward them.

Political developments in the late 1960s and 1970s provided a portrait of Czech and Slovak differences. Slovak demands for reform in the 1960s reflected their dissatisfaction with Czech hegemony in government and policymaking. Whereas Czechs wanted some measure of political pluralism, the Slovak rallying cry was "No democratization without federation." It was less a difference in emphasis than a study in contrasts, and the Slovak focus was institutional change—"federalizing" the government apparatus with largely autonomous Czech and Slovak structures. Slovaks called for the full rehabilitation of the "bourgeois nationalists" and a reappraisal of the 1944 uprising (see Slovak Resistance, ch. 1).

Even economic demands split along ethnic lines, although there was considerable variation within both republics in response to calls for economic reform. Czech communist party planners called for implementation of the New Economic Model (NEM)—an integrated economic system allowing substantial autonomy for individual enterprises and intended to promote a general increase in efficiency (see The Reform Movement, ch. 1). Slovaks wished economic reform to be adapted to their region's particular needs. Rather than a single, integrated economic system, they had in mind parallel Czech and Slovak national economic organizations.

physicians per capita rose from less than two-thirds that of the Czech lands in 1948 to parity in 1978. The number of students in higher education (per 1,000 inhabitants) increased from 50 to 92 percent that of Bohemia and Moravia from 1948 to 1972 (see Health and Social Welfare, this ch.).

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The [illegible] (first secretary of the KSČ, 1953–68) was [illegible] less than enthusiastic [illegible] Novotný himself [illegible] "the decisive struggle against any [illegible] and so [illegible] that the real [illegible] of Czech-Slovak relations [illegible] [illegible] [illegible] to deal with ethnic differences by [illegible] Czechs and Slovaks [illegible] toward them.

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Czech reaction to their concerns further annoyed Slovaks. In the Czech view their own focus on the rehumanization of Marxism was universalistic, whereas the Slovak preoccupation with national autonomy was, in political scientist Robert Dean's phrase, "provincial and anachronistic"—certainly too trivial for those whose concern was "socialism with a human face."

The Constitutional Law of Federation of October 27, 1968, responded to the Slovak desire for autonomy. Significantly, however, the KSČ—the effective political force in the country—remained strongly centralized. Developments in the 1970s further vitiated the two republics' recently established government structures. KSČ efforts, although not necessarily motivated by anti-Slovak feelings, were heavily weighted in favor of centralization (see The Political Setting, ch. 4). A thoroughgoing adherence to Soviet dictates undermined autonomy as effectively as any overtly anti-Slovak sentiment might have.

Whatever the ultimate fate of federalization, its salience as an issue among Slovaks—the general populace as well as party members—gave an indication of how important the Czech-Slovak cleavage remained. A 1960s survey found that 73 percent of Slovak respondents supported federalism; 94 percent wished that Czech-Slovak relations might be restructured. A subsequent survey in the mid-1970s, when the new federal structures were in place, found that Slovaks thought the new government organization—in contrast to much of their historical experience—treated Czechs and Slovaks equally.

### Others

The roughly 6 percent of the population who are neither Czechs nor Slovaks have had an uneven history in the postwar era. The highly centralized rule of the KSČ undermined the political leverage that the First Republic's multiparty politics had permitted ethnic minorities. Beyond this, however, the sheer decrease in the German and Ukrainian populations of Czechoslovakia would have limited their influence in any event. The KSČ's policies on minorities within the party were virtually terra incognita.

The general tumult of the late 1960s brought calls for reform from ethnic minorities. Constitutional Act No. 144 (October 1968) defined the status of ethnic groups in Czechoslovakia and acknowledged the full political and cultural rights of legally recognized minorities. Minorities have the right, with state approval, to their own cultural organizations. The emphasis is on cultural activities: minority organizations have no right to represent their members in political affairs.

Hungarians are the largest enumerated minority ethnic group; over 600,000 Magyars were concentrated in southern Slovakia in the early 1980s. Despite significant anti-Magyar sentiment in Slovakia, the postwar exchange of Slovaks in Hungary for Hungarians in Slovakia met with only limited success; the proportion of Magyars in the population has changed little since 1930.



Although Hungarians were a distinct minority of the total population, they were highly visible in the border regions of Slovakia. There Magyars constituted nearly half the population of some districts. Further, a substantial minority (20 percent) lived in exclusively Hungarian settlements. Given Hungary's long domination of Slovakia, Magyar-Slovak relations have not been easy; the two groups were separated by substantial linguistic and cultural diversity. At their most extreme in 1968 some Magyars called for reincorporation into Hungary. This was apparently a minority view; Hungarian Warsaw Pact troops entering Czechoslovakia in 1968 encountered as much hostility from Magyars as they did from the rest of the population.

The expulsion of the Sudeten Germans was undoubtedly the single most dramatic change in Czechoslovakia's ethnic composition in the postwar period. Over 3 million Germans were included in the First Republic, constituting the largest German community in a non-German state. They were as well intensely pan-German and aggressively nationalistic. Their inclusion in the First Republic precipitated massive protests. Throughout the interwar period Sudeten Germans were acutely aware of their minority status within Czechoslovakia; the contrast with their former preeminence they found galling.

The large, often unabashedly secessionist German minority ultimately proved to be the undoing of the First Republic (see Munich, ch. 1). With their expulsion Czechoslovakia lost over one-fifth of its population. Some 165,000 Germans escaped deportation; they remained scattered along the country's western border in the former Sudetenland. Through the mid-1970s Germans represented a declining proportion of the population; younger Germans increasingly assimilated into Czech society or emigrated to the West.

Even those Germans who were not expelled after World War II lost their citizenship until 1953. In 1968–69 Germans demanded more German-language publications and mandatory German language instruction in regions with a substantial German minority. The 1968 Constitutional Act recognized Germans' legal status as an ethnic minority for the first time since World War II.

Poles (approximately 80,000 in mid-1980) were concentrated in the Ostrava mining region on the northern border. In addition to a large community of resident Poles, substantial numbers commuted across the border from Poland to work or to take advantage of the relative abundance of Czechoslovak consumer goods. Official policies toward the Poles—resident or not—have attempted to limit their influence both in and out of the workplace. In 1969, for example, a Czech journal reported that a primarily Polish-speaking district in the Ostrava region had been gerrymandered to create two districts—each with a Czech majority.

Czechoslovak officialdom considered Polish influence in the workplace an insidious danger. The "seepage" from more liberal Polish regimes had concerned Czechoslovak Communists since the

design limitations and the long period required to complete investment projects. Data revealed during the late 1960s indicated that construction time was often double and sometimes triple that required in Western Europe, freezing funds in uncompleted projects for inordinate amounts of time and frequently rendering the equipment nearly obsolete before it began operation. This continued to be a problem in 1981. Old equipment was retired slowly. In 1976 about one-third of industrial equipment was more than fifteen years old, and some of it had been in use since before World War II. This contributed to the low productivity of Czechoslovak workers compared with their counterparts in Western Europe.

Officials' freedom of action to remedy deficiencies in the industrial sector was somewhat restricted because machinery was the country's main export. During the 1970s Czechoslovakia signed specialization and joint investment agreements with other Comecon members that committed the country to specific long-term obligations in particular production branches, partly to ensure the inflow of energy and raw materials. The multilateral nature and importance of the commitments made them more significant than most foreign trade contracts. During the 1970s officials attempted to carry out the investments and production changes to meet these commitments.

At the same time the government introduced several measures intended to correct the deficiencies in the industrial sector. Laws introduced in 1971 (which entered into effect in 1975) granted limited powers and a degree of decentralization to intermediate levels of administration between ministries and production enterprises. The intermediate level consisted of associations (no longer voluntary as in 1968) of industrial enterprises in the same or closely related branches, which in effect acted as cartels or trusts in terms of management. The intent was to reduce overhead expenditures such as planning and research while promoting innovation and technological development. Changes were also introduced in the wage and price systems to try to improve efficiency, but the effects of the various measures were modest, and the perennial problems of Czechoslovakia's economy reemerged. By the early 1980s the level of technological innovation remained low, unsold products swelled existing stocks, conservation of energy and materials was lower than planned, and the trade balance deteriorated, partly because of external factors. Many economists compared the situation to the 1960s in regard to the need for economic reforms. In 1981 a new set of measures was introduced, after an experimentation period in the late 1970s, to try to correct the deficiencies without giving up directive planning and party control (see The Seventh Five-Year Plan, 1981–85, this ch.).

## Agriculture

Even before World War II industrialization in Czechoslovakia



had substantially diminished the relative importance of agriculture in the economy. In 1937 agriculture's share of GNP was about 29 percent compared with 31 percent for industry. Under communist rule agriculture was reorganized and assigned a priority substantially below that of further industrialization. Partly because of this, agricultural output grew slowly, not regaining prewar levels of production until the 1960s. Officials became increasingly concerned with agricultural output, but the sector's share of GNP continued to decline—from 24 percent in 1950 to a little above 16 percent in 1979.

The official index of gross agricultural output (in constant 1967 prices) stood at 96 percent in 1960 and 97 percent in 1965 compared with 100 percent in 1936. By 1975 the official index had increased to 139, an average annual increase of 3.6 percent a year between 1965 and 1975. Between 1975 and 1980 gross agricultural production rose 9 percent according to preliminary estimates, an average increase of 1.8 percent a year; the lower rate was partly caused by two years of unfavorable weather.

The planners had several reasons for stimulating agricultural production. One important reason was the pressure that rising imports of agricultural products exerted on the country's balance of payments in the 1960s. This pressure increased in the 1970s with the rise in prices of agricultural commodities on world markets. In the 1980s the planners sought near self-sufficiency in food and fodder production to limit the costs of imports.

### Land Use

The total land area of Czechoslovakia is nearly 12.8 million hectares, of which over 7 million is considered agricultural land. Agricultural activity was spread throughout the country. In 1978 normal cropland (arable) amounted to 4.9 million hectares; fields for hops, 12,000 hectares; vineyards, 45,000 hectares; meadows, 866,000 hectares; and pastures, 84,000 hectares. Over 5.8 million hectares were classified as nonagricultural, including 4.5 million hectares of forests. Lakes and ponds in which fish were raised accounted for 53,000 hectares. Urbanization and industrialization have slowly but steadily diminished the amount of agricultural land; it declined by over 600,000 hectares between 1948 and the late 1970s.

Agriculture depends primarily on rainfall for moisture, which is usually adequate, although occasional variations in amount and timing adversely affect cropping (see Climate, ch. 2). In 1980 irrigation facilities existed for over 500,000 hectares, a little over 10 percent of the arable land. Over one-fifth of the irrigation facilities had been developed since 1975. Officials indicated that irrigation cost a minimum of Kčs18,000 per hectare, an expensive investment. In addition in 1980 the country had 630,000 hectares of waterlogged land that required drainage before it could be cropped. Beginning in 1975 about 60,000 hectares a year were drained. The 1981–85 plan proposed to expand irrigation by 160,000 hectares and to drain

290,000 hectares over the five-year period in spite of the costs because there was very little new land that could be brought under cultivation at a lesser cost.

### Organization of Agriculture

Before the KSČ gained control of the government, Czechoslovak agriculture consisted primarily of small- to mid-scale family farms with an efficiency on a par with most of Europe. After World War II officials assured farmers that they would not be forced onto collective farms. The KSČ reversed this policy in 1949, and collectivization was essentially completed by the end of the 1950s. Until the early 1970s the state sector consisted of relatively small production units, but they were much larger than the privately owned farms of the presocialist era. The cooperative farms (or collectives), the most important farm organization, were primarily formed from the farms around a single village. Only some of the villagers were farmers, however; most were engaged in industry and other nonfarm employment. As part of collectivization the government became the almost exclusive supplier of inputs and the primary purchaser of farm produce, a position calculated to dominate the farming communities.

In legal terms members of cooperatives retained title to their land and had a voice in management of the cooperative. In reality land titles became meaningless; management of the cooperatives was essentially controlled by the party and directed toward executing the plan at the village level. Farmers suffered under the collectivization drive and the government policies of the 1950s. Large numbers of farmers, particularly the young, left agriculture for favored industrial jobs. Workers permanently employed in agriculture numbered 1.8 million in 1955 and 1 million in 1979. By the 1960s the active farm population consisted largely of women and older men (see Agricultural Workers, ch. 2). Falling productivity and the need to increase farm output to reduce imports focused official attention on agriculture. Farm prices were raised, and social benefits were extended to the countryside. By the 1970s many urbanites believed that the farm population was in a favored position. As a result of the improvement of farm life already gained by farmers and their skepticism regarding change—particularly that imposed by officials from above—the economic reform movement of the late 1960s did not provoke any overt interest by farmers in a return to private farming. Collectivized agriculture remained the accepted mode of organization.

In 1975 some 6.5 million hectares of the 7.1 million hectares of agricultural land were in the socialist (see Glossary) sector. Collective farms held 4.2 million hectares, and state farms held 2.1 million hectares. Private farmers owned only 404,000 hectares, consisting largely of small farms in the hill country of Slovakia (see fig. 1). Members of cooperative farms were permitted to work private plots of one-half hectare or less and to maintain some livestock. Such



private plots reached a peak of popularity in the early 1960s. Private plots accounted for 355,000 hectares in 1960 but only 171,000 hectares by 1975. Production from private plots was minor and was primarily a food source for the cultivator.

Government officials sought to develop large-scale farming to benefit from modern technologies and powerful farm equipment. Consolidation of farms slowed during the 1960s for several reasons, but in the 1970s amalgamation accelerated rapidly. In 1970 there were 6,381 cooperative farms and 341 state farms with an average size of 622 and 6,173 hectares respectively. By 1978 there were only 1,779 cooperatives and 162 state farms, but their average size had increased to 2,426 and 8,700 hectares respectively. After 1978 mergers nearly ceased. In 1981 there were 1,740 cooperative farms, averaging 2,481 hectares, and 162 state farms, averaging 8,900 hectares. Most of the cooperatives encompassed several villages and raised a variety of crops and livestock. Several of the cooperatives and state farms were quite large and involved diverse activities requiring a complex organizational structure.

Government policy encouraged cooperation and specialization among agricultural units. Both informal and formal arrangements have been carried out. Mutual aid in terms of machinery or for particular tasks had long been practiced among neighboring farms, and this continued in the 1970s. More formal arrangements began in the 1960s and expanded in the 1970s under the name of Joint Agricultural Enterprises (sometimes cited as JAE), entities similar to stock companies. In early 1978 there were 357 JAEs, some of which specialized in such activities as fattening hogs or cattle, egg production, or drying and production of feed mixtures. Some offered agrochemical, construction, land-improvement, or marketing services. A large number engaged in multiple activities, including twenty-one that provided a variety of services to meet most of the needs of farms located in a single administrative district. The enterprises were particularly important in the supply of pork, poultry, and eggs.

Despite official encouragement, such rigidities in the economic system as plan targets, limitations on the number of employees and their wages, and restrictions on independent capital expenditures constrained the flexibility and responsiveness of farm management to the country's needs. The government's pricing policy, among other things, limited the supply of whole milk, and the slow adoption of new techniques by the food processing industry restricted the market potential for several agricultural products. Nonetheless, during the 1970s the supply and marketing relationships between farm units and other parts of the economy expanded, but by the early 1980s they had not reached the level attained in many West European countries. Observers noted unexploited opportunities where greater specialization in farm production could have increased output and incomes and where more vertical links between farm units and suppliers and processors could have facilitated agricultural development.

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Government and party officials viewed the growth of farm size as a mixed blessing. On the positive side it centralized control even more; concentrated land, labor, and capital to benefit from economies of scale and specialization; and diversified the risks inherent for smaller farms. Potentially negative effects included diminished interest, work, and productivity by individual farmers because of the size and complexity of the organization; much higher transportation costs because of the larger area served; and the critical need to have competent managers and staff.

Czechoslovak soil and climatic conditions required crop rotation and diversification of activities in order to minimize risks. The government intent, as expressed in the laws of 1971, was to promote cooperation among small farm units in order to achieve more specialization. Some economists suggested that the amalgamations of the 1970s were the response of farm managers to the risky official specialization policy, which would have reduced the farms' diversified activities. In any event subsequent laws authorized and regulated the rapid mergers of state and cooperative farms. By the 1980s some observers believed that farm size had progressed beyond current economic needs, inducing some diseconomies of scale.

Management of most large farms is organized hierarchically on three levels. A board of management consisting of a director and a staff of specialists is responsible for the operations of large state farms. On large cooperative farms an assembly of members or their elected representatives is legally responsible for farm operation, although a committee and its chairman carry out daily management of operations. In practice, however, the assembly functions largely to ratify decisions already made by the chairman, who is usually approved by the party. As cooperative farms increased in size, the authority of the assembly of members declined further. Management became concentrated in "boards of economic management," which consisted of the chairman and a staff of experts on various operations.

The second echelon of management in large cooperatives or state farms had responsibility for smaller operations in either an area or a particular branch of production. Area divisions are basically subfarms, in which a degree of specialization occurs in the crops cultivated. Smaller cooperatives or large farms that have less diversified production are more apt to be organized by branches of production. The third level of management organizes the labor force that performs the farmwork such as the field brigades. The director of a state farm or the chairman of a cooperative is the focus of actual power, and the subordinate levels are severely restricted in their decisionmaking. Large, heavy machinery is often assigned to a centralized brigade on the farm, but smaller or special-purpose equipment may be issued to the field brigades that will use it in their work.

The quality of management has become more critical with the increase of farm size. In the late 1970s eight very large state farms, averaging nearly 48,000 hectares of agricultural land each, were responsible for nearly all of the agricultural activity within each of the eight administrative districts in which these "district" farms were located. In the late 1970s one of the most successful cooperative farms cultivated 6,130 hectares in seventeen villages with a labor force of 1,480, including fifty-seven university graduates. Despite the farm's large holdings of land and livestock, only 19 percent of its income came directly from farming. Another 17 percent came from activities related to agriculture, and 64 percent of its income came from such activities as construction, transportation, marketing, industrial production, forestry, and woodworking. The cooperative operated a large supermarket in a nearby town, for example.

*Carlsbad Resort*
*Courtesy Eugene C. Robertson*

The size and complexity of the large farms, compared with the smaller units in Western Europe, hampered the flexibility of their managers. In addition the state plan and its targets, which extended even to the farm level, imposed a relatively rigid production structure on the managers. Moreover the availability of machinery, fertilizers, and feed for livestock was partly beyond the control of farm managers. Although mechanization increased substantially after the early 1960s, including larger and more powerful equipment, many observers noted that the level of farm mechanization in Czechoslovakia

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was below that of the more productive countries of Western Europe. In addition serious difficulties in the supply of parts and in repairs limited the use of the equipment. Czechoslovakia ranked, along with East Germany, foremost among the communist countries in the use of fertilizer. In 1979 Czechoslovakia applied about 245 kilograms of chemical fertilizer (in terms of mineral content) per hectare of agricultural land, a little less than some countries of Western Europe. Domestic industry supplied the bulk of the fertilizer used in the country. Czechoslovakia was dependent on imports for part of its grains, fodder and, especially, protein supplements for livestock feed mixtures.

The government set prices for nearly all inputs and production in the agricultural sector. In the 1950s prices paid for farm produce were kept low, partly to extract workers and investment funds for the expansion of industry. Since the early 1960s prices of farm inputs and output have been raised in such a manner as to raise farm incomes. By the early 1970s the average farm income reportedly had reached parity with that of urban white-collar workers. Despite the price increases the state subsidized various inputs and at least some retail food prices. Many state farms required budget subsidies to operate because of various constraints and low productivity. Price adjustments were frequently used to enforce policy decisions. In 1980, for example, farm prices of beef and dairy products were raised 16 percent on an average, while retail prices remained the same to encourage production and consumption of these products. Producer prices for pigs, poultry, and their feed were adjusted to make them less profitable than cattle.

Some economists argued that the rapid rise in the demand for high-quality diets and the large proportion of individual consumption expenditures on food was the result of the low, subsidized retail prices for agricultural produce compared with manufactured consumer goods. The contention of these economists was that until relative prices were adjusted to reflect costs and scarcity, demand would exceed supply for agricultural products, particularly meat and dairy products. But Czechoslovak planners were sensitive to the political difficulties of adjusting relative prices—they were aware, for instance, that Poland had several troublesome episodes when meat prices were raised. Even though meat and dairy product prices had been increased substantially over the years, Czechoslovak consumers had not reacted as violently as the Poles, but the adjustment of prices remained a problem with potentially severe repercussions.

## Cropping Pattern and Production

Crop cultivation has slowly become less important in the gross output of the agricultural sector. Cropping and livestock were almost equal branches in 1960, but by 1979 crops accounted for 43 percent of gross agricultural output compared with 57 percent for livestock products.

In 1978 slightly more than half of the cropped area was sown with grains. Bread grain, mostly wheat, accounted for nearly 1.5 million hectares while acreage in coarse grains was about 1.2 million hectares. After 1960 there was only a small increase in the grain acreage, but there were pronounced shifts in the grains cultivated. Wheat expanded at the expense of rye, reflecting the government's price policy and changing dietary habits. Barley acreage increased from about 700,000 hectares in 1960 to 900,000 hectares in 1978.

The remaining acreage was devoted to a variety of crops, of which clover, alfalfa, and other fodder were the most important. Potatoes and sugar beets had long been major crops, but their importance has been declining because of the government's pricing policies and a shortage of manpower and machinery. Potato acreage dropped from 569,000 hectares in 1960 to 220,000 hectares in 1978; the decline of sugar beets was less precipitous. Land used to plant hops, an important export crop, increased from about 8,000 hectares in 1960 to nearly 12,000 hectares in 1978. Fruit and vegetable acreage also increased but accounted for only a small part of the cultivated area.

As the amount of agricultural land has diminished slowly, expanding output has had to come from higher yields. Official data show increasing yields for almost every crop but reveal a wide divergence in the rate of increase. Wheat yields increased from 2.3 tons per hectare in 1960 to 3.6 tons in 1975, reflecting improved seeds and increased use of fertilizers. In contrast, yields for sugar beets improved only slightly, rising from 34.6 tons per hectare in 1960 to 35.6 tons in 1975.

The small amount of irrigated land makes crop production heavily dependent on weather conditions. During the 1976–80 plan period, drought conditions in 1976 and 1979 seriously reduced crop output, causing total crop production to fall 7 percent below the plan target. Grain production reached a record level of 10.9 million tons in 1978 but fell to 9.2 million tons in 1979 (see table 9, Appendix A). Planned grain production for 1980 was 11 million tons. In the late 1970s about 2.3 million tons of wheat and about 4 million tons of all grains were for human consumption; the remainder of grain production was used for livestock feed. The country imported some 1 to 2 million tons of grains depending on the harvest, most of it for livestock feed.

## Livestock

Since the 1950s the supply of livestock has gradually increased as a result of government encouragement to meet the demand for meat that accompanied the rise in incomes. The number of cattle increased from 4.1 million in 1955 to 4.9 million in 1978. Over the same period the number of pigs increased from 5.3 million to 7.6 million and poultry from 23 million to 47 million. Sheep, of which there were fewer than 900,000, were largely confined to hilly areas with poor pastures and were raised by private farmers. Although older sheep were slaughtered for meat, wool was the primary product;

grains. Bread grains, mostly wheat, accounted for nearly 1.5 million hectares, while acreage in coarse grains was about 1.2 million hectares. After 1960 there was only a small increase in the total acreage, but there were pronounced shifts in the grains cultivated. Wheat remained at the [illegible] [illegible] [illegible] [illegible] [illegible] barley, which [illegible] changing [illegible] [illegible] [illegible] from about 464,000 hectares in [illegible] to 900,000 hectares in 1978.

The [illegible] acreage [illegible] [illegible] of crops of which clover, alfalfa, and other fodder crops were most important. Potatoes and sugar beets had also been major crops, but their [illegible] [illegible] [illegible] [illegible] the [illegible] [illegible] [illegible] [illegible] [illegible] demand for potatoes or rapeseed [illegible] Potato acreage dropped from 460,000 hectares in 1960 to 200,000 hectares in 1978; the [illegible] [illegible] was [illegible] [illegible] land used [illegible] [illegible] an important export crop, increased [illegible] about 80,000 hectares in the [illegible] to [illegible] 120,000 hectares in 1978, and vegetables remained [illegible] accounted for only a small part of the cultivated area.

[illegible] amount of agricultural land had diminished slowly, expanding output has had to come from [illegible] yields. [illegible] had increasing yields for almost every crop but revealed a wide divergence in the rate of increase. Wheat yields rose from 2.3 tons per hectare in 1960 [illegible] tons in 1975, reflecting improved seeds and increased use of fertilizers. In contrast, yields for sugar [illegible] [illegible] [illegible] slightly, rising from 14.0 tons per hectare in 1960 [illegible] 15.6 [illegible] [illegible] 1975.

The small amount of irrigated land makes crop production heavily dependent on weather conditions. During the 1976-80 plan period drought conditions in 1976 and 1979 severely reduced crop output, causing total crop production to fall [illegible] percent below the plan target. Grain production reached a record level of 10.9 million tons in 1978 but fell to 9.2 million tons in 1979 (see table 1, Appendix A). Planned grain production for 1981 was 11 million tons. In the late 1970s about [illegible] 3 million tons of wheat and about 4 million tons of all grains were for human consumption; the remainder of grain production was used for livestock feed. The country imported some 1 to 2 million tons of grains depending on the harvest, most of it for livestock feed.

## Livestock

Since the 1950s the supply of livestock has [illegible] [illegible] increased as a result of government encouragement to meet the demand for meat that accompanied the rise in income. The number of cattle increased from 4.1 million in 1950 to 4.6 million in 1978. [illegible] the same period the number of pigs rose from [illegible] 3 million to 7.6 million and poultry from 23 million to [illegible] million. Sheep, of which there were fewer than 850,000, were largely confined to hill areas with poor pasture and were raised by private farmers. [illegible] [illegible] of [illegible]

[illegible] countries of Western Europe. [illegible] [illegible] supply of parts and in [illegible] [illegible] Czechoslovakia ranked among [illegible] among the continental countries in the Czechoslovakia applied about 215 [illegible] the terms of nutrient content) per [illegible] [illegible] less than some countries [illegible] [illegible] applied [illegible] [illegible] of the [illegible] [illegible] was dependent on [illegible] [illegible] especially protein supple-

[illegible] all meat and producti[illegible] [illegible] prices paid for [illegible] [illegible] [illegible] [illegible] meat [illegible] [illegible] [illegible] prices of farm supplies [illegible] [illegible] farm [illegible] [illegible] [illegible] especially had [illegible] similar numbers [illegible] the [illegible] that at least some [illegible] subsidies to [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] were [illegible] retail prices remained the [illegible] [illegible] of these goods [illegible] and therefore were [illegible] to [illegible]

[illegible] the rapid rise in the demand for [illegible] of individual [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] of the economy was that until [illegible] costs and scarcity, demand [illegible] [illegible] particularly meat [illegible] [illegible] were sensitive to the [illegible] [illegible] prices—they were [illegible] [illegible] [illegible] [illegible] [illegible] when [illegible] [illegible] [illegible] their product prices [illegible] over the years. Czechoslovak [illegible] [illegible] [illegible] but in adjustment with potentially set up repercussions.

production was usually below 4,000 tons a year, supplying a small part of the 24,000 tons of wool the country processed in 1979. The number of horses had fallen sharply since the 1950s, numbering only 62,000 in 1975.

Keeping a few animals had long been a part of Czechoslovak farm life. In 1981 members of cooperative farms were still permitted to have private plots and maintain a few animals, but relatively few did so. After the collectivization of agriculture, raising livestock became increasingly a large-scale operation, usually undertaken in conjunction with cropping. In the 1970s the trend was toward larger barns with more animals, reflecting the official policy of specialization and such economies of scale as the intensive use of milking machines.

The major constraint to livestock expansion has been a shortage of fodder and feed mixtures, although government pricing policies and the labor demands of much of animal husbandry also contributed. During the 1970s progress was made in expanding the supply of and facilities for the processing of fodder and feed mixtures. But the supply of feed and fodder was supplemented through imports that became an increasing burden because they came from noncommunist countries and thus required payment in convertible currencies. In the 1980s the planners hoped to raise agricultural output and adjust it to meet expanding livestock requirements without requiring imports or prejudicing other essential domestic farm products.

Unfavorable weather can have a direct and pronounced effect on conditions for livestock. In 1979 a drought and other unseasonable climatic factors combined greatly to reduce crop production and pasture conditions. Crop output fell by 9 percent (grains by 20 percent), limiting the increase in the livestock sector to 0.2 percent during the year. Even with large grain imports, the limited feed supply reduced the planned expansion of milk production, reduced the weight of animals for slaughter, and adversely affected the planned growth of the livestock population.

For several years Czechoslovakia's meat consumption has been growing; in 1979 it was eighty-four kilograms per capita, among the highest in Europe. Demand for meat has grown faster than grain production. By 1980 grain for feed exceeded 7.5 million tons, and nearly 4 million tons were used for other purposes. The country's total grain consumption exceeded 11.5 million tons, more than domestic harvests had ever produced. In addition domestic sources accounted for only about 25 to 30 percent of the protein used in mixed feeds, which amounted to about 8 million tons. Imports, primarily soybean meal from the United States and small quantities of ground fish, supplied the bulk of protein supplements.

Hogs were a common farm animal and constituted the population's main source of meat. In 1979 pork consumption was forty-three kilograms per capita, more than half of all meat consumed. Price adjustments and other measures introduced at the beginning of 1980 were intended to diminish the profitability of hog raising and



The planners viewed cattle raising as a more efficient use of the country's feed stocks, hence the favored treatment in the 1980 adjustment of prices. The intent was to expand the supply of both dairy products and slaughter animals. In 1979 nearly 40 percent of the cattle population consisted of milk cows. The average cow produced 2,956 liters of milk a year, a relatively low yield. In 1979 about 28 percent of the 4.9 billion liters of milk entering commercial channels was sold as fresh milk. The bulk was processed into such products as butter and cheese. In 1977 production of beef and veal amounted to 365,000 tons, an average per capital consumption of nearly twenty-seven kilograms.

After the 1950s intensive poultry production grew rapidly as a separate operation on cooperatives and state farms and through the formation of JAEs. In 1979 per capita consumption of poultry was nearly eleven kilograms. Production and consumption of eggs rose during the 1970s, and in 1979 over 15 percent of production was exported. Poultry raising also faced feed constraints; the 1980 adjustment of prices reduced the profitability of chicken farms.

END OF EXCERPT

## Transportation

Czechoslovakia has a highly developed transportation system consisting of 13,186 kilometers of railroad tracks, 73,677 kilometers of roads, and 483 kilometers of inland waterways (see fig. 16). In 1975 some 98 percent of all villages and towns were within two kilometers of a railroad or bus station. The state owned and subsidized the means of transport, and passenger fares were among the lowest in the world.

Even though the country had an extensive road and rail network, transportation constituted a bottleneck in the economy because of low operating efficiency. In the late 1970s this sector was blamed for part of the failure to achieve the goals of annual plans. The difficulties of the railroads stemmed largely from inadequate additions of new equipment and poor maintenance of tracks and rolling stock, partly caused by the lack of spare parts, insufficient skilled workers, and the constant pressure to keep operating. Maintenance tended to be postponed until a breakdown forced repair. The road system suffered from a lack of funds and other deficiencies. Maintenance was inadequate, and the country was slow to develop modern highways. Only in 1980 was a modern highway completed linking the three largest cities (Prague, Brno, and Bratislava), a distance of 317 kilometers. This highway, started in 1938, was left uncompleted between the early 1940s and the late 1960s when the results of neglect of road construction could no longer be ignored. The project was assigned priority and scheduled to be finished by 1972, but the slow pace of construction held up completion until November 1980. Most of the rest of the road system was typical of several decades ago and was in a poor state of repair. Highway cargo movement increased rapidly in the 1960s and 1970s, doubling between 1970 and 1979.

American Embassy-Prague, "Economic Trends Report: Czechoslovakia." April 1991.

# 1991 ECONOMIC TRENDS REPORT
# CZECHOSLOVAKIA

April 1991

PREPARED BY:
AMERICAN EMBASSY PRAGUE

## KEY ECONOMIC INDICATORS: CZECHOSLOVAKIA

**Average Official Exchange Rates***

1991: US$ = 29 Czechoslovak Crowns (Kcs)
1990: US$ = 17 Czechoslovak Crowns (Kcs)
1989: US$ = 14.9 Czechoslovak Crowns (Kcs)

| Indicator | Units or Value | 1988 | 1989 | 1990 |
|---|---|---|---|---|
| National Income (1984 Prices) | Kcs billion | 576.5 | 576.3 | 558.2 |
| Growth in NI | percent | 2.8 | 0.0 | -3.1 |
| Income per capita | U.S.$ | 10,130 | | |
| Investment | Kcs billion | 178.6 | 177.1 | 193.3 |
| Labor Force | million workers | 7.5 | 7.5 | 7.4 |
| **Basic Industrial Output** | | | | |
| Hard Coal | mill. metric tons | 25.5 | 25.1 | 22.4 |
| Brown Coal | mill. metric tons | 96.4 | 90.9 | 82.0 |
| Electricity | bill. kilowatts | 87.4 | 89.2 | 86.6 |
| Crude Steel | mill. metric tons | 15.4 | 15.5 | 14.9 |
| Rolled Steel | mill. metric tons | 11.0 | 11.4 | 11.0 |
| Trucks | mill. metric tons | 50.5 | 50.5 | 47.5 |
| Foreign Trade (Czechoslovak data in Kcs billion) | | | | |
| Total Imports | | 214.3 | 214.7 | 238.2 |
| Non-convertible currency countries | | 135.8 | 131.7 | 111.0 |
| Convertible currency countries | | 78.5 | 83.0 | 127.2 |
| Total Exports | | 218.9 | 217.5 | 215.3 |
| Non-convertible currency countries | | 142.1 | 130.0 | 100.8 |
| Convertible currency countries | | 76.8 | 87.5 | 114.5 |
| **U.S.-Czechoslovakia Trade** (U.S. data in millions of U.S. dollars) | | | | |
| Total Trade | | 142.7 | 140.7 | n/a |
| U.S. Exports | | 55.1 | 53.7 | n/a |
| Agricultural | | 15.4 | 18.0 | n/a |
| Nonagricultural | | 39.7 | 35.7 | n/a |
| U.S. Imports | | 87.6 | 87.0 | n/a |
| Agricultural | | 7.3 | 7.8 | n/a |
| Nonagricultural | | 80.3 | 79.2 | n/a |

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* Rates are fixed to a basket of currencies so the dollar rate may vary. In 1990 there were two rates: a commercial rate (given in the table) and a tourist rate of 35 crowns per dollar. Prior to January 1989 several exchange rates existed and the commercial rate had to be multiplied by a co-efficient of 2.5.

## ECONOMIC TRENDS REPORT: CZECHOSLOVAKIA

### SUMMARY

In 1991 Czechoslovakia embarked on extensive economic reforms with the aim of transforming itself into a modern market economy. Major reforms which have already been implemented include liberalization of foreign trade and investment, removal of restrictions on private enterprise, creation of a framework for privatizing large and small enterprises, price liberalization, and partial convertibility. The government has combined these reforms with a strict, restrictive fiscal and monetary policy designed to keep inflation under control while the economy adjusts to new conditions.

The path of economic reform and restructuring has been complicated by external developments. With the disintegration of CMEA, Czechoslovakia has had to pay more for its raw materials imports from the Soviet Union and has lost most of its markets in the former East Bloc countries. Despite some increase in trade with developed market countries, Czechoslovakia's exports fell and imports rose, resulting in shift from a trade surplus in 1989 to a deficit in 1990. A deficit is also expected in 1991. Loans from the IMF and other international organizations will help to cover the expected increase in foreign debt.

As a result of these external shocks, as well as other factors, industrial production declined, especially in heavy industry and construction. National income also declined. Private enterprises, particularly in the service sector, burgeoned, but most private firms are still very small, usually only part time. Tourism was one of the brightest spots in the economy, with an increase of over 50 percent. Saving declined, but investment in equipment rose. Unemployment increased, although it is still very low by Western standards. The removal of many consumer subsidies and price liberalization led to price increases. Nominal wages rose, but did not keep up with the rise in prices.

### CURRENT ECONOMIC SITUATION

During 1990 the economic decline which started in 1989 (by some measures even earlier) continued in Czechoslovkia. Net national income declined by 3.1 percent and gross material product by 2.3 percent. However, the Federal Office of Statistics did an experimental calculation of gross national product, including services, which showed an increase of 3.7 percent. The difference may be due to inflation and to

a boom in tourism and the growth of other services, especially in the private sector, which was legalized in April 1990. At the end of 1990, 488,400 entrepreneurs were registered, but most of these were only active part-time. Most private enterprises are in the fields of services -- construction, repairs, trade and tourism.

Inefficiency in the use of raw materials and energy, low productivity, slow application of new technologies and low quality of production continue to plague the economy. In addition, for the first time there has been significant price rises and unemployment. Unemployment reached 1 percent at the end of 1990 and has risen rapidly during the first months of 1991. Retail prices rose by 10 percent during 1990. After price liberalization in January 1991, prices rose by 25 percent, but the growth in prices slowed to 7 percent in February 1991 and was expected to drop to 4.7 percent in March. However, other price shocks are expected. On May 1, fuel and heating prices are schedule to increase sharply and housing subsidies may be reduced or eliminated later this year.

<u>INDUSTRY.</u>

Czechoslovakia is traditionally an industrialized country. In 1988, approximately 38.5 percent of employees worked in industry, compared to 29.2 percent in Hungary and 29.7 percent in Poland. Under the previous Communist regime, Czechoslovakia became oriented towards heavy industry. For example, in 1989 Czechoslovakia produced 15,465,000 tons of crude steel, about a ton per citizen.

These heavy industries depend on imports of cheap raw materials and energy from the Soviet Union and on export markets in Eastern Europe and the USSR. Since the disintegration of Council for Mutual Economic Assistance (CMEA), Czechoslovak industries must pay world prices and hard currency for their raw material imports and have great difficulty finding customers for their products. As a result, many enterprises face serious difficulties. Light industries are generally in better shape, although some of these industries were also dependent on exports to CMEA countries.

Industries were also hit in 1990 by the strict financial and monetary policies of the government and by disruptions in energy supplies in the latter half of the year. Financial stringency and loss of Eastern markets continue to affect production in 1991. In addition, privatization, while ultimately likely to benefit the economy, may disrupt production in the short run as enterprises struggle to adjust to market conditions.

In 1990 industrial production dropped by 3.7 percent. Slovakia, with an 4.2 percent industrial decline, suffered more than the Czech Republic, with a 3.5 percent decline. Slovakia has a greater concentration of enterprises which are dependent on the Soviet Union for markets and raw materials. It also has more arms manufacturers which have been hit by the successes of arms control and the new government's policy of reducing sales. This decline continued in the first two months of 1991; production was down by 6.7 percent compared to the same period in 1990. Again Slovakia's decline has been greater -- 10.2 percent in January 1991 contrasted to 4.9 percent in the Czech Republic.

CONSTRUCTION, INVESTMENT AND STOCKS.

The construction industry declined in 1990 by 5.6 percent and in the first two months of 1991, by 33 percent. Housing construction fell by 22 percent in 1990. The fall in construction is attributed to the government's strict budget cutbacks leading to less money for housing, schools, and other government projects. Many workers left the construction industry. The decline in construction may be less than the official figures indicate, because a number of small, private companies have sprung up and their production may not be fully reflected in official statistics. Despite the fall in construction, overall investment rose by 5.7 percent in 1990. A 17.1 increase in machinery and equipment compensated for the fall in construction. Stocks grew by 7.7 percent in 1990, compared to 1.7 percent during the previous year.

AGRICULTURE.

In contrast to some of its neighbors, Czechoslovak agriculture was almost entirely collectivized. During the decade before the Velvet Revolution, Czechoslovakia had succeeded in becoming self-sufficient in most temperate climate crops, but at a heavy cost in subsidies. The countryside prospered as a result, all the more so because cooperatives were permitted to diversify into various light and service industries. The new government, in keeping with its market orientation, plans to gradually eliminate subsidies to agriculture and to privatize the agricultural sector. However, the land law, which would restore the rights of the original landowners and restructure cooperatives, had not been passed by April 1991.

In 1990 gross agricultural production fell by 3.7 percent. This decline was not evenly reflected in all crops. The crop of cereals rose by 4.3 percent. However, potato production fell by 17.2, causing a shortage which was alleviated by imports. Milk production fell by 2.4 percent and meat production by 1.2 percent. Price liberalization led to higher retail prices for many foodstuffs, especially dairy products and meat, and lower demand.

ENERGY.

Czechoslovakia is almost completely dependent on the Soviet Union for supplies of oil and natural gas. It is self-sufficient in refining capacity. In 1989, Czechoslovakia imported 17,632,000 metric tons of crude oil, but in 1990, this amount was sharply cut to 13,354,000 metric tons, a fall of almost a quarter. As a result, Czechoslovakia stopped exports of petroleum products and raised domestic prices. In December 1990, Czechoslovakia began to import small amounts of crude oil from Iran. No problems occurred in supplies of natural gas; imports from the USSR rose by 9.6 percent in 1990.

The largest part of Czechoslovakia's electrical production comes from highly-polluting, coal power plants, but a significant proportion is from nuclear generators. In 1990, Czechoslovakia generated approximately 87 billion kwh of electricity, of which 25 billion came from nuclear generators. Czechoslovakia has extensive coal reserves, mostly brown coal. In 1990 coal production was 107,573,000 metric tons, down by 9.9 percent from 1989.

The government's aim is to diversify energy sources and to integrate into the European energy market. They plan to build new pipelines connecting with the West. Currently, Czechoslovakia depends on pipelines linked with the Soviet Union. The government also plans to connect with the West European electricity network, if technical difficulties can be worked out. These plans are, however, dependent on obtaining capital. For environmental reasons, the government expects to reduce the use of coal and increase use of natural gas. Nuclear energy production will probably also increase as a less environmentally-damaging alternative to coal.

## INCOME, CONSUMPTION AND SAVINGS.

Under the Communist regime, the material living standard of Czechoslovak citizens was one of the highest in the Eastern Bloc. The selection and availability of consumer items was good by Eastern European standards. However, compared with Western Europe, Czechoslovakia, which had had one of the highest standards of living in all of Europe before World War II, was falling further and further behind.

The government reduced subsidies and raised prices of many consumer goods in July 1990. Retail prices rose 10 percent in 1990, compared to 1.4 percent in 1989 and 0.2 percent in 1988. Nominal incomes also increased rapidly, by 8.7 percent. The average monthly gross nominal wage of workers in the state and cooperative sector rose by 3.8 percent (to 3,380 crowns); the average net wage (after the deduction of taxes) was 2,755 crowns. However, the cost of living rose faster: by 9.9 percent for workers and employees; 10 percent for peasants and 10.2 percent for pensioners. Real wages decreased by 5.6 percent.

Expenditures increased by 12.3 percent in 1990. The index of savings fell to only 0.3 percent, compared to 3.5 percent in 1989 and 3.7 percent in 1988.

## FOREIGN TRADE.

Czechoslovak figures for 1990 trade show a sharp drop in trade with centrally-planned economies and a rise in trade with the developed market economies. Total trade turnover fell by 7.6 percent, but while trade with CMEA countries and other socialist countries fell by 17.6 percent, trade with developed market countries increased by 3.3 percent.

Total exports fell by 1 percent and imports rose by 10.9 percent, resulting in a negative balance of 22.9 billion crowns compared to a surplus of 2.8 billion crowns in 1989. The fall in exports was most dramatic with the former CMEA countries. Exports to advanced market economies also declined by 3.1 percent. Imports rose by 10.9 percent. The rise was due to imports from developed market economies, since imports from CMEA countries declined.

Czechoslovakia's largest trading partner remains the Soviet Union followed by Germany and Austria. Germany is expected to overtake the USSR in 1991. The Soviet Union is Czechoslovakia's main supplier of raw

Under the [illegible]unist regime, the material living standard of Czechoslovak citizens was one of the highest in the Eastern Bloc. [illegible] the selection and availability of [illegible] items was [illegible] Western European standards. However, [illegible] was [illegible] insufficient [illegible] [illegible] living [illegible] [illegible] Western [illegible] [illegible] [illegible].

The gov[illegible] reduced subsidies and [illegible] prices [illegible] [illegible] consumer [illegible] [illegible] [illegible] [illegible] [illegible] 1991 [illegible] [illegible] 1.4 percent [illegible] 1989 [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] workers in the state [illegible] sector [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] cost of living [illegible] [illegible] 9.1 [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] 10 percent [illegible] [illegible] [illegible] 5.5 [illegible]

Expected [illegible] increase [illegible] 12.1 [illegible] in 1991. The index [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] 1988 and [illegible] percent [illegible] [illegible].

[illegible]

Czechoslovak [illegible] for 1990 [illegible] trade [illegible] [illegible] centrally-planned economies [illegible] [illegible] [illegible] developed market economies. Total [illegible] [illegible] by 7.6 percent, but while [illegible] with [illegible] countries and other socialist countries [illegible] 17.6 percent, trade with developed market countries [illegible] by 3.1 percent.

[illegible] exports fell by 1 percent and imports rose by 18.5 percent, resulting in a negative balance of [illegible] [illegible] crowns [illegible] to a surplus of 2.8 billion crowns [illegible] [illegible] [illegible] in exports was most [illegible] [illegible] [illegible] [illegible] Exports to developed market [illegible] also declined by 3.1 percent. [illegible] [illegible] by [illegible] [illegible] was due [illegible] imports from developed market countries, since imports from CMEA [illegible] declined.

materials. It is also an important market for Czechoslovakia's manufactures, many of which are specialized for the Soviet market. The decline of trade with the Soviet Union will have serious consequences for many Czechoslovak firms, particularly those in the heavy machinery sector.

TOURISM.

Tourism is one of the most promising sectors for development in Czechoslovakia. In 1990 approximately 46.8 million foreign tourists visited Czechoslovakia, more than half again the number in 1989. However, Czechoslovakia lacks the infrastructure to take advantage of its tourist potential. Under the previous regime, tourism, like other service sectors, was neglected. Czechoslovakia has an estimated 55,000 hotel and motel beds, many fewer per 1,000 people than in Western European countries. Only about a third of these beds meet Western European standards. Prague, which is the destination of an estimated 90 percent of foreign visitors, needs about 16,000 hotel beds to meet demand.

The government is looking to privatization and foreign investment to improve the tourist infrastructure. In the next two years, modern hotels with a total capacity of about 5,000 beds are to be built in Prague. These new hotels and several existing ones are joint ventures with Western European partners. There are about 1,600 private tourist agencies in Czechoslovakia, compared to 15 state and cooperative agencies under the previous regime. The largest state travel agency, "CEDOK" continues to exist, but was divested of its chain of hotels.

FOREIGN DEBT.

Czechoslovakia's foreign debt rose by $200 million over 1990. At the end of 1990 gross debt in convertible currencies was $8.1 billion according to the Czechoslovak State Bank. To some extent Czechoslovakia's debt is offset by foreign assets; unfortunately many of these assets are claims on Third World countries which may be uncollectable. Official predictions are for foreign debt to rise to approximately $11 billion during 1991, due to the expected trade deficit. For financing this deficit, Czechoslovakia is relying on the IMF which is providing $1.7 billion for a 14-month program. This amount includes compensation for oil price rises, which may not occur, in which case Czechoslovakia would receive less. The government has also been promised a total of $1 billion from the G-24.

ECONOMIC RESTRUCTURING AND REFORM.

Beginning in 1990, Czechoslovakia embarked on a far-reaching program to convert itself into a market economy. The government appears to have reached a consensus that the move to a market economy must be complete and speedy. Although Czechoslovakia has been criticized for not moving swiftly enough, the number and scope of the economic reforms enacted by early 1991 is impressive, especially considering the profound political changes which had to be instituted at the same time. Below is a summary of the major economic reform measures passed since the beginning of 1990.

Legalization of private enterprise (April 1990) - Removed the restrictions which had limited private industries to small family businesses.

Amendment to Joint Venture Act (April 1990) - Legalized 100 percent foreign ownership of enterprises, permitted joint ventures with private Czechoslovak companies and individuals.

Amendment to Foreign Economic Relations Act (April 1990) - Abolished the monopoly of state-controlled foreign trade companies and removed most limits on rights of individuals and enterprises to engage in foreign trade.

Copyright (May 1990) - Revised and strengthened copyright protection.

Small privatization (November 1990) - Set up the framework for privatizing shops, restaurants, and other small businesses.

Small restitution (November 1990) - Allows restitution of businesses nationalized during 1959. Most large businesses had already been nationalized by 1959, but in that year even small shops and family workshops were taken over by the state.

Patents (November 1990) - Strengthened patent protection.

Foreign exchange (November 1990) - Allows businesses to freely purchase foreign exchange for use in business, current account transactions.

Price liberalization (November 1990) - Allows most prices to be set by market, but retains controls on many to prevent monopolies from exploiting their advantages. After its implementation on January 1, 1991, approximately 80 percent of prices were freed of state control.

Indirect tax reform (November 1990) - replaced the system of turnover taxes with a VAT system and simplified the rate structure.

Labor (December 1990) - Amendments to the labor law governing collective bargaining.

Safeguards legislation (December 1990) - Prevents illegal transfer of sensitive military or dual-use technology.

Extra-Judicial Restitution - Created the framework for restoring companies and properties nationalized after 1948 to their previous owners or heirs. The Act permits restitution only to Czechoslovak citizens who reside in Czechoslovakia.

Large privatization - Sets up the framework for privatizing large state enterprises. Under the Act, each state enterprise must draw up a privatization plan setting out how the firm will be privatized and information of interest to potential investors. Some companies will be sold outright to foreign or domestic investors. Others will be privatized according to a controversial "voucher" scheme, under which each Czechoslovak citizen would be entitled to purchase vouchers for a nominal amount which could then be used to purchase stock in Czechoslovak companies.

Pending:

Land law - An act to privatize the agricultural sector is currently being considered by the Federal Assembly.

Commercial code - Later this year the Federal Assembly is expected to pass legislation drastically revising the commercial code to conform to new market conditions.

Tax reforms - Revisions of the income and business tax systems are needed. Ministry of Finance officials estimate that reforms of the tax code will not be complete until 1993.

## JOINT VENTURES AND FOREIGN INVESTMENT.

In 1990 Czechoslovakia liberalized its foreign investment legislation, permitting 100 percent foreign-owned companies in Czechoslovakia and simplifying the procedures for getting permission to form a joint-venture or to register as a foreign company. The government welcomes foreign investment and foreign investors are eligible for certain tax benefits.

As of December 1990, there were 1168 firms with foreign capital participation in Czechoslovakia; 909 companies in the Czech lands and 259 in Slovakia. 20 percent of the companies are wholly-owned foreign subsidiaries. Another 10 percent are joint ventures between a foreign partner and a state enterprise. The remaining 70 percent are between a foreign partner and private Czechoslovak enterprises or individuals. Most of the foreign ventures are small. Sixty-eight percent have total capital of approximately $18,000 or less. Only 3 percent have capital of approximately $364,000 or more.

Austria, with 348 ventures, leads in investment, closely followed by Germany (330). Other countries lag far behind the leaders: Switzerland (93), U.S. (49), Italy (45), Great Britain (35), Netherlands (34), France (27) and Canada (23).

## IMPLICATIONS FOR U.S. BUSINESS.

As a result of the dramatic political and economic changes that took place in Czechoslovakia in late 1989 and early 1990, the United States moved to normalize bilateral trade. In April 1990, the U.S. and Czechoslovakia signed a trade agreement which was ratified by both sides and came into effect in late November 1990, restoring Most Favored Nation status to Czechoslovakia. The U.S. and Czechoslovakia are negotiating a Bilateral Investment Treaty, which should be completed soon. A bilateral tax treaty is also being negotiated.

Although Czechoslovakia did not benefit from lower tariffs until late 1990, trade with the United States rose significantly. U.S. customs figures show that in 1990 U.S. exports to Czechoslovakia rose by 25.9 percent and imports, by 6.6 percent. U.S.-Czechoslovakia trade remains very small in relation to the total trade of each country. However, total trade figures may give a misleading impression because much of bilateral trade occurs through European subsidiaries of U.S. companies and does not appear in official trade statistics.

Apart from removing trade restrictions, the political changes in Czechoslovakia, have also made it possible for other kinds of economic cooperation between the U.S. and Czechoslovakia. U.S. Export-Import Bank financing is available to promote the export of U.S. goods and services to the CSFR. The Overseas Private Investment Corporation (OPIC), a U.S. government agency which promotes growth in developing countries by encouraging [illegible] are were 1150 firms with foreign [illegible] in Czechoslovakia; 895 companies [illegible] and [illegible] 255 in Slovakia. 30 percent of [illegible] [illegible] as [illegible] [illegible] as wholly-owned foreign subsidiaries. Another 10 percent are joint ventures between a foreign partner and a state enterprise. The remaining 7 percent are between a foreign partner and private Czechoslovak enterprises or individuals. Most of the foreign ventures are small. Sixty-eight percent have total capital of approximately $18,000 or less. Only 3 percent have capital of approximately $264,000 or more.

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U.S. private investment, now operates in Czechoslovakia. OPIC's key programs are its loan guaranties, direct loans, and political risk insurance. For Eastern European countries, OPIC also offers an Eastern European Growth Fund, designed to match OPIC funds with private venture capital to finance new business; the Small Business Loan Guaranty Program; and an environmental investment fund. The U.S. Trade and Development Program can offer grants for feasibility studies and certain other services which would promote U.S. exports.

The U.S. Agency for International Development is active in Czechoslovakia. Congress has appropriated $370 million for assistance to Central and Eastern Europe. The government has recommended a number of projects to the U.S. government for funding. A Czechoslovak-U.S. Enterprise Fund, similar to those already in operation in Hungary and Poland, is in the process of being set up. The World Bank and the European Community are also funding a number of projects, primarily in the environmental area. The International Finance Corporation has established a permanent mission in Prague to assist privatization efforts and help set up joint ventures.

Czechoslovakia adheres to the same multilateral intellectual property conventions as the United States. In 1990 new laws on patents and copyrights were passed by the Federal Assembly. The new Acts strengthen protection of intellectual property.

American companies' interest in the Czechoslovak market has mushroomed. At the beginning of 1990, there were only approximately 15 U.S. companies with offices in Prague; now there are over 70 and more are on the way. Some promising areas for U.S. exports are pollution equipment and services, computers and software, telecommunications, finance services, tourism, aircraft, medical equipment, education and manpower training services, management services and accounting.

Success in the Czechoslovak market requires patience and persistance. American businessmen are often criticized for wanting to "Arrive on Monday, have meetings on Tuesday, and take out their money on Wednesday." U.S. businessmen should not limit their contacts to Ministry officials or even senior enterprise managers. Active support of middle management and, often, labor leaders may be crucial in the success of a deal. Businessmen should not underestimate the importance of regional sensitivities; it is vital to make contacts in Slovakia as well as in the Czech Republic.

Three agencies promote investment in the CSFR at the Federal, Czech and Slovak Republic government levels:

Federal Foreign Investment Agency
Federal Ministry of Economy
Director: Richard Sumann
Nabrezi Kpt. Jarose 1000
170 32 Prague 7
Tel. (42-2) 389-2823, 389-2810
Fax: (42-2) 375-659

Agency for Foreign Investment and Assistance
Ministry for Economic Policy and Development of the Czech Republic
Director: Ing. Ladislav Chrudina, Csc. Deputy Minister
Trida SNB 65
101 60 Prague 10
Tel: (42-2) 712-1111
Fax: (42-2) 712-2263

Ministry for Economic Strategy of the Slovak Republic
Contact: Doc. Ing. Milan Bucek, Deputy Minister
Kycerskeho 1
812 70 Bratislava
Tel: (42-7) 463-40
Fax: (42-7) 434-76; 445-71

The U.S.-Czechoslovak Economic Council, a private sector group sponsored by the U.S. and Czechoslovak Chambers of Commerce, provides a forum for disseminating information and for discussing trade prospects with experienced businesses. The Council is administered by the U.S. Chamber of Commerce, 1615 H St., N.W., Washington, D.C. 20062; telephone (202) 463-5482.

Firms seeking to do business in this market are encouraged to contact the Department of Commerce's Eastern Europe Business Information Center (EEBIC) for basic information on doing business in Czechoslovakia. EEBIC is located in Room H6043, 14th and Constitution Avenue, N.W., Washington, D.C. 20230; telephone (202) 377-2645. Additional assistance can be obtained from Commerce's Czechoslovakia Desk, Room H3415, Washington, D.C. 20230; telephone (202) 377-4915. Visitors to Prague should also contact the Commercial Section, American Embassy Prague, Trziste 15, Prague 1; telephone (42-2) 536-641; telefax (42-2) 532-457; telex 121 196 amemc. The Embassy's mailing address is U.S. Embassy, APO, N.Y. 09213-5630. The Embassy and the Department of Commerce organize a number of trade promotion events each year, including a U.S. exhibit at the annual International Engineering Fair in Brno in September.

World Bank, Czechoslovakia: Transition to a Market Economy. December 13, 1991. (summary and excerpts)

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Report No. 8847-CZ

# Czechoslovakia
# Transition to a Market Economy

**December 13, 1990**

Country Department IV
Europe, Middle East, and North Africa Region

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# CZECHOSLOVAKIA

## TRANSITION TO A MARKET ECONOMY


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MAP

## SUMMARY AND CONCLUSIONS

1. The Government of the Czech and Slovak Federal Republic has decided to move to a market economy more closely integrated with the world economy. Given the ample evidence of the problems and inefficiencies resulting from past policies, there is broad popular support for such a radical reorientation of the economy. At the same time, there are many worries about economic problems which might arise in the course of the transition to a market economy. This report first provides some background (including historical trends) to the recent decision to undertake major economic reforms. Its main focus is, however, a discussion of the policy and institutional reforms necessary to make the desired transition to a market economy relatively rapidly and with minimum social and economic cost.

### Inefficiencies of the Past

2. Over the past twenty years, Czechoslovakia's economic performance--relative to its potential--has been disappointing. Even according to official statistical data, the growth rates of the economy have been declining. Moreover, Czechoslovakia's prices do not reflect economic costs; land and capital, in particular, are seriously undervalued. Although methodological and data problems make it impossible to arrive at precise conclusions, per capita income in real terms has probably declined over the past five years. Even though the country has been doing well compared to other centrally planned economies in the region, it is important to stress that such a comparison is misleading since Czechoslovakia was one of the most industrialized countries before World War II. The allocation of resources through central planning rather than the market mechanism during the past 40 years has resulted in a long-term decline in productivity, loss of international competitiveness and in the standard of living. The country has increasingly fallen behind its neighbors in Europe in virtually all aspects of economic and social development. The variety of goods and services available to Czechoslovak consumers is considerably smaller than that available in Austria or Italy; services in particular are poorly developed. The fact that most consumer durables are of a lower quality than in those two countries further adds to these shortcomings. Preliminary computations based on the adjusted exchange rate put Czechoslovakia's estimated GNP per capita in 1989 at US$3,460.

3. Czechoslovakia's challenge consists of no less than a complete reorientation of its development strategy. The country's comparatively high growth rates during the initial years of central planning in the 1950s were due to productivity reserves in the industrial apparatus reinforced by positive work attitudes, high investment ratios, a labor force that grew faster than the population, and to the role the country played as an important exporter of machinery and equipment to the other war-devastated countries, especially the Soviet Union. These particular sources of growth no longer exist. Although still comparatively high, net fixed investment ratios have been declining in the second half of the 1980s while personal and social consumption have been maintained at relatively high levels. At the same time, modernization of the capital stock and protection of the environment have been

neglected for so long that only massive recapitalization of the economy can halt and reverse the long-standing decline in productivity. Investment ratios will therefore have to be maintained at their present levels or even be raised, even if in the short-term significant productivity increases may be achieved through relatively small investments or organizational changes. In fact, replacement of central planning with competitive market mechanisms by itself can be expected to lead to substantial improvements in overall productivity in the medium-term. The need to achieve a quick modernization of the capital stock is important for two other reasons. First, the country can no longer rely on a fast growing labor force because of the population's changing age structure and fertility rates. Second, a major part of the country's exports consisted of armaments--an industry in decline not only because of the Government's decision to discontinue these exports but also because of dwindling demand world-wide. It will therefore be a major challenge for Czechoslovakia to improve the quality of its export products and to compete successfully with other countries, especially the newly industrialized ones.

4. The negative impact that declining investment ratios had on growth has been aggravated both by the outdated capital stock of Czechoslovakia's industry and the inefficient use of material as well as of human and natural resources. Although technologically advanced sub-sectors or enterprises do exist in Czechoslovakia's industry (and these are a testimony to the robustness of the country's long-standing engineering tradition), machinery, equipment goods, and production facilities tend to be technologically backward. Central planning failed to bring about the kind of efficiency-improving technical and organizational changes that were taking place in the competitive market economies. In addition, the absence of prices which would reflect relative scarcities led to a wasteful use of resources. This is most evident in the energy usage of the economy, which is several times higher than in Western European economies. In 1988, for example, the energy intensity of Czechoslovakia's economy was only 5 percent lower than in 1980, whereas most OECD countries achieved efficiency gains of some 30 percent during the 1980s. The almost total disregard for environmental concerns is another sign of the unsustainability of the extensive growth strategy previous governments had pursued. Growth levels could only be maintained because production costs did not include the long-term costs of damage to the environment, and because too little was spent on environmental protection.

Radical, Comprehensive and Transparent Transition Program

5. The policy and institutional changes required to achieve the fundamental restructuring of the economy present an extraordinary challenge to the population and the Government. Contrary to previous reform efforts made during the late 1980s which aimed at improving the performance of the existing economic system, the "Economic Reform Scenario" developed by the present Government and adopted by Parliament in October 1990 emphasizes the need for a radical transformation of the economy. In presenting a comprehensive set of reform measures, including an anti-inflationary economic stabilization policy, change of ownership and enterprise management, price and import liberalization, and "internal convertibility" of the currency, as well as the

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6. The political deliberations during and following the national elections in June 1990 have revealed a strong preference among the population for a federation in which the Czech and Slovak Republics will have many important rights and responsibilities for taking and implementing political and economic decisions. Although there is a broad consensus about the objective of moving to a full-fledged market economy, the two-level decision making process will inevitably affect the speed of the transition process. Nuances in the direction and contents of the various reform measures may also occur. There is, however, a certain risk of delaying or implementing the reforms only partially because it may be felt that actions are not required with the same degree of urgency as in some other countries with major internal and external disequilibria. This would be a serious mistake, since delay in moving to a market economy would not only render the transition process more difficult, but also increase the costs associated with such a transition. Czechoslovakia's relatively favorable initial situation does, however, improve the prospects for rapid transition.

7. The degree of urgency with which the fundamental reforms need to be carried out has been heightened by recent external events beyond the Government's control. First, oil deliveries from the Soviet Union in 1990 have been significantly lower than originally agreed, which has forced Czechoslovakia to buy the balance needed from other sources at world market prices. Second, from the beginning of 1991, Czechoslovakia's foreign trade with its CMEA partners will be carried out in convertible currency rather than in transferable rubles. To pay for the Soviet Union's petroleum and natural gas exports to Czechoslovakia in convertible currencies and at international prices means that import prices--expressed in domestic currency--for these two products are bound to increase by about 260 and 115 percent, respectively. In 1991, the import bill for petroleum and natural gas, based on a price of US$25 per barrel and US$90 per MCM, respectively, and assuming no change in imported volumes, would therefore rise by about US$2.8 billion, with total energy imports projected at about US$4 billion in 1991 (about 8 percent of projected GDP). The increase is due to the removal of the large distortion in the cross exchange rates. While the effects of this shock can be offset over the medium-term by increases in economic efficiency that should accompany the proposed systemic reforms, the required short-term adjustment effort will render the initial phase of the transition process considerably more painful.

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Third, world prices for petroleum have risen substantially in the wake of the Gulf crisis, and, even assuming a 10 percent decline in petroleum imports in 1991, each US$1 price increase per barrel will add about US$110 million to Czechoslovakia's import bill. Fourth, all formerly centrally planned economies are undergoing far-reaching reforms, most of which are characterized by major fiscal stabilization and demand control. Czechoslovak exports to the former German Democratic Republic and the Soviet Union in particular have declined significantly in 1990, and this trend may continue in the near future. Czechoslovakia's balance of payments outlook has thus deteriorated substantially compared to only a few months ago, and foreign reserves have declined from US$2.4 billion to US$1.4 billion during the first nine months of 1990. The country will therefore need significant amounts of external financing to overcome the projected balance of payments difficulties and help ease the transition process.

8. The transformation to a market economy will involve substantial disruptions and costs. While some of these costs are inevitable, the Government can reduce them by the way it manages the transformation. Experience in other countries suggests that the adjustment costs can be significantly reduced and the process of structural change be made less disruptive if the Government adheres to the following principles: First, the direction and general content of the structural reform program should be announced well in advance, so that consumers and producers can make their own adjustment decisions. Second, in both design and implementation, the reform program should be comprehensive rather than partial. Third, once a reform package and course has been adopted, the Government should stay with it even if short-term shocks or lack of immediate policy responses seem to dictate more frequent policy changes. Fourth, policy measures, adequate institutional arrangements and sufficient budgetary provisions to mitigate the social impact of the reforms are absolutely essential for securing support for the Government's structural adjustment program.

Simultaneous Policy and Institutional Reforms

9. The authorities realize that, while the decision to move to a market economy and to adopt the necessary laws are important, they are by no means sufficient as prerequisites for achieving that goal. In fact, there is a certain risk that the population and the Government could succumb to the illusion that the semblance of market conditions is identical to the substance of an efficient and demand-responsive market economy. In designing a comprehensive reform program for transition, the authorities must keep in mind that key reforms must be undertaken simultaneously because sustaining success in some areas is dependent upon progress in others. The following policy measures should be implemented quickly and simultaneously: (a) a major liberalization of domestic prices, (b) "internal convertibility" of the Koruna (which includes the liberalization of current account transactions and a unified exchange rate responsive to supply of and demand for foreign exchange), (c) changes in the "rights and responsibilities" of the managers of those state-owned enterprises (SOEs) which will remain temporarily or permanently in the public domain, (d) the encouragement of direct foreign investment, and (e) the provision of an adequate social safety net. Careful

Third, world [illegible] substantially [illegible] In [illegible] of the CMEA crisis, and [illegible] decline in petroleum [illegible] 1991, each USSL [illegible] level will are about US$1.0 billion. Czecho[illegible] [illegible] all formerly centrally planned economies are [illegible] reforms, most of which are characterized first [illegible] declining [illegible] Czechoslovak exports to the [illegible] Democratic Republic and the Soviet Union in particular have declined significantly in 1990, and this trend may continue in the near future. Czechoslovakia's balance of payments outlook has thus deteriorated substantially compared to only a few months ago and foreign reserves have declined from US$2.6 billion to US$1.8 billion during the first nine months of 1990. The country will therefore need significant amounts of external financing to overcome the projected balance of payments difficulties and help ease the transition process.

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preparation of these measures is important to ensure successful implementation and credibility so as to have a lasting effect on the behavior of producers, investors and consumers. Other measures are equally important and urgently needed to make this policy package fully effective. They include (f) the promotion of private sector activities, (g) financial sector reform, (h) a program for restructuring state-owned enterprises (SOEs), including their privatization, strengthened organization and management of SOEs remaining in the public sector, and (i) reform of the tax system. Because they involve both policy and institutional changes, they are likely to take some time for implementation (e.g., two to three years is not a long time to plan and introduce a basic tax reform or to get newly created commercial banks to function properly). It is therefore important that these reforms be undertaken immediately (a start has been made in some of them) and that progress be achieved rapidly so as not to jeopardize success in the other areas.

Prudent Macroeconomic Management

10. A medium-term macroeconomic framework consistent with resource availabilities is a prerequisite for successful structural adjustment in any economy. While experience with transformation of centrally planned economies is still limited, it is obvious that policy reforms aimed at changing the behavior of consumers, investors, and enterprise managers can only be successful if they take place in a macroeconomic environment conducive to and supportive of such reforms. Accordingly, the Government has given priority to the elaboration of a macroeconomic framework within which its sectoral reform policies, organizational, institutional, foreign trade and financial reforms can successfully unfold. Priority is correctly given to avoiding both inflation and politically unbearable unemployment levels. Avoiding excessive external indebtedness is another important objective. The authorities are pursuing these objectives with a mix of fiscal, monetary, and exchange rate policies.

11. Fiscal Management. In presenting a surplus budget for 1990 and preparing a similar surplus budget for 1991, the Government has indicated the importance it attaches to the control of inflation. More importantly, it is fundamentally changing the relationship between the fisc, the State Bank, enterprises and consumers. Enterprises will progressively be separated from the budget. This, and the redistribution of functions between the state and private sector, will result in large shifts in budgetary accounts. Budgetary subsidies to consumers and producers are expected to be reduced and phased out almost completely. In the medium term, public expenditures will decline significantly. Some public expenditures will, however, rise in connection with industrial restructuring, the provision of an adequate social safety net, and infrastructure modernization.

12. The projected budgetary surplus amounts to about 0.7 percent of projected GDP in 1990. Although it is difficult to predict the net outcome of the expected changes in revenue and expenditure trends--they depend, to a large extent, on the speed of the Government's reform and public expenditure program, as well as on the speed and strength with which the private sector

emerges--there is a high risk that the budget will come increasingly under pressure. Careful fiscal management will be required in order to avoid unsustainable budgetary deficits that could undercut the reform program. The gradual sale of state assets under the privatization program could be a stimulus to household savings as well as a way of helping to finance the social safety net and the industrial restructuring program. A relatively tight fiscal policy, including uncompensated reductions in subsidies, would also reduce the burden on the exchange rate as a major instrument of adjustment.

13. Monetary Policy. Czechoslovakia has a long tradition of prudent monetary policy and successful control of inflation (albeit in the presence of price controls). The present Government, as well, is firmly committed to avoiding inflationary pressures. The task of implementing sound monetary and credit policies is particularly challenging because a delicate balance must be found between controlling excessive demand for credits, on the one hand, and supporting an emerging supply response, especially of newly emerging private enterprises, on the other. Moreover, monetary policies will have to distinguish between a one-time rise in the average price level (which will undoubtedly accompany the needed adjustments in relative prices and will, to some extent, have to be accommodated) and/or cost-push, demand-pull pressures that could lead to continued general price increases.

14. The authorities have kept domestic credit expansion in 1990 close to the end-1989 level. In face of the imperfectly functioning product, labor and credit markets, they have little choice but to continue, for a transitional period of time, intervening directly in credit allocation in order to balance concerns over inflation and supply responses. It is, however, important to instill immediately elements of market behavior in the process and to progressively phase out direct government intervention in credit markets. The appropriate use of the interest rate is another important element for moving towards a market-based credit allocation. In order to reduce the political and arbitrary element in credit allocation decisions, the authorities should pursue a policy of moderately positive real interest rates. Such a policy would help stabilize the exchange rate and thereby reduce the need for interventions by the authorities on foreign exchange markets. The accompanying higher lending rates would contribute to the needed recognition of the economic cost of capital and thus to the efficiency of investment expenditures.

15. The presence of large forced savings (monetary overhang) can result in inflation in any reforming economy if the population loses confidence in the policy makers' capability to maintain the price level after the initial price adjustment following price liberalization. Although Czechoslovakia's problem of monetary overhang appears to be less serious than in some other reforming countries in the region, it is important to closely follow consumers' spending behavior and take corrective actions if necessary. The stock of money (currency and demand deposits) relative to NMP has risen from 48 percent to slightly more than 50 percent between the early and late 1980s. Temporary shortages of certain products, such as automobiles or consumer electronics, or more permanent shortages of services such as housing, especially in desirable urban areas, or health care, did arise, but consumers

usually substituted among goods. This suggests that there is no monetary overhang of any major significance. More important than the actual size of the liquidity overhang is, however, the anticipated spending behavior of consumers once prices and imports have been liberalized. While it is impossible to predict the extent to which consumers may want to transform demand and time deposits into consumer goods, it is crucial to prevent demand pressure through prudent fiscal and monetary policies, including a realistic exchange rate, positive real interest rates, and a prudent wage policy.

16. Exchange Rate Policy. The intended introduction of a unified exchange rate to be determined by supply and demand and the establishment of "internal convertibility" of the Koruna on January 1, 1991 will be a major step in Czechoslovakia's transition to a market economy. Assuming elimination of licensing and continuation of the relatively uniform and low nominal tariff, such a unified exchange rate will be the basis of a largely undistorted link between the domestic and the global economy operating in convertible currencies. If an import surcharge is considered necessary as a temporary protective and fiscal device, it should be uniform so as to avoid distortions of relative prices and effective protection. Moreover, it should be for a clearly limited period of time to maintain competitive pressure on the domestic market. The exchange rate will be the most important signal and incentive for both exporters and producers for the internal market. The existing large difference between internal and international relative prices, as well as uncertainties about the speed with which domestic producers will respond to the new environment, make it difficult to anticipate the level of (and likely variations in) the exchange rate that would result from the proposed "internal convertibility" arrangements. It would be desirable to have substantial reserves or stand-by credits available to promote confidence and enable the authorities to avoid unnecessary movements in the real exchange rate (which would send confusing signals to producers as well as lead to additional inflationary pressures). The presently low external debt and the ability to borrow abroad increase the flexibility of economic management in this important area.

## Policy Measures Provoking a Supply Response

17. Price Liberalization. In addition to the policies in the area of macromanagement and to the liberalization of product and factor markets, explicit measures need to be taken at microeconomic and sectoral levels to ensure that new enterprises will enter markets and existing ones expand production. It is now widely recognized in Czechoslovakia that markets cannot function properly unless enterprises have the freedom to compete on the basis of both price and quality of products. In general, price controls on tradeable goods and services should be abolished at the same time as foreign trade is liberalized. Trade liberalization would provide needed competition and link domestic relative prices to international levels. At the same time, measures must be put in place to promote actively domestic competition. Foreign trade liberalization needs to be complemented by domestic competition policies since the former can have its full desired impact only if it makes itself felt through a competitive domestic environment. It is important to stress that price liberalization is not at all the same as an adjustment in

usually subsidized among goods. This suggests that there is no monetary overhang of any major significance. More important than the actual size of the liquidity overhang is however, the anticipated spending behavior of consumers once prices and imports have been liberalized. While [illegible] possible to predict the extent to which consumers may want [illegible] demand and time deposits into consumer goods [illegible] it is crucial to [illegible] pressure through prudent fiscal and monetary policies including a realistic exchange rate, positive real interest rates, and a prudent wage policy.

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18. There is considerable concern that, given the present monopolistic organization of industry and commerce, price liberalization could lead to an inflationary spiral. This concern must be taken seriously, since inflation would jeopardize the credibility and sustainability of the reform program. It is, however, important to distinguish between an inflationary spiral and a one-time adjustment in the price level that will accompany the removal of unjustified and costly distortions in relative prices. Prices for all tradeables, and for other goods and services supplied under reasonably competitive conditions, should therefore be liberalized. Moreover, an active competition (anti-monopoly) policy should be pursued to break up existing monopolies and promote the entry of new enterprises. In order to contain inflationary pressures after the initial price increases, it is, however, of crucial importance that price liberalization be accompanied by supporting macro policies, particularly cautious monetary and fiscal policies and "internal convertibility" of the Koruna.

19. <u>Flexible Factor Markets</u>. Efficient labor and capital markets are another essential ingredient for achieving fundamental structural reforms. Past interventions in the labor market have led to rigidities which could thwart achieving the required supply response. This aspect of the reform process has a complex political dimension as well as important short-term effects for the credibility of the reform program. In close cooperation and consultation with entrepreneurs and trade unions, the authorities have therefore begun to design a program of key labor market reforms, which will address both the need for more flexibility and the immediate social impact of the reforms. An Employment Act and decrees and laws regulating small business activities and retraining is expected to be enacted in 1990; employment offices have been created since August 1990 under the auspices of the Labor Ministries in the Czech and Slovak Republics.

20. As of May 1, 1990, the Government has lifted all controls over private sector wages, except for minimum wage provisions. This is an important element in the needed policy to promote the expansion of the private sector. In the short run, while monopolies persist and financial discipline may still be lagging, the need to control cost-push inflation may justify the continuation of some form of wage controls in the state sector. Such a control system must, however, be seen as temporary; and it should be clearly stated that, in the medium-term, wage liberalization will accompany price liberalization. Even in the shorter term, it is desirable to introduce greater differentials in wages in response to differentials in productivity as

an incentive to improved performance. And, although average wages may be subject to controls, there should be no controls of the total wage bill; since that would prevent competitive firms from expanding their employment and output. A uniform framework for wage negotiation, including the extent and timing of government intervention to solve wage disputes, is needed in both the private and public sectors.

## Financial Sector Reform

21. A well-functioning capital market is an essential ingredient in a market economy. Financial intermediation has to replace the administrative allocation of investment funds. A market economy requires a modern banking system with a clear division of labor between the Central Bank in charge of monetary policy and bank supervision on the one hand, and the commercial banking sector on the other. Since the end of 1989, progress has been made towards achieving this goal. Nevertheless, the system still largely reflects the legacy of the past structure, characterized by a monobank system where all banking functions were closely controlled or undertaken by the State Bank, and where credit and access to foreign exchange were centrally allocated. The development of a second-tier commercial banking system since January 1990 and the adoption of the concept of universal banking are commendable first steps. The system is, however, overly concentrated and specialized: one bank in each republic extends credit to the corporate sector, and one is responsible for savings; one federal bank undertakes all operations in foreign currency and holds the government debt. More banks will be needed if market forces are to play their essential role in determining the level and structure of interest rates, in efficiently mobilizing resources, and in expanding credit to the best investments. From a prudential point of view as well, the current concentration is particularly unhealthy.

22. A modern two-tier banking sector is a cornerstone in any reform program, particularly in Czechoslovakia where the private sector is practically non-existent. Experience shows that the implementation of institutional reforms and the application of new banking regulations as well as the acquisition of the necessary banking skills and expertise will take time. It is therefore of crucial importance that appropriate reform measures be initiated immediately.

23. In order to elicit a quicker move towards the establishment of an efficient banking system, the authorities should envisage a revision of the current structure. The savings banks and credit banks could be broken down into smaller units. Credit units would then be merged with matching savings units to provide a more desirable financial structure, a less skewed skills base, and a lower level of institutional concentration. Given the current size of the economy and of banking assets, this process could lead to the establishment of four or five general purpose banks.

24. The need for a rapid turn-around of the banking system will necessitate the transfer of banking know-how to Czechoslovakia. While training would permit the development of the banking profession over the longer-term, in the immediate future, the authorities may consider to seek

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25. To complement the role of banks within the financial system, the authorities should promptly initiate the preparation of a comprehensive and coherent action plan for the development of financial markets. This should include actions aimed at encouraging the intervention of insurance companies and pension funds in direct financial operations.

Social Safety Net

26. In response to changes in relative prices, some industrial sub-sectors will contract while others will expand. Labor, which will be freed from contracting industries, will temporarily be unemployed because some time may elapse before expanding industries will absorb new labor. At the same time, substantial skill mismatches may become apparent and a housing shortage may constrain inter-regional labor mobility. Consequently, open unemployment is expected to rise significantly during Czechoslovakia's transformation to a market economy. Although it is impossible to predict the extent of anticipated unemployment, there is a clear trade-off between the length of the restructuring process and levels of unemployment. However, experience in other countries suggests that carrying out reforms at a slower pace often implies higher total adjustment costs over the long run.

27. In an effort to lower open unemployment, the authorities are considering several policy options. In the past, the fact that employed retired persons could draw two incomes, retirement pensions and salaries, had encouraged many retirees to work. Henceforth, the intention is to discontinue this practice, and additional measures to limit employment and double payment of retired persons are being studied. Basic and primary education has been extended by one year. The possibility of increasing vacation periods by one week starting in 1991 is being discussed; in order to provide further incentives for women to work part-time, arrangements regarding maternity leave and schemes for children's benefits are being strengthened. The Government has already announced a system of training and requalification for unemployed workers, which can help reduce the extent of unemployment due to skill mismatch. To assure that training is in the fields where new skills are needed, such systems should assure the participation of enterprises willing to offer jobs to trainees and be flexible enough to adapt to changing economic circumstances. In the long run, the Government must analyze the design of the Czechoslovak educational system and make sure that its curricula support the skills required on the evolving labor market.

28. Since the country has, thus far, had virtually no experience in dealing with unemployment, particular attention must be given to finding the right balance between the comprehensiveness and adequacy of the social safety net on the one hand and its cost on the other hand. As a general guideline, unemployment benefits should be generous enough to guarantee the recipients a minimum income, but not so generous that they seriously limit the incentive to seek and accept new employment. In order to prevent poverty, the welfare

system to be developed also needs to make provisions for taking care of those who may be unemployed for long periods.

State-Owned Enterprises in a Market Environment

29. The transition to a market economy will force enterprises to operate under competition, which will provide a strong incentive for reducing production costs of goods and services offered at the market. Although the Government has initiated action to complete this transition as quickly as feasible, some state-owned enterprises (SOEs) will remain in the public sector because of their nature (utilities, for example), and others will be privatized at a slower pace than originally envisaged. These SOEs will henceforth operate in an economic environment which is very different from the one they have been operating in so far. Most prices, including wages, SOE managers will face, will be determined by supply and demand on the various markets. Managers will have to compete with other enterprises for inputs and services; and, most importantly, they will face a hard budget constraint. In short, operating in a market environment will require from managers, workers, and the Government attitudes and behaviors fundamentally different from those which were required from them during previous reform efforts aimed at improving the performance of public enterprises in a centrally planned, non-market environment. Enterprises will be separated from the budget, revenues and expenditures will become transparent, and managers will be directly accountable for profits and losses. Enterprise managers must therefore have the authority to make the necessary decisions to adapt to the new circumstances and incentives. Only if managers have and accept the responsibility for making decisions about pricing, production levels, product lines, marketing channels, hiring and firing, and investments, can the dynamic appearance of new products and services (and the disappearance of obsolete products) that is characteristic of market economies take place. Experience in other reforming countries shows that domestic output and employment tend to decline significantly during the initial phase of the transition, especially if stabilization is an important element of the reform process. Such a contraction is likely to occur also in Czechoslovakia. Policy measures to promote competition and to obtain a quick supply response must be aimed at both public and private enterprises. The Government has repeatedly stated that all non-privatized SOEs will become financially independent, commercial-type operations. Many countries undertaking SOE reform have found it useful to launch the implementation process with a short, simple and unambiguous statement of the objectives being sought. In this way, the "rules of the game" are laid down. Typically, these statements instruct SOE managers that their prime objective is to run their firms as successful, non-subsidized, profit-making businesses. The essential points are that hard budget constraints will be imposed on SOEs, that managers will be given clear goals and authority, and that steps will be taken to reward the diligent manager and sanction the lax.

Property Rights and Privatization

30. The Government recognizes that clearly defined property rights, encouragement of private property, and the placement of formerly state-owned assets in private hands are key elements in its overall reform program. It has announced its intention to move as fast as possible toward an ownership structure similar to that of Western European states. Through post-November 1989 amendments to the constitution and through the recent passage of numerous new laws or amendments, many of the legal obstacles to private sector activity and privatization have been removed. The Government has thus begun to answer the first of the three core questions on privatization: what to sell? It has determined that small and medium enterprises and services will be sold quickly, that prior restructuring and demonopolization actions will be required for many of the larger companies, and that enterprises to be retained in the state portfolio will be limited to the natural monopoly social service providers and a few key industries. The other two core privatization questions--to whom to sell? and how to structure the transaction process?--have not yet been fully answered.

31. Several privatization options are being considered. Under one system that is currently being considered by the Government, Czechoslovak citizens would receive vouchers either free or at low cost. They would then use these to bid for shares in enterprises to be privatized. Like other systems, the voucher system has both advantages and disadvantages. It avoids the need for prior valuation of assets and would permit the process to begin quickly, so that fast progress could be made towards increasing competition and efficiency. It would delay, though not permanently prevent, the concentration of share ownership in the hands of individuals with better access to financial resources. Moreover, except for small firms, it would probably create shareholders too fragmented to exercise control over firm management. Distribution of vouchers at a low price means that privatization will not mobilize resources needed to cover the costs of enterprise restructuring and the expanded social safety net. Giving citizens the means to obtain high-risk shares in the absence of adequate information is risky and can easily result in discontent (if and when share values decline) and create considerable political pressure to use public funds to bail out non-viable privatized firms.

32. Admittedly, all conceivable techniques of privatization have advantages and disadvantages, and it is easy to criticize suggested methods not yet tried out in practice. The conclusion to draw from this is that it is to a country's advantage to experiment with multiple approaches to divestiture. The authorities are therefore considering the use of several privatization techniques in addition to the voucher method, including direct sales to individual purchasers (domestic and foreign) and divestiture through public participation in holding companies.

## Private Sector Development

33. Economic activity in Czechoslovakia is dominated by the state. The private sector produces less than 0.5 percent of non-agricultural output (even including the informal economy, the share would probably not reach 2 percent), and more than 90 percent of the labor force is employed in the state and cooperative sectors. Even in such sectors as commerce that are usually most accessible to small private entrepreneurs, the private sector is a distinct minority. The Government has begun to encourage the private sector and taken regulatory steps to promote competition, such as breaking up large conglomerates and streamlining the regulations establishing private enterprises. More specific measures will, however, have to be taken to remove barriers to competition on domestic markets. In particular, demonopolization and private sector entry need to be addressed.

34. In the near future, new entry of domestic private firms is likely to be limited to small enterprises, mainly in the service sectors. Given the size of the sector and its past history of suppression, the Government should immediately remove controls on the establishment of small, private firms. Specific policies might give some temporary preferential treatment to new private enterprises, since incumbent public enterprises face a lower risk situation than new private entrants. Such policies could include: reduction of "red tape" to an absolute minimum and a neutral and commercially oriented tax system as well as improved access to inputs (such as office space) and financing.

## Industrial Restructuring

35. Fundamental restructuring both at the sectoral and the enterprise level will be essential if Czechoslovakia is to restore and maintain competitiveness as it increases its trade with market economies. As a first step in this process, enterprises must realistically assess their comparative advantage in the markets under the new, competitive circumstances. On the positive side, Czechoslovakia has a tradition of technological innovation with a skilled and low-cost labor force. It is also well-located with respect to European markets and can offer Western companies access to markets in Eastern Europe and the Soviet Union. On the negative side, however, are: lack of familiarity with Western commercial markets; a relatively outdated plant and technological base; relatively low labor productivity; and the lack of technological linkages with Western European markets.

36. Based on a sample of enterprises supplemented with some global figures for the economy, massive <u>financial</u> restructuring at the enterprise level would not seem to be required under present circumstances. Most inter-enterprise accounts are being settled quickly. Even the balance sheets of enterprises which have been heavily engaged in the sale of armaments to developing countries do not show high levels of accounts receivable, as these are presumably carried at the level of central accounts. Working capital is financed by short-term bank credits, but current ratios are at acceptable levels. Under new conditions of hard budget constraint and substantial price increases projected for industrial inputs, especially energy, a large number

of enterprises will, however, face serious financial difficulties. Preliminary estimates suggest that about 30 percent of the banks' borrowers may be in financial difficulties, and the banks themselves will have to undergo substantial financial restructuring.

37. Czechoslovak enterprises facing a new economic environment will fall into one of three broad categories with regard to restructuring needs: (a) Those which can adjust effectively by themselves. A preliminary review suggests that, in an appropriate policy framework, perhaps 1,400 enterprises, or between 50 and 60 percent of all industrial enterprises, will fall into this category, especially those engaged in light industries primarily aimed at consumer goods markets. Following commercialization and demonopolization, the Government can withdraw from these enterprises and privatize them. (b) Those requiring substantial restructuring to become competitive under market conditions. Perhaps 650 enterprises, or between 25 and 35 percent of the total number, particularly in the heavy engineering and electronics industries, will fall into this category. Without assistance, enterprises in this category could be needlessly bankrupted due not to a fundamental lack of competitiveness, but to a lack of knowledge, information, skills and access to credit. The process of restructuring itself would facilitate the eventual privatization of this group. (c) Those which are not likely to become competitive and which, consequently, should be liquidated--possibly between 300 and 350 enterprises. An orderly and carefully designed liquidation process would lead to some spin-offs of profitable divisions or subsidiaries and should include provisions for retraining and reorienting redundant workers to more viable activities.

Direct Foreign Investment

38. Direct foreign investment (DFI) can be expected to play a major role in transforming Czechoslovakia's economy into a market economy and in enterprise restructuring. Countries in Eastern Europe that are unsuccessful in attracting foreign investment may tend to fall behind in international competitiveness, since multinational companies have increasingly become efficient vehicles for transferring technological change, fostering inter-firm cooperation, spreading modern management techniques, and providing access to international markets. Because of Czechoslovakia's highly trained labor force, its shortage of capital and management skills, and its geographical location in the heart of Europe, it would be especially suited for making DFI, particularly through joint ventures, a centerpiece in its transition program. DFI in joint ventures is capable of providing what Czechoslovak enterprises need most: risk capital, management at various levels and functions, technology, and export marketing or access. Direct foreign investment can also help accelerate the privatization process. In this context, it is essential that the authorities have competent negotiators who are experienced both in the particular field in question and in dealing with Western business partners.

39. The Government's process for screening DFI is, however, top-heavy and cumbersome because it requires decisions for each individual case. The process is likely to delay and impede DFI rather than give the authorities the

firms will, however, face serious financial difficulties.
[illegible] estimates suggest that about 30 percent of the banks' borrowers [illegible] be in financial difficulties, and the banks themselves will have to undergo substantial financial restructuring.

37. Czechoslovak enterprises facing a new economic environment [illegible] fall into one of three broad categories with regard to restructuring needs. (a) Those which can adjust relatively by themselves. A preliminary [illegible] suggests that, in an appropriate policy framework, perhaps [illegible] enterprises, or between [illegible] and [illegible] percent of all industrial enterprises, will fall into this category, especially those engaged in light industries primarily aimed at the consumer goods market. The following commercialization and demonopolization, the Government can withdraw from these enterprises and privatize them. (b) Those [illegible] which need [illegible] restructuring to become competitive under market [illegible] conditions. Perhaps [illegible] enterprises, or between [illegible] and [illegible] percent of the total number, particularly in the heavy engineering and electronics industries, will fall into this category. Without assistance, enterprises in this category could be needless [illegible] not [illegible] due not to a lack of [illegible] or competitiveness, but to a lack of knowledge, information, skills, or access to credit. The process of restructuring itself would facilitate the eventual privatization of this group. (c) Those which have no likely chance of competitive [illegible] [illegible] [illegible] [illegible]--possibly between [illegible] and [illegible] enterprises. An orderly and carefully designed liquidation process would lead to some spin-offs of profitable divisions or subsidiaries, and should include provisions for retraining and reorienting redundant workers to more viable activities.

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[illegible] process for screening DFI is, however, [illegible] a [illegible] individual [illegible] desired control. A light and swift screening process should be based on a generalized admission without specific approval subject to two possible restrictions: a "negative list" identifying any activities where DFI is not allowed, and a list of activities that are permitted only with government approval.

## Foreign Trade Policy

40. Starting in 1991, Czechoslovakia's foreign trade will operate in a world where the past distinctions between convertible and non-convertible currency areas, and between bilateralism and multilateralism, will have lost their meaning. Firms will no longer be subject to quantitative controls, and Czechoslovakia's trade with CMEA countries will be similar to trade with market economies. It will be conducted in hard currency, and firms will be able to take advantage of arbitrage opportunities. Since the distinction between various trade areas is quickly becoming irrelevant, Czechoslovakia will have to reorient its geographical trade flows and adjust the product composition of its trade in line with its comparative advantage. This reorientation will have to occur gradually so that old export markets are not lost before new ones have been acquired. Nevertheless, over the next few years, Czechoslovakia's exports can be expected to grow at a slower pace than its imports or even to decline. This is partly due to the expected low demand from Czechoslovakia's traditional trading partner countries, which are also undergoing economic reform and stabilization programs, and partly due to the fact that the restructuring of existing export industries and the coming into being of new ones will take time. Machinery exports are likely to undergo a massive adjustment, mainly because they are strongly oriented towards CMEA and developing countries. Moreover, machinery exports to developing countries have been expanded through buyers' export credits, a policy which is not likely to continue.

41. The challenge for Czechoslovakia's policy makers and enterprises consists in realizing that the bilateral foreign trade approach is no longer appropriate, and that only a global and multilateral trade integration into world markets can yield the necessary productivity gains. Czechoslovakia's enterprises can be expected to gain improved access to international markets. Trade agreements with the United States and the European Community in particular will provide new opportunities for trade expansion. Even if trade barriers continue to exist on certain markets, it is important that they will not be used as a pretext for protectionist measures in Czechoslovakia. Only then will enterprises be able to take full advantage of trade opportunities with industrialized market economies and will it be possible for domestic consumers to benefit from the stimulus to greater efficiency provided by full participation in international markets.

## Environmental Protection

42. Czechoslovakia suffers from severe environmental degradation. The energy sector is the single largest contributor to this degradation, and air pollution from burning low-quality brown coal in power and heating plants is

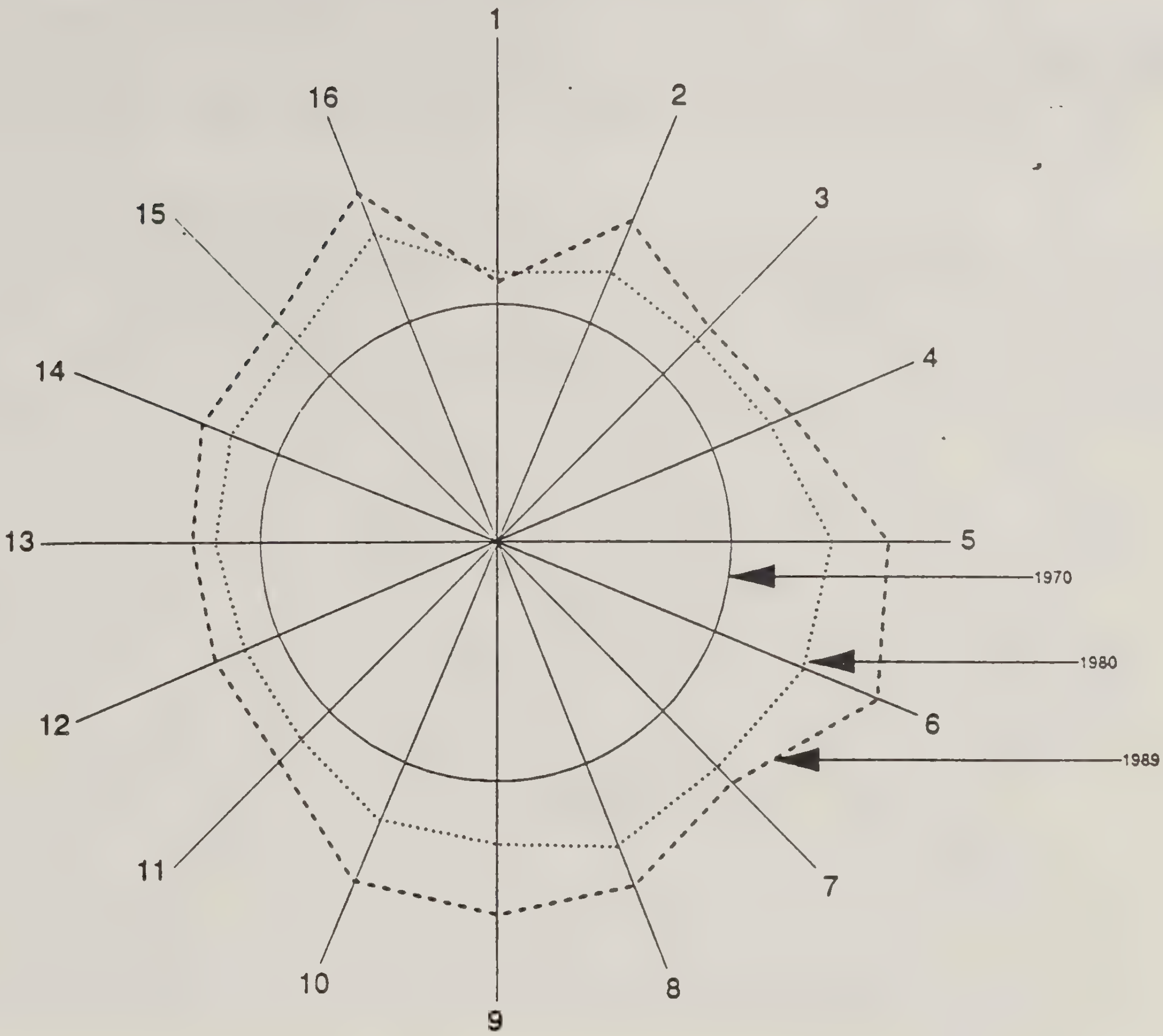
the most pressing problem. Another source of concern is the quality and availability of water. Almost 70 percent of the country's waterways are heavily polluted, and more than a quarter of the major rivers are incapable of sustaining fish. In addition, there are water shortages which are due to the contamination of surface and ground water sources. It is estimated that as much as one-third of forests may have been irreversibly damaged, and almost half of the country's forests could be lost by the end of the century. Other forms of pollution, including municipal solid wastes and hazardous wastes from industry, are widespread. Nearly one third of Czechoslovakia's population is exposed to high levels of air and water pollution, which is particularly serious in Northern Bohemia. Human health data are incomplete, and a monitoring system for long-term health problems is not available, but it is clear that pollution results in lower life expectancy and higher mortality rates. According to official estimates, the cost of environmental degradation to the economy amounted to between 5 and 7 percent of GDP during the 1980s. Using shadow prices, these costs could, however, easily be twice as high.

43. To a large extent, Czechoslovakia's environmental problems are due to an economic growth pattern which is based on extensive use of energy and materials and on production technologies which generate high volumes of waste. The bias in favor of heavy industry, coupled with central allocation of funds and administered prices which placed no value on scarce natural resources, encouraged environmentally irrational use of resources and inevitably led to rising levels of pollution. Below-cost pricing and extensive recourse to subsidies did not favor investments in pollution abatement, adequate maintenance of existing plants, or recycling. Over the past four decades, efforts of the Government to protect the environment met with minimal success. Numerous pieces of legislation of an administrative nature defining and regulating environmental standards were enacted between 1965 and 1980, and monitoring and inspection systems were set up. However, many of the enterprises and municipalities, unable to meet these air and water quality standards, were granted "exceptional permissions" and thus avoided compliance. Enforcement of norms, standards and regulations by institutions responsible for the protection of the environment has therefore been uneven. In 1983, the Academy of Sciences prepared a landmark survey of the nature and extent of Czechoslovakia's environmental degradation. The report was, however, suppressed. An even more ambitious study demonstrating the seriousness of the country's environmental problems was released following the change of Government in late 1989.

44. Czechoslovakia's transition to a market economy provides a good opportunity for addressing environmental problems as an integral part of economic, social, and institutional reforms. Improvements in economic efficiency sought through economic reforms (pricing, enterprise and regulatory reform, industrial restructuring) can also reduce the pressures on the environment at a minimum additional financial burden. Conversely, the long-term cost of not addressing high-priority environmental problems during the transition period will lead to irreversible losses in the economy's productive resource base. Allocating resources by the market mechanism--with taxes and subsidies that reflect environmental externalities--rather than by central planning, and applying hard budget constraints, will provide producers and consumers with incentives for making choices between fuels and technologies.

This will entail a phased approach toward: (a) a progressive reduction of subsidies to energy-intensive, heavy industry; (b) economic pricing of natural resources, including inter alia a revision of mining licensing and an increase in the prices of raw materials, energy, and water to a level to recover the social as well as private costs. As the experience of the Western countries shows, the existence of market mechanisms, while necessary for effective environmental protection, is not in itself sufficient. Economic reform measures need to be complemented by a revision of norms and standards and of the regulatory and legislative framework. Standards should be related both to international norms (particularly EC standards) and to the levels which can realistically be achieved in the medium-term. Monitoring networks and the staffing of inspectorates need to be strengthened, and legal sanctions applied consistently.

Figure 1: STRUCTURAL CHANGE IN CZECHOSLOVAKIA'S INDUSTRIAL OUTPUT, 1970-89 a/




LEGEND:

1. Fuels
2. Power
3. Iron metallurgy
4. Non-ferrous metallurgy
5. Chemicals & rubber
6. Machinery, electrical engineering electronics, metal working
7. Construction parts
8. Woodworking
9. Paper and cellulose
10. Glass, ceramics and china
11. Textiles
12. Apparel
13. Leather
14. Printing
15. Food, beverages and tobacco
16. Other

a/ This figure is an updated version of the analysis done by Josef C. Brada, "Czechoslovak Economic Performance in the 1980s", pp 215-229, East European Economies: Slow Growth in the 1980s, Selected papers submitted to the Joint Economic Committee, Congress of the United States, 1985.

projected decline of demand from neighboring reforming countries, and, last but not least, the Government's tight fiscal and monetary policy (paras. 7.02, 7.12) must be expected to lead initially to a shrinking of industrial output and employment. Such a restructuring is, however, an unavoidable and necessary precondition for a viable industrial sector and renewed growth in the medium term.

1.23 Agriculture plays a relatively small role in the economy. Its contribution to NMP, which had already been reduced substantially before World War II, declined from 10 percent in 1970 to about 6 percent in the late 1980s. Before its collectivization, which began in 1949 and was essentially completed by 1960, agriculture consisted predominantly of small to mid-size family farms with productivity levels similar to other European countries. By 1985, about 95 percent of agricultural land belonged to the socialist sector. Almost 1,700 farmers cooperatives ("unified agricultural cooperatives") with nearly one million members produce some two-thirds of agricultural output. These cooperatives were formed throughout the 1960s by merging landholdings into larger units; they often encompass several villages and raise a variety of crops and livestock. They operate as self-contained units, elect their management, retain profits for their own purposes and often diversify into other activities, such as agro-industries, farm machinery production or even electronics. In contrast, the approximately 220 state farms, employing about 166,000 farm workers and accounting for about 30 percent of agricultural output, are owned by the state and operate like state enterprises. Private farming accounts for only 4 percent of land and output. Members of cooperatives were permitted to cultivate personal plots of up to one-half hectare and to own some livestock, but private agricultural production remained minor and serves mainly as a food source for cultivators. In the early 1980s, however, the authorities began to encourage private small-scale animal breeding and fruit and vegetable cultivation aimed at helping satisfy the growing demand. As a result, private farms are estimated to account for 60 percent and 40 percent of vegetable and fruit production, respectively.

1.24 Agricultural production has risen significantly over the past 20 years (Annex, Tables 2.13 and 2.14). Overall grain production has risen some 50 percent between the early 1970s and late 1980s, and yields have also improved significantly. Grain yields have been close to 5 tons per hectare since the mid-1980s and are close to those of Hungary, which has the highest yields among CMEA countries. For a number of other crops, such as potatoes, maize, fodder roots, hay, and sugar beets, yields are among the highest or in fact the highest in Eastern Europe. These high yields laid the basis for rapid increases in livestock production. Livestock yields and productivity levels are generally also at the top of the Eastern European scale.

1.25 In terms of arable land per worker (5 hectares), and despite the still fairly high share of agriculture in total material sphere employment, Czechoslovakia has one of the least labor-intensive agricultural sectors in Eastern Europe. Since the 1970s, agriculture's share of investment funds in total material sphere investment has been twice as big as its share in NMP. Fixed assets per agricultural worker have amounted to 80 percent of the average in the material sphere. Nevertheless, agricultural labor productivity (net output per agricultural worker) has been declining for many years, and is prolonged decline of demand from no[illegible] socialist countries and, last but not least, the Government's tight fiscal and monetary policy (paras. 7.22, 7.25) were expected to lead initially to a shrinking of industrial output and employment. Such a restructuring is, however, an unavoidable and necessary precondition for a viable industrial sector and renewed growth in the medium term.

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1.26 Czechoslovakia's relatively good quantitative agricultural performance has, however, been achieved at very high costs. This is partly due to the Government's policy of self-sufficiency, which reached 98 percent in 1988. The sector is heavily subsidized. During the 1980s, more than half of all budgetary subsidies (55 percent on average) went to agriculture. The largest part of these subsidies is channelled to less and least efficient farmers with the help of a complicated compensation system comparing soil and other production conditions and average national production costs. The high cost of the policy of extreme self-sufficiency can be illustrated with the example of meat production. Since the 1950s, farmers have been encouraged to increase meat production to meet the growing demand associated with rising income levels, and present per capita meat consumption ranks among the highest in the world. After agriculture had been collectivized, livestock raising became increasingly a large-scale activity. High domestic meat production could, however, be maintained--in spite of good harvests--only through increasing imports of feed grains, diverting foreign exchange from other purposes.

1.27 In centrally planned economies, <u>services</u> are underdeveloped in relation to the development stage of the economy. This is also true in Czechoslovakia, albeit to a lesser extent than in the other East European economies.[1/] Conversely, like the other East European countries, Czechoslovakia employs a relatively high share of the labor force in the primary (agriculture, forestry, fisheries) and secondary (mining,

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1/ International comparisons of service sectors suffer, however, from the fact that there is no internationally accepted definition of "services" and that they are classified under different components in the different systems of national accounts. In Czechoslovakia, passenger transport and communications serving the population are included in the non-material sphere; whereas in other East European countries, they form part of the material sphere. For practical reasons, "services" are therefore often defined as all those activities in the economy outside agriculture, forestry, construction and industry.

Table 2.1: CZECHOSLOVAKIA - Selected Economic Indicators, 1970-89

| | 1970 | 1980 | 1985 | 1986 | 1987 | 1988 | Est. 1989 | Growth rates or Period Averages 1/ 1980-85 | 1986-89 |
|---|---|---|---|---|---|---|---|---|---|
| Index of national income produced (NMP 2/) (1980=100) 3/ | 64.2 | 100.0 | 114.4 | 117.2 | 119.9 | 124.7 | 127.0 | | |
| Annual Growth of NMP (in %) | .. | 2.9 | 3.0 | 2.6 | 2.1 | 2.3 | 1.3 | 1.8 | 1.9 |
| Gross fixed investment as a share of GDP (in %) | .. | 25.7 | 24.9 | 24.5 | 24.9 | 25.1 | .. | 25.0 | 24.8 |
| Sectoral contribution to NMP (in %) | | | | | | | | | |
| Agriculture | 10.1 | 7.2 | 6.7 | 6.9 | 6.6 | 6.4 | .. | 7.1 | 6.6 |
| Industry | 61.0 | 63.6 | 59.8 | 59.8 | 59.9 | 59.6 | .. | 60.7 | 59.7 |
| Construction | 11.2 | 10.5 | 10.9 | 10.7 | 10.7 | 10.7 | .. | 10.6 | 10.7 |
| Trade and Catering | 9.1 | 10.3 | 13.5 | 13.4 | 14.1 | 15.1 | .. | 12.6 | 14.2 |
| Other | 8.5 | 8.5 | 9.2 | 9.1 | 8.7 | 8.2 | .. | 8.9 | 8.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | .. | | |

Source: Derived from data provided by CSFR authorities.

Notes:
1/ Growth rates or averages were computed for 1986-88 where 1989 figures are not available.
2/ Excluding personal transport and communication.
3/ Index based on current NMP.

2.06 Although economic growth rates exhibited a declining trend over the following twenty years (Table 2.1), Czechoslovakia's growth performance varied over time and was sometimes quite good. During the first half of the 1970s, the economy grew less rapidly than during the years of economic reforms in the late 1960s ("Prague Spring"), but with net material product growing at 5.7 percent a year between 1970 and 1975, the authorities had reason to believe that, following the abortion of the reforms in 1968, the return to traditional central planning was paying off. Several factors contributed to this impressive growth: agricultural output increased strongly due to favorable climatic conditions, but also because both cooperative and private producers operated under conditions of increased independence (contrary to the re-centralization in other sectors) and increased profitability (because producer prices had been raised more rapidly than input prices). Most importantly, investment expenditures grew rapidly during the early 1970s. Total fixed assets in industry grew by 31 percent between 1970 and 1975, with machinery and equipment increasing by 41 percent. This increase, and the shift from heavy to manufacturing industry, were the result of investment decisions taken as part of the economic reforms in the late 1960s.

2.07 During the second half of the 1970s, economic growth slowed to 3.6 percent a year, still a respectable performance. This slowdown was due to developments opposite to those observed in the early 1970s. Agricultural output declined both because of adverse climatic conditions and because farmers responded negatively to the mergers and excessive concentration that were forced upon them. The shift of investment expenditures in favor of manufacturing proved short-lived, and emphasis was again given to capital-intensive industries such as fuels, energy, mining, nonferrous metals, heavy

## PART TWO
## THE REFORM PACKAGE FOR TRANSITION

### CHAPTER FIVE
### THE CHANGING ROLE OF THE STATE

5.01 The authorities have decided and taken first steps to transform Czechoslovakia's economy to a market economy. This second part of the report discusses how this might be done. The needed reforms involve a major change in the role of the state. This means not only the state's withdrawal from the administrative control of the economy, but also steps to create an economic environment in which the private sector will function efficiently. Even after the transition process has been completed, the public sector will continue to be responsible for a number of essential economic functions. In addition to the continuing concern for overall macroeconomic management, these include (a) providing the legal and regulatory framework for private sector activity and (b) effectively planning and managing those activities that remain in the public sector.

5.02 The market system is a powerful tool for economic management and increasing economic efficiency, but it is not by itself a solution for all economic management problems. Some of the limitations and possible difficulties need to be considered at the start. For one thing, there may be some "side effects" on economic security and equity that will run counter to national values and give rise to a need for state intervention in the interest of these other objectives. Moreover, the benefits of the free market approach to economic management will be realized only if there is effective competition. Since competitive markets do not happen by themselves--especially when one is starting from a highly concentrated and monopolistic command economy--the state must play a positive role in the development and maintenance of the necessary market institutions. We will preface the more detailed consideration of specific issues of managing the transition to a market economy with a brief discussion of (a) how management by market determined prices is expected to work and (b) the role of the state in a market economy.

5.03 Management by market determined prices. A central point in the transition from a command economy to a market economy is the use of prices determined in competitive markets as "signals" to producers, consumers and owners of the factors of production. When prices are determined in competitive markets, scarcity of any particular good results in a higher price, and surplus stocks result in a lower price. Surpluses and shortages tend to be eliminated by the reactions of producers, consumers and owners of factors of production to these price changes. For the producers of consumer goods, the prices determined in the market are "signals" that indicate what goods and services are wanted by consumers. At the same time, these market determined prices provide an incentive to producers to provide the goods and services most in demand, since doing so will increase the producer's profits (and failing to do so will result in losses).

5.04 Similarly, because owners of factors of production (labor, capital and land) wish to increase their incomes, and because producers compete in the

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CHAPTER [illegible]
THE [illegible]

5.01 The authorities have decided that a first step [illegible] to [illegible] [illegible] toward market economy. This second part [illegible] discusses how [illegible] the [illegible] in the [illegible] the state [illegible] the [illegible] administ[illegible] the sector [illegible] which the private sector will [illegible] the [illegible] be responsible for a number of [illegible] functions. In [illegible] the conducting [illegible] economic [illegible] legal and regulatory [illegible] (b) [illegible] that remain [illegible] public.

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5.05 The role of the state in overcoming the limitations of management by free markets. While the theory seems clear, and there is ample evidence that the market can be an effective tool of economic management, there are limitations of the market system that, if ignored, can lead to unsatisfactory results. The most important, perhaps, relate to income distribution and economic security. Market systems tend to result in greater inequality in income distributions and higher levels of unemployment. Although progress in macroeconomic management has reduced the concern about business cycles, they have not been entirely eliminated. Also, it must be noted that influence in the market place is based upon income and wealth rather than need. The gains from the greater economic efficiency of the market system, however, should be more than enough to provide some compensation for those who might become worse off under a market system, and still leave society as a whole substantially better off. In designing an economic reform program, one cannot ignore the trade-off between equality and economic security on the one hand and individual opportunity and economic efficiency on the other.

5.06 How a society chooses to balance these values is a matter of social choice for that particular society. However, the conflict of values can be greatly reduced by accompanying the market system with state interventions which moderate income inequalities (e.g., from progressive income taxes to excise taxes on luxuries), contribute to equalize opportunity (e.g., by public education and health programs) and provide some minimum economic security (e.g., by unemployment, old age and disability benefits). In all market economies, the political process has resulted in state interventions in the interest of greater equity and economic security, although the extent of such interventions varies from place to place and from time to time.

5.07 In practice, the problem is to design these interventions on behalf of equity and security in such a way that they do not seriously undercut the objectives of economic efficiency. Additionally, as enterprises begin to operate under private market rules, some of the social functions previously fulfilled by these enterprises (e.g., unemployment compensation, provision of recreation facilities, and often housing) will become either private or government responsibilities. Most importantly, in a society like Czechoslovakia's which has been accustomed to a high degree of economic security and where unemployment had been practically unknown, the adequacy of

the social safety net will be of fundamental importance--both to meet basic needs and for the acceptability and thus sustainability of the reform program.

5.08 In a command or tightly controlled economy, one commonly finds problems of "administrative failure" resulting from factors such as the simple inability to collect and process all the information required, the lack of motivation by the managers involved, favoritism and corruption, and the absence of a clear system of accountability. Although different in kind, in a market economy there may be problems of "market failure." This may result from the lack of some of the necessary institutions, such as commercial and investment banks, a commercial code, and commodity and stock markets. However, the most frequent cause of "market failure" is likely to be the presence of monopoly power. The efficiency gains from using market prices as signals and incentives to producers and to owners of factors of production depend in large part upon having the prices determined in competitive markets. When a market is dominated by a single producer, or relatively few with a penchant to collusion, the exercise of such monopoly power will substantially reduce the efficiency gains that should be expected from the market system. Thus, there is a need for the state to introduce "competition policy." As this concern is discussed in greater detail subsequently, only a few general observations are made at this point.

5.09 The state must play an active role to promote competition and avoid monopolies. The implementation of anti-trust legislation and regulations are the most obvious requirements, but not the only ones. Thus, the state also needs to avoid controls and regulations that may be used to strengthen monopoly powers (for example, controls on the establishment or expansion of economic activities not clearly justified by necessary zoning, health and safety considerations; or the allocation of import licenses for essential inputs to a favored group of producers). There may also be a need for a positive program to encourage new entrants into particular activities. For example, under present circumstances in Czechoslovakia, there is a need to see that new private firms have equal access to the means of production (such as credit; space for stores, plants and offices; imports; and other inputs to the productive process).

5.10 Import liberalization provides a particularly powerful way of promoting competition, especially for small economies such as Czechoslovakia where imports meet a substantial part of final demand. For "tradeables" (goods and services that can be imported and exported), free imports can provide a readily available source of competition. For "non-tradeables" (primarily services that cannot be exported or imported), this approach will not work, but it is generally easier to develop domestic competition in such non-tradeable service activities. Insofar as monopolies may continue to exist, the public interest may require some regulation of these activities in order to avoid the abuse of monopoly power. However, it is essential that public officials focus on making markets work better rather than reacting to problems by introducing new controls. Even when monopoly regulation seems essential, one must carefully compare the feasibility and costs of such regulation with its expected benefits.

the social safety net will be of fundamental ... both to meet basic needs ... for the acceptability and thus sustainability of the reform program.

5.08 In a command or tightly controlled economy, one commonly finds ... of "administrative failure" resulting from factors such as the simple ... to collect and process all the information required, the lack of ... by the managers involved, favoritism and corruption, and the ... systems of accountability. Although different in kind, in ... there may be problems of "market failure." This may result ... of some of the necessary institutions, such as commercial and ... a commercial code, and commodity and stock markets. ... frequent cause of "market failure" is likely to be the ... power. The efficiency gains from using market prices as signals ... incentives to producers and to owners of factors of production ... on having the prices determined in competitive markets ... is ... by a single producer, or relatively few with ... collusion, the exercise of such monopoly power will substantially reduce ... gains that should be expected from the market system. ... need for the state to introduce "competition policy." As ... discussed in greater detail subsequently, only a few general ... made at this point.

5.09 The state must ... active role to promote competition and ... implementation of anti-trust legislation and ... requirements but not the only ones. Thus, ... to avoid controls and regulations that may be used to strengthen monopoly powers (for example controls on the establishment of ... activities not clearly justified by necessary ... or the allocation of import licenses for ... group of producers). There may also be a need for a positive program to encourage new entrants into particular activities. For ... present circumstances in Czechoslovakia, there is a need to see that new private firms have equal access to the means of production (such as credit, ... banks and offices, imports and other inputs to the productive process).

5.10 Import ... provides a particularly powerful way of promoting competition, especially for small economies such as Czechoslovakia where imports ... substantial part of final demand ... of "tradeables" (goods and services that can be imported and exported), free imports can provide a readily available source of competition. For "non-tradables" (primarily services that cannot be ... or imported), this approach will not work, ... it is generally ... in such non-tradeable ... exist, the public interest ... to avoid the abuse of ... public ...

5.11 There are some activities for which management by the market system is unlikely to be sufficient and where there is a need for longer-term state planning and administrative management. This applies particularly to economic and social infrastructure and to the social services. In these areas, there is a need for long-term planning (e.g., a least-cost plan for meeting the country's need for electric energy over the next ten or fifteen years; a program for the development of an adequate highway network; or land use planning in urban areas). The dangers of private sector activities being unduly restricted, or of being "crowded out" by the Government's excessive demand upon resources, are frequently emphasized. But it must also be recognized that government activities can have important positive effects; an inadequate social and economic infrastructure will prevent the efficient development of private sector activities.

5.12 There are other areas where the productive process may involve important "externalities," e.g., costs (such as pollution) which are not borne by the producer, or benefits (such as training workers) which do not accrue to the producer. In such cases, there may be good reason for the Government to intervene in the workings of the free market process. While regulation may be the appropriate approach in some instances, in many cases it is possible to make use of the market mechanism by imposing special taxes on activities that give rise to social costs or to provide subsidies to encourage those which offer significant social benefits. In this way, the market mechanism can be used to bring private costs and benefits more in line with social costs and benefits so that private decisions will more adequately reflect social as well as private interests. Command economies have been surprisingly lax in handling pollution externalities, and more government attention to these problems has become urgent. This process may be aided by the increased political accountability of government officials.

5.13 In countries where the private economy is at an early stage of development, or where there remains a good deal of uncertainty regarding the longer-term, it is not unusual to find that the private sector has relatively little interest in investing in the more capital intensive and slowly gestating productive activities. In such instances, there may be good reasons for the Government to undertake or at least share in such directly productive activities. But such state owned enterprises (SOEs) should be operated on a commercial basis, i.e., subject to the same market disciplines and incentives that would apply to a firm that was wholly privately owned. In the case of Czechoslovakia, which has only begun the transition to a more market oriented economy, such "commercialization" of SOEs is particularly important because numerous activities will remain in the public sector for some time (if only because demonopolization, as well as restructuring and privatization all will take time).

5.14 Thus, the issue is not one of simply abolishing the role of the state in the economy. The state must play a positive role in building the institutions and implementing the policies that must accompany using the market as a basic tool of economic management.

## CHAPTER SIXTEEN
## TRADE AND EXPORT EXPANSION POLICIES

16.01 In the context of the reform efforts during the late 1980s some progress was made towards liberalizing foreign trade. Under the old system, the country's foreign exchange plan specified exports and imports by branch ministries and enterprises, and all foreign trade was organized by some 50 to 60 foreign trade organizations (FTO) under the direction of the Ministry of Foreign Trade. All foreign exchange earnings had to be surrendered to the State Bank.[1/] Since mid-1988, all enterprises can engage in foreign trade,[2/] and some 500 new FTOs, trading mainly in services and small-scale industry products, have registered with the Ministry. The original FTOs, however, still account for more than 80 percent of all foreign trade. As part of the transition from a central foreign exchange allocation to a market-determined exchange rate, a foreign exchange retention system was introduced in January 1989. Retention quotas are determined individually for each enterprise with an incentive to exceed planned export targets to hard currency countries.[3/]

16.02 The abolition of foreign trade monopolies in early 1990 and move to "internal convertibility" at the beginning of 1991 require a different approach to foreign trade policy. Enterprises will surrender their foreign exchange earnings to the State Bank at market-determined exchange rates and buy the foreign exchange they need at an equally freely determined rate on the foreign exchange market. The monetary authorities will no longer be able to influence allocations of foreign exchange earnings through direct intervention. In elaborating a new trade policy, the authorities will have to take into account the following constraints: the existing tariff structure, the "dualism" regarding countries and goods in the export structure, and the barriers that Czechoslovak exporters may face in their attempts to expand sales on industrialized countries' markets.

### A. Low Tariff Protection

16.03 Tariffs will become the Government's main trade policy instrument. Czechoslovakia's tariff structure has the following characteristics: First, the tariff protection is low. In 1988, the unweighted average tariff rate amounted to 4.8 percent, and the import-weighted average rate was 4.5 percent. These figures are similar to those prevailing in industrial countries. Moreover, the tariff schedule consists of a relatively flat tariff, with almost two-thirds (58.4 percent) of the tariffs being lower than 5 percent,

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1/ Foreign exchange is actually surrendered to the Obchodni Bank which administers it on behalf of the State Bank and the Government.

2/ The Law on External Economic Relations came into effect on July 1, 1988.

3/ In 1989, 40 percent of total hard currency earnings were retained by enterprises, the remaining 60 percent were transferred to the Central Foreign Exchange Fund. Enterprises with no or insufficient foreign exchange receive direct allocations from this fund.

and virtually all of them (96.4 percent) are below 10 percent. As a result of this flat structure, the effective protection rates are low.[1/]

16.04 Second, the 265 tariffs higher than 10 percent result in a very narrow fringe of extremely high effective protection rates. Their nominal rates lie between 10.2 and 70 percent (Table 3.14, Annex), and the most protected industries (food canning, textiles and clothing, pulp and paper, synthetic products and motor vehicles) are important export-oriented industries, which are likely to resist the major restructuring efforts required for becoming competitive on export markets.

16.05 Third, the transition from the previously high protection resulting from non-tariff barriers (NTB) (foreign exchange controls, import-export monopolies) to the relatively uniform and low protection afforded by the current tariff schedule could raise pressures for increasing the existing tariff rates and "tariffying" the politically more sensitive non-tariff barriers. The tariffication process could take the from of one or a combination of the following options: (a) the use of GATT Article XII allowing for the introduction of restrictions (surcharges) for balance of payments reasons; (b) the use of an antidumping law;[2/] and (c) the use of "import licensing" as protectionist instrument.[3/] All these approaches will be economically very costly, since higher tariffs will contribute to inflation, and since restricted imports, especially of machinery and other capital goods, will delay the process of industrial restructuring and export expansion. For instance, the Government cannot increase the existing tariffs without renegotiating them with the other Contracting Parties of the General Agreement on Trade and Tariffs (GATT) because former Governments have bound tariffs to their existing level. Such negotiations will take time, even if they are limited to the "main trading partners," and they are likely to erode the goodwill enjoyed by Czechoslovakia's decision to introduce a market economy. The GATT tariff-binding constraint has an additional advantage.

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1/ In 1989, in the framework of the Uruguay Round negotiations currently being held in Geneva, the authorities proposed a 30 percent decrease of their tariffs, which reinforces the points mentioned above. It is unlikely that this economically sound tariff feature will be negatively affected by the fact that Czechoslovakia's "autonomous" tariff schedule consists of 195 different tariff rates, 103 of which lie between 0 percent and 10 percent (with increases on a 0.1 percent basis). The administrative costs of enforcing such a complex tariff structure are, however, high.

2/ Czechoslovakia has signed the Tokyo Antidumping Code and is likely to sign the Uruguay Antidumping Code.

3/ The authorities may be tempted to pursue the latter two options because they would make use of the collusive behavior of central authorities and large enterprises over the past 40 years. They should, however, resist this temptation because such an approach to tariff policy would risk to preserve the existing industrial structure rather than stimulate its modernization.

and virtually all of them (98.6 percent) are below 10 per cent. As a result of this tariff structure, the effective protection rates are low.[illegible]

16.06 [illegible] Second, the 255 tariffs higher than 10 percent result in a very narrow range of extremely high effective protection rates. The nominal rates are between 10.2 and 88 percent (Table 2.16, Annex), and the most protected industries [illegible] textiles and clothing, pulp and paper, [illegible] motor vehicles [illegible] are important export-oriented industries [illegible] likely [illegible] resist the most [illegible] restructuring [illegible] [illegible] negative or export [illegible]

16.07 [illegible] the transition [illegible] the previously [illegible] protection [illegible] [illegible] [illegible] relatively uniform [illegible] could raise pressures [illegible] [illegible] [illegible] politically [illegible] [illegible] options [illegible] [illegible] [illegible] [illegible] [illegible] protectionist instruments. All these [illegible] procedures [illegible] [illegible] [illegible] high [illegible] [illegible] [illegible] inflation [illegible] since restricted imports, especially [illegible] capital goods [illegible] the process of industrial restructuring and export [illegible] the Government can [illegible] [illegible] without renegotiating [illegible] the other Contracting Parties [illegible] General Agreement on Tariffs and Trade (GATT) because former Governments have bound tariffs [illegible] existing level. Such negotiations will take time, even if they are limited to the "main trading partners," and they are likely to erode the [illegible] Czechoslovakia's decision to introduce [illegible] economy. The GATT tariff binding constraint has an additional advantage

1/ In 1986 [illegible] the framework of the Uruguay Round negotiations currently being held in Geneva, the authorities proposed [illegible] of [illegible] tariffs, which reinforces the point made [illegible] It is [illegible] that this economically [illegible] tariff [illegible] will be negatively affected by the [illegible] Czechoslovakia's [illegible] tariff schedule consists of [illegible] tariff rates [illegible] of which [illegible] between [illegible] and 10 percent, with increases on [illegible] percent [illegible] [illegible] structure are, however, high.

Czechoslovakia
[illegible]

[illegible]

According to Czechoslovak trade laws, the Government can change the tariffs through a simple decree. The GATT commitments would thus help the authorities resist eventual pressures to raise tariffs exerted by domestic interest groups.

16.06 The relatively low level of protection granted by the existing tariff schedule makes it particularly important to choose an appropriate exchange rate mechanism. The authorities have decided to introduce a system of flexible exchange rates at the beginning of 1991, which will result in a long-term exchange rate level that takes into account the existing tariff structure.

B. A "Dual" Export Structure

16.07 Starting in 1991, Czechoslovakia's foreign trade policy will operate in a world where the traditional distinctions between convertible and non-convertible currency areas, and between bilateralism and multilateralism, will have lost their meaning. Firms will no longer be subject to quantitative controls, and Czechoslovakia's trade with CMEA countries will be quite similar to trade with market economies. It will be conducted in hard currency, and firms will be able to take advantage of arbitrage opportunities.

16.08 This perspective is essential for assessing the so-called "terms of trade" problem in 1991 and thereafter. Based on the energy prices prevailing in May 1990, the Czechoslovak authorities estimated that the cost of the 1990 "bundle" of imported raw materials (crude oil, gas and iron ore) will increase from US$3.3 billion to US$5.0 billion in 1991. By contrast, the foreign exchange received for the "bundle" of products exported (machines, transit fee for oil transit, and returns on investments made in USSR) would drop from US$3.2 billion in 1990 to US$3.1 billion in 1991. Assuming no change in the volume and composition of products traded between the two countries, the projected terms of trade loss would thus amount to US$1.8 billion in 1991, or about 3.6 percent of GDP (at present exchange rates). It is, however, important to point out that this scenario will only materialize if the two Governments want and have the capacity to enforce the outcome of their negotiations, i.e., if they succeed in imposing the contracts that have been negotiated between them on firms. If this were not the case, Czechoslovak firms could export their products to any country where they find buyers, and deficits with one country would be balanced by surpluses with others. The "terms of trade" changes will therefore be determined on a bilateral basis only if the Government denies firms any arbitrage, that is, if reforms towards a market economy are not implemented. By contrast, if such reforms do take place, "terms of trade" changes will be determined by the demand and supply constellations on all markets, as trade with former CMEA countries will be conducted in hard currency.

16.09 Over the years, the territorial orientation of Czechoslovakia's foreign trade has developed into a "dual" export structure. This can be illustrated by comparing the products exported to CMEA and OECD countries (Table 3.12, Annex). Only two sectors (non-steel and clothing) export to both Western and Eastern countries. Products such as meat, beverages, cork and wood, textile yarns or non-metal minerals are almost exclusively sold to the

West because the required quality standards are relatively easy to meet, whereas products with comparatively high technology standards, such as power-generating equipment, metal-working machinery, office machines, road vehicles, clothing and footwear, are almost exclusively exported to Eastern countries. In recent years, an increasing number of these products has encountered difficulties even on those markets. At the same time, exports of foodstuff and industrial consumer goods to Western markets have slowed down, which is partly due to the increased competition from newly industrialized countries. Czechoslovakia's trade adjustment will therefore have to be achieved not only through a reorientation of the trade flows, but also through far-reaching industrial restructuring. Machinery exports in particular are likely to undergo a massive adjustment.

C. Export Barriers

16.10 In 1990, Czechoslovakia has been very active in establishing new trade agreements. In April 1990, a new trade agreement has been signed with the United States, which serves as a basis for applying the GATT principle of most-favored nation between the two countries. The absence of such a principle[1/] explains the very low level of trade between the United States and Czechoslovakia over the past 40 years (less than 2 percent of trade in convertible currencies). In May 1990, Czechoslovakia and the European Community signed an agreement on trade and economic cooperation. It stipulates the progressive dismantlement of the quantitative restrictions imposed by the various EC member states against Czechoslovak exports. However, major quantitative restrictions imposed by the EC and the US were excluded under these agreements.

16.11 These trade agreements and the relatively low US and EC tariffs notwithstanding, Czechoslovakia's exports still face trade barriers, mainly in the following three sectors: export quotas for textiles with the US and EC; steel quotas and price agreements with EC and countervailing actions with the US; and petrochemicals antidumping actions within EC. With regard to textile quotas within the framework of Multifibre Arrangement (MFA), the following points are worth mentioning: Czechoslovak exports face quotas for 34 MFA products, a relatively long list by EC standards; the quotas have been increased in most cases, on average by 7 percent a year between 1985 and 1989; at an average "fulfillment" ratio of 78 percent, Czechoslovak exporters have demonstrated an above-average performance compared to other exporters to the EC.[2/]

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1/ This means that "autonomous" tariff rates, which are much higher than the "conventional" rates analyzed above, are applied. "Autonomous" tariff rates refer to those rates not covered by any agreement. They usually are comparatively unfavorable. "Conventional" rates are the result of bilateral or multilateral agreements.

2/ Recently, fulfillment ratios have, however, declined. It is not clear whether this is due to difficulties experienced by Czechoslovak producers in their attempt to expand production, or to generous quotas granted by the EC.

16.12 There is little information available about EC restrictions on steel exports. These restrictions have been enforced since the late seventies, and are part of a wider net of restrictions known as the "Davignon Plan." They consist of quantitative restrictions accompanied by minimum prices determined by the EC Commission on the basis of its information on "normal" costs and profits in the exporting country. US restrictions on Czechoslovak steel exports consist mainly of one countervailing action against wire rod (in 1983) and two antidumping actions against coils, plates and sheets (in 1984), which are substantial protections if one takes into account the minute volume of trade between the two countries.

16.13 Between 1980 and 1989, 34 antidumping cases against Czechoslovak exports have been initiated by the EC Commission. This is a comparatively high figure, and Czechoslovakia's share in EC antidumping cases has been significantly higher than its share in EC imports. Only five cases have been terminated by unofficial measures. In the EC antidumping law, such measures are discontinued only five years after first having been imposed. However, there is always the possibility to review the cases which are about to expire or to re-initiate them. In many cases, this has happened to Czechoslovak firms. For instance, exporters of fibre building board have been involved in cases initiated in 1978, 1981, 1983, and 1988. Since many EC antidumping measures against Czechoslovak exports consist of undertakings and specific duties, it is difficult to give a good estimate of their ad valorem equivalents. A conservative figure would place them between, on average, 10 percent to 15 percent.

D. Development of an Unbiased Trade Pattern

16.14 Although Czechoslovakia may have better prospects for expanding exports on international markets in the medium term than some other countries in the region, many problems must be solved before exports can become a forceful engine of economic growth. As described above, the integration of the economy into the CMEA, especially its strong trade ties with the Soviet Union, led to a very limited exposure of its products to competition from industrialized countries. This, with a few exceptions, prevented Czechoslovakia, from developing a trade specialization in line with its comparative advantage. Since the distinction between various trade areas becomes quickly irrelevant, Czechoslovakia will have to reorient its geographical trade flows and adjust the product composition of its trade in line with its comparative advantage. This reorientation will have to occur gradually so that the country does not lose old export markets before having acquired new ones. Several other factors mitigate against a quick increase of industrial exports. Both "internal convertibility" of the Koruna at the beginning of 1991 and trade liberalization will increase the pressure on the balance of payments in the short term. Export competition from the newly industrialized countries and the other reforming countries in the region will not make it easier for Czechoslovakia to gain shares on competitive world markets. Last but not least, while the Soviet Union is likely to continue to provide a large market for Czechoslovakia's exports, its trade may increasingly orient itself towards industrialized Western countries. Czechoslovakia's exports over the next few years can therefore be expected to grow at a slower pace than its imports. In fact, exports may even decline

during the initial phase of the transition. The challenge for policy makers and enterprises consists in keeping the projected trade deficits at manageable levels and in integrating the economy more fully and without major policy reversals into industrialized countries' trade.

16.15 The existing tariff is the best anchor for the new "global" approach in trade policy. After forty years of distortions which resulted in a hypertrophy of trade with USSR due to low import and high export prices, Czechoslovakia's trade needs to return to more normal conditions, both in terms of trading partners and products. A uniform and low tariff coupled with a flexible exchange rate mechanism are the best instruments for achieving this goal. Such an approach has two immediate consequences. First, the bilateral agreement with the USSR should be interpreted as a framework for providing information to Czechoslovak exporters on possible trade opportunities rather than mandatory contracts imposed on Czechoslovak firms. Expansion of foreign trade, especially on increasingly competitive markets and involving such a fundamental re-orientation as Czechoslovakia's trade is undergoing, requires a well-functioning infrastructure. In order to be able to benefit from the integration into world markets and to expand exports of goods and services rapidly, Czechoslovakia should upgrade and modernize its transport infrastructure, including telecommunications, as quickly as possible.

16.16 Supply reactions to rapid and massive changes in the economic and social environment tend to be slower than demand reactions. It is therefore quite likely that domestic pressure groups will attempt to re-establish the level of protection they enjoyed before the reforms. It is important to resist such attempts because trade restrictions result in welfare losses for all citizens. The Government should make use of the assistance offered by GATT and other agencies to fend off such policy reversals. It should also envisage establishing a "Trade and Industry Commission" composed of independent experts who would apply economic analysis for assessing the net costs or benefits of certain protection measures requested by vested interests for the economy as a whole. In order to enhance its visibility, such a Commission should have a high status. In addition, Czechoslovakia should be given credit by its main trading partner, the EC, for undertaking fundamental trade liberalization. Such a "credit" could take the form of a progressive dismantlement of EC regulations targeted against non-market economies. For instance, the special rules for non-market economies in the EC antidumping law could be abandoned for cases involving Czechoslovak firms.

Table 2.10. Czechoslovakia: Derivation of Gross Domestic Product
(In billions of current koruny)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 |
|---|---|---|---|---|---|---|---|---|---|
| Domestic demand | | | | | | | | | |
| Personal consumption | 257.2 | 262.5 | 271.1 | 279.7 | 287.2 | 297.6 | 306.1 | 315.3 | 330.4 |
| Social consumption | 96.5 | 101.9 | 106.6 | 111.5 | 123.9 | 127.9 | 135.9 | 143.8 | 149.5 |
| Accumulation | 124.2 | 91.8 | 96.6 | 94.5 | 101.5 | 102.3 | 112.6 | 106.2 | 99.9 |
| Foreign balance | 3.2 | 11.9 | 15.2 | 16.5 | 22.0 | 22.4 | 9.3 | 10.0 | 18.3 |
| Losses on fixed capital and works 1/ | 5.1 | 5.1 | 6.5 | 5.8 | 6.5 | 6.1 | 6.2 | 8.0 | 8.3 |
| Net material product | 486.3 | 473.3 | 496.0 | 507.9 | 541.1 | 556.3 | 570.0 | 583.3 | 606.4 |
| Value added on non-material services | 77.8 | 73.3 | 74.3 | 73.3 | 76.4 | 83.6 | 85.3 | 89.1 | 92.0 |
| Less nonmaterial costs of material sphere | 39.2 | 38.8 | 41.7 | 44.6 | 46.2 | 46.9 | 48.8 | 52.5 | 55.3 |
| Depreciation 2/ | 62.0 | 70.5 | 72.8 | 77.9 | 81.2 | 84.0 | 88.1 | 91.2 | 96.8 |
| GDP at market prices | 586.8 | 578.3 | 601.4 | 614.5 | 652.5 | 677.0 | 694.7 | 711.1 | 740.0 |

Source: CSFR authorities.

Notes:
1/ Depletion of capital assets in addition to normal depreciation.
2/ Less losses on stocks.

Table 2.11. Czechoslovakia: Gross Domestic Product and Gross National Product 1/
(In billions of koruny)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | (In current prices) | | | | | |
| Gross domestic product 2/ | 586.8 | 578.3 | 601.4 | 614.5 | 652.5 | 677.0 | 694.7 | 711.1 | 740.0 | 759.5 |
| By sector: | | | | | | | | | | |
| Agriculture | 39.6 | 34.5 | 43.2 | 45.8 | 47.3 | 44.0 | 46.8 | 46.3 | 46.9 | .. |
| Industry | 350.2 | 332.2 | 348.0 | 360.7 | 374.6 | 389.8 | 399.6 | 409.6 | 425.2 | .. |
| Services | 196.9 | 211.6 | 210.2 | 208.0 | 230.6 | 243.2 | 248.3 | 255.2 | 267.9 | .. |
| By expenditure: | | | | | | | | | | |
| Total consumption | 395.2 | 403.3 | 413.1 | 426.8 | 449.4 | 469.9 | 483.7 | 500.1 | 516.3 | 532.2 |
| Gross investment | 191.3 | 167.4 | 175.9 | 178.1 | 189.2 | 192.4 | 206.9 | 205.4 | 205.0 | 210.2 |
| Fixed investment | 155.4 | 154.8 | 161.7 | 162.7 | 176.5 | 178.2 | 188.7 | 181.7 | 194.4 | 201.0 |
| Changes in stocks | 35.9 | 12.6 | 14.2 | 15.4 | 12.7 | 14.2 | 18.2 | 23.7 | 10.6 | 9.2 |
| Exports of goods and nonfactor services | 198.7 | 179.8 | 193.2 | 198.3 | 227.7 | 239.7 | 239.7 | 244.1 | 256.0 | 266.3 |
| Imports of goods and nonfactor services | 198.4 | 172.2 | 180.8 | 188.7 | 213.7 | 224.9 | 235.6 | 238.5 | 237.3 | 249.2 |
| Net factor income receipts | -6.6 | -8.1 | -5.4 | -3.4 | -3.8 | -2.9 | -1.9 | -1.8 | -2.2 | -1.3 |
| Gross national product | 580.2 | 570.2 | 596.0 | 611.1 | 648.7 | 674.1 | 692.8 | 709.3 | 737.8 | 758.2 |
| | | | | | (In January 1, 1984 prices) | | | | | |
| Gross domestic product | 595.1 | 595.3 | 600.2 | 614.6 | 627.5 | 641.1 | 652.7 | 658.0 | 675.2 | 683.9 |
| By sector: | | | | | | | | | | |
| Agriculture | 42.7 | 38.0 | 41.4 | 41.5 | 44.8 | 42.0 | 42.8 | 41.4 | 41.7 | .. |
| Industry | 344.4 | 349.4 | 342.8 | 347.9 | 358.9 | 370.4 | 377.8 | 388.7 | 402.5 | .. |
| Services | 208.0 | 207.8 | 216.0 | 225.2 | 223.8 | 228.7 | 232.1 | 227.8 | 231.0 | .. |
| By expenditure: | | | | | | | | | | |
| Total consumption | 420.6 | 421.3 | 422.1 | 440.6 | 448.5 | 460.3 | 473.1 | 485.6 | 499.4 | 508.6 |
| Gross investment | 199.9 | 182.8 | 178.2 | 169.5 | 165.8 | 167.0 | 174.3 | 170.5 | 167.0 | 179.7 |
| Fixed investment | 164.9 | 167.2 | 160.0 | 152.2 | 153.8 | 152.6 | 156.1 | 146.7 | 156.7 | 170.8 |
| Changes in stocks | 35.0 | 15.6 | 18.2 | 17.3 | 12.0 | 14.4 | 18.2 | 23.8 | 10.3 | 8.9 |
| Exports of goods and nonfactor services | 181.0 | 184.7 | 195.0 | 204.6 | 227.5 | 236.3 | 236.0 | 241.0 | 251.3 | 254.8 |
| Imports of goods and nonfactor services | 206.5 | 193.5 | 195.1 | 200.0 | 214.3 | 222.5 | 230.7 | 239.1 | 242.5 | 259.2 |
| Net factor income receipts | -6.7 | -8.3 | -5.4 | -3.4 | -3.6 | -2.7 | -1.8 | -1.6 | -2.1 | -1.2 |
| Gross national product | 588.4 | 586.9 | 594.8 | 611.2 | 623.9 | 638.4 | 650.9 | 656.3 | 673.2 | 682.7 |

Source: Staff estimates and the Federal Statistical Office (FSO).

Notes:

1/ Staff estimates of sectoral value-added and expenditures are based on official NMP and GDP figures shown in Tables 2.1, 2.3, 2.4 and 2.10, official 1987 input-output data, and related basic statistics. These data are preliminary and subject to revisions.

2/ The GDP figure for 1989 is based on an NMP figure which has recently been revised by the FSO and is slightly higher than the figure presented in Table 2.1.

Table 2.12. Czechoslovakia: Agricultural Production

| | 1988 | 1988 | 1970-75 | 1975-80 | 1980-85 | 1986 | 1987 | 1988 | 1989 |
|---|---|---|---|---|---|---|---|---|---|
| | (Billions of current koruny) | (Share in total agricultural production) | (Annual percentage change, at constant 1980 prices) | | | | | | |
| Crop production | 68.7 | 46.7 | 1.5 | 1.5 | 2.5 | -2.6 | 1.9 | 3.9 | 0.2 |
| of which: | | | | | | | | | |
| Grains | 23.3 | 15.9 | 5.4 | 2.9 | 2.2 | -7.5 | 8.6 | 1.5 | 0.5 |
| Fodder and root crops | 17.2 | 11.7 | .. | 1.4 | 3.6 | -4.1 | 2.6 | -4.2 | .. |
| Potatoes | 6.5 | 4.4 | -5.6 | -5.6 | 4.7 | 2.9 | -11.4 | 19.4 | -16.2 |
| Vegetables | 5.1 | 3.5 | -0.7 | -3.0 | 2.4 | .. | 11.1 | -6.7 | 3.6 |
| Animal production | 78.3 | 53.3 | 2.8 | 2.1 | 1.3 | 3.0 | 0.3 | 2.1 | 1.6 |
| of which: | | | | | | | | | |
| Livestock for slaughter | 35.0 | 23.8 | 4.3 | 1.7 | 0.9 | 0.7 | 1.6 | 2.6 | 1.3 |
| of which: | | | | | | | | | |
| Cattle | 15.1 | 10.3 | 4.9 | 0.9 | 1.4 | 0.7 | 0.7 | -1.4 | 0.7 |
| Pigs | 19.1 | 13.0 | 5.0 | 3.0 | .. | 1.3 | 3.3 | 7.6 | 0.6 |
| Milk | 26.8 | 18.2 | 2.7 | 1.5 | 3.2 | 1.9 | -1.4 | 0.5 | 2.8 |
| Eggs | 5.4 | 3.7 | 2.7 | 1.5 | 2.6 | .. | .. | .. | 2.0 |
| Total agricultural gross production | 146.9 | 100.0 | 2.2 | 1.9 | 1.8 | 0.5 | 1.0 | 2.9 | 1.0 |

Source: CSFR authorities.

Table 2.13. Czechoslovakia: Production and Yields of Selected Agricultural Crops

| | 1970 | 1975 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | (In thousands of tons) | | | | | | | |
| Grain overall | 7204 | 9283 | 10699 | 9400 | 10275 | 11044 | 11977 | 11769 | 10797 | 11771 | 11902 | 12042 |
| Barley | 2280 | 3114 | 3575 | 3392 | 3654 | 3276 | 3677 | 3538 | 3530 | 3551 | 3411 | 3550 |
| Corn | 513 | 843 | 745 | 706 | 941 | 722 | 940 | 1114 | 992 | 1160 | 996 | 1000 |
| Wheat | 3174 | 4202 | 5386 | 4325 | 4606 | 5820 | 6170 | 6023 | 5305 | 6154 | 6547 | 6356 |
| Potatoes | 4793 | 3565 | 2695 | 3743 | 3608 | 3177 | 3978 | 3450 | 3512 | 3072 | 3659 | 3167 |
| Rye | 454 | 530 | 570 | 544 | 583 | 751 | 710 | 620 | 547 | 496 | 534 | 708 |
| Sugar beets | 6644 | 7734 | 7255 | 6969 | 8210 | 6041 | 7513 | 7746 | 7134 | 6697 | 5481 | 6389 |
| | | | | | (In tons per hectare) | | | | | | | |
| Grain overall | 2.77 | 3.43 | 4.18 | 3.67 | 4.03 | 4.38 | 4.80 | 4.70 | 4.30 | 4.70 | 4.80 | 4.85 |
| Barley | 2.84 | 3.20 | 3.92 | 3.44 | 3.79 | 4.00 | 4.73 | 4.49 | 4.30 | 4.26 | 4.30 | 4.41 |
| Corn | 4.09 | 5.49 | 4.69 | 4.17 | 5.33 | 4.44 | 4.82 | 5.44 | 4.72 | 5.64 | 5.30 | 5.27 |
| Wheat | 2.95 | 3.57 | 4.53 | 3.99 | 4.31 | 4.89 | 5.14 | 4.98 | 4.40 | 5.08 | 5.28 | 5.13 |
| Potatoes | 14.21 | 14.24 | 13.80 | 18.88 | 18.18 | 16.57 | 20.66 | 18.55 | 19.39 | 17.19 | 20.64 | 18.60 |
| Rye | 2.07 | 2.79 | 3.21 | 3.18 | 3.31 | 3.70 | 3.70 | 3.46 | 3.52 | 3.50 | 3.74 | 4.05 |
| Sugar beets | 36.96 | 35.62 | 34.26 | 32.17 | 38.99 | 29.08 | 36.13 | 37.70 | 36.71 | 35.44 | 33.64 | 35.16 |

Source: CSFR authorities.

Table 2.14. Czechoslovakia: Production and Yields of Selected Livestock Products
(In thousands of units)

| | 1970 | 1975 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Meat (tons, live yield) | 1234 | 1539 | 1691 | 1714 | 1580 | 1665 | 1727 | 1749 | 1760 | 1792 | 1847 | 1881 |
| Beef | 505 | 641 | 669 | 651 | 657 | 674 | 709 | 721 | 726 | 728 | 719 | 727 |
| Veal | 48 | 28 | 17 | 13 | 12 | 16 | 21 | 21 | 15 | 14 | 11 | 8 |
| Pork | 681 | 870 | 1005 | 1050 | 911 | 975 | 997 | 1007 | 1019 | 1050 | 1117 | 1146 |
| Eggs | 3733 | 4499 | 4900 | 4968 | 5030 | 5232 | 5504 | 5499 | 5558 | 5544 | 5596 | 5628 |
| Milk (liters) | 4650 | 5298 | 5731 | 5740 | 5753 | 6300 | 6560 | 6676 | 6804 | 6713 | 6754 | 6888 |
| Average live weight (kg) | | | | | | | | | | | | |
| Slaughtered cattle | 480.6 | 492.6 | 472.9 | 462.4 | 449.1 | 460.7 | 467.4 | 470.2 | 479.1 | 479.2 | 479.7 | 489.3 |
| Slaughtered pigs | 117.2 | 108.9 | 113.9 | 109.9 | 110.4 | 116.8 | 121.2 | 123.2 | 122.9 | 123.6 | 124.3 | 125.6 |
| Average annual milk yield/cow (liters) | 2487.9 | 2803.0 | 3089.0 | 3091.6 | 3102.5 | 3383.6 | 3535.6 | 3642.7 | 3748.6 | 3741.2 | 3777.1 | 3880.0 |
| Average annual egg production/chicken | 174.9 | 218.3 | 228.3 | 229.8 | 227.6 | 229.7 | 239.9 | 246.5 | 247.2 | 246.3 | 246.8 | 250.8 |
| Number of calves born per 100 cows 1/ | 88.6 | 92.6 | 98.5 | 98.2 | 98.7 | 100.3 | 101.8 | 100.9 | 101.6 | 100.9 | 101.8 | 101.1 |
| Number of piglets born per sow 1/ | 14.2 | 15.9 | 16.7 | 17.2 | 16.9 | 17.5 | 17.9 | 18.1 | 18.2 | 18.1 | 18.1 | 18.2 |

Source: CSFR authorities.

Notes:
1/ Socialist sector only.

Karel Dyba and Jan Svejnar. "Economic Developments and Prospects in Czechoslovakia, Yugoslavia, and Germany." American Economic Review. May, 1991.

# ECONOMIC DEVELOPMENTS AND PROSPECTS IN CZECHOSLOVAKIA, YUGOSLAVIA, AND GERMANY

## Czechoslovakia: Recent Economic Developments and Prospects

*By* KAREL DYBA AND JAN SVEJNAR*

Czechoslovakia provides a unique example of a country that became underdeveloped as a result of an externally imposed system. Before World War II, Czechoslovakia was a democracy, with GNP per capita similar to that of Belgium and Austria. Its industries were on the technological edge and its products were known worldwide for their superb workmanship. By 1990, Czechoslovak GNP per capita is estimated by the World Bank at $3,300, thus being comparable to that of Venezuela, Gabon, and Yugoslavia, but only slightly above one-fifth of that of Austria and Belgium.[1] Most Czechoslovak products are now of mediocre quality and selling at a discount, if at all, in the West.

This remarkable transition occurred over approximately 40 years. During the post-World War II reconstruction, the country was still run as a market economy, although major parts of industry, banking, and insurance were already nationalized. After the 1948 Communist takeover, Soviet-type economic planning was imposed, the remaining private enterprises were nationalized,[2] and priority was given to heavy industry. Czechoslovak foreign trade was reoriented from world markets toward Soviet bloc countries.

The Czechoslovak government adhered to the Soviet-type planning system faithfully throughout the 1950's. The economic slowdown in the early 1960's led to a series of reform attempts, that culminated during the Prague Spring of 1968 with a short-lived and partial program of price liberalization, separation of economic policy from political decision making, enterprise autonomy, and workers' participation in enterprise management. However, central planning was reimposed after the 1968 invasion and remained virtually intact until the late 1980's.

### I. An Historical Overview of Economic Performance

Even if one were to treat the current estimates of Czechoslovak GNP per capita as downward biased, the profound decline of Czechoslovakia's standing relative to advanced market economies is undisputable. As a result, one has to accept the official as well as Western data on Czechoslovak economic growth with caution. The data indicate that the most impressive rate of growth occurred during the First Five-Year Plan (1949–53), when the officially measured net material product (NMP) increased at nearly 10 percent a year. However, this pace proved unsustainable and in the second half of the 1950's, NMP grew at 7 percent annually. The 1961–65 period witnessed virtual stagnation and led to the subsequent reform. Growth resumed at about 7 percent during the 1965–70 reform period and the economy still registered almost 6 percent annual growth during the following 5 years. A major slowdown to 3.6 percent set in between 1975 and 1980 as the first oil shock turned the terms of trade against Czechoslovakia

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[1] The estimated GNP of Czechoslovakia naturally depends on the methodology used. Some other studies generate higher estimates.

[2] Private agriculture was collectivized or converted into state farms.

within the Council for Mutual Economic Assistance (CMEA) and agriculture recorded poor performance.

As can be seen from Table 1, the 1980's witnessed a further slowdown in economic growth. The 1.8 percent growth in the first half of the 1980's reflected the impact of the world recession, rising input prices, and restrictive government policies. However, even in the 1985–89 period, the growth rate was only 2.2 percent a year. With many observers noting that inflation was being increasingly underestimated, the 1980's can arguably be seen as a decade of economic stagnation (see Dyba, 1989).

Other indicators also signaled deterioration in economic performance. The share of net fixed investment in NMP fell from 20 percent in 1975 to a mere 13 percent in the late 1980's, and the share of consumption rose. Export growth slowed down in the 1980's and exports to economically troubled developing countries were increasingly accompanied by trade credits. Within CMEA, Czechoslovakia became a net creditor, especially vis-à-vis the USSR and Poland.

The secular deterioration of economic performance was brought about by a number of factors. The centralization of all economic activity after 1948 initially created phenomenal growth as the command system could rapidly mobilize existing resources. The other engine of growth was the rapid increase in inputs that temporarily sustained respectable growth rate. The shortcomings of the centralized system that gradually became overwhelming were the perverse incentives, limited innovation, inefficient allocation of resources, and rigidities. These latter factors became especially important as input growth could no longer be sustained at high rates, and the quality of marginal inputs declined. The situation was further aggravated by the isolation of Czechoslovakia from world markets and its extreme reorientation on trade within the CMEA. This reorientation contributed to the increasing technological backwardness of Czechoslovak industry and vulnerability to disruptions in the protected CMEA markets.

## II. The Start of Economic Transformation, 1988–90

A number of initial reform steps, undertaken in 1988–90, pave the way toward more substantial changes that are to take place in 1991 and thereafter. Even before the November 1989 "Velvet Revolution," the Communist government had reduced the role of central planning somewhat. The November 1989 revolution ushered in a liberally oriented transitional government, and created strong expectations of a radical economic transformation from a centrally planned to a market economy. A number of domestic as well as some external proposals (see Svejnar, 1989) for the strategy of economic transformation appeared, but disagreement also emerged within the government about both the overall direction of the economic transition, and the nature and timing of specific measures. As a result, it was not until May 24, 1990, that a government economic strategy, reflecting the above principles, was officially adopted as a formal resolution.

The June 8–9 parliamentary elections brought about major personnel changes in the federal parliament, with the broadly based Civic Forum and Public Against Violence together winning 170 of the 300 total seats, the Communist party retaining only 47 seats and the Christian Democratic Alliance capturing 40 seats. Less-extensive personnel turnover took place in the executive branch, since many of the ministers of the transitional government belonged to the newly formed coalition of the Civic Forum, Public Against Violence, and the Christian Democrats. The new government in principle adopted the May 24 economic resolution but, apart from the elimination of a negative turnover tax on July 9, 1990, no significant economic measures were adopted in the immediate postelection period.

The main reasons for delaying the reform were the inability to achieve consensus on a specific economic program within the executive branch of the federal government, the desire of the newly elected parliament to play a major role in shaping economic laws

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[illegible] signaled deterioration [illegible] economic performance. The share of [illegible] investment in NMP fell from 30 [illegible] 1972 to a mere 15 percent in the [illegible] and the share of consumption [illegible] growth slowed down in the [illegible] to accumulate [illegible] troubled [illegible] were increasingly ac-[illegible] trade credits. Within CMEA, [illegible] net creditor, especially vis-à-vis [illegible] SR and P[illegible]

[illegible] deterioration in economic performance was brought about by a number of factors. The central rationing of all [illegible] after 1948 initially created [illegible] growth, as the command system [illegible] resources. [illegible] of growth was the rapid [illegible] temporarily [illegible] and policies, the need to create a completely new legal framework for economic activity,[3] and the onset of difficult negotiations about the relative powers and jurisdictions of the federal and the two national (Czech and Slovak) governments.

On September 1, 1990, the government formally submitted to the parliament a "scenario of economic reform." The document contained the first detailed set of economic and social principles, specific measures, and time parameters. It was also a political document that reflected the major compromises that were speedily concluded within the relatively short period. On the macroeconomic front, the scenario placed top priority on a strict anti-inflationary policy, with all other macroeconomic goals (growth, employment, and balance of payments) being "within reasonable limits" subordinate. Specific measures that were to ensure the success of this strategy in 1990 were a zero growth of money supply and a budget surplus of at least 1–1.5 percent.[4] Measures proposed for 1991 were more far reaching and included a restrictive monetary policy, a 2–2.5 percent budget surplus, a convertible Crown (Kcs), and a positive real interest rate.

The proposed micro policies stressed the need to induce efficient allocation of resources, introduce new institutions, and minimize the social costs of transition. The main measures identified in this context were 1) a major tax reform emphasizing value-added tax, a personal income tax, and an "enterprise" tax; 2) a budgetary reform stressing independence of units and transparency of budgetary allocations; 3) a process of de-etatization and privatization of property, 4) price liberalization; 5) internal convertibility of the Kcs, 6) reduction and retraining of redundant labor; 7) legalization of collective bargaining and a stiff tax on wage growth; 8) restructuring of social security and health care systems and their gradual separation from the state budget; and 9) structural (industrial) policy based on Czechoslovakia's comparative advantage.

The proposed measures varied in terms of specificity, consistency, and timing. The tax reform proposal, for instance, listed a detailed set of taxes but, despite the fact that the government was elected for only 2 years, scheduled the implementation of the tax reform over a period of 3 years. The backbone of the tax proposal, the value-added tax, was to be phased in only in 1993.

The proposed privatization package consisted of a rapid auctioning of small properties such as restaurants and workshops, speedy restitution of certain types of properties confiscated by the previous government, and a somewhat slower commercialization and privatization of medium-sized and large firms. The privatization of medium-sized and large firms would rely on a variety of methods, including investment vouchers (to be used by citizens to buy shares of enterprises), preferential sale of shares to employees, sales of shares or entire firms to foreign investors, and leasing of firms. The backbone of the proposed microeconomic program was the liberalization of prices that was to take place for a significant part of commodities on January 1, 1991. In this realm the proposal was both emphatic and cautious, noting the need for various forms of price regulation and the need to link price liberalization with the opening of the economy to imports. The principle of internal convertibility obliged enterprises to sell their foreign exchange to the banks, but promised unrestricted possibilities to buy foreign exchange for international transactions.

The variety of views among the architects of the scenario could be perhaps best gauged by comparing the economic and social sections of the document. In contrast to the subordinate position given to income growth, employment, and social security in the restrictive package of economic mea-

[3]An alternative would have been to adopt temporarily a modified set of Western (for example, German or EEC) laws. However, in view of the voluminous nature of Western legal statutes and the paucity of skilled translators, it turned out to be simpler to create a new set of Czechoslovak laws.

[4]These goals were in fact pursued from the start of 1990.

sures, the social program stressed the social and ecological orientation of the upcoming market economy and placed priority on social justice, employment, workers' incomes, and social security. It declared significant decline of real incomes to be unacceptable and called for an *ex ante* social agreement on the acceptable limit. This aspect was largely brought in line with the more austere economic part of the reform package by the end of 1990.

The parliament approved the scenario, but, from the standpoint of implementation, the striking feature was the large number of laws and decrees that were to be drafted and passed before the major parts of the reform would be launched on January 1, 1991. This indeed proved to be a major burden and the resulting fatigue was increasingly visible. The introduction of some widely expected measures (for example, the privatization of small enterprises) has consequently been delayed.

### III. Economic Developments in 1989 and 1990

As shown in Table 1, the 1989 slowdown in NMP growth turned into a decline in 1990. Employment also decreased, but in a less pronounced way. In many cases the labor force reduction has taken the form of retirements and termination of guest workers.

Despite the commitment to a restrictive monetary policy, various measures pointed to a relatively fast expansion of money supply in the first half of 1990, followed by a decline in the last quarter. Consumer prices rose significantly, reflecting both the increased money supply and the rising velocity of circulation of money. Nominal wages rose slower than inflation, but real consumption continued to increase in the first half of the year. Personal savings have registered a significant shift into foreign exchange accounts. The runs on stores that took place in the last quarter of 1990 suggest that consumers have intensified attempts to reduce their savings and money balances in the expectation of higher inflation.

TABLE 1—CZECHOSLOVAKIA: BASIC ECONOMIC INDICATORS[a]

| | Annual Average | | | |
|---|---|---|---|---|
| | 1980–84 | 1985–89 | 1989 | 1990 |
| 1) NMP %Δ | 1.8 | 2.2 | 0.7 | −3.5 |
| 2) Employment %Δ | 0.6 | 0.8 | 0.4 | −2.5 |
| 3) Official CPI %Δ | 1.9 | 0.6 | 1.4 | 17.0 |
| 4) CPI (PlanEcon est.) %Δ | 3.6 | 2.6 | 3.4 | |
| 5) Nominal Earnings %Δ | 2.2 | 2.8 | 2.5 | 3.6 |
| 6) Personal Consumption %Δ | 0.8 | 2.7 | 1.8 | −1.3 |
| 7) Social Consumption %Δ | 4.1 | 5.3 | 7.3 | 3.8 |
| 8) Net Fixed Investment %Δ | −6.8 | 2.4 | 3.1 | −12.3 |
| 9) Money Supply | | | | |
| *M*1 %Δ | 5.8 | 4.7 | 2.7 | −0.2 |
| *M*2 %Δ | 4.4 | 3.3 | −0.8 | −3.8 |
| *M*3 %Δ | | | | 4.4 |
| 10) Exchange Rate | | | | |
| Kcs/$Commercial | 14.40 | 15.05 | 15.05 | 28.00 |
| Kcs/$Tourist | – | – | – | 28.00 |
| Kcs/$Parallel Mkt. | 29.10 | 33.70 | 47.40 | – |
| Kcs/$Auction | | | 121.24 | 39.40 |
| Kcs/Ruble Commercial | 12.24 | 10.80 | 10.00 | 9.00 |
| 11) External Debt[b] $mill. | 5.766 | 6.406 | 7.915 | 8.100 |

*Source*: Czechoslovak Government and PlanEcon Inc.
[a]Unless indicated otherwise, all values are in constant prices in Kcs;
[b]In convertible currencies.

The point of major uncertainty is the enterprise sector. The fall in production, profits, and trade with CMEA countries all reflect the vulnerability of enterprises to the disintegration of the CMEA market. Indeed, after falling 9 percent in 1989, real exports to the Soviet Union declined additional 15 percent in the first half of 1990.[5] The concomitant drop in the Soviet deliveries of oil and raw materials resulted in a

[5]By the end of 1990, many enterprises were still unable to conclude the usual annual trade contracts with their Soviet partners. Moreover, those that did were unsure whether the contracts would be honored.

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14 percent decline in Czechoslovak imports from the USSR in the first half of 1990. Exports to developed Western countries rose by about 7 percent in real terms, but imports from this area jumped by more than 21 percent from January to June, 1990.

A major problem is enterprise insolvency—it has been rapidly rising. This phenomenon is particularly severe because many government subsidies to enterprises were in the past extended in the form of revolving credits. The current pursuit of tight monetary and fiscal policy has resulted in a major increase in interest rates and requests for rapid repayments of enterprise loans by banks. Enterprises have been caught off guard, as the bank interest rate on short-term loans has recently exceeded 20 percent, and they are increasingly relying on inter-enterprise credit.

Finally, the October devaluation of the Kcs/$ commercial exchange rate from 16 to 24 has created considerable difficulties for nonexporting firms. Similarly, the 10 percent revaluation of the Kcs vis-à-vis the ruble in the first quarter of 1990 created financial difficulties for enterprises with a heavy export orientation toward the Soviet market. Most enterprises expect to continue operating on this market and have not made significant steps toward diversification or restructuring of operations.

## IV. Prospects

At the end of 1990, the official government forecast for 1991 predicted a 5 percent decline in real GNP, a 30 percent rise in the consumer price index, unemployment of 5–7 percent, and a $2.5 billion increase in foreign debt. The extent to which this forecast will materialize naturally depends on a number of factors.

The short-term economic situation will be significantly affected by key external developments such as the political and economic situation in the Soviet Union and the world price of oil. If extreme, these developments could temporarily swamp the impact of internal systemic and policy changes. In particular, a major disintegration of the Soviet economic activity, resulting in a decline of paid orders for Czechoslovak goods or of deliveries of Soviet oil, would result in a major shock to the Czechoslovak economy. Of course, certain shock is expected in any case as on January 1, 1991, Czechoslovakia starts conducting its trade with the Soviet Union in convertible currencies and at world prices. This shift results in a significant deterioration in the terms of trade for Czechoslovakia.

On the internal side, the major danger lies in further delays of the reform and in the introduction of an inconsistent package of measures. As the major reform steps are approaching, there appears to be rising discontent, a decrease in credibility and increasing resistance to a significant (albeit temporary) fall in living standards. Further delays would probably solidify the opposition to undertaking a major and rapid economic transformation. Similarly, if the government were to abandon the overall program and enact only a set of partial and inconsistent measures, the resulting disequilibria could engender significant opposition to further reforms. Examples of possible mishaps include the loss of macroeconomic stability, a major rise in inflation in the presence of rigid wage controls, an inability to spur the development of small and medium-sized (private sector) enterprises as major layoffs take place in state-owned firms, undertaking only partial price liberalization, and enforcing the foreign exchange surrender without giving enterprises the possibility to obtain hard currency on demand. These and other partial measures have backfired in other countries, and there is no reason to expect Czechoslovakia to fare differently.

There is also considerable room for optimism. Czechoslovakia is one of the few reforming economies that enjoys relative financial stability, a low level of foreign debt, a solid human capital base, and low wages. The economic program has been relatively carefully prepared and could yield rapid results. Recent investments by foreign companies (for example, Volkswagen and Glaverbell) into Czechoslovak enterprises economic activity, resulting in a decline of paid orders for Czechoslovak goods or of deliveries of Soviet oil, would [illegible] in a major shock to the Czechoslovak [illegible]. Of course, certain shock is expected [illegible] case as on January 1, 1991, Czechoslovakia starts conducting its trade with the Soviet Union in convertible currencies and at world prices. This shift results in a significant deterioration in the terms of trade for Czechoslovakia.

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## IV. Prospects

At the end of 1990, the official government forecast for 1991 predicted a 5 percent decline in real GNP, [illegible] 30 percent rise [illegible] index, unemployment [illegible] and a $2.5 billion increase [illegible] the extent to which this [illegible] naturally depend[illegible]

[illegible] economic situation will be [illegible] key external [illegible] and commun[illegible] growth, would [illegible] these developments suggest that a well-executed economic transformation could attract significant Western capital and know-how. With more than 200,000 Czechoslovaks registered to start private businesses and many already in operation, there appears to be no shortage of domestic entrepreneurial spirit. It will be of interest to see how rapidly Czechoslovakia will start to close the gap that now separates it from its Western neighbors.

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# CZECHOSLOVAKIA

## An Economic Strategy for 1991–1992

Peter Martin

*The federal government has approved a "Strategy for Czechoslovakia's Economy through 1992," which contains projections of what awaits the country's economy in 1991 and 1992 and proposals for dealing with four possible economic scenarios: the first an economic upswing, the second and third assuming an economy on the verge of complete collapse, and the last a total breakdown. The document also made a series of recommendations relating to the federal government's radical economic reform program currently being implemented in both republics. The document stressed that the success or failure of the reform program would depend on the impact of the measures taken thus far, the population's response to them, and future developments in the Soviet Union, the country's main trading partner.*

In February President Vaclav Havel warned that Czechoslovakia was on the verge of economic and political collapse, unless the parliament could put aside its internal power struggles and focus instead on pending bills designed to accelerate the transition to a market economy.[1] In the meantime, the Federal Assembly adopted two major laws, one on the privatization of large enterprises,[2] the other the so-called restitution law for the return to its original owners of property confiscated by the communist regime.[3] Another major law on the privatization of the agricultural sector is still being debated.

Despite the increased activity of the Federal Assembly, the prospects for an immediate improvement of the economic picture are slight. Economic problems have worsened since January 1, when the economic reform program was launched.[4] Business and industrial associations have warned of the danger of the country's industrial production collapsing. Debts between enterprises jumped from 35.9 billion koruny at the end of October 1990 to 80 billion koruny at the end of January 1991.[5] The Czechoslovak agricultural sector, once among the most productive of the communist countries, is on the point of collapse. The bankruptcy or failure of many agricultural cooperatives could lead to serious food shortages in the near future. A growing number of farmers face the risk of bankruptcy owing to financial burdens and the absence of new legislation on agriculture.[6] The country's health system is also facing hard times.[7]

As a result of these serious problems, doubt over the effectiveness of the economic reform

measures is growing. Tight monetary policy, high inflation, and rising unemployment are coming under increasing criticism from a population accustomed to four decades of stagnation and state-guaranteed social security under the Communists.

### The 1991–1992 Economic Strategy

Anticipating this reaction, the federal government approved a document entitled "Strategy for Czechoslovakia's Economy through 1992," which was drafted by the Ministry for Strategic Planning in October 1990.[8] Approved on November 22, 1990, the document was not made available to the public until February 1991, because the government feared it might cause panic. Parts of the document were leaked, however,[9] and there was no choice but to publish it to "counter misinterpretation."

The "Strategy" is not an alternative to the "Scenario for Economic Reform" adopted by the Federal Assembly on September 14, 1990.[10] The latter charted a specific course for economic reform, whereas the "Strategy" consists of proposals and solutions aimed at "realizing [economic reform] under whatever extreme conditions that could, in theory, arise."

The "Strategy" based its economic forecast for 1991–1992 on an analysis and a prediction of Czechoslovakia's economic performance through the end of 1990. It predicted that the gross national product (GNP) would drop in 1990 by 15 billion koruny in current prices from its 1989 level. The national net material product (national income utilized) was expected to increase by more than 8 billion koruny (a 1.4% increase—and the first since 1978) and to surpass the domestic net material product (national income produced) by about 24 billion koruny (4.3%). These figures proved correct and corresponded closely to the statistical data for 1990 published by the Federal Statistical Office in March 1991.[11]

The "Strategy" revealed economic vulnerability and a slowness in adapting to change as the most serious economic issues confronting the country. It noted that the "one-sided orientation" on imports of oil, natural gas, and raw materials from the Soviet Union could not be immediately remedied in view of "technical and payment problems."[12] It considered the use of the Adria pipeline, which runs from Yugoslavia to Hungary and has an annual maximum capacity of between 4,500,000 and 5,000,000 tons, the only "viable way" to reduce dependence on Soviet oil in the future. The "deterioration of almost all major foreign trade indicators" had made the country economically vulnerable. Indeed, the figures in the 1990 statistical report of the Federal Statistical Office showed Czechoslovakia's balance-of-trade deficit with market-economy countries in 1990 to be 17 billion koruny (compared with only 900,000,000 koruny in 1989) and 12.8 billion koruny with East European and socialist countries (such as China and Cuba). The industrial sector's failure to adapt to the demands of the market had resulted in a drop in production of 3.7% by the end of October 1990 compared with the same period in 1989. The 1990 statistical report confirmed that this figure also applied to 1990 as a whole. Moreover, the report noted that the construction industry's production levels had dropped by 6.6% in 1990.[13]

With regard to social developments, the analysis concluded that the population had become less willing to make sacrifices since the November 1989 revolution. Fear of the future had contributed to the escalation of social tension.

In view of the country's economic decline and the uncertainty about the impact or success of the economic reform program, the strategy outlined four economic scenarios that might unfold in 1991–1992. The first, the "favorable" scenario, was considered the most likely given the current economic situation. The next two scenarios assumed a shortfall of oil, natural gas, and raw materials serious enough to "lead to economic collapse." The "breakdown" scenario suggested what might happen if the government failed to pursue its radical economic reform program.

### The "Favorable" Scenario

The "favorable" scenario divided 1991 and 1992 into three periods: price shock, adaptation, and recovery. After the January 1 price and foreign trade liberalization and the introduction of currency convertibility, price hikes of between 35% and 40% were predicted for 1991. Food prices were expected to rise the most quickly and sharply—by about 50%. In January, the first month of economic reform, prices increased by about 26%, and food prices rose by 31% compared with December 1990.[14] The price shock stage was expected to have two critical turning points, both related to wage and price controls. Prices would increase in the first three months of 1991 as long as people were willing to accept them. The eventual "price ceiling"—the first turning point—would be a signal for companies to adapt supply to consumer demand. On March 20 the Czech daily *Hospodarske Noviny* reported:

> It is a reality that price liberalization and the devaluation of the koruna changed the situation of a shortage [of goods] on the market to one of [insufficient] demand. We are facing the classical Keynesian situation whereby insufficient demand becomes the main hindrance to economic

development. Stagflation, with stagnating production and increasing prices, is becoming a reality.[15]

Fearing that wage increases might stimulate inflation, the "Strategy" called for the conclusion of an agreement on wage increases in 1991; this would constitute the second turning point. The government, meanwhile, did in fact implement measures to keep the growth of wages well below the inflation rate. On January 28, 1991, the three Czechoslovak governments, the Czech and the Slovak Confederations of Trade Unions, and other officials signed the so-called General Agreement for 1991. The agreement established clear rules for collective bargaining, employment, and dismissals and determined the minimum wage and the level of unemployment compensation. But freezing wages while prices were being liberalized fueled social unrest.

The "Strategy" also recommended that during the price shock phase of the "favorable" scenario, interest rates for bank deposits be increased to 25–30% or more and that interest rates on loans stay higher than the rate of inflation. The measure was designed to encourage people to save and to increase capital. Thus far in 1991, the interest rate on bank deposits has climbed no higher than 17% and for loans to 24%. Assuming that the rate of inflation in January, which was 26% higher than in December 1990, continued, the interest rates for deposits and loans would fall considerably short of the "Strategy's" recommendation for fighting inflation.

Following the price shock phase, according to the "favorable" scenario, the Czechoslovak economy would enter an adaptive phase, in which "expensive products [would] not be in demand and producers [would] have to look for other production programs or lower prices." It would become apparent at this stage which firms had the ability to survive and which would go bankrupt.

In the "favorable scenario," it was recommended that the government pressure unprofitable enterprises to close down and support by reducing their taxes those firms that had demonstrated an ability to survive. Minister of Strategic Planning Pavel Hoffmann recently announced that the government would lend its support to such companies by inviting them to submit tenders for government contracts.[16] He said the government was prepared to channel its relief efforts to regions or sectors of the economy particularly hurt by the reforms. At the same time, he added, the government was not bent on drawing up a list of enterprises "condemned to ruin."

The "Strategy" stated that short-term unemployment could rise to about 10–12% and that expenditures for unemployment benefits could be 12–15 billion koruny in 1991. In fact, 7% of the 1991 state budget (10 billion koruny) was earmarked for unemployment benefits and retraining costs.[17] The "Strategy" suggested that a 15% reduction in real wages constituted a "socially and politically acceptable limit" in such an economic downturn. The "favorable" scenario also predicted an "impressive" social differentiation in 1991–1992. Social unrest among minimum-wage earners (including many young people and parents with large families), the unemployed, and pensioners with fixed incomes would increase as a result, it was said.

Under the "favorable" scenario, rapid privatization, the establishment of joint ventures, and a "selective state policy in restructuring the economy" would trigger an economic recovery—that is, a halt to the economic decline but no economic growth—by the end of 1991. The country's national income level would not regain its absolute level of 1989 before the mid-1990s. (In 1989 the national income was 619 billion koruny; it decreased by 3% in 1990.)

The devaluation of the koruna and price liberalization were expected to cause a further rise in government expenditures. This forecast is borne out by the findings of the Czech economist Jaroslav Fidrmuc, who noted that the 1990 devaluation had failed to promote exports and limit imports. Instead, imports had increased by about 10% in 1990 and exports had stagnated or actually declined. Fidrmuc said that in view of the increased demand for hard currency, a balance-of-payments deficit could be expected in 1991.[18]

The "Strategy" supported the notion that a market economy could not function unless there was an unemployment rate of at least 3%. This level was considered a prerequisite for maintaining a low rate of inflation. At a critical stage in the process of changing to a market economy, the unemployment rate might rise to as much as 12–15%. However, a restrictive wage policy and an increase in the number of companies able to adapt to the demands of the market could prevent such a steep increase. During 1991–1992, the inflation rate could be held at 25–30%, provided the nominal money supply increased by 10–13%; the circulation of the money supply accelerated (reflecting a higher turnover of goods and services) by 5%; and the domestic net material product dropped no more than 5%.

The "favorable" scenario was based on the assumption that a sufficient fuel and energy supply wouldbe available throughout 1991–1992. Oil imports were forecast to be 13,000,000 tons annually. Annual natural gas supplies, reduced by about 2 billion cubic meters, would be offset by lower gas

consumption in the production of electricity. An annual drop of 10% in the output of electricity (compared with 1990), it was also assumed, would be matched by a reduced demand for energy resulting from the decline in economic activity.

**The Close-to-Economic-Collapse Scenarios**

The "Strategy" offered contingency plans for controlling the economy should "adverse developments from external factors" threaten the course of economic reform. The first of the two variations assumed an annual drop in the oil supply to between 11,000,000 and 13,000,000 tons and of the natural gas supply to 11–12 billion cubic meters (from the 14 billion cubic meters available in 1990). Assuming a shortage of heavy heating oil and a drop in the iron ore supply of 700,000 tons, the production of rolled steel would be about 1,000,000 tons less than the projected production levels in 1991. Crude oil processing would decrease by half, and exports of all petroleum-based products, including plastics, would be stopped. As a result, the national income would drop by more than 10%. Still, the government would be able to pursue its economic reforms, albeit with the adoption of certain harsh "administrative" measures.

The second—and worse—of the two close-to-collapse scenarios assumed that supplies of oil and raw materials would fall below the critical level, which, in the case of oil, would mean less than 11,000,000 tons annually. As a result, according to the strategy, the tough administrative measures of a "war-time economy" would have to be applied, which would slow down, or bring to a halt, economic reform.

The Czechoslovak government recently took steps to counter problems caused by the uncertainty of Soviet oil deliveries. On December 17, 1990, Czechoslovakia and the USSR signed an agreement that obligated the latter to sell Czechoslovakia 7,500,000 tons of oil in 1991.[19] On March 7 of this year Czechoslovakia concluded a barter agreement with the Russian Soviet Federated Socialist Republic, including the establishment of a joint-stock company, the Russian Commercial House. By circumventing the Soviet presidential decree prohibiting commercial transactions in nonconvertible currencies, the agreement should help relieve the current Czechoslovak export crisis and clear the way for the importation of oil from the Soviet oil-producing region of Tiumen. The joint-stock company would function as a clearing house for direct trade between enterprises in other regions of the Soviet Union and their Czech and Slovak counterparts.[20]

**The Total-Breakdown Scenario**

The "Strategy's" least optimistic scenario assumed a complete economic breakdown were the government not to press ahead with its economic reform program at the planned pace. The "Strategy" pointed to three factors that could lead to such a "dangerous development:" pressure put on the government by monopolistic firms to subsidize them or protect them by means of high customs duties on imported goods and services; strikes triggered by a population reluctant to accept a drop in real wages or a rise in the rate of unemployment; and Slovakia's insistence on having its own brand of more gradual economic reform, which could "soften" the restrictions imposed by the radical economic reform program, thereby slowing down the pace of economic change for the rest of the country, as well.

The "Strategy" warned that the recent sharp devaluation of the koruna and the accompanying price shock might be the first step toward the dissolution of the "social consensus," which would result in a postponement of the reform process and its resumption later under "substantially worse conditions." The strategy proposed implementing measures, without being more specific, to reduce the demand for hard currency and to brake inflation. It appears that more financial aid to encourage privatization and refraining from devaluing the koruna again in the near future (at the expense of increasing the country's foreign debt) would, in effect, rein in the inflation rate and the balance-of-payments deficit. On April 24 a team of experts from the International Monetary Fund (IMF), visiting Czechoslovakia to evaluate the success of the reform process to date and to study the problems confronting businesses and companies, apparently supported such an approach. The team expressed the opinion that, under the privatization plan (and with it, the creation of the National Property Fund), the government should consider helping firms eliminate their debts. Their recommendation is not without good reason: it is feared that privatization will produce more unemployment with the closure of inefficient, loss-making factories. The 1990 devaluations of the koruna made imported materials more expensive. Consequently, many firms became dangerously indebted to one another; they have had to limit their imports and are expected to go bankrupt.[21]

The "Strategy" observed that another real danger lay in the "different realization of economic reform" in the Czech and the Slovak Republics, which could impede the implementation of a "consistent economic policy." In the words of Slovak Prime Minister Vladimir Meciar:

> The Slovak Republic casts no doubt upon economic reform but [upon] its realization. The choice of priorities as they relate to social policy

and the creation of [employment] opportunities is different in [Slovakia] from that in the Czech Republic.[22]

The "Strategy" forecast that in 1991–1992 the higher prices of energy, transportation, and rents would affect retail trade turnover and that demand would shift from industrial goods to food. For 1991–1992, a reduction of about 12% in the national income and 15% in industrial production compared with 1989 was also predicted. Agricultural production would be stagnant or even decrease, it warned. Despite these negative factors, the report predicted that an economic recovery would begin in the course of 1992.

### The 1991 Trends

On March 27 federal Prime Minister Marian Calfa presented a report on the state of Czechoslovakia's economy to the 14th joint session of the Federal Assembly.[23] Calfa said that GNP had been falling since the beginning of this year and industrial production had declined by almost 6% in the first two months compared with the same period in 1990. The price shock had stabilized, and the prices of some goods had slightly declined. At the end of February, unemployment was registered at 2% (152,000) of the working population.

Calfa said that the most characteristic features of the country's economy were the crisis in sales, the growing indebtedness between companies, and the reduction in demand on the domestic market. He said that the economic reform program had been implemented during the first three months of 1991 "more or less as planned." He cited as positive achievements the gradual correction of the imbalance between supply and demand, the growing importance of consumers to the market, the expansion of available services, and a partial switch of companies' operations to a market-oriented approach. Calfa emphasized, however, that the days of extensive state intervention in the economy, including subsidizing ineffective firms, were over.

### Assessment

The "Strategy's" message was that 1991–1992 would be a critical period in the country's economic reform, which the IMF is monitoring closely. The picture painted by the "Strategy" of economic conditions in 1990, based on available data, was neither unexpected nor unduly grim in view of the virtual collapse of trade with the rest of Eastern Europe and the Gulf crisis.

The "favorable" scenario for 1991–1992 was based on the assumption that the current economic reform measures would begin to take effect, that the population would respond to those measures in a positive way, and that imports of oil and raw materials from the Soviet Union would continue at sufficient levels. The "breakdown" scenario was based on the assumption that the government would fail to press on with the radical economic reform program or win the public's cooperation and support for it. The two "close-to-collapse" scenarios assumed that the economic reform program would continue but have to struggle with a shortage of Soviet oil supplies and raw materials. In all these cases, the "Strategy" suggested several possible solutions or preventive measures.

The current economic developments, however, reveal that the main threat to the radical transformation of the economy is the growing social unrest nationwide. A significant minority of Czech and Slovak government officials and experts are pressing for slower and less socially divisive economic policies. In response, federal Finance Minister Vaclav Klaus recently condemned the "ideas of *perestroika*, which is ruining the Soviet economy and undermining economic development in Czechoslovakia." He also dismissed both the "third-road" approach to the economy (a mixture of elements of a state-run economy and a free-market economy, a concept that originated during the Prague Spring of 1968) and the Western "market-socialism" model as practiced, for example, by Sweden.[24]

The extent and the swiftness of the deterioration in the industrial sector, triggered by the collapse of the Soviet market, came as a surprise. Calfa said recently that Czechoslovakia's exports to the Soviet Union in 1991 were expected to drop by about 70% from their 1990 level. He added that Czechoslovakia had been seeking new export markets but that "if we fail, we simply cannot afford to produce goods we cannot sell."[25] As a result, Czechoslovakia's economy might "cool down" to a dangerously low point, paving the way for a possible recession.

CS0149.91R March 30, 1991

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*Notes:*

1 Reuter, February 17, 1991.

2 See Jan Obrman, "Two Landmark Bills on Privatization Approved," *Report on Eastern Europe*, no. 11, March 15, 1991. The law on privatization of small enterprises was enacted on October 25, 1990. See also Peter Martin, "Privatization: A Balance

1990, based on [illegible] ... period, but [illegible] as one of the [illegible] collapse of trade with [illegible] of Eastern Europe and the Gulf crisis.

The "Invisible" [illegible] was based on the [illegible] that the [illegible] measures would [illegible] ... would [illegible] and to [illegible] ... [illegible] way [illegible] and [illegible] from the [illegible] sufficient level [illegible] based on the assumption [illegible] would fail to [illegible] of the [illegible] ... say, or for [illegible] close to collapse [illegible] that the [illegible] continue but have [illegible] Soviet oil supplies [illegible] ... case, [illegible] suggested [illegible] solutions or preventive [illegible].

[illegible] reveal that [illegible] ... the [illegible] of [illegible] ... A significant [illegible] Czech and Slovak government of [illegible] ... [illegible] in response [illegible] Minister [illegible] ... [illegible] ... [illegible] and the Western [illegible] practices [illegible] for example [illegible] ...

[illegible] of the Soviet [illegible] ... that [illegible] Soviet Union in 1991 were [illegible] from their 1990 level [illegible] ... that [illegible] goods [illegible] ... Czecho-Slovakia's [illegible] ... [illegible] recession.

[illegible]

1990–1992 the [illegible] and rents [illegible] that demand [illegible] consumption. For 1991 [illegible] of about 29% in the [illegible] ... predicted [illegible] ... were [illegible] ... [illegible] of 1992.

## The 1991 Trends

On [illegible] Federal Prime Minister Marian Čalfa presented a report on the state of Czecho-Slovakia's economy to the [illegible] joint session of the Federal Assembly. Čalfa said that [illegible] had been falling since the beginning of this year, and industrial production had dropped by [illegible] in the first [illegible] months compared with the same period in [illegible] price shock had stabilized and the prices [illegible] ... At the end [illegible] unemployment was registered at [illegible] of the working population.

[illegible] said that [illegible] ... [illegible] were the [illegible] ... the growing [illegible] ... the [illegible] ... He cited [illegible] ... [illegible] ...

Sheet," *Report on Eastern Europe*, no. 5, February 1, 1991.

3 See Jiri Pehe, "The First Weeks of 1991: Problems Solved, Difficulties Ahead," *Report on Eastern Europe*, no. 10, March 8, 1991.

4 *Lidove Noviny*, February 19, 1991. Statistical data showed that in January retail prices had risen by 45.6% and the cost of living by 44.2%, compared with January 1990. The number of people seeking unemployment benefits in January was 119,500, or 1.5% of the work force; in February it had reached 150,000, or 2% of the work force. In a separate statement, Federal Labor Minister Petr Miller said some 94,000 families in Czechoslovakia lived below the subsistence level; the number might increase to 180,000 families, including 411,000 children, if the cost of living rose by 10% (RFE/RL Correspondent's Report [Prague], February 17, 1991).

5 *Die Presse*, March 9, 1991.

6 Annex to *Zemedelske Noviny*, February 20, 1991, p. 3; and Reuter, March 3, 1991.

7 *Die Welt*, March 9, 1991.

8 *Rozvojova strategie Ceskoslovenske ekonomiky do roku 1992* [Strategy of the Czechoslovak Economy through 1992] (Prague: Federal Ministry for Strategic Planning, November 1990), p. 56.

9 *Rude Pravo*, December 4, 1990, pp. 1 and 5; and *Hospodarske Noviny*, December 10, 1990, pp. 1 and 8. In the fall of 1990, lines of people waiting for gasoline often began to attack shops. External factors, ranging from the collapse of Czechoslovakia's traditional export markets to the Gulf crisis, had an unfavorable impact on economic and social life. As these factors started to accumulate, the government began to fear that the document on economic strategy would cause panic among the population.

10 See Peter Martin, "'Scenario for Economic Reform' Adopted," *Report on Eastern Europe*, no. 42, October 19, 1990.

11 *Zprava FSU o ekonomickem a socialnim vyvoji CSFR v roce 1990* [Report of the Federal Statistical Office on Czechoslovakia's Economic and Social Development in 1990] (Prague: Federal Statistical Office, 1991); and *Hospodarske Noviny*, March 12, 1991, p. 4.

12 *The Wall Street Journal*, February 22, 1991. In discussing the issue of Soviet oil supplies to Czechoslovakia, Zdenek Jiras, the director of the state petrochemical concern Chemapol, said, "We are obviously interested in getting as much crude oil as possible from the USSR for logistical reasons." Federal Minister of the Economy Vladimir Dlouhy said, "In the case of destabilization in the USSR, the danger of a reduction in oil supplies could arise" (RFE/RL Correspondent's Report [Prague], January 18, 1991). Experts calculated that in 1991 Bulgaria, Czechoslovakia, Hungary, Poland, Romania, and Yugoslavia together would need to import daily about 70,000,000 tons (1,400,000 barrels) of oil. They expect the Soviet Union to meet about 37,500,000 tons of this demand. The drop in Soviet oil supplies to Czechoslovakia in 1991 amounted to 20%, or about 3,000,000 tons (*Hospodarske Noviny*, March 12, 1991), p. 4.

13 *Hospodarske Noviny*, February 21, 1991, p. 15. While the average productivity per worker in the Czechoslovak engineering industry equaled $13.01 in 1990, the productivity level in five small European countries (Denmark, Sweden, Finland, Belgium, and Austria) averaged $43.45 per worker.

14 *Lidove Noviny*, February 19, 1991, p. 2.

15 *Hospodarke Noviny*, March 20, 1991, p. 8. The notion that this might represent a "classical Keynesian" situation is the subject of some dispute among economists.

16 *Ibid.*, December 10, 1990, pp. 1 and 8.

17 See Peter Martin, "The 1991 Budget: Hard Times Ahead," *Report on Eastern Europe*, no. 9, March 1, 1991.

18 *Nove Slovo*, March 7, 1991, p. 5.

19 *Financial Times*, March 12, 1991. Czechoslovakia, seriously hurt by shrinking Soviet oil supplies, wants to buy 10,000,000 tons of oil from Iran.

20 *The Wall Street Journal*, March 21, 1991.

21 *Nove Slovo*, March 7, 1991, p. 5. The first three devaluations in 1990 caused an increase in the price of imports and a subsequent loss to the economy of 41 billion koruna. The devaluations failed to boost exports or cut down on imports. In 1990 the latter increased by 9–10%, whereas exports stagnated. It has been predicted that the 1991 balance-of-payments deficit will be $2.5 billion. It would appear that the best course of action for Czechoslovakia would be to obtain foreign loans to keep inflation and the balance-of-payments deficit in check, rather than to devalue the koruna again.

22 CTK, March 21, 1991. The deteriorating economic conditions in independent-minded Slovakia are also acting to slow down the pace and the extent of the economic reform program. The Slovak Republic's huge arms factories have been hit by the lack of domestic orders and a ban on arms exports. "Conversion" to civilian production is making little progress, and political parties in Slovakia, including the Christian Democrats, are urging the federal government to slow down the reform program.

23 *Ibid.*, March 27, 1991.

24 AFP, March 25, 1991.

25 AP, March 29, 1991.

Susan Z. Weil. Czechoslovakia. (Privatization Update). May 1991.

DRAFT

Susan Z. Weil
Draft -- May 8, 1991

# Czechoslovakia

## Introduction

Czechoslovakia has selected a gradual approach (versus a "shock" approach) to privatization and is currently in a critical phase of the this process. The GOC has developed a framework for privatization, but implementation has been limited. Significant barriers to entry and structural impediments, including the complexities of the restitution process, inadequate banking and telecommunications systems, [an inadequate legislative framework,] and limited access to capital, have impeded the privatization process and development of new business.

## I. Snapshot of Economic Structure

Czechoslovakia's economy is dominated by state-owned conglomerates. There are approximately 4,500 large enterprises, all of which are state-owned, and approximately 100,000 small enterprises, of which approximately 17 have been privatized since the beginning of 1991.[1] In addition, there are approximately 500,000 entrepreneurs, many of whom are doing business on a part-time basis.

Czechoslovakia ia one of the most industrialized countries in Eastern Europe. As of December 1990, industry accounted for 37% of total employment. Until recently, almost 99% of all industrial workers were employed by large state conglomerates (employing more than 500 people). The private sector (including unofficial output comprised of the black market, underground economy, and moonlighting) produces only approximately 0.5% of non-agricultural output. Approximately 95% of the labor market is employed by the state and cooperative sectors.

The following table illustrates the composition of the labor market by sector:

| Sector | Employment (000) | Percent |
|---|---|---|
| Material Sphere | | |
| Agriculture | 810 | 10.4% |
| Industry | 2,851 | 36.5 |
| Construction | 694 | 8.9 |
| Other | 1,385 | 17.7 |
| Total | 5,740 | 73.4% |
| Non-Material Sphere | | |
| Education | 492 | 6.3% |
| Health | 357 | 4.6 |
| Transportation | 158 | 2.0 |
| Science/R&D | 179 | 2.3 |
| Other | 889 | 11.4 |
| Total | 2,075 | 26.6 |
| | 7,815 | 100.0% |

[1] Reports about the number of small firms and the number of small firms privatized have ranged from 70,000 to 150,000 and 17 to 50, respectively.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

## II. Development of Private Property Rights, a Modern Business Infrastructure, and New Private Firms.

A. Changes in The Legal Structure

1. Codification of Rights in Business, Contract Law and Bankruptcy.

Significant legislation governing the structure and conduct of business transactions has been enacted and provides the basis for a modern legislative framework. However, existing legislation does not appear to be sufficient to support a modern market economy. **[need more information on whether laws are satisfactory and/or comprehensive]**

Legislation enacted to date or under consideration includes:

a. Business Law.

(i) The new 800-section Commercial Code, which will be finalized in June 1991, provides the legal basis for a modern business infrastructure. The Code is based upon rules developed in the EC and will replace or eliminate existing laws and regulations now governing economic issues. Corporations, partnerships, and other business associations are among the major topics covered in the Code.

(ii) The Law on Private Enterprise (April 1990) removed most restrictions on the formation of new private businesses, including the number of employees a business can hire and the amount of profit a business can earn.

(iii) The Joint Stock Companies Act (April 1990) provides that: (1) licenses are not required to found stock corporations (although stock corporations must register in the Companies Register); (2) the state does not supervise stock corporations; and (3) business activities are not limited, and businesses cannot be dissolved by the state (except for a court ruling in the case of insolvency). **[Do the shareholders have limited liability?]**

(iv) The Law on Relations between Trade Unions and Employers (April 1990) **[need more information]**.

(v) The Law on Corporations (May 1990) removed impediments to the formation of corporations and allowed for changes in corporate charters.

(vi) The Directive on the Principles of Private Enterprise Accounting (June 1990) seeks to reform accounting practices along EC guidelines.

(vii) Banking legislation is being drafted **[need more information]**.

(viii) The Bill of Fundamental Human Rights and Liberties (January 1991) guarantees the right to become involved in private business.

b. Bankruptcy Law. Legislation is currently being drafted. **[need more information]**

c. Contract Law. Basic contract law will be covered under the new Commercial Code (see above). **[need more information]**

d. Development of the court system. **[need information]**

2. Legislation to Define Intellectual Property Rights.

As part of the Title IV Trade Agreement concluded in April 1990,

Czechoslovakia agreed to substantially upgrade its intellectual property regime. The legislation, once enacted, will produce a strong protective framework for intellectual property rights. Commitments were made in all areas of intellectual property protection, and the GOC agreed to submit all necessary legislation to Parliament by the end of this year. New patent legislation has already been submitted.

Notwithstanding the legal protection which will become available, enforcement will be difficult. Copyright industries have expressed concerns over piracy, with piracy of computer software of particular concern for the US.

3. Private Ownership of Land.

The GOC recognizes the importance of private land ownership. (However, foreigners are not permitted to own land.) However, the most significant land reform legislation, which would have abolished Communist-style agricultural cooperatives and put land into the hands of private owners, was defeated in April 1991. The bill was defeated because: (a) farmers' unions expressed fears that the land reform plan would lead to the loss of jobs in agriculture; (b) there was dispute over whether to return land previously owned by ethnic minorities living in Czechoslovakia; and (c) there was dispute over whether to honor claims from owners prior to 1948.

The legislation is still being debated. If enacted, it will enable owners to decide freely whether to farm individually or join a group of farmers. However, the bill does not clarify whether farm buildings and land will be returned to individuals who do not intend to continue farming.

**[need more information on whether laws are acceptable/comprehensive]**

In addition, the following property rights have been codified:

(a) laws passed in 1988 and 1989 abolish restrictions on the size of farm holdings;

(b) the Law on Private Enterprise (April 1990) removed the restriction on the amount of property a privately held firm could own;

(c) the Bill of Fundamental Human Rights and Liberties (January 1991), a constitutional document, lists property ownership as an internationally recognized human right; and

(d) as of **[insert date]**, limited private ownership of farms and homes is allowed. **[what law is this?]**

4. Restitution of Property to Pre-Communist Owners.

Legislation has been enacted to facilitate the return of property to its pre-communist owners and their heirs and to provide for reasonable compensation to former owners. The initial six month time limit on claims has been extended until the Spring of 1993 due to the complexities of the process.

(a) The Restitution Law (October 1990) governs the return of approximately 70,000 smaller businesses and properties expropriated between 1948 and 1961.

(b) The Law on Extrajudicial Rehabilitation (February 1991) provides the legal basis for the return of most expropriated industries and businesses. Former owners or their heirs will not receive the benefit of improvements.

B. Development of a Modern Business Infrastructure.

1. Framework for Commercial Property and Liability Insurance and Tort Law.

Due to the high percentage of state-owned companies, a legal framework for business insurance and **[tort law]** has not developed. However, recent legislation has been adopted to encourage such development.

a. Commercial Property and Liability Insurance. The market for commercial insurance is limited due to the high percentage of state-owned companies. However, in early 1991, a new insurance law was passed, providing for private ownership of insurance companies and competition within the insurance market (including foreign companies). There are currently two state-owned insurance companies, and one Austrian company has been licensed to operate. **[need more information on whether insurance law is adequate, types of insurance available, etc.]**

b. Tort Law. **[need more information]**

2. Reform of Accounting Standards and Practices.

A Federal Ministry of Finance Directive on the Principles of Private Enterprise Accounting was developed and released in 1990 to reform accounting standards and practices along EC guidelines. The GOC, however, is relying heavily on Western firms for company valuation in the context of privatization. **[is the Directive sufficient?]**

3. Development of a Modern Banking System.

The GOC understands that financial sector reform is critical to the success of economic reform. Consequently, the 1989 State Bank and Commercial Bank laws sought to establish a modern banking system with central bank independence, banking supervision, and the eventual creation of financial markets. As of January 1990, the old mono-bank (which conducted all commercial activities) was dismantled into a new State Bank of Czechoslovakia (the new central bank) and three new banks (The Commercial Bank of Prague, The Common Credit Bank of Bratislava, and The Investment Bank Prague).

In November 1990, the Postovni Banka (Postal Bank), a joint stock company with an initial capitalization of 250 million Crowns (approximately $8.6 million), was founded. The Postal Bank of Vienna is currently the only foreign shareholder, but others are expected. By the end of 1991, the Postal Bank hopes to begin offering current accounts, selling deposit cards, and introducing credit cards. The credit cards will be issued in association with an Association of Credit Cards (currently being formed), which also plans to establish a chain of cash machines. The majority of the commercial banks plan to participate in the Association of Credit Cards.

Despite this progress, current efforts to develop the banking sector in the region have not yet produced a system which can support a modern market economy:

a. Insufficient Banking Network. There is general under-banking in the CSFR, with under 300 branches in a population of 15.6 million. In addition, the banks are highly concentrated geographically.

b. Shortage of Banking Skills. There is a considerable shortage of banking skills, with a total bank employment of approximately 26,000.

c. No Financial Markets. Other than the basic banking system, there are only two insurance companies, one located in each Republic. Furthermore, while a stock exchange is in the process of being established, there are currently no financial markets, money markets, or other financial intermediaries. Promissory notes and bonds are rarely used.

d. Lack of Competition. Although legislation envisioned the formation of new banks, its intent was to establish the new structure before new competition emerged. As a result:

(i) There is only one major commercial bank in each republic, resulting in a high degree of centralization and a complete absence of competition in banking.

(ii) The Czech and Slovak savings institutions still retain a monopolistic position on household savings and credit.

(iii) Foreign Banks are just beginning to enter the banking sector. In Prague, several foreign banks from Austria, Germany, the UK, and the U.S. have opened representative offices and have only recently received operating licenses.

(iv) Czechoslovakia has only one joint venture in banking outside the country (Prager Handelsbank in Frankfurt, Germany) and only one bank which has a subsidiary abroad (Zivnostenska Bank).

e. Low capitalization. Capital asset ratios are low because bank reform was not accompanied by capital infusions to help support the troubled loan portfolios. Capital assets ratios are only 1% - 1.25%. (BIS standards recommend 8%.) As a result, the banks have limited capacity to finance the projects which would develop the private sector. The recently established state-owned Consolidation Bank, however, which will purchase inventory loans from commercial banks, is a first step towards the improvement of capital asset ratios.

f. Bank regulatory practices not developed. Legislation on minimum capital and reserve requirements, lending limits, foreign exchange risk limits, liquidity, credit concentration limits, and country risks has been drafted but not yet codified.

g. Non-convertible Crown. According to both U.S. and Czech sources, it will be several years before the Crown is fully convertible.

h. Basic financial services not provided. Services and products which meet the needs of the private sector are not offered by the banks. **[what products are offered? Is there a demand for other products?]**

i. Lack of legal framework for bankruptcy. Because the bankruptcy laws are not yet in place, banks cannot exert real control over borrowers.

j. Lack of public education. The general public does not have a basic understanding about the types of services and products that banks can offer.

4. Development of a Modern Telecommunications Systems.

To facilitate privatization of the PTTs (the Czech and Slovak telecommunications authorities), Czechoslovakia is receiving U.S., European, and multilateral technical and financial assistance. (Note that the federal telecommunications authority, similar to the FCC, will remain state-owned.) Assistance activities include feasibility studies, regulatory advice, and major project financing. The most significant assistance to date is a joint venture with US West and Bell Atlantic, which has been started for a country-wide cellular and packet data network. The companies are investing $80 million in the joint venture, which is expected to be operating in 1992. **[Need more information on the quality of the existing telecommunications system.]**

C. <u>Formation of New Private Firms and Barriers to Emergence.</u>

While recent legislation and high unemployment will encourage new business, entry of domestic firms has been and may in the future be largely limited to small enterprises in the services sector. There are currently 500,000 entrepreneurs, many of whom are doing business part-time while maintaining their original professions. 30-40% of firms have one to five employees. There are several dozen manufacturing firms concentrated in metal working, woodworking, and textile industries with 50 to 400 workers.

Actual new business development has been limited due to significant barriers to entry, including:

a. <u>Trade barriers.</u> In an effort to encourage private enterprise, as of January 1991, many of the foreign trade and currency exchange procedures were liberalized. However, export and import licenses are still required for a few strategic items, a 20% import surcharge is imposed on most consumer goods, and there are significant restrictions on foreign exchange.

b. <u>Complicated registration process.</u> Private firms must show that they have space and financing before they can register with local authorities.

c. <u>Limited access to private and public financing.</u> Savings are inadequate. Individuals can qualify for government loans only after they have registered, effectively limiting government financing to established companies.

d. <u>Limited access to inputs.</u> State enterprises with established ties to suppliers still have priority for inputs, leaving private firms with the [limited?] remainder.

e. <u>Uncertainties in the marketplace.</u> Prospective businessmen have uncertainties about: (i) the prospects following economic reform and the absence of an efficient capital market (e.g. disclosure provisions, etc.); (ii) the restitution law and voucher schemes; and (iii) property rights.

f. <u>Unskilled Labor.</u> There is a lack of skills needed to run small and large businesses and a need for training in marketing, management, international business, and accounting

g. <u>Lack of tax incentives.</u> The GOC's general objective is to lower taxes to level which are customary in market economies and to establish equal tax consequences for different sectors of the economy. However, the tax code does not encourage investment. Official tax incentives to foreign and domestic investors are not given, although press reports indicate that tax holidays for foreigners of up to two years are negotiable. A 40% tax applies to company profits above 200,000 Crowns ($7,400) and where foreign ownership is 30% or greater. In order to discourage nominal foreign contributions, the rate increases to 55% if the foreign equity share is less than 30%. Joint ventures in banking and insurance pay a 65% rate regardless of the percent of foreign ownership.

h. <u>Lack of a housing market.</u> Labor mobility is severely restricted by the inadequate housing market. In urban areas, there is: (i) virtually no home ownership; (ii) an acute shortage of housing accompanied by rents controlled at far below market levels; and (iii) no formal housing market. Rather, there is only informal trading accompanied by side payments.

i. <u>Bankruptcy legislation not completed.</u> Because bankruptcy laws are not yet in place, the rights of creditors are not clear, including rights to: (i) reclaim assets sold on credit; (ii) reclaim assets on which they have valid liens; and (iii) have priority over unsecured creditors. As a result, [illegible] and high unemployment will [illegible]

[illegible] of [illegible] largely limited to small enterprises in the private sector. There are currently 500,000 [illegible], many of which are doing business [illegible] maintain [illegible] professions. 30-40% of firms [illegible] employees. There are several dozen manufacturing firms [illegible] metal [illegible], woodworking, and textile industries with 50 to [illegible].

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f. Unskilled labor. There is a lack of skills needed to run small and large businesses and a need for training in marketing, management, [illegible] business, and accounting.

g. [illegible] incentives. The [illegible] general objective is to lower [illegible] to level [illegible] market economies and to establish [illegible] for different sectors of the economy. However, the tax code [illegible] encourage investment. Officials [illegible] incentives to foreign and [illegible] are not given, although press reports indicate that tax [illegible] of up to two years are negotiable. [illegible] tax applies [illegible] 20,000 crowns (\$7,400) and [illegible] foreign owners, [illegible] to discourage [illegible] foreign control [illegible] foreign equity share is less than 30%. [illegible] pay a 65% rate regardless of the percent of [illegible]

[illegible] mobility is severely restricted [illegible] areas, there is: (i) virtually no [illegible] and (ii) no formal housing market. [illegible] by side payments.

[illegible] bankruptcy laws [illegible] including rights [illegible] they [illegible] potential transactions, including sale and leaseback arrangements, are be inhibited.

j. Exorbitant real estate prices. Suitable office space (at international standards) is often only available at international hotels.

k. Unfavorable treatment by anti-monopoly authorities. A firm with a 30% market share is in a presumptive "dominant position" under the recently enacted anti-monopoly statute and may be subject to restrictions on its behavior. There is no indication that firms entering the market with new products, and thus 100% market shares, will be exempt from such treatment.

l. Unfavorable treatment by price control authorities. The price control statute has special provisions regulating the prices of firms with a "monopolistic or dominant position." It also specified that "sellers must not misuse their economic positions in order to obtain disproportionate economic benefits resulting from the sale of goods for prices incorporating unjustifiable costs or inappropriate conduct. Again, firms producing new products may be deemed to hold 100% market shares and be treated restrictively under the statute.

m. Restricted advertising and promotion channels. **[Is this true? How so?]**

n. Underdeveloped transportation system. **[Is this true? How so?]**

o. Underdeveloped wholesale and retail distribution systems. **[Is this true? How so?]**

D. Foreign Investment

Foreign investment is viewed as a means of restructuring and modernizing the obsolete capital stock of the country, introducing new technology, extending the scope of foreign economic activity, and gaining access to new markets. As a result, foreign investment laws were liberalized in 1990, and the Foreign Investment Agency was established as a "one-stop shop" for investors. As a further result, the laws are less restrictive that the laws on domestic investment. Areas of critical concern include the environment, telecommunications, transportation, tourism, energy, light industry, and metallurgy. **[need more information on the law on domestic investment]**

Concerns about the proper level of foreign participation (i.e., increased capital, technical knowledge, and modernization of plant and equipment versus the possibility of loss of control, decreased distribution of ownership, foreigners "buying up" the country, and unrestricted land speculation), particularly in larger projects, however, have resulted in laws which reflect the Government's uncertain attitude.

Recent legislation encourages foreign investment by:

1. allowing foreigners to own 100% of private businesses;

2. allowing repatriation of both hard and soft currency profits;

3. permitting the signing of bilateral agreements which guarantee favorable conditions; and

4. liberalizing the rules on foreign banks' loans and transfer of capital in the event of liquidation.

However, legislation may discourage foreign investment because: (1) foreigners are not permitted to own real estate; (2) foreign firms must

convert 30% of their hard currency earnings into the local currency; and (3) there are limited tax incentives (see IIC).

## III. Status of Efforts to Put State Assets into Private Hands

### A. Rules and Regulations Adopted or Proposed for Selling State-Owned Assets

With the exception of developing a two-track approach for privatizing assets of different sizes, the GOC has not yet firmly defined rules and regulations for selling state-owned assets.

#### 1. Restructuring enterprises prior to sale.

The GOC generally favors the restructuring of larger enterprises, particularly of those that have monopolistic positions and whose existing commitments preclude their commercial viability. However, concerns about restructuring prior to sale have arisen. These concerns focus on whether the government can efficiently restructure assets and on the appropriateness of restructuring due to the possibility of lost economies of scale.

#### 2. The order of priority for selling state-owned enterprises

The GOC plans to draw up a detailed implementation plan over the next few months. The plan must be approved by the Financial Council before the sale of vouchers can begin this Fall. Implementation will be the responsibility of the Czech and Slovak republics.

Under the "Large Privatization" Law, each enterprise to be sold must design its own detailed privatization plan, including timing and employee participation, before the property can be converted into a stock corporation and put up for sale. National Property Funds, which will be controlled by the Federal Republic Privatization Ministries, will own assets prior to sale. **[Need more information]**

#### 3. Approaches for enterprises of different sizes.

Czechoslovakia has developed a two-track approach for privatization:

a. "Small Privatization." In October 1990, legislation was passed to privatize approximately 100,000 shops, services, and small businesses, excluding cooperative property. The goal is to privatize all of the small enterprises within two years. All small enterprises will be sold via public auction. Direct sales to foreigners for hard currency are prohibited, and privatized enterprises may not be resold to foreigners for two years after privatization.

Proceeds will be deposited in a special account to be used for compensation of claims under the Restitution Law, to defray costs related to the privatization commission, and to pay off debts on enterprises that fail in the privatization process.

[need more information on the mechanics of the auction system.]

b. "Large Privatization." In February 1991, legislation was passed to privatize approximately 4,500 large state enterprises. Sales are not expected until early 1992. The percent of shares offered to Czechoslovak citizens will vary from enterprise to enterprise, with the remaining shares being retained by the GOC on a temporary basis or sold to foreign investors. Individuals may purchase stocks in individual companies and mutual funds and will have the right to invest in groups of companies.

-- currency earnings into the local currency and (3) [illegible] incentive. (see IIC)

## [illegible] of [illegible] and [illegible] Rights [illegible] Czechoslovakia

Rules and Regulations [illegible] or Proposed [illegible] State Owned Assets

With the exception of developing a two-track process [illegible] of different sizes, the [illegible] has not yet firmly defined rules and regulations for [illegible] state-owned assets.

1. Restructuring [illegible] enterprises prior to sale

[illegible] GOC generally [illegible] the restructuring of [illegible] enterprises, [illegible] of those that have [illegible] and [illegible] products, [illegible] commercial [illegible] viability. [illegible] restructuring due to the possibility of [illegible] of [illegible].

2. The [illegible] of [illegible] for [illegible] at [illegible] state-owned [illegible] [illegible]

The GOC [illegible] to draw up a detailed implementation plan over the next few months. The plan must be approved by the [illegible] sale of vouchers can begin [illegible]. [illegible] implementation will be the responsibility of the Czech and Slovak republics.

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[illegible] more information on the mechanics of the auction system.]

[illegible] In February 1991, legislation was passed [illegible] 3,500 [illegible] enterprises. [illegible] are not [illegible] 1992. The [illegible] offered to Czechoslovak [illegible] the remaining shares [illegible] to foreign investors. [illegible] mutual funds and

Of the 4,500 enterprises to which the Large Privatization law applies, approximately:

(i) 30% have been deemed "unprivatizable" because they are in industries deemed of national importance. These include infrastructure-type enterprises, including utilities, telecommunications, transportation, mining, and certain resources classified as "strategic."

(ii) 10% are the most financially sound, will be reserved for case-by-case privatization, and are expected to be targets of foreign investors.

(iii) 10% will be declared bankrupt.

(iv) 50% will be converted into stock corporations and sold via auction or the voucher system.

**[need more information on the mechanics of the voucher system]**

4. <u>Procedures to liquidate assets.</u>

Bankruptcy laws are expected to be drafted in 1991, which will facilitate the liquidation of assets. **[Need more information]**

B. <u>Progress to Date.</u>

The GOC has adopted many of the appropriate mechanisms to privatize state-owned assets. It has allocated resources (the large and small privatization processes are under the control of Privatization Ministries of the Czech and Slovak republic and 114 district commissions, respectively) and adopted a significant amount of legislation. **[Need further information on the staff and budget]**

However, few actual sales have occurred and few joint ventures have been established due to:

1. the size of the task (except for the USSR, Czechoslovakia began the privatization process with a higher level of state ownership than any other country in the region);

2. delays in establishing a common strategy for the transition process, reflecting tensions between the Czech and Slovak Republics;

3. fears about job security (from both local officials and the general population) and pessimism about economic prospects in 1991 (25% of Czechoslovak residents are afraid that they will not be able to cope with economic conditions);

4. skepticism about the proposed voucher system and privatization scheme;

5. resistance by some local officials, who are accustomed to cozy relationships with local state enterprises;

6. skepticism by many Western businessmen who believe that the GOC has not developed a coherent economic policy and is moving too slowly in implementing reforms that would improve the business climate;

7. the lack of skills needed to run both small and large businesses;

8. inadequate savings (private savings only amount to 10% of the book value of state assets); and

9. perhaps most importantly, the complexities of the restitution process, which has severely focused attention away from new privatization but is considered to be the appropriate means to transform the system. The restitution process has paralyzed the privatization process because (i) the privatization of any business on which a restitution claim has been made is prohibited; and (ii) the privatization ministries are understaffed, **[and their budgets are insufficient. is this true?]**

The following progress has been made to date:

1. Sale of assets via:

a. Small Privatization. In January 1991, the first group of 17 small businesses, representing a wide range of specialties and geographic locations, was auctioned of. The auction was considered a success by the privatization agency. Total proceeds were approximately $800,000, and the average sales price was approximately $50,000. Most buyers had access to foreign capital either because they were emigres themselves or because they had expatriate relatives.

Retail shops included fruit and vegetable stores, grocery stores, a sweet shop, textile stores, a clothing shop, housewares stores, and an electronics shop. Two of the enterprises included real estate, and the other enterprises included two year leases. (The GOC has indicated that it will not sell buildings containing 10 or more flats until the housing privatization policy, which is currently under consideration, has been approved.)

b. Large Privatization. Because the Large Privatization Law was just passed in February 1991, no large enterprises have been sold. Distribution of vouchers and sales of enterprises are scheduled to begin in the Fall of 1991 and in early 1992, respectively. However, due to the complex restitution process, this time frame appears optimistic.

3. Wholly-owned foreign subsidiaries.

**[Need information on number, size, and sectors of wholly-owned foreign subsidiaries.]**

4. Joint Ventures.

Approximately 1,168 joint ventures have been registered, of which 909 are registered in the Czech republic and 259 are registered in Slovakia. Nearly 70% of these, however, are capitalized at less than $20,000, and only five companies are capitalized at more than $200,000. Projects tend to be of a small scale and operate mainly in tourism and construction.

Austria and Germany account for 58% of total joint ventures. Switzerland and the US (with four percent of the total) rank third and fourth, respectively, followed by other European countries. 20% of all joint ventures are totally foreign owned; 10% are joint ventures with state-owned enterprises; and the remaining 70% are with individuals or private companies.

Some potentially lucrative deals have been completed or are under consideration, including a $6 billion investment by Volkswagen in the Skoda automobile factory; CBC (France) acquisition of Tourinvest Hotels for $175 Million; Linde (Germany) investment of $106 million in Technoplyn (gases); US West and Bell Atlantic investment of $80 million with the government on phone switches; and a potential $300 million Kuwaiti investment in the petroleum sector.

C. Legal Mechanisms to Promote Competitive Domestic Markets and Prevent Anti-competitive Behaviors.

In support of de-monopolization, the GOC has:

1. Adopted antitrust laws.

The CSFR anti-monopoly statute was passed on January 30, 1991 and went into effect on March 1, 1991. It contains the following four substantive sections common to most of the statutes in force or under discussion in Eastern Europe:

a. restrictions on monopolistic practices of dominant firms, defined as firms "subject to no substantial competition" (a condition presumptively satisfied by a 30% market share);

b. restrictions on agreements among firms (though the distinction between horizontal and vertical agreements is not always made);

c. restrictions on mergers or transformations of firms; and

d. provisions for the involuntary break-up of firms.

2. Provided resources to enforce antitrust laws.

The anti-monopoly statute provides for the creation of three competition offices, one Federal, one Czech, one Slovak. The Federal office has jurisdiction only over matters involving firms with over 40% of sales in each republic. Each office is expected to have a staff of 50 - 70, although neither the Federal nor Czech office is yet of appreciable size.

The Ministries of Privatization and the local district commission which oversee the privatization of large enterprises and small enterprises, respectively, must either:

a. "set up tangible conditions which when implemented, guarantee the elimination of the monopolistic position;" or

b. recommend a plan to eliminate the monopolistic position within two years (e.g. by loosening of import restrictions or entry of firms into the market.) For large privatizations, if the relevant anti-monopoly office does not approve the plan, the matter is appealed to the relevant government. For small privatizations, the code is silent on such appeals.

3. Provided protection to entrants seeking to purchase inputs.

The anti-monopoly statute offers protection to entrants seeking either to purchase inputs from or to share distribution outlets with vertically integrated dominant firms. Dominant firms are forbidden to "apply differing conditions for equal or comparable fulfillment towards individual members in the market, which results in their disadvantage in economic competition."

A firm considering itself the victim of such discrimination may appeal to the relevant anti-monopoly body, the result of which may be a "cease and desist" order, enforceable on appeal by the civil courts. It may be difficult, however, for firms tc demonstrate that "differing conditions" are being imposed upon them or that the sales or services they seek are "equal or comparable" to that which the vertically integrated firm supplies itself.

Despite the Government's goal to prevent anti-competitive behavior, the law may inhibit new business in several ways:

1. A successful new entrant which produces a new product (and hence has a market share at or near 100%) may be labeled a dominant firm and treated similarly to a state-created monopoly;

2. Distinctions have not been made between horizontal and vertical agreements. Market entrants who may need to set up new vertical chains may be forbidden from imposing what we consider innocuous vertical restraints, such as exclusive territories. (There is an exception from restrictions on agreements for firms with market shares below five percent, so an entrant into an existing market could employ such practices until it became successful.)

3. Entrants may be discouraged by uncertainty over which anti-monopoly body would have jurisdiction over firms or possible differences in enforcement among the different bodies.

## IV. Alternative Approaches to Privatization

The GOC has considered various approaches to privatization but currently favors the voucher system for large privatization and the auction system for small privatization. The voucher system is favored because it is expected to achieve the widest and "most fair" distribution of ownership. However, the voucher system will likely pose a number of problems as well, including:

a. Administrative burdens. The program will require the government to set up a computerized registration system to issue vouchers, thereby causing a significant administrative burden and possible delays.

b. Difficulties pricing vouchers. The GOC will encounter difficulties pricing the vouchers. The GOC must determine the price at which it can attract the most capital, which is needed for modernization and renovation, but at the same time, exclude the fewest segments of the population. However, the GOC must also determine the price at which it can weed out unsophisticated investors (to prevent a backlash if losses are incurred) but at the same time give the general population an immediate sense that they will benefit from economic reform.

c. Wide distribution is not guaranteed. A wide distribution of ownership is not guaranteed:

(i) According to recent polls, 45% of the population is not interested or does not understand the voucher privatization program. One Czechoslovak official estimated that fewer than half of eligible citizens will buy vouchers.

(ii) Shares bought with coupons will be relatively inexpensive. However, after the stock exchange is established, shares may not be affordable for the general population.

d. The general public may not be able to bid in a "rational" manner. The general population will have difficulty making informed investment decisions because (i) the general public has limited technical knowledge with which to assess the value of enterprises; and (ii) past performance of firms does not necessarily reflect underlying potential.

e. Limited supervision. A widely dispersed shareholding might imply that no individual shareholder would undertake supervisory functions.

f. Coupons may be deemed complementary income. This would effectively increase consumer demand and may worsen the already strong inflationary pressures.

Due to the potential problems associated with the voucher system, the

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The CDC has considered various approaches to privatization [illegible] currently favors the voucher system for large privatizations [illegible] small privatization. The voucher system [illegible] achieve the widest and most fair distribution of ownership [illegible] the voucher system will likely pose a number of problems [illegible]:

a. Administrative burdens. The program will [illegible] the government to set up a computerized [illegible] system [illegible] thereby causing a significant administrative burden and possible delays.

b. Difficulties in pricing vouchers. The CDC will encounter difficulties pricing the vouchers. The CDC [illegible] determine the price at which it can attract the most capital, which is needed for [illegible] and renovation, but at the same time [illegible] of the [illegible]. However, the CDC must also [illegible] the price at which it can weed out unscrupulous investors [illegible] but at the same time give the general population a [illegible] sense that they will benefit from economic reform.

c. Wide distribution is not a strategy. A wide distribution of ownership is not guaranteed:

(i) According to recent polls, 45% of the population is not interested or does not understand the voucher privatization program. One Czechoslovak official estimated that fewer than half of eligible citizens will buy vouchers.

(ii) Shares bought [illegible] will be relatively inexpensive. However, after the stock exchange is established, shares may not be affordable for the general population.

d. [illegible]

A widely dispersed shareholding might imply [illegible] would undermine supervisory functions.

[illegible] This would [illegible] already strong government is contemplating other privatization techniques involving financial intermediaries, including:

a. allowing citizens to use vouchers to purchase government and privately administered mutual funds which hold shares in numerous companies;

b. offering shares to employees through employee stock ownership plans;

c. selling shares to state pension programs; and

d. encouraging foreign investment.

While these methods will broaden public ownership, they may add another layer in the corporate governance structure without solving the problems associated with a wide distribution of ownership.

## V. Lessons Learned to Date

The GOC has learned the following lessons from the privatization process:

1. The importance of clearly defined property rights. Clearly defined property rights and the encouragement of private property are key to the privatization program.

2. The complexities of the restitution process. Claims on property confiscated prior to 1948 have complicated property sales both to foreigners and domestic buyers and will severely delay the privatization process. The GOC has just begun the complicated process of verifying ownership and examining compensation claims which are necessary before it can determine which businesses can be sold under the privatization program.

3. The need for general population support. Skepticism about job security and withstanding the shocks of economic reform have inhibited entrepreneurship. The COG must educate the public about concepts of risk versus gain, diversifying risk, mutual funds, etc. in order to encourage new business development.

4. Other impediments. Other impediments, including limited access to capital, limited savings, an inadequate infrastructure, and difficulties establishing asset values have severely restricted the pace of privatization.

a. allowing citizens to use vouchers to purchase government and privately administered mutual funds which hold shares in numerous companies;

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While these methods will broaden public ownership, they may not [illegible] in [illegible] corporate governance structure without solving the problem [illegible] with wide distribution of ownership.

V. Lessons Learned [illegible]

The OCG has learned the following lessons from the privatization process:

1. The importance of clearly defined [illegible]. Clearly defined property rights and the encouragement of private property are key to the privatization program.

2. The complexities of the restitution [illegible] claims on property confiscated before [illegible] have complicated [illegible] sales [illegible] foreign and domestic buyers and will severely delay the privatization process. The OCG is just begun the complicated process of [illegible] examining compensation claims which [illegible] before [illegible] can be sold under the privatization program.

3. The need for [illegible] population [illegible] job security and [illegible] the absence of economic [illegible] entrepreneurship. The OCG must educate the public about concepts of stock returns, gain, diversifying risk, mutual funds, etc. in order to encourage new business development.

4. Other impediments. Other impediments, including limited access to capital, limited services, an inadequate infrastructure, and [illegible] establishing asset values have severely restricted the pace of privatization.

## Special Notes on the Individual Republics

Czech Republic

The Czech Republic is developing various programs to encourage new business development and provide assistance to the unemployed, including:

1. Subsidies for new businesses. As of February 1, 1991, an unemployed person or a person threatened with unemployment can receive 30,000 Crowns (approximately $1,000), equivalent to 12 months average unemployment benefits, to set up a private business. The applicant must submit a business plan which promises to make him gainfully employed. If the project will also create jobs for additional unemployed workers, the subsidy may be increased.

2. Interest-free credits. The Czech republic has developed a program for small and medium size businesses designed to facilitate the introduction of modern technology. Non-interest bearing credits with a minimum maturity of three years will be granted to entrepreneurs presenting projects with good prospects. In addition, a financial benefit of up to 20% of expenses may be granted in special cases. In the future, expanded credits may be offered.

Slovak Republic

The Slovaks were reluctant to agree to a radical economic reform program, including restrictive monetary and fiscal policies. This is primarily because most of the Slovak economy was built during the totalitarian, centrally planned period and did not benefit from any market influence. As a result, Slovakia has larger concentrations of heavy and armament industry, is highly dependent on East European markets, and has a lower level of development in various areas (i.e. transportation), all of which make it more vulnerable to severe industrial restructuring, unemployment, and a slower pace of privatization.

**Czechoslovakia**

Summary of Information Outstanding

1. Legislation/Judicial System: In general, are laws satisfactory? What laws still need to be written? In addition, need information on the following:

a. Status of bankruptcy legislation
b. Status of contract law.
c. Development of a court system and related legal procedures.
d. Status/development of tort law.
e. Do shareholders of stock corporation have limited liability?
f. Status of banking legislation.

2. Insurance: Framework for/status of commercial property and liability insurance, including number of firms (public and private) which provide insurance and type of insurance offered. Are insurance laws satisfactory?

3. Accounting Standards: Are accounting standards and practices satisfactory?

4. Telecommunications Systems: Quality of existing telecommunications system.

5. Formation of New Private Firms:

a. Are there restrictions on advertising and promotion channels?
b. What is the quality of the transportation system?
c. Are wholesale and retail distribution channels developed?
d. What is tax law on domestic investment? Does it encourage new business development?

6. Foreign Investment: What is the law on domestic investment?

7. Sale of State-Owned Assets:

a. Approximate value of firms sold to date.
b. Approximate size of staff of and budget for privatization ministries.
c. Approximate number and size of wholly-owned foreign subsidiaries. What sectors are they in?
d. What determines the priority for selling assets?
e. Have procedures been adopted to liquidate assets?
f. Discuss the mechanics of the small and large privatization programs.

8. Political Climate: How much autonomy do the republics have over the privatization process?

Vladimir Benacek. "Financial Institutions in a Transient Economy: Czechoslovakia in 1991." Paper presented at a conference in Prague on "The Transition to a Market Economy -- Institutional Aspects." March 1991.

V l a d i m í r   B e n á č e k

# FINANCIAL INSTITUTIONS IN A TRANSIENT ECONOMY: CZECHOSLOVAKIA IN 1991

The paper aims at explaining peculiarities of the rise of institutional structures of economies in transition from central planning to market, and at analyzing their changing relationship to economic policy making. An attempt is made to separate the role of financial institutions in this process and to estimate the cost of their reconstruction in Czechoslovakia. The analysis results in normative conclusions discussing the strategic guidelines for implementation of financial institutions.

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Working paper prepared for a panel discussion
at Conference on Institutional Aspects of Transition
to a Market Economy
organized by IRIS, University of Maryland

My dues are to Virginia Boelhower of CS State Bank and to Martin Kupka of Charles University for comments on the first draft of this paper

Prague, March 24-27, 1991

## 1. THE RISE OF ECONOMIC INSTITUTIONS

Conventional economic analysis is largely preoccupied with the investigation of economic transactions (exchanges) between autonomous economic entities (agents) under the tacit assumption of given institutions and hierarchies. Needless to say, this is a very useful approach if the institutional side is well established and develops incrementally in accordance to the evolution of the market. If we accept that command (planned) and market economies are two different paradigms for the realization of economic transactions, we must conclude that there must also exist, as natural organizational complements, two different institutional structures supporting their operation. In cases of a "normal" economic state the role of an institutional superstructure can be played down or disregarded.

Once society commits itself to scrap abruptly central command and to switch to a market, economy is challenged by numerous obstacles, which locks it into many vicious circles leading to a deadlock. The recent events of the last 18 months in Central and Eastern Europe have proven that the transition to market economy presents a much harder problem than was originally thought. Surprisingly there is no parallel with the seemingly similar, but reversed process of switching from a market to a command economy. The transient societies from Elbe to Kamchatka are floundering, showing little hope for quick stabilization.

Why is economic instability, which radiates throughout the rest of society (eg. into politics and morals), so difficult to solve in transient economies? Why are commodity market transactions and their contracting so inefficient? Why are transaction costs so exceedingly high? Why do markets resist to clear and evidently operate in a highly distorted way - eg. in a situation of vertical and retreating supply curves? Why is the reallocation of resources so slow? Why do not the released resources re-enter the production process? Why does the future play such a marginal role in microeconomic decisions? Why can we observe in all transient economies phenomena that have not been

encountered before: deep recession coupled with high inflation? Why do traces of negative growth, rising unemployment and creeping international indebtedness suggest 1929-33, while others do not fit - such as rampant inflation and the parallel shortage of a large number of commodities with deregulated prices (!). Viz. Footnote /1/. The answer to these questions presented in this paper could be labeled as "the consequences of collective action failure".

What rests behind the collective action concept? According to institutional economic theory (eg. Commons (1934), (1970)) it is a set of man-made rules imposed on society - a society which is essentially scattered into elements that, under conditions of high uncertainty, clash into conflicts of interest. These rules are intrinsically different in the totalitarian and the democratic society. The latter is marked by the paramount role of the market in achieving economic order. However, the existence of the market alone is generally not a sufficient condition to produce order from conflict. The creative and cooperative nature of agents in the market is finally achieved by the invention of "rules of the market game" and by economic institutions which constitute a more organized way of introducing human values, morals and a predefined behavioral pattern (something like a substitute for instinct) to the interaction of economic agents. The crucial motive for bringing about a social consensus for the building up of institutions are the resultant economies in transaction costs, the higher speed of reallocation of resources and, finally, the adjustment to equilibrium under Pareto efficiency criteria.

The more exogenous shocks to which the economic system must adjust /2/, the more conflicting the interests of economic agents /3/, the more uncertain the future economic contingencies /4/, the higher is the complexity of behavioral patterns of agents /5/, the gloomier are the expectations /6/, the more the public goods aspects intermix with market economic decisions /7/, the more imperfect is the market /8/ - in another words, the more Heraclean are the labours loaded onto the market - the encompasses between deep recession coupled with high inflation; why do traces of recessive growth, rising unemployment and creating international indebtedness suggest 1929-33, while others do not fit - such as rampant inflation and the general shortage of a large number of commodities with concealed prices (!). Viz. Footnote /1/. The answer t[illegible] pr[illegible]nted in this paper could be label[illegible] as "the consequences of collective action failure".

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[illegible]ous shocks to which the economic system must [illegible] the interests of economic [illegible] economic contingencies [illegible] behavioral patterns of [illegible] [illegible]itutions /6/, the more the [illegible] market economic decisi[illegible] higher is the risk of market inefficiency and/or failure. The market itself is not a free good - it needs servicing, maintaining of both rules and investment. The higher burden loaded on it, the higher the requirements necessary for guaranteeing its smooth performance. Without a doubt, the markets of former command economies have been (and still are) grossly neglected objects. The requirements to refine them are market institutions. But not all economic transactions are market mediated. Many governmental economic functions (eg. fiscal policy, interventions, education) fall into this category. Thus we should not forget that, along with market institutions, there is a large spectrum of complementary "sideline" economic institutions.

## 2. TIMING AND SEQUENCING OF ECONOMIC TRANSFORMATION

Should all economic institutions be assigned the same weight, the same urgency for buildup? Certainly not! Since institutions are only the means, sort of a "soft" catalyzer accelerating the processes in the real ("hard") sphere, they must follow the timing and the weighting emphasis of the purposes for which they were created. Let us therefore analyze the structure of the transformation policy in command economies.

Policymaking in transient economies has been concentrated nearly exclusively in the following areas representing 8 rather specific policy instruments, all of them heavily inclined to deregulation and competition:

a) fiscal policy
b) monetary policy (including interest rate)
c) exchange rate policy (incl. convertibility)
d) foreign trade policy
e) commodity price policy (incl. fair competition)
f) labour market policy
g) capital market policy
h) privatization policy.

It is quite apparent that the listed set of instruments widely differs from those used in old Keynesian therapies, while higher is the risk of market inefficiency and/or failure. The market itself is not a free good - it needs servicing, maintaining of both rules and investment. The higher burden loaded on it, the higher the requirements necessary for guaranteeing its smooth performance. Without a doubt, the markets of former command economies have been (and still are) crossly neglected objects. The requirements to refine them are market institutions. But not all economic transactions are market mediated. Many governmental economic functions (e.g. fiscal policy, interventions, education) fall into this category. Thus we should not forget that, along with market institutions, there is a large spectrum of complementary "sideline" economic institutions.

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Policymaking in transient economies has been concentrated nearly exclusively in the following areas representing a rather specific "soft" [illegible] all of them [illegible] is inclined to the difference in relation to new classical remedies rests in its magnified dosage. The policy target variables are primarily focused on the Heraclean task of fundamental reallocation of resources. Only secondarily is there the task to control inflationary pressure and external equilibrium, while the role of employment and growth is assigned a sideline importance. Both policy instruments (control variables) and target variables differ from the conventional approach to policy-making, which accentuates the macroeconomic side, while the institutional side is assumed constant. In transient economies, by completely discarding the latter condition, the microeconomic side can become an object of policy control. This process is nevertheless partial and indirect. Some important economic activities were deliberately excluded from our list (a-h), eg. the harmony of interpersonal relations in the workplace, the level of entrepreneurial control, efficiency or innovations. These activities were not assumed here as possible policy instruments, because they were assumed to be final targets, mediated through the effects of indicated instruments (viz. /10/).

The mentioned ranking (a-h) is not haphazard. It takes into account the sequencing and timing of the operational availability of the instruments, which in turn reflects their different degrees of natural complexity and thus their readiness to function as an efficient instrument for policy purposes. Since the primary problem of transient economies is to find a trajectory from the old equilibrium of command economy to the new equilibrium of the market economy (viz. /11/), each of the presented instruments is earmarked for the fulfilment of two tasks: first, to destabilize the equilibrium of the command economy and, then, to safeguard the process of convergence to the new market equilibrium. Each of them therefore has its own "shakeout" stage and its own stabilization stage. The failure of any instrument in any of the two stages must thus be balanced with the compensating effects of some remaining instruments - in the first place by those ones listed above that one in default.

Now we are ready to turn to the more practical question of the difference in relation to classical remedies rests in its mentioned decade. The policy target variables are primarily focused on the Herculean task of incremental reallocation of resources. Only secondarily is there the task to control inflationary pressure and external equilibrium, while the role of employment and growth is assigned a sideline importance. Both policy instruments (control variables) and target variables differ from the conventional approach to policy-making, which accentuates the macroeconomic side, while the institutional side is assumed constant. In transient economics, by completely discarding the latter condition, the microeconomic side can become an object of policy control. This process is nevertheless partial and indirect. Some important economic activities were deliberately excluded from our list (a-h), e.g. the harmony of interpersonal relations in the workplace, the level of entrepreneurial control, efficiency or innovations. These activities were not assumed here as possible policy instruments, because they were assumed to be final targets, mediated through the effects of indicated instruments (viz. /10/).

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Having this situation in mind, a more important role must be assigned to a quick take-off of the competent and competitive capital market instruments, where the core of financial institutions is concentrated. The revival of this core will positively feed back to the financial institutions linked with the remaining instruments, whose operational power is thus strengthened. The capital market represents a much more operational instrument than the competitive labour market or privatization, which are highly politically vulnerable and liable to fail at the most undesirable moment. Eg. in the moment of recession the nominal wages become either sticky or rise (instead of being downward flexible) due to the populistic vows of trade unions and government. On the other hand, privatization easily stalls because of various counteracting clashes of vested interests for property redistribution. In this critical stage of transformation it is absolutely essential to get the capital market into working shape. Its success or failure is closely correlated with the concomitant resuscitation of financial institutions, which may be the crucial move which wins or loses sequencing. Actually, in Yugoslavia, there are two instruments which can be still treated as nonconsistent: the competitive labour market and privatization. The capital market situation is controversial, because it is still in infancy and not ready to perform its delicate shakeout and stabilization [illegible]. At the same time, there are proceeding [illegible] battle in price liberalization and foreign trade deregulation. [illegible] this. Given that, the only instruments available for such stabilization policy are the first three mentioned: fiscal, monetary and exchange rate policies. It is obvious that at this stage the "middle" policy instruments (i.e. [illegible]) are not [illegible]: transformation cannot progress either, because their limited shakeout and stabilization powers come quickly to a dead end. There is a danger that the credibility of the government's reform program will quickly dissipate, the entire transformation will grind to a halt and, finally, a political backlash will loom.

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Our conclusion is obvious: financial institutions (in the wider sense) are the most complex of institutions, because they are directly or indirectly embedded both in policy instruments (a-h) and in targeted economic transactions. This is natural, since it is the pricing and monetary phenomena that lies at the core of market economies and that strikes the difference between market and command economies /9/.

There is emerging another important aspect to the sequencing of transformation to this point. It is the demise of the institutional superstructure belonging to the old command system. It is widely accepted that prices, money and financial institutions, as such, played a third class role in the functioning of command economies. What institution substituted for them, then? Logically, these must have been the "almighty bureaucratic hierarchies" - in a figurative sense the command economie s blood and nerve system. Once we accept that market and command institutions are disjunctive, the constructive process of economic transformation to a market economy cannot work without abolishing the old institutions - including the cross-sectional network of bureaucracy.

In fact, the role of bureaucracy in contemporary transient economies of Eastern Europe is far from being broken. It has lost, perhaps, its central drive. But it was just this moment, which enabled the bureaucracy to strengthen its operational autonomy at the grassroots level. The actual situation of power distribution in the vast majority of Czechoslovak state enterprises is not disproving this hypothesis. Attempts at forceful dissolution of the bureaucracy without abolishing its causes is a Quixotian task. What is more realistic, is to make its existence irrelevant by stripping it of power by cutting its hierarchies and by granting more opportunities for alternatives to bureaucracy: to markets, to its own institutions and to entrepreneurial individuals. Small islands of strongly motivated creative people have cropped up practically everywhere in Eastern Europe, once the command rule was disclaimed. Their fate

has been so far generally frustrating: their creative potential has been refused and steamrolled by the more straightforward counter-objective of the bureaucracy: to redistribute existing resources. The promotion of production (and not re-distribution) motivated individuals to entrepreneurial ranks should not be a function of the invisible hand only, but also of a well visible finger (or leg) of its institutional background. The problem is how to build this into new economic order.

## 3. THE COST OF REVAMPING FINANCIAL INSTITUTIONS

The urgent need to close the gap for missing economic institutions in transient economies is evident. However, its implementation is not automatic or mechanical. The problem does not rest in the proclaimed formal existence or non-existence of certain institutions, but in their factual performance. Eg. the formal establishment of commercial banks in this country does not mean the automatic availability of credit to its effective demand, not to mention the availability of some special banking services for which there is only a token demand so far. Since an institution is defined as a man-designed organization, custom or usage to fulfill certain socially agreed purposes, its existence depends intrinsically on the revealed consensus of both interacting partners, ie. to exercise its functions as providers and to be accepted by users. It is a question of whether people spontaneously manifesting in 1989 their keen will "to go back to Europe" realized that it is not only perestroika (ie. the "hard" changes in the productive base - restructuring of industry shares, prices or sizes of firms and enjoying the promised similar standard of living), but also those more tricky "soft" changes of objective functions, decision mechanisms, ownership and institutions), which are implied by such a move.

The change in institutional leverage of radical economic transformation presents a phenomenal problem - reminiscent of the revolutionary changes in science, as described by Kuhn (1962). While the traditional piecemeal (incremental) trial-and-error evolutionary" method of creating institutions

cannot be accepted because it is too time consuming, the new institutions must be born in a radical, discontinuous way. Otherwise the presence of a temporary vicious circle between the mentioned "hard" changes in production structure and the "soft" changes in institutions, which mutually keep their progress checked by a stalemate, is eminent. Therefore, the catastrophic "big bang" phase of social breakdown is inescapable and as such must be accepted as a natural disaster turning finally into a process of re-creation. The only question is whether there are instruments available which would make this phase shorter or less costly.

While it is accepted that the "hard" reallocative changes in the productive sphere must lead to recession, even to a recession deeper than market economies have recently became accustomed to, due to at least 40 years of neglect of the rational allocation of resources, it is by far underestimated that, on top of what is already mentioned, there will operate the contractual effects of clashing institutions, which will go through their parallel demise and re-birth. These institutions are so inherently embedded into social life that both economic systems - that of the market, as well as that of the command - do not fully realize their cardinal role and the necessity of painful revolution.

It is difficult to quantify the opportunity cost (eg. the number of man-years) for switching from command to market institutions. The best approximation can be exercised on the evaluation of transaction costs. Some western businessmen argue that the reallocation of certain assets or resources in Czechoslovakia is actually 2 to 5-times more time-consuming than it is in Western Europe. On the other hand some Czechoslovak entrepreneurs argue that the local reallocation of an asset or resource is definitely more complicated now than it was in the darkest times of planned rationing. If it is true, we can estimate that the social cost of the existing quasi "market" reallocation of resources in transient economies, subject to the lack of institutional backup, is not only conspicuously higher cannot be attempted because it is too time consuming, the new institutions must be born in a radical, discontinuous way. Otherwise the presence of a temporary vicious circle between the mentioned "hard" changes in production structure and the "soft" changes in institutions, which mutually keep their progress checked by a stalemate, is eminent. Therefore, the catastrophic "big bang" phase of social breakdown is inescapable and as such must be accepted as a natural disease turning finally into a process of re-creation. The only question is whether there are instruments available which would make this phase shorter or less costly.

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What could be the explicit cost of the restructuring of financial institutions? If we compare a command and a market economy (eg. Czechoslovakia and Austria) we can discover various differences, but not all of them showing the same magnitude. Gross production per capita, foreign trade intensity or the industrial structure of manufacturing differ with no disturbing associations. Relative prices, the size of firms, quality, cost structure, managerial efficiency and the structure of services differ much more, but one can still recognize the Czechoslovak score. The most striking differences can be seen in the speed of adjustment, capital transaction cost, economic education, entrepreneurial marketing culture and economic education. It is not surprising that the financial institutions are most closely correlated with just this set of activities. If we compare the service sector (with transport excluded), we get the following picture :

| | Czechoslovakia | Western Europe |
|---|---|---|
| Labour | 30 % | 55 % |
| Capital (machines) | 6 % | 30 % |
| Export earnings | 7 % | 26 % |

(The data show the share of the indicated factor in the service sector out of its full usage or earnings in the economy in 1988. Resource: own estimates.)

If we compare the financial sector only, the results would be even more divergent. The Czechoslovak score would then be nearly invisible, while in Western Europe the earnings from then in a mature market economy, but also higher than is the notoriously wasteful cost of reallocation of resources under bureaucratic command. This finding is fully consistent with implications of the theory of second best. We can only hesitate with a rather silly question, whether the restructuring of institutions is not finally more costly than the (rather more frequently discussed) restructuring of material resources under the mature market institutions. Without a doubt, the financial institutions would represent a fair portion of the whole opportunity cost of institutional revamping.

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investments, insurance and interest approach nearly half of the service sector s foreign exchange earnings. The development of financial institutions would inicially require a significant labour reallocation (5-8 % of the total employment). The requirements of capital investment represent approximately 150-200 billion Kčs (approximately all annual investments) - the majority of it from imports. However, the most challenging would be the task of eliminating the human capital gap, where Czechoslovak comparative disadvantage is the largest.

Except, there are two particular unsettled problems which deserve special attention. Even though Czechoslovakia might somehow solve its acute shortage of capital, in the short run there will still remain the problem of its efficiency. Many modern financial institutions are subject to economies of scale. Eg. size is a very important factor for the efficiency of electronic and communication networks. The second problem is connected with its complexity. The existence of a certain institution requires the anticipated functioning of some other complementary institution (eg. ethical, legal, communicational, etc.), whose development may take a very long time to evolve.

## 4. THE IMPLEMENTATION OF FINANCIAL INSTITUTIONS

Our task in this final section is not to show a detailed specification of targets, procedures or actions, but to bring the previous analysis to its global conclusions, pointing to the philosophy of policy-making and its strategic aims. It does not mean that this will automatically imply a flawless path. It will remain with the reader to add more colour to the picture outlined here. In difference to the previous analysis, the language in this part is purely normative.

Transient economies should follow a contrary approach to the functioning of both the economy and institutions, as compared to the situation under central command. While the latter contrived a sophisticated bureaucratic system of direct control over the allocation of resources, the development of its economic institutions was practically left to a slow investment: insurance and interest approach nearly half of the service sector [illegible] foreign exchange earnings. The development of financial institutions would initially require a significant labour allocation (5-[illegible] % of the total employment). The requirements of capital investment represent approximately 150-200 billion Kčs (approximately all annual investments) - the majority of it from imports. However, the most challenging would be the task of eliminating the human capital gap, where Czechoslovak comparative disadvantage is the largest.

Except, there are two particular unsettled problems which deserve special attention. Even though Czechoslovakia might somehow solve its acute shortage of capital, in the short run there will still remain the problem of its efficiency. Many modern financial institutions are subject to economies of scale. This is a very important factor for the efficiency of electronic and communication networks. The second problem is connected with its complexity. The existence of a certain institution requires the anticipated functioning of some other elementary institution (eg. ethical, legal, communicational, etc.), whose development may take a very long time to evolve.

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T[illegible] to follow a contrary approach to [illegible] evolutionary growth bordering on anarchy. A contrary approach, which I suppose fits better with the state of affairs of transient economies, is to leave the allocation of resources to the market, while the development of institutions should be kept firmly in hands of direct control or even central supervision. The latter does not imply introducing a central planning of institutions or customs, but an imposition of an authoritative "visible hand" in charge of responsibility for its promotion.

A large part of the creative role could be supervised by ministeries - either directly or indirectly by offering tenders or open contracts to firms. Similar functions on district levels could be exercised by District or Local Administration Authorities. This would lead to a twofold result. On the one hand it would strip the bureaucratic networks of their uncontrolled suffocating power by means of superseding them on the other hand by supervising creative tasks /12/. The central role of all new institutional activities would be a free informational and advisory service, eg. about capital acquirement procedures, real estate markets, international assistance, legal rules, educational programmes, business standards, fiscal conditions, etc. This would bring about a full transparency of government dealings.

Let us now follow individual policy instruments (see section 2) and inquire what financial institutions can be expected to develop in the present phase of transition in Czechoslovakia, characterized by its halfway its halfway to break-even point for stabilization and recovery.

Fiscal policy should release its shakeout stage and enter fully into stabilization functions. It should offer a clearly defined perspective of the tax system, tax relief schemes and subsidization rules. The same should be said for monetary policy, which should offer clear rules for the role of the central bank and its relationship to the ministries of finance, commercial banks and international organizations. The aim is to gain credibility for anti-inflationary policy. Closely linked to this is the exchange rate and foreign trade policy. Both these evolutionary growth depending on entropy. A contrary approach, which I suppose fits better with the state of affairs of transient economies, is to leave the allocation of resources to the market, while the development of institutions should be kept firmly in hands of direct control or even central supervision. The latter does not imply introducing a central planning of institutions or customs, but an imposition of an authoritative "visible hand" in charge of responsibility for its promotion.

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instruments should now be prepared for a transition from its shakeout to stabilization. The most effective answer to this problem is the establishment of a credible exchange rate commitment. A devaluation or depreciation-free exchange rate requires a firm anchor safeguarded by stringent financial constraints imposed on the domestic economy. The pseudo-floating of CS Koruna, so typical for 1990, should be abolished. International cooperation, even delegation of some responsibility to international institutions (eg. European System of Central Banks, EMS, EMU, ERM, European Bank for Reconstruction and Development, IMF, World Bank) is unavoidable.

Another crucial step in this respect concerns the establishment of normal trading and payment relations with countries of Eastern Europe. At least, three countries (Poland, Hungary and Czechoslovakia) should form a sort of Central European Payments and Free Trade Union. The reason is to return back to intensive trading and to find new "friendly" markets for their shattered trade flows. The rationale is that intraCMEA trade has had a long tradition, it did show (whatever its irrationalities) both the elementary effects of interindustrial comparative advantages and deep intraindustrial specialization patterns. At least, in Eastern Germany and Czechoslovakia, the CMEA trade breakdown has been regarded the most important single shock causing recession. It is still only the Eastern European demand which is capable of absorbing in the short run that peculiar quality and image of local products, redressing therefore producers, at least partially, for the huge losses in terms of trade deterioration or even the total loss of demand when trading had to be switched to the West.

On the side of foreign trade policy the government should anticipate the urgent need for export supply curves to be more flat in relation to price. This will also contribute to making the supply curve for total export earnings more elastic to exchange rate changes, while the demand for foreign exchange should stop its shifting to the right. This long expected watershed point, marking the stabilization of convertibility, instruments should, as we reasoned, for a transition from a [illegible] to stabilization. The most effective answer to this problem is the establishment of a credible exchange rate commitment. A devaluation or depreciation-free exchange rate requires a firm anchor safeguarded by stringent financial constraints imposed on the domestic economy. The [illegible] of 18 [illegible] so typical for 1990, should be sheltered. International cooperation, even delegation of some responsibility to international institutions, eg European System of Central Banks, EMS, EMU, EBRD: European Bank for Reconstruction and Development, IMF, World Bank) is unavoidable.

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Financial institutions in the field of price and competition policy should take on more of the burden of market shakeout functions and so relieve the instruments just mentioned (a-d). Government should help in establishing a powerful Consumer Protection Board, which should inform the public about regional prices, real production costs, profit markups, shortages, supply rigidities, substitutes, monopolistic or cartel practices, quality standards, etc. - so that each household or outside producer can respond immediately to current alternatives in the market. The result would be a deep decentralization of the "voice" (and consequently the "exit") functions of the commodity markets (viz. Hirschman (1970)) and their increased efficiency. This consumer based intervention presents a more natural arrangement of market surveillance than the ministerial harassment of producers.

Similar requirements can be laid on labour market policy. Unfortunately, this field is heavily rigged with imperfections due to goverment and/or Trade Union constraints and the continued presence of labour ethics from the command period. The new market wage prices should reflect the efficiency of labour, including its aversion to risk, responsibility, initiative, subordination and innovation. This means that the dispersion of market wages in transient economies, if they were to reflect the marginal revenue products of labour, would have a natural inclination to be extremely high /14/. The indexing of minimal wages to the aggregate price level (eg. as was recently accepted by the CS government) should be abandoned, because in some industries the minimal wage could soon be higher than the average market wage. There is no economic reason to have ceiling or floor restrictions on a sound competitive labour market.

A very important long-run problem is the solution of the skilled labour gap. In fact, it is a problem of the lack of human capital and education. This gap is probably widest and should be made a prime target of trade policy concentrating on a rational tariff system, transparent government export promotion and import substitution schemes /13/.

Financial [illegible] -tutions in the field of price and competition policy should take on more of the burden of market shake-out functions and so relieve the instruments just mentioned [a-u]. Government should also in establishing a powerful Consumer Protection Board, which should inform the public about regional prices, real production costs, profit margins, shortages, supply rigidities, substitutes, monopolistic or cartel practices, quality standards, etc - so that each household or outside producer can respond immediately if certain alternatives in the market. The result would be a decentralization of the "voice" (and consequently the [illegible] functions of the commodity markets (viz. Hirschman (1970)) and their increased efficiency. This consumer based intervention presents a more natural arrangement of market surveillance than the unilateral [illegible] -ess ent of producers.

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With considering this human capital problem we have at the same time touched capital market policy, which plays a key role in the future evolution of transient economies. It is upon this sphere to decide whether the thrust of the heated-up boiler of CS economy will either shun its growing idle energy into a productive entrepreneurially motivated activities or explode the boiler. Financial institutions should be established here in such a way that they can cope with rising bottlenecks on both the supply and demand side for capital.

Even though CS is still in an investment depression, the shortage of capital (financial, physical and human) is apparent. An investment revival, so essential for the economy to catch up, may lead to frustrating capital market failures at the most critical moment. Even though we considered a full recovery of saving behaviour of all economic agents, which is now in CS suffering a setback from recent price shocks, domestic savings could still provide only a small fraction of the requirements needed of reconstruction. Thus the task of financial institutions should be to help save from idling and subsequent decay as much of the local accumulated capital as possible by most acute in the field of economic and financial management, because for various reasons in command economies these activities were not allowed. It was a shocking experience to learn that after 16 months, when Czechoslovak society officially confessed to being aware of this enormous educational debt, this practically nothing has been done from the side of official from the circles responsible for economic education. The ministry of education stands apparently powerless by the old bureaucratic concepts of egalitarian treatment, queuing, preference for the weak at the expense of the strong, hierarchical organisations based on a fuzzy set of subordination, redistributional motivations, liquidation of "parallel" activities and collective irresponsibility. The necessary private or semiprivate reorganization of Czechoslovak education, motivated by the concept of human capital, should be considered as a real (and only) alternative.

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Once it was discovered that CS privatization is going to proceed much slower than was originally expected, due to the clash of vested interests and legal or technical problems, a makeshift provision for stranded property rights transfers should be found. Eg. the directors of enterprises, which wait in uncertainty for privatization, should be given such powers that they can behave in the meantime like entrepreneurs, and not like custodians of lost property. In this respect a reappraisal of the spontaneous ("wild") privatization and the "dirty" investment money notions should be realized. Both of them enjoy a very negative ethical reputation throughout all transient economies. However, at least in CS, they so far still remain the most important acts undertaken for the formation of local entrepreneurship. The institutionalized control of these capital operations, if they guarantee competitiveness, transparency and the legal character of purchasing or leasing conditions might lead to highly efficient provisional steps.

The dead situation of local capital markets can be partially revived if private housing and real estate ownership received top priority in privatization schemes. It should be introduced as an alternative to pending extensive rent increases, which may be supposed as an attempt at life by nearly a half of the CS population living in state or cooperative houses. This simple privatization move, so successful in Britain a few years ago, may not only lead to increased savings, increased investment and so to a better relationship of the public to property, but also may increase the role of mortgages as an efficient institution for obtaining capital.

Another important institutional problem is represented by foreign capital flows. It is an indisputable fact that without means of reallocation. Actually the omnoactive physical transactions [illegible] buyers, sellers, renters or leaseholders [illegible] in a sense, because the social [illegible] is [illegible] cold shoulder. In [illegible] is closely linked with the solution [illegible] question.

[illegible] as discussed [illegible] privately [illegible] proceed much [illegible] was [illegible] cis [illegible] verbal [illegible] and legal [illegible] a creative [illegible] vision for [illegible] the [illegible] incl [illegible] for privatization should be [illegible] they [illegible] the meant me [illegible] questions [illegible] local community. In this [illegible] the [illegible] ("wild" privatization [illegible] intelligent money [illegible] should be realized [illegible] a very negative ethical reputation throughout all [illegible] countries. However, at least [illegible] they so far [illegible] the most important acts undertaken for the formation of local entrepreneurship. The institutionalized control of these capital operations, if they guarantee competitiveness, transparency and the legal character of purchasing or leasing [illegible] might lead to highly efficient provisional steps.

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[illegible]

external capital injections CS cannot satisfy its needs for restructuring of production, its modernization and entry to the global world economy. The xenophobia, hidden behind the bogey of "cheap sell-out", is one of the most counterproductive attitudes against the market. Such fields as banking, accountancy expertise, financial communication, securities and equity market, portfolio investment, mutual funds, insurance, banking surveillance, investment consultancies, bankruptcy procedures, fiscal auditing, futures market, financial education, trade practices law, competition policy, etc., cannot wait for a "nicer" partner to call. All foreign capital or financial expertise willing to come should be offered a public tender or an open auction for its premises, disregarding the price it fetches. The immediate commencing of external economies from such moves are a far greater benefit to society than any "better" dealings postponed to the remote future. Where else, if not in the field of local so neglected financial services, the well-known Pasinetti s (1981) notion of learning-by-trading can be applied?

Let me close with a final remark that the renaissance of "alien" financial institutions in transient economies is a necessary condition for the effective process of privatization and for the efficient reallocation of resources, which are both concluding acts for transforming command economies into there mature market counterparts.

FOOTNOTES:

/1/ This new paradoxic phenomenon of recession and inflation would be better named "recflation" than keep it masquarading under the more innocent name of stagflation.

/2/ In this respect it is very important to stress that mainstream economics (ie. the general equilibrium theory) is concerned with marginal (infinitesimal) changes of the old equilibrium and (ceteris paribus) subsequent piecemeal adjustments for the relevant variables to a new equilibrium, others, typical influences on [illegible] for

[illegible] production, its [illegible] and [illegible]

[illegible] economy, the [illegible] [illegible]

"cheese sell-out" is one [illegible]

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amenities, financial communication, securities and equity [illegible], portfolio investment, mutual funds, insurance [illegible] [illegible], investment consultancies [illegible] structure [illegible] auditing, futures market [illegible] [illegible] trade practices law, competition policy, etc. [illegible] want a "clear" partner to call. [illegible] [illegible] [illegible] experience [illegible] [illegible] some [illegible] be [illegible] an open [illegible] for [illegible] [illegible] [illegible] reforms. The [illegible] commentary [illegible] such moves are a few greater benefits to [illegible] than any "better" [illegible] [illegible] to [illegible] [illegible]. Where [illegible] not in the [illegible] [illegible] neglected [illegible] [illegible] the well-known Pestieau's (1971) notion [illegible] [illegible] can be avoided.

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[illegible] paradoxic phenomenon of [illegible] and [illegible] "[illegible]" [illegible] [illegible]

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[illegible] theory) is

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[illegible] [illegible]

while disruptive catastrophic shocks are less elegantly dealt with, not to speak of the explanation of an out-and-out breakdown of the whole economy.

/3/ Here the depth of conflicts can be measured by the extent of the forthcoming redistribution of capital, bankruptcies and reallocation of labour. It is expected that in Czechoslovakia in 1991 one third of the capital and labour will be subject to a risk of reallocation. In this respect the situation resembles more a war econom[illegible] [illegible]an any other.

/4/ The concept of [illegible]ued rationality (Simon (1958)) explains this problem [illegible] [illegible]nvironmental contingencies pose another example.

/5/ Since economic agents in a post-command economy need not accept the maximization of profit as their objective function, their tree of possible games is much more complex than is the case of a more settled market society. In transient economies even bankruptcy, stealing, embezzlement, rundown of capital, shutdown of production or maximization of "reserves" in production cannot be excluded as an irrational pattern of behaviour (viz. Quandt, Tříska (1990)).

/6/ Rational expectations theory is fully consistent with this aspect of behaviour.

/7/ Since in command economies the environmental and the public health problems represent an enormous social cost burden in practically every location of production, it is extremely difficult to separate externalities from single market decisions about cost structure.

/8/ This may be the case of bargaining between bilateral monopolists or so [illegible]alled "small numbers" exchange relations, where no competitive forces drive the exclusive agents into competitive behaviour. Opportunistic outcomes naturally lead to price distortions and transactional difficulties. Coase theorem and 2-person game theory apply well to this environment.

/9/ Except financial in[illegible][illegible]ions there is another set of distinct institutions deali[illegible] with property rights and

transfers of legal control. In this paper these are not the focus of our analysis. This should not imply, however, that the property rights are taken as irrelevant in our context.

/10/ The opposite, rather metaphysical view is advocated by Vanek (1990) and Zeleny (1990), who propose to control the process of transformation by direct interference with human nature - its philanthropic motives, cooperative instincts, religious persuasion or morals, which are considered more autonomous from the bequeathed distribution of resources, hierarchies and backfire clashes.

/11/ It is the fundamental point of our analysis that the "transition" is treated as a trajectory between two situations of equilibrium. The analyzed path begins at the known equilibrium of the central command economy and drifts towards an expected final equilibrium of a mature market economy. The theory of second best is a good auxiliary instrument for explaining such a challenging task. Thus the nature of transition path is comprehended as a generally suboptimal and volatile process. The existence of equilibrium forces trying to pull the diverging system back to original order should be accounted for. Two institutionally different optima can be viewed as two competing players. As known from game theory, a lack of cooperation between two rivalling players leads to inefficient solutions, harmful for all participants. The reality of transient economies is full of such illusory irrationalities.

/12/ Maybe these organizations will prove totally unsuitable for such a task! But it is not what matters. The point is to divert the bureaucracies from their anti-market activity into a more creative role - giving them at least a fair chance to help society. This would also require the abolishment of the system of permission and paternalism, which forms their main reason for existence, to an unavoidable minimum. Of-course, they should be remunerated according to their creative results only.

/13/ The existence of government export or import substitution schemes does not imply the need to return to trameters of local control. In this paper these are not the focus of our analysis. This should not imply, [illegible] the property rights are taken as irrelevant in our context.

/10/ The opposite, rather metaphysical view advocated by [illegible] (1990) and [illegible] (1993), [illegible] control the process of transformation by direct interests [illegible] with [illegible] nature - its philanthropic motives, [illegible] inoculate altruous persuasion or morals which are [illegible] more out [illegible] from the bequeathed distribution of resources [illegible] and backward classes.

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/14/ The natural tendency of free market wages in transitional economies to show wider variance around statistical mean (in comparison to market economies) is primarily due to the lack of labour market adjustment and the very low marginal efficiency of labour. Particularly it would show in their left tail of distribution function , which goes from the average wage through zero, and plunging even to negative values.

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# 22

# Inter-regional and Inter-organizational Differences in Agricultural Efficiency in Czechoslovakia

*Josef C. Brada, Jeanne C. Hey, and Arthur E. King*

## Introduction

Agricultural policy in Czechoslovakia has aimed at three objectives. First, agriculture was to be socialized, with private production replaced by the collective farm or JZD (jednotne zemedelske druztvo), or by the state farm (statni statek). Second, agriculture was to become more productive. In part productivity gains were to come from socialization, but also from the substitution of capital for labor. More recently, the reorganization of state farms and JZDs into larger units has been viewed as an important source of productivity gains. Finally, planners have sought to eliminate regional differences in the productivity of agriculture. This process required the raising of productivity in the Slovak Socialist Republic (SSR) to the level attained in the Czech Socialist Republic (CSR).

The collectivization of agriculture in Czechoslovakia began in 1949 on the basis of the Unified Cooperatives Act of February 23. The pressure exerted on peasants to join collectives eased somewhat in 1953 and a brief period of de-collectivization, particularly intense in Slovakia (Faltus *et al.*, p. 504), ensued. The collectivization effort was renewed in the Summer of 1955 and was effectively completed by 1960. During the same period, state-owned land as well as parcels from large estates that had been nationalized were formed into state farms. These state farms were supposed to serve as models for the collective farm sector in the introduction of new technologies and large scale mechanization. Since the state farm was viewed as a more socialist form of organization than the collective, it was hoped that it would eventually emerge as the dominant form. In the case of Czechoslovakia, this has not come about, largely because state farms do not appear to have developed a significant edge in productivity over collectives.

Once collectivization was completed, attention turned to increasing the productivity of agriculture. This was in part obtained by increasing the level of investment in agriculture, so that, by 1960, agriculture's share in investment surpassed the contribution of agricultural to NMP (Waedekin, pp. 114–5). The supply of fertilizers and agricultural chemicals was also increased (Brada and King, 1983). In addition to increases in capital and material inputs, both state farms and JZDs were amalgamated into larger units, although the relative importance of the two types of organizational form did not change much. Thus, while the number of collective farms decreased from 6,200 in 1970 to 1,722 in 1980, the average size of the collective farms almost quadrupled, and the total membership of JZDs decreased only slightly. During the same period, the number of state farms decreased from 393 to 200 while their share of arable land dropped only marginally from 20.4 percent of the total to 19.9 percent. Also, their share of the agricultural labor force has remained around 16 percent.[1]

While the rationalization of both JZDs and state farms appears to be consistent with the goals of the planners to mechanize agriculture and to create an agro-industrial complex, the relative stability of the share of land, labor and other resources allocated to these two forms of organization is somewhat surprising. Presumably, if the planners have ideological preferences for state farms over JZDs, then a period of amalgamation and organizational restructuring would appear to have been particularly favorable for converting JZDs to state farms. However, if Czechoslovak policy-makers perceived the lower efficiency of state farms, one possible obstacle to such a course would have been the expected decline in output from the shift in resources to state farms. The evidence of the superior efficiency of JZDs is, however, based on rather simple measures of productivity, such as output of milk per hectare of land, etc., that are subject to a number of biases. Thus whether, indeed, the desire to promote the growth of state farms at the expense of JZDs on ideological grounds ought to have been held in check by pragmatic considerations remains an unanswered empirical issue.

The regional allocation of agricultural resources between the two Republics involves both economic and political issues. Slovakia had traditionally been more dependent on agriculture as a source of employment, and thus some disguised underemployment in that sector and the resultant lower labor productivity were to be expected. Moreover, the mountainous nature of Slovakia presumably hindered both crop production and the type of large-scale mechanization being promoted in the Czech Republic. The leveling of incomes and perforce productivity between the two Republics was a political goal. To achieve it, the rapid industrialization of Slovakia appeared as the most practical means. Thus agriculture appeared to be, at best, a source of labor not only for nascent industries in Slovakia but also in the Czech Republic where labor reserves were less abundant. The movement of surplus labor out of Slovak agriculture increased productivity, and labor-saving investments served the same end. These improvements across the agricultural sector of the economy presumably raised important allocational

issues for planners. In particular, the Czechs seem to suspect that, due to its topography, Slovakia is less suitable for agriculture than the Czech Republic. If true, the optimal policy, from a national standpoint, would be to wind down agriculture in Slovakia and to employ the workers thus released in industry, either in Slovakia or elsewhere. On the other hand, if the remaining differences in factor productivity between Czech and Slovak agriculture reflect lower levels of capital stock in the latter, then it would make sense to shift investment resources away from Czech agriculture in order to strengthen agriculture in Slovakia.

Thus in their agricultural investment decisions, Czechoslovak planners have faced two allocational issues, the first involving the relative importance of state versus collective farms and the second involving the allocation of investment between the agricultural sectors of the two republics.

## Estimating Factor Productivity

To provide some insight on these allocational issues we estimated production functions for state farms and for JZDs each in the Czech and Slovak Republics. Complete data disaggregated by type of agricultural unit and by Republic were only available for the period 1967–80, and consequently we chose to estimate a relatively simple form of the Cobb-Douglas production function of the form:

$$Y = A K^{a} L^{1-a} \qquad \text{(Eq. 1)}$$

One of the difficulties in estimating production functions for agricultural activities is the range of complex possibilities for complimentary or substitution that exist among both inputs and outputs. To overcome these difficulties we chose crop production as our output measure. Since our measure of capital, tractors, is more likely to be related to production of crops than to animals, this should improve the statistical power of our results. The nominal value of crop production, by type of agricultural unit and by Republic, was deflated using a price index derived from national data on crop output in current and fixed prices. Of course, such a procedure is not without problems. Delivery prices may have varied between JZDs and state farms and possibly also between Republics, particularly for the output of private plots that is included in the output of the JZDs. However, this issue of output from private plots should not be very serious as many JZDs eliminated them in the 1970s. Moreover, the share of private plots in total JZD land fell from 6.3 percent to 1.5 percent in the Czech Republic and from 8.0 to 3.5 percent in the Slovak Republic over the sample period. Labor is measured in number of economically active workers with no adjustment for hours worked, since information on the latter was not available for the entire sample period.[2] The most difficult data problem is in the capital stock series. As the proxy for capital, we elected to use number of tractors, as these appeared to be the most appropriate available capital measure for crop production. This is due to the fact that tractors form the primary form of motive power for other types of machinery, and they are also an important means of transporting crops. Thus other machinery should be roughly proportional to the number of tractors. Unfortunately, at the level of disaggregation employed in this study, the Czechoslovak reporting practice switched from tractor equivalent units of 15 horsepower to the number of tractors in 1971. To account for the effects of this change on both the level and rate of change, we included a dummy variable for both intercept and slope. This procedure, by increasing the sample size, also improved the degrees of freedom and hence the power of our results.

We estimated, for JZDs and state farms in each republic, Equation 2 as

$$\ln\left(\frac{Y}{L}\right)_t = A_0 + A_1 \ln\left(\frac{K}{L}\right)_t + A_2\,DUM + A_3\,DUM * \ln\left(\frac{K}{L}\right)_t + e_t$$

$Y_t$ = value of crop output in millions of 1967 kcs in year t
$L_t$ = number of workers employed in year t
$K_t$ = tractors in year t; pre-1971 in 15hp. units, post-1971 in number of tractors
DUM = 1 for $t < 1970$, 0 otherwise

Thus, we assume constant returns to scale and, even though we account for change in the measure of capital by intercept $A_2$ and slope $A_3$ dummies, no disembodied technological progress.[3] Moreover, the production function implicitly requires two additional assumptions. First, since land is not included, we must assume that land per worker was relatively constant throughout the period. This seems reasonable on the basis of available evidence. Moreover, land is assumed to be of the same quality for all units. Although the Czech literature argues that state farms have poorer land there is no hard evidence to support this. In any case, the poorer land of state farms should be offset by greater use of fertilizer, irrigation etc. on state farms. As between Czech and Slovak farms, quality of land should favor the former. Second, we exclude purchased inputs, despite our use of a gross output measure, again because the ratio of material costs and depreciation to gross agricultural output increased only very slightly from 0.652 in 1965 to 0.673 in 1975 (*Economic Survey of Europe*, p. 33).

Parameter estimates were computed with a maximum likelihood estimator in order to adjust for serial correlation; they are presented in Table 22.1. In terms of variation explained and significance of the estimates the results are reasonably good although the multicollinearity problem (see footnote 3) for the Slovak farms is particularly obvious. The estimates for $A_1$ imply positive marginal products for capital in all cases save state farms in the Slovak Republic. In the latter, the replacement of small tractors by large ones in recent years may reflect an errors-in-variable problem rather than a true judgement on the productivity of tractors. Nevertheless we take the result at face value for purposes of discussion.

## Inter-regional and Inter-unit Differences in Productivity

Differences in output per worker between JZDs and state farms or between the Czech and Slovak Republics stem from two measurable causes. First there are differences in technology and efficiency. These are reflected in the parameters of the production functions reported in Table 22.1, which reveal significant inter-unit and inter-republic differences in efficiency ($A_0$) and in the marginal product of capital. The other source of difference in per capita output is the amount of capital per worker available to different units or Republics. These differences, expressed in the measures of capital and labor employed in our regression results, are illustrated in Table 22.2. It is evident that there are significant inter-unit and inter-Republic variations in resource endowments. Nationally, for both years, state farms have more tractors per worker than do JZDs. However, in the Czech Republic, their advantage over JZDs has narrowed much more rapidly than in the Slovak Republic. There is also a large disparity between the two Republics, with the Czech Republic having a large and growing advantage over the Slovak Republic in capital per worker. There has been only a slight improvement in Slovak capital intensity. Thus from Table 22.2 we may conclude that the allocation of capital in Czechoslavakia has favored state farms over collective farms and the Czech Republic over the Slovak Republic.

To determine whether such an allocation of capital was desirable, we calculated the per capita production of the two types of agricultural units on the basis of hypothetical alternative allocations of resources. These resulting estimates of output per worker, in collective and state farms in each Republic, are reported in Table 22.3. Column 1 was calculated from the production function parameters in Table 22.1 with the actual capital-labor ratios that existed in each type of agricultural unit. In 1971, estimated output per worker was highest in state farms in the Czech Republic. Taking this level of output as the base for comparison, in index form, Czech JZDs had per worker output of 8 percent less, followed by Slovak state farms which were 11 percent below this level and Slovak JZDs at 16 percent less. In 1980 the ranking is reversed between Czech JZDs and state farms, the former now 17 percent higher. While Slovak farms were still less productive than Czech ones, the gap between JZDs and state farms had narrowed. In both republics the improvements in JZD productivity per worker, vis a vis state farms, appear to be the result of more equal capital-labor ratios (evident in Table 22.2).

Turning now to a comparison of intra-Republic differences in labor productivity between JZDs and state farms, we examine columns 2 and 3 of Table 22.3. In Column 2 we estimated what the output per worker in Czech JZDs and state farms would have been if both types of units had the same K/L ratio, that being the one obtaining for the entire Czech Republic. For 1971, such a redistribution of capital would have had an appreciable impact and reversed their positions. This would have occurred largely because the K/L ratio for JZDs was nearly the same as for the Republic (see Table 22.2) and collective farms comprise about three times the amount of input or output of state farms. Moreover, in 1980, we can see that an equal distribution of capital between the two types of units would have widened the spread in the productivity between them by 2 percentage points in favor of JZDs (i.e. 119 instead of 117). In the case of Slovakia, the higher productivity of state farms relative to collective farms is diminished when resources are distributed equally between them. With such a reallocation, state farms have virtually no change in the level of productivity, but JZD improvements close the gap. Also, this conclusion holds over time. Even though Slovak state farms become slightly more capital intensive there is no improvement in their estimated output per worker. Thus on an absolute level based on Columns 2 and 3, it is evident that, ceteris paribus, Czech JZDs are more productive than Czech state farms and Slovak JZDs appear to be marginally less productive than Slovak state farms. Over time, the productivity differential betwen JZDs and state farms widened in the Czech Republic but narrowed slightly in Slovakia.[4]

Columns 4 and 5 of Table 22.3 compare the efficiency of each agricultural organization across Republics. In column 4 the K/L ratio for all collective agriculture was used to compute output per worker in Czech and Slovak JZDs. This is equivalent to measuring productivity on the assumption that tractors belonging to Czechoslovak JZDs were redistributed so that JZDs in both the Czech and Slovak Republics had the same K/L ratio. The results clearly indicate that with the same K/L ratio, Slovak collective farms would have had higher output per worker than would Czech ones. The margin was 19 percent in 1971 and 13 percent in 1980. For state farms this finding is reversed. Czech state farms are more efficient, ceteris paribus, than are their counterparts in Slovakia, and the gap is widening.

Finally, column 6 of Table 22.3 reports the estimated output per worker if all tractors in Czechoslovakia were allocated among state and collective farms so as to equalize the K/L ratio across units and Republics. Using the output of Czech JZDs as the basis for our index so as to maintain comparability with Column 1 (reflecting actual resource allocations), we obtain a much altered perspective of agricultural efficiency in Czechoslovakia. The most efficient agricultural units, adjusted for resource endowment, are Slovak collective farms. With this adjustment, projected Slovak JZD output per worker is 31 percent higher than Czech state farms in 1971, and 29 percent higher in 1980. Even if the comparison is made between like units, productivity in Slovak collectives is 22 percent more than in Czech ones in 1971 and 14 percent more in 1980. The ranking does not change over time. Czech collective farms are the second most efficient units, followed by Czech and then Slovak state farms.

## Conclusion

From Table 22.2 it is evident that agricultural investment policies have favored Czech over Slovak agriculture. This has made Czech agriculture

[illegible] and Investment
[illegible] Productivity

[illegible] terms of between [illegible]

[illegible] capital [illegible]

[illegible]

[illegible] Column 2 we calculated what the output per [illegible]

[illegible]

appear to be more efficient, and thus provided a rationale for the existing allocation of resources. Our calculations, based on production function estimates, indicate that in the collective sector Slovak farms are more efficient than their Czech counterparts and that, as a result, investment resources have been misallocated. Agricultural output in Czechoslovakia could have been higher had capital been shifted from collective farms in the Czech Republic to those in Slovakia.

We have also shown that, ceteris paribus, state farms are less efficient than collective farms and thus that shifts in capital from the former to the latter would have increased agricultural production. The failure of the Czechoslovak authorities to expand the state sector at the expense of the collective sector would seem to reflect an awareness of these differences in efficiency. At the same time, the maintenance of a large gap between the capital endowments of Czech and Slovak collective farms represents a serious misallocation of resources.

## Notes

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1. All data from *Statisticka Rocenka Ceskoslovenske Socialisticke Republiky*, various years.

2. The use of workers rather than hours worked does not create much of an error as the correlation between the two for the entire Czechoslovak Republic is over 0.99. Of course, one must assume that the allocation of labor between crop production and animal husbandry was relatively constant over the sample period.

3. As it is, the data present serious problems due to multicollinearity. The correlation coefficients of ln K, ln L, ln Land are all well above .95. The inclusion of land per worker or of a time trend exacerbates these problems without providing much additional information. It is, of course, difficult to differenciate between economies of scale and neutral technological progress. We have chosen a relatively restrictive form of the production function, though our analysis of the errors suggests no serious problem from this specification.

4. Land quality and climate effects may be responsible for some of this, particularly in Slovakia where the mountainous terrain may lead to greater variance in micro climates.

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TABLE 22.1

PARAMETER ESTIMATES FOR EQUATION 2*

| COEFFICIENT | CZECH SOCIALIST REPUBLIC: STATE FARMS | CZECH SOCIALIST REPUBLIC: COLLECTIVE FARMS | SLOVAK SOCIALIST REPUBLIC: STATE FARMS | SLOVAK SOCIALIST REPUBLIC: COLLECTIVE FARMS |
|---|---|---|---|---|
| $A_0$ | -2.401 | -1.709 | -4.025 | -2.308 |
| (constant) | (0.783) | (0.294) | (1.715) | (2.586) |
| $A_1$ | 0.769 | 1.059 | 0.044 | 0.686 |
| (ln (K/L)) | (0.442) | (0.156) | (0.780) | (1.076) |
| $A_2$ | 49.884 | 31.859 | 33.596 | 0.463 |
| (DUM) | (18.249) | (11.506) | (32.831) | (13.937) |
| $A_3$ | -4.824 | -2.809 | -3.653 | -0.092 |
| (DUM*ln (K/L)) | (1.759) | (1.003) | (3.560) | (1.309) |
| $R^2$ ** | 0.715 | 0.986 | 0.938 | 0.955 |
| F-ratio | 11.037 | 267.764 | 60.399 | 84.628 |
| D.W. | 1.898 | 2.054 | 1.512 | 1.492 |
| $\rho$ | -0.73 | -0.48 | 0.32 | 0.48 |
| | (0.19) | (0.31) | (0.36) | (0.33) |

*standard errors in parentheses below estimates
**statistics based on rho-transformed variables

TABLE 22.2

TRACTORS PER WORKER, 1971 AND 1980

BY REPUBLIC AND BY ORGANIZATIONAL UNIT*

| | CZECHOSLOVAK SOCIALIST REPUBLIC | | | CZECH SOCIALIST REPUBLIC | | | SLOVAK SOCIALIST REPUBLIC | | |
|---|---|---|---|---|---|---|---|---|---|
| YEAR | TOTAL | COLLECTIVE FARMS | STATE FARMS | TOTAL | COLLECTIVE FARMS | STATE FARMS | TOTAL | COLLECTIVE FARMS | STATE FARMS |
| 1971 | .1185 | .1123 | .1458 | .1340 | .1271 | .1606 | .0903 | .0873 | .1077 |
| 1980 | .1390 | .1354 | .1541 | .1692 | .1682 | .1728 | .0918 | .0892 | .1082 |

*Source: Computed from Statistiká Ročenka ČSSR

TABLE 22.3

ESTIMATED OUTPUT PER WORKER BY REPUBLIC AND BY ORGANIZATIONAL UNIT

(IN MILLION 1967 KCS PER WORKER)

ESTIMATES BASED ON:

| | (1) | | (2) | | (3) | | (4) | | (5) | | (6) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REGION & UNIT | ACTUAL K/L RATIOS | INDEX | CZECH REPUBLIC K/L RATIO | INDEX | SLOVAK REPUBLIC K/L RATIO | INDEX | COLLECTIVE FARM K/L RATIO | INDEX | STATE FARM K/L RATIO | INDEX | CZECHOSLOVAK K/L RATIO | INDEX |
| 1971 | | | | | | | | | | | | |
| ČSR | | | | | | | | | | | | |
| JZD | .0204 | 92 | .0215 | 111 | | | .0179 | 81 | | | .0189 | 107 |
| State Farm | .0222 | 100 | .0193 | 100 | | | | | .0206 | 100 | .0176 | 100 |
| SSR | | | | | | | | | | | | |
| JZD | .0187 | 84 | | | .0191 | 96 | .0222 | 100 | | | .0230 | 131 |
| State Farm | .0197 | 89 | | | .0198 | 100 | | | .0194 | 94 | .0196 | 111 |
| 1980 | | | | | | | | | | | | |
| ČSR | | | | | | | | | | | | |
| JZD | .0274 | 117 | .0276 | 119 | | | .0218 | 87 | | | .0224 | 113 |
| State Farm | .0235 | 100 | .0231 | 100 | | | | | .0215 | 100 | .0199 | 100 |
| SSR | | | | | | | | | | | | |
| JZD | .0189 | 80 | | | .0193 | 97 | .0252 | 100 | | | .0256 | 129 |
| State Farm | .0197 | 84 | | | .0198 | 100 | | | .0194 | 90 | .0195 | 98 |

Robert Deutsch. "Czechoslovakia." <u>The Food Revolution in the Soviet Union and Eastern Europe.</u> 1986. (excerpt)

Robert Deutsch
from The Food Revolution in the Soviet Union and Eastern Europe, 1986.

# 7
# The Petrified Economies

## CZECHOSLOVAKIA

Situated in central Europe, Czechoslovakia is lodged between Poland to the north, East Germany to the northwest, West Germany to the west, Austria to the southwest, Hungary to the southeast, and the Soviet Union to the east. Establishment of the republic was proclaimed in Prague on 28 October 1918. An effort was made during the Nazi occupation in 1942 to plan for a post-war Czechoslovak-Polish federation, but Soviet opposition--Czechoslovakia had signed a twenty-year treaty of alliance with the USSR in 1943--caused President Benes to concentrate on establishing his country as a bridge between the USSR and the West. A program for a postwar government, democratic yet allied with the Soviet Union, was drawn up at Kosice in April 1945 by Benes, Stalin, and Czechoslovak communist leader Klement Gottwald.

In 1948 twelve non-communist ministers resigned to protest the interior minister's efforts to pack the police force with communists. "Action committees" joined the police in taking over the newspapers and public buildings. The ailing Benes was forced to allow Gottwald to establish a government solely of communists and their supporters. Rather than sign a new constitution legalizing communist control, Benes resigned on 7 June 1948, and Gottwald became president. In mid-1982, the population of Czechoslovakia was 15.4 million.

In 1949, the new government inaugurated a five-year plan that emphasized the development of heavy industry and the industrially backward Slovakia. In 1953 the nationalization of business, industry, and transportation was complete, while one-half of the farmland had been

collectivized.

The most significant recent event in Czechoslovakia centers around the events leading up to and following the "spring" of 1968. Under the popular Dubcek, the "Action Program" for "socialism with a human face" was adopted by the Central Committee on 4 April 1968. While such policies as freedom of expression and assembly and decentralization of industry and agriculture were included, it was emphasized that the communist party remained the sole political party and that there would be no change in policies toward the USSR. However, Soviet leaders remained unconvinced. On 15 July, an ultimatum--the "Warsaw Letter" issued by the communist leaders of the USSR, Poland, the GDR, Bulgaria, and Hungary--demanded that Prague return to the "socialist" path. On the night of 20-21 August 200,000 troops of the Soviet Union and four Warsaw Pact nations invaded Czechoslovakia. On 1 January 1969, a new federal constitution became effective, establishing a Czech Socialist Republic and a Slovak one with a federal government responsible for foreign affairs, defense, and foreign trade. On 16 April 1969, Soviet pressure forced the replacement of Dubcek by Gustav Husak, who had followed a "realistic," pro-Soviet line after the invasion.

Under the fifth five-year plan (1971-1975), the economy began to show improvement: industrial production increased from 6 to 7 percent annually, while real income rose 4 to 6 percent. In June 1972 federal government administration of agriculture was tightened, but the overall record of agricultural production was uneven and represented annual gains of only 1 to 2 percent. Czechoslovakia resembles the GDR in its high degree of industrialization: only 11 percent of the total work force is engaged in agriculture. Despite rising commodity prices, during the sixth five-year plan the standard of living remained stable because of the government's policy of price subsidies--25 percent of foodstuffs purchased in 1977--and of "stable prices for staple foods."

While agricultural production has grown since the 1960s, the growth rate has slowed considerably. In 1981, the grain harvest fell 1.6 million tons short of the projected 11 million tons, causing severe shortages and domestic unrest.[2] The average rate of growth of production in the 1970s was only 0.7 percent, not nearly enough to cover domestic food requirements. Czechoslovakia has only been able to supply about 90 percent of its total domestic food and livestock feed requirements. Furthermore, because of outstanding external debts, it has experienced difficulty lately in securing credit for trade with countries outside the region.

Ninety percent of the arable land is socialized into cooperatives which have been found to be more efficient than state farms. However, artificially low retail food prices have not been incentives for higher production, especially for the independent private plots, which supply a substantial amount of the domestic meat production.

The progress of horizontal integration in Eastern Europe has been slowest in Czechoslovakia. During the 1970s, experimental projects in management, efficiency and quality were initiated in 12 Production and Industry Associations (PIAs), which covered about 150 farms and almost 500,000 workers. So far, however, the practical results have not matched expectations.[3]

Meat imports have significantly decreased because of domestic efforts to attain self-sufficiency, but there has still been a need to import feed grain, protein supplements and fertilizer from both the West and the Soviet Union. The country does export hops, malt, beer and sugar--mainly to the West, but not enough to cover imports of feed and fertilizer. The 1979 trade deficit for Czechoslovakia stood at 4.8 million crowns. Czechoslovakia faces problems similar to those of other CMEA countries in satisfying the ever-increasing domestic demand for meat. As elsewhere--except in Poland; Hungary, and Bulgaria--real incomes have risen faster than retail food prices in the early 1980s, contributing to the increased demand for both more and higher quality consumer goods.

Three forms of organization and ownership exist in Czechoslovak agriculture. The first is the state sector, comprising enterprises owned by the state; that is, state farms and other state and public businesses. Since 1953 the state farms' share of the total agricultural land increased from 9 to 20.9 percent, and their share of arable land, from 10 to 20.8 percent.[4] The second and largest, the collective farm sector, was created in 1949 through the collectivization of private farmers and consists of united agricultural cooperatives (collective farms) and joint agricultural enterprises--enterprises formed for specialized production purposes such as egg production and pig breeding. These two sectors, the state and the collective, form the socialist sector. The third

sector is the smallest; it encompasses farmers remaining outside the collective farm system, farming on land of half a hectare or little more.

The collective farm sector came into being after Law No. 69 of 23 February 1949 (the Collective Farm Act) came into force. The collectivization of the countryside was carried out until in 1960 collective farms were established in practically every village. At that time, the number of collective farms reached its highest level of 12,560. Later on, their number was reduced through mergers and amounted to only 1,701 on 1 January 1983.[5] By the end of 1960, the agricultural land integrated in collective farms through forcible collectivization amounted to 67.5 percent of the total farm land in the state and 71.4 percent of arable land. As of 1 January 1983, these figures had declined to 64.8 and to 67.9 percent, respectively.[6]

At the end of 1960, 759,043 privately owned farms with a total area of 780,949 hectares of agricultural land were still in existence. However, the vast majority (660,844) of these farms were tiny plots with an average area of only 0.42 hectares each. The overall area of the privately-owned sector continued to decrease, and by the beginning of 1983 it constituted only 286,603 hectares of the country's total agricultural land. Although the number of privately owned plots is not cited in the 1983 statistical yearbook, it is probable that no more than 200,000 still exist, which would mean a decline of over 550,000.[7]

The government succeeded in drastically reducing the area taken up by private plots from 355,000 hectares of agricultural land (4.8 percent of the total) in 1960 to 93,000 hectares (1.4 percent) in 1982. The respective figures for arable land were 258,000 hectares (5 percent) down to 39,000 hectares (0.8 percent).[8] This is the opposite of agricultural trends in Bulgaria and Hungary between 1960 and 1980.

This trend, however, produced adverse side effects that the government had not anticipated and that upset the calculations of its leaders. Families who had been self-sufficient to a large degree became consumers who satisfied their requirements from commercial outlets. For instance, the share of consumption-in-kind of slaughter cattle dropped from 17.7 percent of total cattle consumption in 1965 to 8.6 percent in 1975 (by 64.5 percent), and the share of slaughter poultry decreased from 50.8 to 14.6 percent (by 72 percent).[9]

In later years, this decline of so-called "self-suppliers" caused difficulties mainly as far as meat supplies were concerned. However, as long as the government was able to make good the shortfalls in cereal production through imports from the USSR, all was well. But then, the USSR (itself a large-scale importer of cereals from the West) intimated to Czechoslovakia that deliveries, hitherto amounting to 1,000,000-1,500,000 tons per year, would no longer be available in the future; beginning in the early 1970s, the USSR drastically reduced these exports to minor quantities.

Thus, Czechoslovakia was compelled to find other sources, mainly in the West. During the sixth five-year plan (1976-1980), the CSSR imported 7,800,000 tons of cereals and 3,600,000 tons of concentrated, protein-rich fodder in order to safeguard livestock production. Almost a quarter of the total meat production, chiefly pork, was produced from imported fodder in these years.[10] The recession in Western economies made it more difficult for Czechoslovakia to sell its industrial products in the West, and the resulting decline in foreign currency earnings substantially restricted imports of cereals from the West.

An official reappraisal of the situation became necessary. At the end of 1981, the number of hogs (the main consumers of imported cereals) was reduced by 592,000 (from a total of 7,894,000)[11], and the prices of meat, particularly of higher quality cuts, were steeply increased on 30 January 1982. This caused per capita meat consumption of 86.6 kilograms in 1981 to drop to 82.0 kilograms in 1983.[12] While in 1980 the fattening of 20,606 head of beef cattle, 959 pigs, 5,256 sheep and lambs, 13,395 geese, and 401,977 rabbits was contracted for, contracts concluded for 1981 stipulated the fattening of more than 25,000 head of beef cattle, 18,000 hogs, 36,000 sheep and lambs, 10,000 geese, and nearly 620,000 rabbits.[13] In 1982, the total deliveries of animals for slaughter from small landholders amounted to more than 19,200 tons. In 1983, the delivery of slaughter cattle alone rose to 32,300 tons. Apparently, this was more than planned inasmuch as only about 20,000 head of cattle fattened for slaughter per year were anticipated in the current, seventh five-year plan (1981-1985).[14]

Like meat production, fruit and vegetable production from small landholders has become irreplaceable. Most of this is produced by market gardeners who are organized throughout the republic in their own organization of about

500,000 members. Their contribution to total fruit and vegetable production has become substantial. In 1983, it amounted to 61.8 and 39.2 percent of total fruit and vegetable production, respectively. In 1982, their share of deliveries to state stores represented 59.3 percent in the case of fruit and 17.7 percent in the case of vegetables.[15]

In evaluating the effectiveness of production of the different agricultural sectors, the independent sector manages better than the socialist sector, and within the socialist sector, the collective farms do better than the state farms. For instance, in 1960 the share of the private sector, that of small landholders and private plot holders, in the total area of agricultural land amounted to about 15 percent, yet their share in overall farm production was 21.2 percent. In 1981, their share of total farm land amounted to only 5.6 percent and that of arable land to as little as 2.8 percent, but the small-scale production sectors accounted for nearly 10 percent of the total of 10,195 million Kcs gross agricultural production value. Notably, in 1977 the statistical yearbooks ceased to give data on the division of agricultural production by sectors.[16]

The effectiveness of production in collective farms versus state farms is evident from the following data (the figures for the latter are given in parentheses): in 1981, gross farm production per hectare of farm land in the farm cooperatives amounted to 14,918 Kcs (11,997 Kcs), profit (loss) per hectare of farm land, to 1,025 Kcs (-41 Kcs), and subsidies and subventions, to 260 Kcs (749 Kcs). As the foreign currency situation and the country's cereal harvest yields cannot be expected to improve substantially in the near future, the government is compelled not only to permit agricultural production in the private sector but perhaps even to support and expand it inasmuch as it cannot replace it with anything else. The regime is well aware that a further reduction of meat consumption, especially of the traditional favorite pork, would spur the public's protest. Expressed in the jargon of the party, this would mean that this economic problem had "proliferated" into a political question, which is something it cannot afford now.

END EXCERPT

POLAND

Poland is bounded by the Baltic Sea to the north; East Germany to the west, Czechoslovakia to the south, and the Soviet Union to the east. Threats to Poland's existence have come from powerful, expansionistic neighbors; a perennnial territorial struggle on two fronts has threatened the Polish state. From the twelfth century onward, various German forces have struggled to wrest the Baltic coast from Polish control. To the east, the rise of Russia in the sixteenth century created a permanent threat to Polish interests in Lithuania, Belorussia, and the Ukraine. Once these enemies combined forces in the eighteenth century, the Polish state was swallowed by Germany, Austria, and Russia. Since that time, Poland has been restored to the European map only twice--in 1918 and 1945.

Today, Poland is second to the Soviet Union among East European countries in area and population. Having regained the prewar level of about 35 million, the population is nearly homogenous--almost 98 percent Polish in ethnic composition. In mid-1982, the population of Poland was 36.2 million.[17] Following the 1945 Yalta Conference, a Polish Provisional Government of National Unity was formed on 28 June 1945. Poland acquired Silesia from Germany after the war--an area containing damaged but important industrial complexes--while giving up less valuable Eastern agricultural land to the USSR . Elections held on 19 January 1947 were controlled by the communist party--not as Yalta had called for-- and a People's Republic under communist rule was established the following month. In January 1946 large- and medium-scale industries, banks, businesses, and transportation were nationalized. In July 1952 a Soviet-style constitution sanctioned the process of nationalization.

Since World War II, Poland has changed from an essentially agrarian to a predominantly industrial economy. In the 1930s, about 60 percent of the Poles were engaged in agriculture and 30 percent in other forms of economic activity. By 1970, these ratios were reversed, with 33 percent engaged in agriculture and 66 percent in other areas. Poland's dependence on the Soviet Union for oil, iron ore, other raw materials, and grain is a primary factor in its trading patterns and economy.

While Poland's agriculture can be described as nominally having several sectors--collective, state, and agricultural circles--it is dominated by the private farmers' landholding and production. It is because of agriculture's vital role both in the national economy and domestic politics that most of the crises in postwar Poland have hinged in some way on the availability and

Robert Cummings. "Agricultural Performance and Prospects in Czechoslovakia Through the Eighties." JEC. East European Economies: Slow Growth in the 1980's. Volume 3, 1986.

TABLE 17.—DEVELOPMENT OF QUALITATIVE GROWTH FACTORS OF NATIONAL PRODUCT, 1981–1984 [1]

[Index (1980=100)]

| | 1981 | 1982 | 1983 | 1984 |
|---|---|---|---|---|
| 1. Output per person employed | 99.6 | 99.8 | 101.7 | 103.8 |
| 2. Output per unit of fixed capital stock | 94.4 | 89.3 | 87.5 | 84.8 |
| 3. Total factor productivity [2] | 98.0 | 96.7 | 97.4 | 98.1 |
| 4. Material inputs per unit of NMP | 100.7 | 101.8 | 102.6 | 102.9 |
| 5. Primary energy consumption in terajoules per unit of NMP | 99.2 | 98.0 | 97.0 | 95.0 |

[1] Calculated according to constant 1977 prices.
[2] Assuming capital elasticity $\alpha=0.3$, and labour elasticity $1-\alpha$).

Source: Statisticka rocenka CSSR 1984, pp. 128 and for 1984 Plan Fulfillment Report, partly estimated.

# AGRICULTURAL PERFORMANCE AND PROSPECTS IN CZECHOSLOVAKIA THROUGH THE EIGHTIES

By Robert Cummings*

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## I. Introduction and Summary

### INTRODUCTION

Czechoslovakia, like the rest of Eastern Europe, was considered a growing market for agricultural imports as recently as 2-to-3 years ago. The country traditionally enjoys one of the most prosperous economies in the region and the relatively small agricultural sector meant that substantial farm imports, particularly of livestock feed, were essential to preserve the standard of living.

However, recent economic and political events in the region and the Czechoslovak responses have seriously darkened the market outlook in the country. This study is a reassessment of agricultural prospects in Czechoslovakia in light of recent political turmoil in Poland, foreign credit problems in all countries, and major disappointments in the performance of the domestic economy.

The Five Year Plan (FYP) for the Czechoslovak economy covering 1981–1985 reflects the Government's response to these problems. Analysis of the agricultural portion of the plan provides insights into the prospects for U.S. agricultural trade with Czechoslovakia. Since it is likely that officials will still be confronting later in the eighties many of the same problems they faced in drawing up the 1981–85 plan, and that the conservative nature of the lead-

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[illegible]

IV [illegible]

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ership will remain, the major agricultural policies of the 1981–85 FYP should continue through the end of the eighties.

Based on this assumption and historical performance, projections covering production, domestic utilization, and trade were made for the major commodities of interest to Western officials and businessmen: grain, oilseeds, potatoes, sugar beets, meat, milk, and eggs. In making these projections the author relied heavily on statistical information contained in the Czechoslovak statistical yearbook, translations of relevant Czechoslovak economic and political journals, and publications of the U.S. Department of Agriculture, especially "Eastern Europe: Agricultural Production and Trade Prospects Through 1990" (34).** This report contains the projections used here plus the projection methodology. Interested readers are referred to this report for an East European-wide discussion of agricultural prospects.


## SUMMARY

Economic growth prospects in Czechoslovakia for the remainder of the eighties are for continued disappointing performance. This poor performance, the pessimistic expectations of planners illustrated in the 1981–85 targets, and the conservative nature of the Czechoslovak leadership should all work against any significant improvement in the economy for several years.

Agriculture is being called on to supply more of the country's food requirements while imports are to be cut. This has meant several changes in agricultural policy. The farm consolidation campaign of the late seventies has been shelved and replaced by policies to spur production and efficiency on farms without changing their present structure. This has resulted in some tentative reform of central planning in agriculture, new support for private agriculture, de-emphasis of livestock production and a halt to the steadily rising per capita consumption of livestock products which the country enjoyed through the seventies.

Czechoslovakia entered the eighties following five years of generally disappointing overall agricultural production. Very poor crop production accounted for the subplan performance. Average 1976–80 grain output, for example, was 10.1 million tons, only 8 percent above average 1971–75 output and the production rise was just below one-half of the planned increase. Of the major crops, only oilseed (rapeseed, sunflowerseed, and soybean) output met the expectations of planners.

Despite the crop shortfall, the livestock sector performed well. Average meat production rose 13 percent between 1971–75 and 1976–80 and milk and egg production also grew. Livestock's success was based on higher grain and protein inputs: by 1976–80, average grain imports were 1.68 million tons, up from an average 1.56 million in 1971–75. Average oilseed meal imports increased even more, rising to 643,000 tons in 1976–80, 21 percent higher than in 1971–75. Oilseed imports remained unchanged at an average annual 135,000 tons in 1971–75 and 1976–80.

These higher imports became untenable to officials, however, when the debt repayment problems of Poland and Romania drastically reduced credit availability for the entire region and highlighted the area's economic and financial problems. Czechoslovak officials were forced to plan extremely slow economic growth through 1985 and cut imports as a result. There is to be no increase in investment, exports are to be up significantly, imports reduced, and crop production is to grow much more than livestock output (11 percent vs 2 percent). Any increases in crop and livestock production will have to result from more efficient use of existing inputs as little increase in machinery and chemical use is expected.

The production and trade projections for 1990 reflect these economic problems and constraints. Grain production is forecast at 11.6 million tons, 15 percent above average 1976–80 output but meat production, at 1.4 million tons, should be unchanged from the 1976–80 average. The meat forecast combined with higher forecasted grain production should reduce grain imports to some 945,000 tons in 1990/91, 44 percent lower than the 1976–80 average.

Total oilseed and oilseed meal imports, in soybean meal equivalent, could actually increase, however. Imports are forecast at 878,000 tons in 1990/91, 22 percent higher than average 1976–80 imports.


## II. Planning and Policy

Economic growth prospects in Czechoslovakia for the remainder of the eighties are for continued disappointing performance similar to that of the early eighties (Table 1). Performance in 1981 and 1982 (the first two years of the 7th Five Year Plan) was generally well below plan targets, casting doubt on overall fulfillment of the 1981–85 plan. Poor performance and the pessimistic expectations of planners illustrated in the 1981–85 targets should work against any significant improvement in the economy for the remainder of the decade (Table 2).

TABLE 1.—PRINCIPAL PLAN INDICATORS AND PERFORMANCE, 1981–85 ANNUAL

[Percent change from previous period]

| Indicator | 1981 | | 1982 | | 1983 plan | 1983-85 plan [1] |
|---|---|---|---|---|---|---|
| | Plan | Actual | Plan | Actual | | |
| National income | 2.7 | 0.2 | 0.5 | 0.4 | 2.0 | 2.7 |
| Industrial production | 2.4 | 2.0 | 0.8 | 1.0 | 2.4 | 3.4 |
| Agricultural production | 2.6 | −3.4 | 3.2 | 1.1 | 2.7 | 1.3 |
| Investment | −3.5 | −2.0 | −2.5 | −1.1 | −1.4 | −4.0 |

[1] Annual percent change in 1983–85 versus performance in 1981–82.

Sources: (12, 15, 32, 33).

TABLE 2.—PRINCIPAL PLAN INDICATORS AND PERFORMANCE 1976–80 AND 1981–85

[Percent increase from previous period]

| Indicator | 1976–80 plan | 1976–80 actual | 1981–85 plan [1] |
|---|---|---|---|
| National income | 27 | 20 | 10–14 |
| Industrial production | 33 | 25 | 14–18 |
| Agricultural production | 14 | 9 | 5.2 |

**Numbers in parentheses refer to sources at the end of this report.

TABLE 2.—PRINCIPAL PLAN INDICATORS AND PERFORMANCE 1976–80 AND 1981–85—Continued

[Percent increase from previous period]

| Indicator | 1976–80 plan | 1976–80 actual | 1981–85 plan [1] |
|---|---|---|---|
| Food industry production | 20–21 | [2] 20 | 6.5 |
| Investment | 37 | 30 | 0 |

[1] Targets as of June 1982, revised down from earlier levels.
[2] Estimate.

Sources: (20, 24, 25, 31).

The economic problems now familiar to Eastern Europe underlie these prospects. Like most countries of the region, Czechoslovakia imports the bulk of its energy and raw material needs. These imports contributed significantly to Czechoslovakia's trade deficits in the seventies and disappointing industrial and agricultural production limited the availability of new investment funds. Also, the conservative political outlook of officials has prevented successful changes in economic management. As a result, Czechoslovak planners had little choice but to scale back economic growth targets. However, data contained in tables 1 and 2 indicate that even the present aggregate targets for 1981–85 are too optimistic. Total investment, for example, will fall in the 7th FYP rather than remain constant as the plan stipulates. Growth of national income and industrial production should just approach the low end of the plan targets but agricultural production could fall well short of the mark.

## A. Agricultural Policy

The primary goal of Czechoslovak agriculture remains the achievement of self-sufficiency in most agricultural products. However, the expectation of little growth in agricultural investment and inputs has led to a revamping of agricultural policy. Emphasis is now on pragmatic policies which will increase output at the least cost: relaxation of a farm consolidation campaign, elimination of excessive plan indicators, solving farm management problems, and a positive reassessment of private production.

In the 5th and 6th Five Year Plans (1971–80), the Government hoped that large-scale, specialized agro-industrial enterprises combining farms and processing industries would lead to higher output. Starting in the midseventies, collective and state farms were consolidated to form these new enterprises which had a priority claim on investment. However, problems late in the 6th FYP led to a halt in consolidation efforts. The hoped for increases in output did not occur and serious management problems developed (30).

Officials also cite an excessive number of plan indicators as an underlying factor explaining the disappointing performance of Czechoslovak agriculture (25). While the number of plan indicators has been extremely low on the federal level—4 mandatory and 31 orientation (non-binding) indicators—regional and local administrators have frequently added more. There were reports of some agricultural enterprises having more than 90 plan fulfillment indica-



In January 1982, officials introduced the "New System of Planned Management of the National Economy" into the agricultural sector. This new policy's major influence in agriculture should be a lessening of central control over day-to-day farm administration and wider management initiative for farm officials (10). There are now only 2 binding plan targets imposed from the federal level—for the procurement of grain and of slaughter animals. Local officials may add up to only 3 supplemental targets (21).

## B. Private Production

Czechoslovak authorities, like their counterparts in most other East European countries plus the USSR, have "rediscovered" the economic value of private farming. Czechoslovak planners have seized on private undertakings as an important component of current agricultural policy, although the size of full-time private agriculture is very small. Private farmers accounted for less than 2 percent of the agricultural labor force in 1980, down from 6 percent of 1975. These individuals live mainly in hilly regions where large-scale agriculture is impractical. By law, they are restricted to owning only up to 1 hectare of land but are allowed access to certain state-owned lands for grazing.

Part-time private production is considerably more extensive and, economically, more important than its full-time counterpart. Every collective farm member and state farm employee is entitled to a private plot. In addition, many urban dwellers also farm plots in the suburbs. This part-time private production is an important source of food: private production accounts for approximately 40 percent and 70 percent, respectively, of total vegetable and fruit production and roughly one-quarter of meat production.

For planners, the benefits of private production are threefold. First, because of its small-scale nature this sector can most efficiently utilize much of the agricultural land unsuited for large-scale mechanized use which has steadily fallen out of use. (19) This land is located primarily in hilly and mountainous regions.

Secondly, the past de-emphasis of private production led to local food production shortfalls, especially of livestock products. (19) This lack of "rural self-sufficiency" placed unwanted demands on state stocks, the livestock portion of which was produced in part with imported feed. Increased private livestock-product output for the rural market based on local feed supplies is an important policy goal.

Finally, expansion of the private sector is a relatively inexpensive policy promising increased output in a timely fashion. While the Government will find it necessary to increase production of small scale tools and implements plus increase deliveries to private producers of fertilizers, plant protection agents and livestock feed, the costs involved are likely less than those needed to raise the marginal output in the socialist sector.

Contract fattening of livestock by an individual for delivery to a state organization (collective or state farm or food processing enterprise) is the most visible aspect of the more positive attitude

In January 1982, officials extended the "New System of Planned Management of the National Economy" into the agricultural sector. The new policy's major features in agriculture should be a lessening of central control [illegible] information and wider [illegible] (50). There are now only 2 binding [illegible] targets [illegible] the procurement of grain and of slaughter animals. Local officials may add up to [illegible] (51).

### D. Private Production

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For planners, the benefits of private production [illegible] First, [illegible] its small-scale nature this sector [illegible] currently utilize much of the agricultural land unsuited for large-scale mechanized use which has steadily fallen out of use. This land is located primarily in hilly and mountainous regions.

Second, the past de-emphasis on private production led to food production shortfalls, especially of livestock products (53). In a [illegible] national self-sufficiency" placed unwanted demands on [illegible] stocks [illegible] livestock, a portion of which was produced in part [illegible] imported feed. Increased private [illegible] livestock-product output based on local feed supplies is an important goal.

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Contract fattening of livestock by an individual for delivery [illegible]

| | | | |
|---|---|---|---|
| [illegible] 1976-80 | [illegible] | [illegible] | |
| 63 | 20 | 19-21 | [illegible] |
| 9 | 4 | 11 | [illegible] |

[illegible] similar to [illegible] Eastern Europe underlie [illegible] countries of the region, Czechoslovakia [illegible] These [illegible] deficits in [illegible] produc[illegible] Also, the [illegible] of [illegible] as perceived success [illegible] agement. [illegible] economic growth [illegible] indicate [illegible] 1980 [illegible] FYP [illegible] agricultural [illegible] and [illegible] of the plan production could fall well short of the [illegible]

### E. Agricultural Policy

[illegible] Czechoslovak [illegible] remains the [illegible] of self-sufficiency [illegible] agricultural products [illegible] investment [illegible] phase [illegible] will [illegible] output at the least [illegible] price controls [illegible] management problems, and [illegible]

[illegible] Plan (1971-80), the Government [illegible] agro-industrial enterprises [illegible] induced [illegible] higher [illegible] collective [illegible] state farms [illegible] enterprises which had a [illegible] however, [illegible] late in the [illegible] FYP [illegible] the hoped-for increases in [illegible] and serious management problems developed.

[illegible] number of plan indicators [illegible] performance [illegible] number of plan indicators [illegible] level—a mandatory and [illegible] regional and local adminis[illegible] There were reports of [illegible] more than 30 plan indicators [illegible] tract currently represents less than 1 percent of total production. Plan discussions call for a 150 percent increase in meat production under contract by 1985. If achieved, this target would still leave contract livestock fattening a minor supplier for the nation.

The Government in early 1982 abolished all taxes on revenue from the sale of food produced privately by citizens on a part-time basis. Although full-time farmers are excluded from this tax benefit, it should be a considerable incentive to part-time producers. Also, small scale producers have been eligible since March 1982 to receive loans to cover expenses connected with plant and livestock production. If the producer is a member of one of the several small grower associations, the interest rate is substantially below that charged the population at large (12).

Although Czechoslovak authorities have begun to tone down their longstanding opposition to private agriculture, their current policy is tactical only and does not signify a fundamental change. The preeminence of large-scale socialized agriculture will continue with private agriculture called on to help augment supplies in specific areas only (19).

In addition, expansion of private production is also facing opposition from state and collective farm officials fearful of new competitors. Promises of access to state and collective farm grazing areas and guaranteed sales of livestock feed challenge the privileged positions of these farms and the implied assumption that private producers are more efficient feeders is embarassing to large-scale producers. If this opposition cannot be managed, hoped for results from private production will not be forthcoming.

## III. Agricultural Production

Gross output targets for agricultural production are available only through 1985. The 1981–85 plan calls for an increase in agricultural production of 5.2 percent over 1976–80 output, substantially below performance in the 6th FYP. In a major effort to reduce grain and other feed imports, crop production, particularly of forage crops, is planned to increase much faster (10.8 percent) than livestock production (2 percent). Self-sufficiency in livestock feed production will remain the main goal of Czechoslovak agriculture through 1990.

### *A. Crop Production in the 6th FYP*

Czechoslovakia entered the eighties following five years of disappointing agricultural performance. The 9 percent increase in agricultural output in 1976–80 was well below the planned 14 percent. Very unfavorable weather in some years and insufficient inputs were primarily responsible.

The crop shortfalls of 1976–80 were made worse by a high degree of processing and storage waste. Although exact data are rare, approximately 10–30 percent of various crops are lost to harvesting, processing and/or storage waste. Almost exclusive emphasis on rising gross crop output has resulted in neglect of adequate harvesting technology and storage capacity (1).

*Grain and Forage.*—Average 1976–80 grain production increased only 8 percent from the 1971-75 average



planned increase (Table 3). The shortfall in production is attribut to below-plan yields with the planned 4.1–4.2-tons per hectare f all grain met only in 1980. Forage production in the 6th FYP wa probably disappointing, although few targets are available. Ave age production of feed roots in 1976–80 was 58 percent less than i 1971–75, average hay output was unchanged and corn silage pro duction was 29 percent higher.

TABLE 3.—PERCENT CHANGES IN CROP OUTPUT AND AREA, 1976–80 VERSUS 1971–75

[In percent]

| Crop | Change in output 1976–80/1971–75 | Change in area 1976–80/1971–75 |
|---|---|---|
| Grain | 7.6 | −1.5 |
| Wheat | 13.5 | 2.5 |
| Coarse grain | 2.4 | −4.6 |
| Corn silage | 29.2 | +12.9 |
| Hay | INS | −10.8 |
| Potatoes | −19.5 | −25.2 |
| Oilseeds [1] | 46.6 | 46.7 |
| Sugar beets | 2.4 | 9.6 |
| Vegetables | −6.5 | NA |
| Fruits | −3.0 | NA |
| Feed roots | −57.5 | −53.3 |

[1] Soybean, rapeseed and sunflower seed.

INS = Insignificant, NA = Not available.

Source: (28).

*Oilseeds, Sugarbeets, and Potatoes.*—Of the other major crops only oilseed production (rapeseed, sunflower seed and soybean) met the expectations of planners. Average oilseed production expanded 47 percent in the 6th FYP. Production in 1980, at 245,000 tons, was above the plan target of 240,000 tons (Table 4). The increase in oilseed output is attributable to higher harvested areas for rapeseed and sunflower seed. The average area for rapeseed increased one third in the 6th FYP to 72,200 hectares and accounted for 82 percent of average oilseed area (Table 5).

Sugar beet production fell substantially below plan. Area harvested, yield, and sugar content were all below plan targets. For the 1980 crop, the yield was 33.3 tons of beets per hectare, versus the planned figure of 40–41.5 tons per hectare. Despite an area increase of 9.6 percent, total production in 1976–80 was only 2.4 percent above that of 1971–75. Sugar content remained constant at 10–11 percent. Poor weather and less-than-planned area were responsible for this poor performance. Potato outturn in the 6th FYP was disastrous. Total output fell 19.5 percent due to very adverse weather, especially in 1980, a 25 percent decline in sown area, and inadequate supplies of plant protection agents.

### *B. Crop Production Prospects*

The major guidelines of the 7th FYP—increased crop production relative to that of livestock and expansion of domestic feed supplies—should influence crop production

but high-protein livestock feed supplies by 1990 and this has resulted in increased emphasis on expanded forage and grain production.

TABLE 4.—PRODUCTION OF SELECTED CROPS, 1976–80 AVERAGE AND 1980–82 ANNUAL [1]

[Thousands of tons]

| Item | 1976–80 average | 1980 | 1981 | 1982 |
|---|---|---|---|---|
| Grain | 10,060 | 10,699 | 9,400 | 10,225 |
| Wheat | 4,949 | 5,386 | 4,325 | 4,600 |
| Rye | 578 | 570 | 544 | 545 |
| Barley | 3,386 | 3,575 | 3,392 | 3,650 |
| Oats | 423 | 423 | 433 | 490 |
| Corn | 724 | 745 | 706 | 940 |
| Potatoes | 3,678 | 2,695 | 3,743 | 3,500 |
| Sugar beets | 7,132 | 7,255 | 6,969 | 8,210 |
| Sunflowerseed | 17 | 25 | 33 | 35 |
| Rapeseed | 151 | 214 | 200 | 180 |
| Soybeans | 4 | 6 | 6 | 6 |
| Corn silage | 14,390 | 14,647 | 15,642 | NA |
| Hay [2] | 6,179 | 7,169 | 6,635 | NA |
| Feed roots | 870 | 715 | 795 | NA |

[1] 1982 data are preliminary and unavailable for corn silage, hay, and feed roots.
[2] Does not include meadow hay.

NA = Not available.

Source: (28).

TABLE 5.—AREA OF SELECTED CROPS, 1976–80 AVERAGE AND 1980–82 ANNUAL [1]

[Thousands of hectares]

| Item | 1976–80 average | 1980 | 1981 | 1982 |
|---|---|---|---|---|
| Grain | 2,699 | 2,628 | 2,595 | 2,565 |
| Wheat | 1,229 | 1,197 | 1,090 | 1,070 |
| Rye | 186 | 179 | 171 | 170 |
| Barley | 919 | 921 | 996 | 970 |
| Oats | 162 | 139 | 160 | 170 |
| Corn | 202 | 192 | 178 | 185 |
| Potatoes | 223 | 199 | 200 | 200 |
| Sugarbeets | 217 | 218 | 219 | 215 |
| Sunflowerseed | 13 | 20 | 19 | 22 |
| Rapeseed | 72 | 91 | 95 | 80 |
| Soybeans | 3 | 1 | 2 | 3 |
| Corn silage | 439 | 436 | 423 | NA |
| Hay | 957 | 998 | 1,010 | NA |
| Feed roots | 21 | 20 | 17 | NA |

[1] 1982 data are preliminary and unavailable for corn silage, hay and feed roots.
[2] Does not include meadow hay.

NA = Not available.

Source: (28).

*Forages.*—Although the plan for agriculture as a whole is modest, the forage (hay, corn for silage, and feed roots) portion of the plan is quite ambitious. The high cost of imported grain, the generally poor performance of the Czechoslovak economy and the lower cost of forage feeding relative to grain have made domestically produced forage an increasingly attractive feed. The production of forages is to increase approximately one-third in the 7th FYP over 1976–80 production. Plans call for area under forage crops (excluding meadows) to expand by 150,000 hectares (about 10 percent)



be drained and re-sown with perennial grasses (5). Throughout the seventies, forage production suffered at the hands of official apathy. Area fell in every year except 1979 and 1980 and there was little yield stability.

It is unlikely that the 7th FYP will be met for forage production (5). Some expansion in area, particularly of corn silage and hay, is likely but the lack of new agricultural land in Czechoslovakia and a reluctance to shift large acreage out of grain indicate no significant forage area growth. Also, investment constraints should hamper the use of yield improving fertilizers, plant protection agents and machinery.

Because of uncertainty over the degree of actual support for expanded forage production and input availability, and because of the erratic historical yield of the major forages, no output projections for these crops were made.

*Grain.*—The plan is relatively silent on grain for 1981–85. Production in 1990 is projected at 11.6 million tons (Table 6). This forecast is based on the following factors: diminished grain area, lower yield improvements than in the past, and diminished marginal returns from increased fertilizer use. Grain area is projected to decline to 2.6 million hectares by 1990, four percent below average 1976–80 area.

A major constraint on achieving higher yields is the declining marginal returns from increased fertilizer application. Czechoslovakia has reached high levels of fertilizer application (344 kilograms/hectare of arable land in 1981). Any further increase in use should not significantly increase grain yields. Higher yielding seeds, more extensive use of plant protection agents and reductions in harvest losses will grow in importance as yield determinants. Given the long lead time necessary to develop seed hybrids and the current constraints on investment and energy use, any expected yield improvements from these inputs are not expected until the late eighties.

*Oilseeds.*—Oilseed production should continue a healthy growth rate for the rest of the decade, although below the 50 percent increased achieved in 1976–80. Total oilseed area is relatively small (an average 88,000 hectares in 1976–80) but has risen consistently since the mid-seventies. This increase is expected to continue, with production of rapeseed in 1990 forecast at 280,000 tons from an area of 115,000 hectares. Because of the traditionally small area and production of soybeans and sunflowerseed, output of these crops was not forecast.

*Potatoes.*—Potato area is expected to fall to 170,000 hectares by 1990, 24 percent below average 1976–80 area. Yields should increase, however, as production is forecast at 3.1 million tons, 14 percent below the 1976–80 average. Declining potato area and production forecasts continue the trend of past years.

Potatoes are not a significant livestock feed in Czechoslovakia and per capita human consumption has fallen steadily, although slowly, as the country's standard of living has risen. The relative labor intensity of potato production, the lack of adequate harvesting machinery, and insufficient post-harvest storage space, have caused planners to shift

losses, which are particularly high for this crop, three or four large potato processing plants (for starch extraction and other commercial products) are to be built by 1991.

*Sugar beets.*—The emphasis in future sugar beet cultivation will be on improved harvesting technology to reduce losses and on improved sugar beet seed development, particularly of monogerm varieties, to produce a crop more easily harvested by machine (7). Sugar beet harvesting is fully mechanized but an inadequate supply of harvesters results in early digging, reduced sugar content, and a loss of up to 20 percent of all beets. Sugar beet area will be approximately 213,000 hectares by 1990, only slightly below current area with improved yields leading to forecasted production of 8 million tons, well above output for all but two years between 1976 and 1982.

TABLE 6.—SELECTED CROP AREA, YIELD, AND OUTPUT PROJECTIONS, 1990

| | Area (1,000 ha.) | Yield (ton/ha.) | Production (thousands of tons) |
|---|---|---|---|
| Grain | 2,600 | 4.47 | 11,610 |
| Rapeseed | 115 | 2.43 | 280 |
| Sugar beets | 215 | 37.00 | 7,955 |
| Potatoes | 170 | 18.50 | 3,145 |

Source: (34).

## *Livestock Production in the 6th FYP*

The livestock sector in Czechoslovakia performed well in the 6th FYP, fulfilling the planned output target. The value of livestock output, in constant prices, was 11.6 percent higher in 1980 than in 1975. The production of eggs, poultry for slaughter, and hogs for slaughter was above plan while the plan for milk production, and cattle numbers was not met (Tables 7 and 8). Despite rising grain and protein feed imports, the country failed to supply proper rations of balanced livestock feed to the cattle sector.

*Livestock numbers and production.*—The poultry sector grew most in 1976–80 with average poultry numbers and meat output 14 and 29 percent higher, respectively, in 1976–80 than in 1971–75. Egg production increased 10 percent. The total number of hogs was up 19 percent and, by 1980, the population was approximately 1.2 million head more than provided for in the plan. The plan was also overfulfilled for slaughter hogs, indicating that the average 803,000-tons of pork produced in 1976–80 was likely above plan expectations.

Plan fulfillment commentary continuously cited poor performance in the cattle sector. Cattle numbers were up only 7 percent in 1976–80 and cow numbers actually fell slightly. Beef and veal production was virtually unchanged. Milk output was also disappointing. While it increased 6 percent in the 6th FYP, it was still short of planned production.



TABLE 7.—JANUARY 1 LIVESTOCK NUMBERS, 1971–75 AND 1976–80 AVERAGES

[Thousand head]

| | 1971–75 average | 1976–80 average |
|---|---|---|
| Total cattle | 4,445 | 4,754 |
| Cows | 1,908 | 1,902 |
| Hogs | 6,109 | 7,240 |
| Sheep | 891 | 837 |
| Poultry | 39,461 | 44,871 |

Source: (28).

TABLE 8.—OUTPUT OF SELECTED LIVESTOCK PRODUCTS, 1971–75 AND 1976–80 AVERAGES

[Thousands of tons]

| | 1971–75 average | 1976–80 average |
|---|---|---|
| Total meat [1] | 1,256 | 1,423 |
| Beef and veal | 403 | 424 |
| Mutton, lamb, goat | 8 | 6 |
| Pork | 683 | 803 |
| Poultry | 123 | 159 |
| Milk | 5,288 | 5,629 |
| Eggs [2] | 4,272 | 4,690 |

[1] Carcass weight.
[2] Millions.

Source: (28).

*Feeding efficiency.*—Despite the overall favorable livestock performance, Czechoslovakia suffers from serious feedings efficiency problems. These problems are most severe in cattle production where they contributed significantly to 1976–80's poor performance.

The average slaughterweight of cattle and calves dropped steadily, with few exceptions, through the 6th FYP (Table 9). By 1980, cattle slaughterweight was 4 percent less than the 1975 level and that of calves was just over 13 percent lower. Average daily weight gains for feed cattle also fell despite increased consumption of feed per kilogram of meat produced (Table 10). The drop-off in slaughterweights meant that larger numbers of animals had to be slaughtered to maintain beef production. Extensive reliance on roughage feeding, poor nutritional content of silage, and insufficient high-protein feed concentrates are the main reasons for poor performance in the cattle sector (13).

Productivity in hog production was mixed, with average slaughterweight increasing 11 percent between 1975 and 1980, although there was no improvement in average daily weight gain. The situation has worsened, however, over the past 3 years. Slaughter weights fell almost 3 percent between 1980 and 1982 as tight feed supplies reduced the consumption of mixed feed per kilogram of pork produced. Milk and egg yields also improved in the 6th FYP but, as with hog production, yield increases have slowed recently and, for eggs, even declined slightly.

[illegible]

*Feeding of ... —* Despite the overall favorable [illegible] formance, Czechoslovakia suffers from serious feeding [illegible] problems. These problems are most severe in cattle [illegible] where they contributed [illegible] gains [illegible] per [illegible]

The average slaughter-weight of cattle and [illegible] ly, with few exceptions, through the 6th FYP [illegible] cattle slaughter-weight was [illegible] percent [illegible] than the 1971 level that of calves was just over [illegible] percent lower. Average daily [illegible] gains of beef cattle also fell despite increased consumption [illegible] per kilogram of meat produced [illegible]. The drop-off in [illegible] [illegible] that larger numbers of animals had to be [illegible] [illegible] to maintain the [illegible] production. Extensive reliance on [illegible] feeding, poor nutritional content of [illegible], and insufficient protein feed concentrates were the main [illegible] poor perf[illegible] ance of the cattle sector [illegible]

Productivity in hog production was mixed, with average [illegible] weight increasing [illegible] percent between 1975 and 1980, [illegible] there was no improvement in average daily weight gain. The [illegible] tion has worsened, however, over the past [illegible] years. [illegible] [illegible] fell almost 3 percent between 1980 and 1982 [illegible] ... ratio of the consumption of mixed feed per kilogram [illegible] [illegible] also improved in the [illegible] but, [illegible] ... yield increases have slowed [illegible] and, for [illegible] even declined slightly.

[illegible] for this crop, three or four large [illegible] extension and the [illegible] [illegible] by 1985.

[illegible] future sugar beet cultivation will [illegible] to reduce losses and on [illegible] [illegible] of [illegible] usually harvested by machine [illegible] mechanization, but an inadequate [illegible] reduced sugar con[illegible] [illegible] per beet area will [illegible] 1980 only [illegible] below [illegible] to increased production of [illegible] all but two years between [illegible]

... Production in the ... FYP

[illegible] k sector in Czechoslovakia performed well in the sixth [illegible] the planned output [illegible]. The value of livestock [illegible] ant prices, was [illegible] percent higher in 1980 than [illegible] [illegible] duction of eggs, poultry for slaughter, and hogs for [illegible] while the plan for milk production, and [illegible] 7 and 8), [illegible] rates grew [illegible] [illegible] country failed to supply proper [illegible] [illegible] feed to the cattle sector.

[illegible] numbers and production.—The poultry sector grew [illegible] in 1976–80 with average poultry numbers and most out[illegible] [illegible] percent higher [illegible] in 1976–80 than in 1971–75. [illegible] production increased [illegible] percent. The total number of hogs [illegible] [illegible] percent and, by 1980, the population was [illegible] [illegible] hundred one [illegible] for in the plan. The plan was [illegible] [illegible] indicating that the average [illegible] [illegible] in 1976–80 was likely above [illegible]

[illegible] commentary continuously cited poor perform[illegible] sector. Cattle numbers were up only [illegible] percent [illegible] cow numbers [illegible] fell slightly [illegible] [illegible] was virtually unchanged. Milk output was [illegible] [illegible] percent in the 6th FYP, it was [illegible] [illegible]

TABLE 9.—LIVESTOCK PRODUCTIVITY INDICATORS, 1975, 1976–80 AVERAGE, AND 1980–82 ANNUAL

| Indicator | Unit of measure | 1975 | 1976–80 average | 1980 | 1981 | 1982 |
|---|---|---|---|---|---|---|
| Liveweight: | | | | | | |
| Slaughter cattle | Kilograms | 492.6 | 474.6 | 472.9 | 462.4 | 449.1 |
| Slaughter calves | Kilograms | 100.6 | 89.9 | 87.1 | 69.9 | 56.3 |
| Slaughter hogs | Kilograms | 102.3 | 108.2 | 113.9 | 109.9 | 110.4 |
| Daily weight gain: | | | | | | |
| Feed hogs | Kilograms | .51 | NA | .52 | .50 | .49 |
| Feed cattle | Kilograms | .76 | .70 | .72 | .68 | .64 |
| Milk yield per cow | Liters | 2,803.0 | 2,934.5 | 3,089.0 | 3,091.6 | 3,102.5 |
| Eggs per hen | Units | 218.3 | 224.6 | 228.3 | 229.8 | 227.6 |

NA = Not available.

Source: (13, 14, 22, 28).

TABLE 10.—CONSUMPTION OF FEED, IN STARCH UNITS, PER UNIT OF OUTPUT OF SELECTED LIVESTOCK PRODUCTS IN THE SOCIALIZED SECTOR, 1977–82

| | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
|---|---|---|---|---|---|---|
| 1 liter of milk | .87 | .88 | .86 | .84 | .82 | .79 |
| 1 kilogram of slaughter cattle | 5.24 | 6.50 | 6.48 | 6.45 | 6.59 | 6.56 |
| 1 kilogram of slaughter hog | 2.58 | 2.58 | 2.58 | 2.50 | 2.46 | 2.45 |
| 1 egg | .11 | .11 | .11 | .11 | .11 | .11 |

Source: (28).

### *D. Livestock Prospects*

Livestock production for the remainder of the eighties will follow the path of the recent past: reduced meat production, particularly of port, rising milk and egg output and expansion of the cattle and sheep sectors at the expense of hogs and poultry.

Cattle and, to a much lesser extent, sheep are the main growth segments of the livestock sector. Beef production is planned to increase 10 percent from the 1980 level by 1985 with milk production up 6 percent (2). Pork production is to remain constant however, near the reduced 1982 level of 785,000 tons. Officials are well on their way toward restricting growth in the hog sector. By January 1, 1983 hog numbers had fallen 10 percent below the 1981 level, and 1982 pork production was 12 percent below 1981 output.

This reduction is a major change in policy for Czechoslovak agriculture. While hog numbers and pork output have fallen recently in other East European countries, most notably in Poland and Romania, these declines were unintended and resulted from reduced financing for feed imports. Czechoslovakia remains the only country in Eastern Europe choosing reduced meat production and consumption over continued levels of food imports.

*Livestock products.*—Because of this policy, 1991 pork production is projected at 750,000 tons, 12 percent below 1980 output (Table 11).[1] Despite the emphasis on cattle, beef output is estimated at 470,000 tons in 1991, only 8 percent above 1980 production. The longer development period for cattle and emphasis on raising slaughter cattle weights and feeding efficiency rather than increasing the number of animals will limit output growth. Poultry meat production is forecast at 180,000 tons, 5 percent over 1980 output. As with hogs, poultry output will be restrained because of its dependence on high-protein mixed feeds. Despite a rapid increase in sheep numbers in recent years—approximately 990,000 head on January 1, 1983 versus 875,000 in 1980—production of mutton and lamb should not increase beyond 10,000 tons.

Total meat production by 1991 is forecast at 1.4 million tons, 4 percent below 1980 output. The declining trend projected for meat output is in line with plans for per capita meat consumption which calls for little change from the 80 kilograms consumed in 1982. Per capita meat consumption peaked at 86.6 kilograms in 1981.

In contrast to meat production, milk and egg production should increase as a partial substitute for the protein lost because of lower meat consumption. Egg production is forecast at 5.9 billion pieces in 1991, 20 percent above 1980 output and milk output could be 6.6 million tons or 11 percent higher in 1991 than in 1980.



TABLE 11.—OUTPUT OF SELECTED LIVESTOCK PRODUCTS, 1980–82 ACTUAL, AND 1991 PROJECTED

[Thousands of tons]

| | 1980 | 1981 | 1982 | 1991 | Percent change 1991/1980 |
|---|---|---|---|---|---|
| Meat, carcass weight | 1,499 | 1,527 | 1,425 | 1,440 | −3.9 |
| Pork | 851 | 889 | 785 | 750 | −11.9 |
| Beef | 436 | 423 | 430 | 470 | 7.8 |
| Poultry | 172 | 170 | 165 | 180 | 4.7 |
| Other meat | 40 | 45 | 45 | 40 | 0 |
| Cow's milk | 5,909 | 5,918 | 5,900 | 6,580 | 11.4 |
| Eggs (millions) | 4,900 | 4,968 | 5,030 | 5,900 | 20.4 |

Sources: (28, 34).

## IV. Resource Use

There will be little overall increase in the use of resources in agriculture—investment, machinery, chemicals, irrigation and drainage, and land and labor—for the rest of the eighties. This presents serious problems for Czechoslovak agriculture because the higher planned crop output will have to result almost entirely from more efficient use of a relatively stable supply of resources.

*Investment.*—The growth of agricultural investment (new buildings and equipment, excluding the food processing industry) has been almost zero since the mid-seventies. The value of agricultural investment increased less than one percent (in constant prices) in 1976–80, while total investment in the economy rose 21 percent. This trend did not continue, however, in 1981 when agricultural investment rose 6 percent (constant prices) while total investment fell 5 percent.

Despite the modest rise in 1981, farm investment is expected to follow the declining trend of total investment, at least through 1985. There should be little

Nevertheless, agricultural investment as a share of total investment should increase. This share dropped from 12 percent in 1976 to 10 percent in 1980. It is expected to regain the 12 percent mark by 1985, indicating a somewhat increased emphasis on agriculture (12). Even at 12 percent, this share is one of the lowest in Eastern Europe and reflects the highly industrialized character of the Czechoslovak economy.

Future agricultural investment will be directed at reducing harvesting, processing, and storage losses rather than at simply raising gross agricultural output. In line with the forage campaign, equipment for the plant sector is the priority claimant on agricultural investment funds. Development of more efficient forage harvesting machinery will be stressed along with special attention to draining meadows and pastures. Other preferential investment areas are fruit and vegetable production, particularly harvesting machinery, storage facilities for grain, potatoes, and fodder, and expanded repair shops and diagnostic centers for machinery (22).

*Agricultural machinery.*—Czechoslovakia has already attained a high level of agricultural mechanization and current policy is directed toward increased efficiency and expansion of use into remaining under-mechanized and labor-intensive areas. Machinery plans for the next several years include larger deliveries of sugar beet and other sowing machines and larger deliveries of plows (26). The total tractor supply (136,700 units in 1980) is planned to fall by approximately one-half by mid-decade as more fuel efficient trucks increase their share in agriculture transportation. Authorities hope to reduce the share of tractors in total agricultural transportation from the current 30 percent (in terms of ton kilometers) to 5 percent (8).

Although most current discussion of farm machinery policy is shaped in terms of the 1981–85 plan, today's goals and directives should still be in place by 1990. The no-growth investment policy is forcing increased efficiency from each unit of agricultural machinery rather than a simple increase in machinery numbers.

*Agricultural chemicals.*—Average fertilizer use increased 15 percent in the 6th FYP. By 1980, use reached 340 kilograms per hectare of arable land compared with 295 kilograms in 1975. Use increased to 344 kilograms per hectare in 1981. Czechoslovakia is second only to the German Democratic Republic (GDR) in fertilizer use in Eastern Europe and the country can expect little rise in marginal crop output from increased fertilizer application. Recent policy has emphasized more efficient application of fertilizers and a shift to liquid fertilizers which are easier to apply and insure more precise mixing than granular varieties. Although the share of liquid fertilizer in the total supply of nitrogen fertilizer increased 13 percent between 1975 and 1980, the supply of liquid fertilizers in 1982 was only 2–3 percent of the total fertilizer assortment. Expansion of liquid fertilizer production and use will continue in the eighties (11).

Fertilizer use should increase slightly throughout the eighties but the magnitude of change will be restricted by planned energy cutbacks throughout the economy, environmental concerns and de-



*Irrigation and drainage.*—Only 322,000 hectares, or 6 percent of arable land in Czechoslovakia is under irrigation, one of the lowest shares in Eastern Europe. Approximately two-thirds of irrigated area is in Slovakia. Drained area is much more extensive, covering approximately 1.3 million hectares in 1980 or 19 percent of all agricultural land.

Plans call for approximately 552,400 hectares of irrigated land and 1.6 million hectares of drained land by 1985 (29, 39). Almost all of the drained area will be of meadows in order to increase forage production. The target for expanded irrigated area is very optimistic—it is well above what was achieved in 1971–75 and 1976–80—and overall investment constraints will likely focus attention more on improved use of existing facilities.

*Land and labor.*—Land and labor are in short supply in Czechoslovakia and agriculture competes with every other sector of the economy for these resources. Total agricultural land area has fallen steadily since World War II as industry expanded and rising crop yields reduced the value of marginal producing areas. Agricultural land fell 2.2 percent between 1975 and 1980 while arable land area fell 1.7 percent (Table 12).

TABLE 12.—TOTAL AND AGRICULTURAL LAND SUPPLY, 1975, 1980–1982

[Thousands of hectares]

| | 1975 | 1980 | 1981 | 1982 |
|---|---|---|---|---|
| Total land | 12,789 | 12,789 | 12,789 | 12,789 |
| Total agricultural land | 7,004 | 6,851 | 6,843 | 6,840 |
| Total arable land | 5,257 | 5,169 | 5,171 | 5,171 |
| Meadows | 906 | 852 | 845 | 841 |
| Pastures | 841 | 830 | 827 | 828 |

Source: (28).

Users of agricultural land for industrial purposes have been required since 1976 to reclaim, at their own expense, unused land of a least the same size. This law has not been strictly enforced, however. The decline in the supply of farm land should slow through the remainder of the eighties because of strong official support for increased agricultural self sufficiency and the low expected growth rate for the economy.

As with land, the agricultural labor force has fallen since 1945. The lure of higher-paying industrial jobs served to transfer labor out of agriculture and labor was increasingly substituted with machinery. In 1980, the agricultural labor force (including employees of machine tractor stations) equalled 953,000, 7 percent less than in 1975. The share of agricultural labor in the total labor supply fell to 13 percent in 1980 from 15 percent in 1975 (Table 13).

*Jamaica* [illegible] — Only [illegible] 2,000 [illegible] are [illegible] able land [illegible] irrigation [illegible] south [illegible] Eastern [illegible] area [illegible] suitable farmland [illegible] approximately [illegible] 1.4 million [illegible] in 1960 [illegible] [illegible]

[illegible] 1.6 million [illegible] of [illegible] under [illegible] 1960 [illegible] production. The target [illegible] as well [illegible] what was achieved in [illegible] [illegible] on improvement [illegible] existing facilities.

[illegible] labor [illegible] labor are in short supply [illegible] [illegible] economy for these [illegible] [illegible] World War II [illegible] expanded [illegible] reduced the value of marginal [illegible] [illegible] (Table [illegible])

TABLE [illegible] — [illegible] SUPPLY, 1955, 1958-1962

| | | | |
|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] |

[illegible] for industrial [illegible] have [illegible] [illegible] the same size [illegible] [illegible] [illegible]

[illegible] industrial [illegible] [illegible]

[illegible]

[illegible] will [illegible] directed [illegible] reducing [illegible] [illegible] the foreign companies [illegible] [illegible] with special attention to [illegible] investment [illegible] reduction [illegible] [illegible]

[illegible] attainment [illegible] [illegible] and [illegible] policy [illegible]

[illegible] position [illegible] [illegible] [illegible] commitment [illegible]

[illegible] discussion of [illegible] policy [illegible] plan [illegible] 1960 [illegible] [illegible] [illegible] compared with [illegible] [illegible] [illegible] [illegible] than [illegible] [illegible] countries [illegible] [illegible] supply of [illegible] [illegible]

TABLE 13.—TOTAL LABOR FORCE AND AGRICULTURAL LABOR FORCE BY SECTOR, 1970, 1975, AND 1980

[Thousands of Persons]

| Indicator | 1970 | 1975 | 1980 |
|---|---|---|---|
| Total labor force | 6,871 | 7,060 | 7,358 |
| Agricultural labor force | 1,178 | 1,024 | 953 |
| Machine tractor stations | 46 | 34 | 55 |
| State sector | 267 | 252 | 238 |
| State farms | 178 | 165 | 148 |
| Cooperative sector | 718 | 679 | 645 |
| Private farmers | 147 | 59 | 15 |

Source: (28).

The agricultural labor force is relatively young and well educated—45 percent of the labor force was under 40 years in 1980, up from 39 percent in 1975—and the number of graduates with specialized secondary and higher education degrees in agriculture was 37 and 30 percent higher in 1982 and 1980, respectively, than in 1975. Successful Government efforts to raise overall farm income to that of the industrial sector and to meet the cultural and recreational needs of the agricultural labor force has reduced the tendency somewhat for young people to leave the farm.

The decline of the agricultural labor force will bottom-out in the 7th FYP with an estimated loss of 20,000–30,000 workers by 1985. This loss will be most severe in the Czech lands and will coincide with an increase in the total workforce that will be 50 percent less than the comparable increase in 1976–80.

Officials announced major changes in agricultural wage policy early in 1982 as part of the expansion of the New System of Planned Management into agriculture. The major change is that wage levels on state farms will no longer be limited by an average ceiling. In theory, managers will be able to differentiate wages to a greater extent than before to reward performance. Discussion of reforms linking wages more directly to performance have a long history in Eastern Europe. However, the anticipated reductions in the Czechoslovak agricultural labor force and recent unplanned declines in the state-farm labor force are powerful incentives to move away from remuneration based on an average wage scale (15).

## V. Agricultural Prices and Profitability

### PRICES

Since the end in the sixties of compulsory delivery quotes for agricultural products to the State, officials have relied heavily on the structure of producer prices (prices paid by state organizations for farm goods) to influence output. This has meant periodic price increases for goods in short supply, primarily livestock products and livestock feed plus some industrial crops such as sugar beets. The gap between procurement prices and retail prices has been filled by subsidies from the central Government.

The need to adjust producer prices more frequently should in-



through 1985 and the Government appears committed to compensatory producer price increases.

The value of all prices paid to agricultural producers by state procurement agencies rose kcs 700 million on January 1, 1981, and by another kcs 7 billion on Janaury 1, 1982 (U.S. $1=kcs 5.60 in April 1981). The livestock sector was the major beneficiary in both increases but hop, tobacco, and corn prices also increased to compensate for the cost of hot air drying which is used extensively with those crops. Future producer price increases will likely be skewed in favor of forages and other feeds and, within livestock, toward cattle and sheep rearing.

Rising retail price subsidies for food from the federal budget accompanied the increased producer prices. In 1976–80, the amount of subsidies for retail meat prices alone nearly doubled from 1971–75, reaching kcs 12 billion in 1980. By 1981, direct consumer food price subsidies were valued at more than kcs 30 billion, or roughly 10 percent of the federal budget (38). In late 1981, a market basket of food worth kcs 100 contained kcs 40 worth of state subsidies.

The higher producer prices of the early eighties threatened to make it even more expensive to keep retail prices stable and this led to retail food price increases in early 1982 from 18 to 100 percent. Some of these price increase were the first in almost 30 years for several types of meat and meat products (18). This represents a major change in price policy indicating that the Government will no longer absorb completely procurement price increases.

### PROFITABILITY

The recent producer price increases were long overdue. In 1975, state farms on average suffered a loss of kcs 75 for every hectare of agricultural land. By 1979, this loss had reached kcs 616. The situation was only slightly better on collective farms. While these farms remained profitable, the average rate of profitability had declined nearly 40 percent between 1971–75 and 1976–80. As a result, bank indebtedness of these farms increased significantly (39).

The financial situation of farms in the socialized sector improved somewhat following the price rises but profitability remains below expectations, particularly on state farms. These farms are much more heavily indebted than collective farms and federal budget grants and subsidies, for example, accounted for approximately 56 percent of all operating revenues in 1982 versus 12 percent for collective farms (37).

Improved farm profitability should gain increased attention through the eighties because of the economy-wide emphasis on improved efficiency. State farms could come under particular scrutiny by officials because of their chronic unprofitability.

## VI. Foreign Trade

Foreign trade plays an important role in the Czechoslovak economy as would be expected for a small, highly industrialized but resource-poor country. Manufactured and engineering products make up the bulk of traded goods with agricultural products accounting

[illegible]

The world producer price [illegible]

[illegible]

3. AGRICULTURAL [illegible] AND [illegible]

[illegible]

socialist countries had risen to approximately 75 percent from 70 percent in 1975. This share is one of the largest in the region.

*Agricultural Trade.*—Czechoslovakia traditionally runs deficits on its agricultural trade balance. The deficit in 1982 was valued at approximately $1 billion, 17 percent less (in current prices) than in 1976 and well below the record deficit in 1979 (Table 14).

Grain, oilmeal, vegetable oils and animal fats, cotton, coffee, tea, cocoa, fruit, and meat and meat products are the leading agricultural imports. The leading exports are brewery products, meat and meat products, sugar and malt products (Tables 15 and 16).

Czechoslovakia receives the majority of its fresh vegetables and fruit, tobacco, cotton and meat imports from other East European countries and the Soviet Union. Western nations are the primary suppliers of vegetable oils and fats, coffee, tea, and cocoa, protein meal and grain.

TABLE 14.—TOTAL AND AGRICULTURAL TRADE, 1976–82 [1]

[In billions of dollars]

| | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
|---|---|---|---|---|---|---|---|
| Exports | 9 | 10.3 | 11.7 | 13.2 | 14.9 | 14.9 | 15.2 |
| Agricultural | .3 | .4 | .4 | .5 | .7 | .6 | .5 |
| Imports | 9.7 | 11.2 | 12.6 | 14.3 | 15.1 | 14.6 | 16.2 |
| Agricultural | 1.5 | 1.6 | 1.7 | 2.2 | 2.1 | 1.9 | 1.5 |
| Balance | −.7 | −.9 | −.9 | −1.1 | −.2 | .3 | 0 |
| Agricultural | −1.2 | −1.2 | −1.3 | −1.7 | −1.4 | −1.3 | −1.0 |

[1] 1982 data are preliminary.
Sources: (6, 33).

TABLE 15.—MAJOR AGRICULTURAL IMPORTS, 1976–80 AVERAGE AND 1980–82

[Thousands of tons]

| Commodity | 1976–80 average | 1980 | 1981 | 1982 [1] |
|---|---|---|---|---|
| Grain | 1,679 | 1,975 | 1,003 | 1,326 |
| Oilseeds [2] | 135 | 91 | 51 | 109 |
| Oilseed meal | 643 | 828 | 722 | 767 |
| Vegetable oil, edible | 44 | 21 | 53 | 41 |
| Cotton | 109 | 114 | 109 | 126 |
| Cattle hides [3] | (52) | (51) | NA | NA |
| Meat and meat products [4] | 26 | 31 | 21 | 26 |
| Sugar [5] | 88 | 99 | NA | NA |
| Tobacco | 21 | 26 | 28 | 19 |
| Fruits and vegetables | 486 | 483 | 465 | 428 |

[1] 1982 data are preliminary.
[2] Rapeseed, soybeans and sunflowerseed.
[3] Converted from pieces to metric tons at 22 kilograms per piece.
[4] Includes poultry meat.
[5] Raw basis.
( ) = Estimate. NA = Not available.
Source: (3, 28).

TABLE 16.—MAJOR AGRICULTURAL EXPORTS, 1976–80 AVERAGE AND 1980–82

| Commodity | Unit | 1976-80 | 1980 | 1981 | 1982 [1] |
|---|---|---|---|---|---|
| [illegible] | Thousands of tons | 32 | 54 | 72 | NA |



TABLE 16.—MAJOR AGRICULTURAL EXPORTS, 1976-80 AVERAGE AND 1980-82—Continued

| Commodity | Unit | 1976-80 | 1980 | 1981 | 1982 [1] |
|---|---|---|---|---|---|
| Hops | Thousands of tons | 8 | 9 | 7 | 9 |
| Beer | Million liters | 212 | 215 | 219 | 222 |
| Eggs | Millions | 54 | 23 | 66 | 13 |

[1] Data for 1982 are preliminary.
[2] Includes poultry.
[3] Raw basis.
Source: (3, 28).

## *A. Agricultural Trade Prospects*

The traditional goals of export expansion and import limitation characterize foreign trade policy for the eighties. For 1981–85, exports are to increase by 31 percent in constant prices with exports to socialist countries up 28 percent and those to capitalist countries up 35 percent (4). No figures are available on planned import growth rates. It is certain though, that imports are slated to grow less than exports and any increase in imports will come from socialist and developing countries at the expense of those from developed capitalist countries. The share of trade conducted with CMEA (Council for Mutual Economic Assistance) members will remain steady or rise at least through 1985.

As a net agricultural importer, emphasis is on restraining farm imports. Throughout the seventies, agricultural imports sustained generally increasing per capita food consumption levels, particularly of meat, in excess of domestic capabilities. In 1976–80 for example, roughly one-quarter of the meat and meat products produced in Czechoslovakia was produced with imported feed (17).

The forced reduction in hog and poultry numbers over the last two years and a strong aversion against completely offsetting grain and oilseed production shortfalls through imports should hold down grain imports for the rest of the decade, but oilseed and oilseed meal imports (in soybean meal equivalent) should increase. Every effort will be made to obtain agricultural imports from nonconvertible currency countries first before turning to the West, although this policy can have only limited success.

Assuming a grain crop of 11.6 million tons in 1990, 1990/1991 grain imports should be about 945,000 tons, well below the 1976–80 average of 1.5 million. Oilseed and oilseed meal imports (in soybean meal equivalent) are estimated at 878,000 tons, up from the 719,000-ton average in 1976–80 (Table 17).

TABLE 17.—TOTAL GRAIN, OILSEED AND OILSEED MEAL UTILIZATION, 1976–80 AVERAGE AND 1990–91 PROJECTION [1]

[Thousands of tons]

| Period | Production [2] | Feed use | Other use | Total use | Net imports |
|---|---|---|---|---|---|
| Grain: | | | | | |

TABLE 17.—TOTAL GRAIN, OILSEED AND OILSEED MEAL UTILIZATION, 1976–80 AVERAGE AND 1990–91 PROJECTION [1]—Continued

[Thousands of tons]

| Period | Production [2] | Feed use | Other use | Total use | Net imports |
|---|---|---|---|---|---|
| Oilseeds and oilseed meal: | | | | | |
| 1976–80 average | 100 | 819 | NA | 819 | 719 |
| 1990/91 projection | 117 | 995 | NA | 995 | 878 |

[1] Oilseed and oilseed meal utilization is in soybean meal equivalent and includes fish meal.
[2] Processing from domestic supplies of oilseeds and oilseed meal.

NA = Not applicable.

Sources: (28, 34).

An additional factor which will hold down agricultural imports is the official policy of reducing the country's foreign debt denominated in hard currencies (26). At $3 billion at the end of 1982, Czechoslovakia's net hard currency debt was one of the lowest in Eastern Europe. However, officials hold conservative attitudes toward Western borrowing, particularly in the aftermath of recent Polish and Romanian debt servicing problems. While the country will continue to borrow in Western capital markets, the borrowing should be small and the overall level of the country's hard currency debt in 1990 should be, at worst, no more than the present level.

### *B. Agricultural Trade With the United States*

Czechoslovak-U.S. trade (imports and exports of merchandise) averaged $255 million annually in 1976–80. Trade was below $200 million in 1977 and 1978 but jumped to over $300 million in 1979 and 1980 because of much increased agricultural imports by Czechoslovakia. Conversely, trade was below $175 million in 1981 and 1982 because of a sharp drop in farm exports to Czechoslovakia. U.S. exports accounted for roughly 80 percent of the bilateral trade (dropping to approximately 65 percent in 1981 and 1982) with agricultural commodities consistently claiming an 80 percent or higher share of total exports.

Grain, soybean cake and meal, and cattle hides are the main U.S. export items. Czechoslovak imports of U.S. grain averaged 638,000 tons annually in 1976–82 and were particularly heavy in 1976, 1979 and 1980. Soybean cake and meal imports averaged 218,000 tons annually but varied widely from year-to-year. Cattle hide imports were fairly steady with imports averaging 528,000 pieces in 1976–82 (Table 18).

TABLE 18.—PRINCIPAL AGRICULTURAL IMPORTS FROM THE UNITED STATES, 1976–82

[Thousands of tons]

| Commodity | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
|---|---|---|---|---|---|---|---|
| Grain | 912 | 81 | 398 | 1,252 | 974 | 412 | 435 |
| Soybeans | 1 | 3 | 20 | 3 | 1 | INS | 13 |
| Soybean cake and meal | 475 | 341 | 130 | 243 | 218 | 36 | 85 |
| Cattlehides [1] | 678 | 680 | 586 | 685 | 318 | 334 | 415 |

[1] Thousand [illegible]



Little real growth is expected in bilateral trade through the eighties. The strong Czechoslovak intention to reduce grain imports and the desire to cut hard currency trade deficits will constrain demand for U.S. exports. Also, the United States does not grant most favored nation tariff treatment to the products of Czechoslovakia, nor is the country eligible for agricultural export credits from USDA's Commodity Credit Corp. Any substantial increase in the value of bilateral trade should be due to price rather than volume increases.

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Little real growth is expected in bilateral trade through [illegible] eighties. The strong Czechoslovak inclination to reduce [illegible] and the desire to cut hard currency trade deficits will [illegible] demand for U.S. exports. Also, the United States [illegible] most favored nation treatment to the products of Czechoslovakia, nor is [illegible] credit available for agricultural export [illegible] from USDA's Commodity Credit Corp. Any substantial [illegible] the value of bilateral trade should be due to price [illegible] volume increases.

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# 8. Principal Characteristics of Agricultural Policy Trends in Czechoslovakia

*Joseph Hajda*

## Agricultural Policy Evolution

Attempts to assess future agricultural policy evolution in Eastern Europe are usually related to and colored by the past. The foreseeable future is seen as the continuation of decades of national history telescoped into coming years, with national political leaders being expected to continue efforts aiming at a national adaptation to internal and external demands and expectations.

A glance at the agricultural policy evolution in Czechoslovakia since 1948 reveals that national policymakers had to give recognition to their country's social background and economic conditions. Historically, socioeconomic motives played a fundamental role in shaping national strategies for the long haul. At the same time, external policy considerations contributed in a fundamental way to the evolution of the national operational environments for agricultural policymaking.

Given the overall importance of national socioeconomic orientations in the sphere of agriculture, certain generalizations may be made about the evolution of agricultural policy in Czechoslovakia. Especially relevant is the linkage between ongoing policy change and the origins of policy structure and process.

First, socialist transformation of Czechoslovakia's agricul-

trial development, and agriculture was relatively modern in economic and technological terms.

Second, the main obstacle to achieving a satisfactory rate of progress in the socialized sector was the core of the management system governing the sphere of food and agriculture in the 1950s and the early 1960s.

Third, while the agricultural sector declined in its labor force, it gained in policy interest and importance after the early 1960s, benefited from the reforms introduced in the mid-1960s, and achieved substantial progress in the 1966-75 period.

Fourth, economic and social pressures to create considerable improvement in living standards are generally perceived as the most important factors influencing recent policy evolution. To achieve the working people's demands requires greater emphasis on efficiency in food production and marketing, and a rapid acceleration in the growth of productivity.

Fifth, the demand for abundant food supplies and high-quality products requires fundamental changes in the agricultural economy's structure, and the policy process. Efforts to consolidate, specialize, and industrialize agriculture by combining farms in the cooperative and state sectors into large production units are designed to meet this requirement, as is the substantial infusion of capital, technology, scientific methods, and managerial skills.

Sixth, although it presents an enormously varied picture, life for the majority of farm people was better in the mid-seventies than it was before reforms designed to stimulate agricultural development were introduced in the mid-sixties.

Having linked current policy emphases with the beginning of their evolution in the agricultural sphere, let us now attempt to give a more detailed answer to the question of how Czechoslovakia's socioeconomic and political system has met its most important agricultural policy imperatives. The nature of policy evolution in the seventies will be discussed in the context of the fundamental transformation that took place in agricultural institutions. The evolution of policy can be divided into three stages:



liquidating the established sets of agricultural institutions, and forming and strengthening new sets of socialist institutions in the agricultural sphere.

2. 1961-70. The stage of transition aimed at improving the sets of socialist agricultural institutions by means of gradual and pragmatic changes.
3. 1970s. The stage of fundamental reorganization aiming at centralizing and concentrating the sets of socialist agricultural institutions.

A brief look at the first two stages helps clarify the principal characteristics of policy trends in the 1970s.

*The Stage of Socialist Transformation, 1949-60*

Compared to its East European neighbors, Czechoslovakia seemingly had no significant social problems in the sphere of agriculture in the 1930s. The inequities were so prominent elsewhere that the relative social progress in Czechoslovakia was admired by outside observers. Yet the land reform did not solve many pressing questions when it dealt with large private farms by fixing at 150 ha (370 a) the maximum of arable land an individual could own.

For a brief twenty-two months after May 1945, public policy in Czechoslovakia was produced by a national front coalition, in which the Communist Party shared power with other political parties. A most ardent and vocal champion of the slogan, "Land belongs to those who till it," the Party sought to attract support in the villages among smaller farmers and workers, and pushed to implement land reform goals that limited private ownership to 50 ha (123 a).

In February 1948, the Party terminated the power-sharing arrangement, and assumed the role of the leading political and organizational force in all areas of public life. That fall the Party announced a new policy of fundamental structural changes in agriculture by liquidating the existing sets of agricultural institutions, and launching the two sets of socialist institutions: the major ones under cooperative arrangements, and the others under state management. Conforming with the

23, 1949, a public law providing the legal basis for a new unified agricultural cooperative system.

The Ninth Party Congress in May 1949, directed public attention to the goal of socialist transformation in agriculture. Endorsing resolute action in rural areas—unprecedented in political, economic, social, and technological scope in the modern history of Czechoslovak agriculture—the Party declared a political war on the upper strata of farmers and all others who resisted its drive.

The campaign was the most determined effort ever undertaken by a political party in rural areas of Czechoslovakia. Guided by Party activists from the ranks of smaller farmers and workers—the backbone of the revolutionary effort—the drive accomplished the exacting task of transforming working and living conditions in farming communities in a brief ten years. Farmers who resisted the Party drive became involved in a foredoomed situation. For farm families designated as "political enemies" the consequences were disastrous. To peasants owning smaller farms, methods of voluntarism, persuasion, and object lessons were applied.

Two kinds of traditions were used to form and strengthen the unified agricultural cooperative system. First, the new agricultural cooperative farms benefited from the rich traditions of an advanced cooperative system at home, which had its roots in the latter part of the nineteenth century. Without developing agricultural production cooperatives, the system evolved between the two world wars into a multitude of specialized and diversified cooperative structures—a pluralistic network of various forms of cooperation. The cooperative movement received even more support among different segments of the population after World War II.

Second, the experience in establishing and managing collective farms in the Soviet Union was especially important in formulating the strategy and tactics of socialist transformation in Czechoslovak agriculture. Soviet collective farms were visited by members of Czechoslovak cooperatives. Soviet specialists provided some sage advice in virtually all areas of Czechoslovak agriculture. Czechoslovak agricultural science



Lenin All-Union Academy of Agricultural Sciences.

By the end of 1960, the whole structural framework of agriculture was fundamentally transformed. The sets of formerly dominant agricultural institutions were largely liquidated. The number of people farming individually decreased from more than 2 million in 1949 to .25 million in 1960. Only 10 percent of the agricultural land was still farmed privately, and this was mainly in foothill and upland regions where small-scale agricultural production was tolerated.

Two sets of institutions gained a dominant position in the evolving agricultural system: unified agricultural cooperatives and state farms, both representing forms of socialist ownership with potential for large-scale agricultural production. Striving largely to produce many kinds of products rather than emphasizing specialization, the 12,560 unified cooperative enterprises (the highest number ever reported) owned 63 percent of the agricultural land by the end of 1960. Cooperative membership was nearly 900,000 farm people whose private plots accounted for 4 percent of the agricultural land. There were 170,000 state farm employees, and the state farms' share of the agricultural land was 16 percent.

State machine and tractor stations played an important role in the formative years of the unified cooperative system, but their importance in subsequent years declined and their main function was changed to providing maintenance and repair services.

Great differences emerged among individual agricultural enterprises in the level of organization and management, and in economic performance. On the one hand there were some economically strong enterprises, which were relatively well equipped with qualified personnel and an adequate economic and technological base. On the other hand there were many economically weak enterprises with poor economic and technological bases and a low level of managerial ability.

A system of enterprise management was developed whereby cooperative farm members elected their managing boards, headed by a chairman, to run each farm, with the final authority vested in the membership meeting. While the bulk of

plots not exceeding 0.5 ha (1.24 a). Each member shared in the joint income according to the work he or she had done in terms of an output norm. Cooperatives developed into multibranch, relatively autonomous production units with a functional organizational structure. Each management specialist was in charge of a production sector: plant production was directed by an agronomist; animal production by a zootechnician; and repair shops by specialists in mechanization.

State farms were operated as any other state enterprise employing wage earners. Using a divisional organizational structure based on local spatial production organization, state farms were run through the organizational division of a large production unit into smaller units—more manageable and relatively autonomous farmsteads—united with the whole enterprise system through their managers.

An important impact of public policy was the exodus of people from rural areas to cities. The total permanently engaged in agriculture decreased from 2.1 million in 1949 to 1.35 million in 1960. Working and living conditions of farming people were fundamentally changed. Affecting all aspects of farm life, the socialist transformation in agriculture was the most complex revolutionary change in Czechoslovakia in the 1949-60 period.

*The Stage of Transition, 1961-70*

The 1961-70 period was a stage of transition when the structural framework was modified by gradual improvements. A more pragmatic approach was used in dealing with central issues of agricultural development. With the perceived need in the late 1950s to modify the style of socialist transformation came recognition of the value of modernizing the material and technological bases of agriculture and improving living conditions in farming communities, including housing, cultural life, and other aspects.

The Czechoslovak economic system in the fifties and early sixties was criticized for inefficiency and waste of scarce resources, extensive growth with declining productivity, deceleration and fluctuations in growth rate, "misallocation of [illegible]



the standards of living, rigidity, hampering innovation, administrative monopolization, informational inefficiency, and distorting information."[1] Much of this criticism was applicable in the case of the socialist sector of agriculture.

Initially, the Party could not remedy the serious farm management deficiencies of local leaders, under whose guidance many unified cooperatives were developed. Mismanagement produced distressingly horrendous results from cooperatives led by people with no managerial skills, no education in the fundamentals of agriculture, and no experience in farming successfully. Prospects for improving the cooperatives' performance depended on replacing poorly qualified local leaders with more capable persons. While it would be difficult to estimate their proportion, individuals recruited from the ranks of the Party's former opponents played a significant role in upgrading the management of agricultural cooperatives. After management was improved, cooperatives revitalized themselves, made better use of available resources for the benefit of their members, and enjoyed relative prosperity.

Growth in farm prosperity derived also from advances in scientific and technological knowledge—a most critical element of agricultural development. Research institutes, agricultural universities, and other agricultural schools had a direct role in helping a growing number of cooperatives to adopt elements of scientific and technological knowledge.

Considerable sums had been appropriated in the budgets for financing agriculture. As the state prices paid for compulsory deliveries of agricultural products were lower than those of world markets, agriculture still had to be heavily subsidized. One of the main motives for the subsidies was to make incomes in agriculture proportionate to incomes in industry. As industrial bases grew, manpower reserves dwindled, and the suction effect of industry made itself strongly felt. The problem was how to make the farming population remain in the villages in spite of disparities in income and social allotments, while providing for fundamental social care, including health services, educational and old-age provisions, and child welfare. The obvious answer was to adjust incomes and social allotments to those in industry. This adjustment became an important

principle of public policy and a key improvement. The quest for the complete liquidation of disparity between agriculture and industry was justified as part of a broader program of action aimed at integrating agriculture and industry, a higher standard of rural living and working conditions, and intensive development of agricultural production. Designed to enable rural people to attain the general living standards of people in urban areas, programs implemented emphasized acquiring greater agricultural skills, strengthening agricultural training and education of younger generations, sensitizing youth to changed conditions in farming, and attracting trained people to work and live in rural localities.

By the late 1960s economic conditions had become more favorable on farms. The farm population accepted the unified agricultural cooperative system to such an extent that the issue of abandoning it in favor of private farm ownership was never raised in public discussions of policy goals during the general reform era from January 1968 to April 1969. All public pronouncements consistently stressed the need to preserve and improve the unified cooperative system.

While most important elements in the reform matrix—the different Party strata, the government, and nongovernmental organizations—were divided in their perceptions of the need for economic reform and their preferences for particular proposals, public policy in agriculture never became a major issue. The basic course of agricultural policy was politically acceptable to all segments of the reform matrix.

What did the reformers envisage? The action program adopted by the Party's central committee on April 5, 1968, stated that "cooperative enterprises in agricultural production are of exceptional importance for the development of our economy," and affirmed that "the party considers the development of agricultural production in cooperatives and state farms to be the decisive line of large-scale production in agriculture."[2]

Envisaging a modified approach to overall planning and management, the reformers sought to replace command planning with indicative planning and to substitute economic [illegible] bureaucratic controls. The action



program emphasized that "it will be expedient to make individual cooperatives independent economic and social organizations with full rights, abolish the impractical admmnistrative centralization of cooperatives, and create only such bodies over cooperative enterprises whose economic activity is advantageous for them."[3]

The program voiced support for the conclusions of the seventh congress of unified agricultural cooperatives held in February 1968, "particularly the creation of a national organization of cooperative farmers, the right of unified agricultural cooperatives to do business also in other branches, and the possibility of selling part of the farm products directly to the population and to retailers."[4]

Three different agricultural union organizations were established in the course of 1968: the Czech agricultural union (with individual membership) was formed to protect the individual interests of the cooperative farmers as well as the social interests of the farming population; the Slovak union (with membership by agricultural enterprises) was organized as an economic interest group; the union formed by employees of state farms (included individuals and state agricultural organizations).

Leading Party and government spokesmen endorsed the developments, recognized agricultural unions as an important factor of the political system, and promised to raise social allotments of the farming population to the level enjoyed by industrial workers.

In the stormy atmosphere in late 1968 and early 1969, the leadership of the Czech agricultural union was particularly active, in a coalition with trade unions, on behalf of a variety of public causes.

An important part of the general reforms was the federal arrangement under which autonomous governmental, political, and social organizations were established for the Czech and Slovak nations, including autonomous agricultural agencies. The Constitutional Law of October 1968 adopted a bicameral federal parliament and gave the federal government a share of authority with the Czech and Slovak governments in

were authorized by a constitutional amendment enacted in 1970 to interfere and invalidate the measures of Czech and Slovak structures.

A measured dismantling of the reforms was accelerated after April 1969, but certain important exceptions were made, such as retaining the social and economic benefits attained by the farming population as well as the federal arrangement of institutions of government.

The general reform movement was generated for a variety of reasons, none of them stemming from rural unrest or agitation. On the contrary, tranquility characterized the rural landscape, as the village people were in no mood to engage in general reform activity or to push for fundamental structural changes in agriculture.

Under the impact of relative village prosperity, cooperative farmers learned to enjoy the good things in life. Not wanting to jeopardize their economic security, they perceived the risks of public action leading toward destabilizing the institutional foundations of agriculture, and generally preferred to abstain from deep involvement in the quest for a new national institutional design.

At the end of the 1961-70 period, the structure of Czechoslovakia's agriculture was modified in several respects. The trend toward large-scale agricultural production became visible as unified agricultural cooperatives declined from 12,560 at the end of 1960 to 6,270 at the end of 1970, with the bulk of the decline in the 1961-64 period. By the early 1970s, the cooperatives' agricultural land area was 62 percent of the country's total, the state farms 30 percent, and individual farm holdings 8 percent.

Exodus from the farms changed to a trickle, as the total number of persons permanently engaged in agriculture decreased from 1.35 million to 1.13 million during the 1960-70 decade. The number of cooperative farmers declined from nearly 900,000 to 716,000, and the number of independent farmers, from 256,000 to 147,000. But the number of state farm employees went up from 223,000 to 269,000.

Great differences remained among individual agricultural



in economic performance. Some substandard performances in certain farming areas resulted from unfavorable natural conditions, but great differences were visible even in areas with approximately the same natural conditions. Significant progress was made in projecting the results of some elements of scientific and technological knowledge into agriculture. Enjoying a relatively satisfactory living standard, members of cooperatives were generally satisfied with their incomes, the supply of farm inputs, and the extent to which they were able to codetermine their cooperatives' policies.

*The Stage of Fundamental Reorganization, 1970s*

With the termination of reform rule came the end of independent Czechoslovak experiments in public policy. The new leadership of Czechoslovakia solidified its position by removing the most important elements in the reform matrix from policymaking and by orchestrating the formulation of public policy with the leading members of the Soviet alliance system. Agriculture became part of two closely linked political systems: the changed domestic political system, and the larger international system of the revitalized Council for Mutual Economic Assistance (CMEA).

As the impact of Soviet leadership on the changing domestic relationships and interactions became decisively important, public policy could no longer be made without internalizing Soviet norms and carefully weighing Soviet reactions to the new Party leaders' conceptions of public policy. Reflecting the changed nature of the domestic political system, the Fourteenth Party Congress in May 1971 mapped a new, fundamental reorganization in the structural framework aimed at centralizing and concentrating the established sets of socialist agricultural institutions. Emphasizing the policy of intensification in agricultural production and greater labor productivity, the Party directed public attention to the need for realizing the goal of reorganizing the socialist institutional structure and accelerating agricultural development. That was to be accomplished in a drive for production concentration, specialization, cooperation, and a broad application of the results of scientific and technological knowledge in economic performance. Some substantial performance [illegible] certain [illegible] areas resulted from unfavorable natural and [illegible] units, but [illegible] were visible [illegible] in areas with approximately the same natural conditions. Significant progress was made in [illegible] results [illegible] scientific and technological knowledge into agriculture [illegible] enjoying a relatively satisfactory living standard, members of cooperatives were generally satisfied with their incomes, the supply of farm inputs, and the extent to which they were able to [illegible] concerning their cooperatives' policies.

*The Stage of Fundamental Reorganization, 1970s*

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[illegible] the 1961-70 period, the structure of Czechoslovak [illegible] in several respects. The [illegible] and [illegible] production [illegible] cooperatives declined from 12,000 [illegible] to 6,270 at the end of 1970 with the [illegible] in the 1961-65 period. By the early 1970s, the [illegible] cooperatives' agricultural land area was 62 percent of the [illegible] total, the state farms 30 percent, and individual farms [illegible] 8 percent.

[illegible] the farms changed to a [illegible] the [illegible] number of persons permanently engaged in agriculture [illegible] from 1.35 million to 1.13 million during the 1961-70 decade. The number of cooperative members declined from [illegible] 900,000 to 716,000 [illegible] from 258,000 to 147,000, but the number of state farm [illegible] to 209,000 [illegible]

Closely linked with the changed domestic public policy structure, the revitalized CMEA political structure became significant in public policy production, especially in regard to the components of planning and advanced agricultural research and development. The new Party leaders fully endorsed the comprehensive program for further intensification and improvement of cooperation and development of socialist economic integration, approved by CMEA members in August 1971. As part of the comprehensive program, the concept of socialist integration in agriculture appears to have been intended to embrace all major aspects of public policy concerns and activity, and to have been based on the assumption that in agriculture, as much as in other spheres of public activity, the CMEA countries share indivisible basic interests, evolving into unbreakable relationships, continuing interdependence, and sustained interaction. Fundamental changes in the structural framework of agriculture in Czechoslovakia should be seen as part of the larger international system of the CMEA.

Following the Soviet example, the Party addressed itself to the question of new public policy by seeking to redefine the set of relationships and interactions in the agricultural sphere. Redefining and redistributing decision-making authority in the unified agricultural cooperative system became a central policy concern. Under Party guidance, directives were developed for reorganizing agriculture by enterprise restratification, centralization, and concentration, leading to up-to-date, large-scale enterprises. The directives reflected the long-established ideological predilection to organize agriculture into ever larger production units, and to regroup farms time and again, with the aim of developing optimum-size farms to ensure rational conditions for crop and animal production.

The concept of centralizing and concentrating agricultural enterprises in Czechoslovakia's socialist agricultural system is multidimensional. Three basic dimensions of centralization can be distinguished:

1. *Integration*. Two or more existing units establish a joint, larger unit and develop a single, central organization with a distinct administrative structure that links the units together



functional areas. The joint unit is a new, legally and economically autonomous organization. Integration by function is the result of policy decision by Party and government authorities. The new organizations can be seen as special cases of cooperation.

2. *Cooperation*. Existing units are also able to cooperate to a certain extent in arenas other than the central organization that links the units together. In such cooperation no new autonomous organization is established. The organizational, economic, managerial, and legal autonomy of cooperating enterprise is preserved. Cooperation leads to multiplication of relationships and interactions, which are important for future integration beyond what now exists.

3. *Merging*. Two or more existing units combine in one. They give up their autonomous economic, managerial, and legal identities, and become a single unit with a new autonomous status, and a new organization with an administrative structure that replaces the former structures and is endowed with decision making in general. Merging entails the support or consent of the majority of members of the enterprises concerned.

The problem of centralization and concentration was treated as part of a broader problem involving the whole structural framework with two dominant sets of socialist institutions—cooperatives and state farms. The Party's conception derived from the need to accelerate the process of applying results of scientific and technological knowledge, as well as results from the U.S.S.R.'s experience in modifying its collective farm system. Implementation required organizational measures aimed at bringing together unified agricultural cooperatives and state farms in a process of gradual, harmonious blending so they would become more alike. This momentous problem required policy decision about the intensity and direction of organizational and political changes, including the way concentration, specialization, and cooperation were to be applied. There was the question of forms of integration, cooperation, and merger, and the question of priority among them.

The highest Party and government authorities issued direc-

main path, with the hope that the boundaries among cooperating enterprises, especially among cooperatives, would be gradually eliminated, thus creating conditions for their eventual merging.

The main path of developing agricultural structures for concentration and specialization was intended to consist of various forms of interenterprise cooperation, with the goal of organizing farm groupings with land areas of about 5,000 ha (12,355 a) each. The declared policy envisaged a structural transformation process under the guidance of the Party and government authorities along horizontal lines—involving cooperatives and state farms—as well as along vertical lines—including cooperatives, state farms, and services related to the whole sphere of agriculture. Cooperating enterprises were expected to take into account their own economic situation as well as the national interest in volunteering to establish joint enterprises and make other arrangements for mutually beneficial cooperation. Plans for developing various forms of interenterprise cooperation were incorporated into the plan for developing agriculture at all levels of public management. District studies of specialization, concentration, and cooperation were organized and carried out as part of the ongoing planning process.[5] The policy of merging cooperatives into larger units was considered by Party and government authorities to be less urgent, and feasible mainly in the case of small cooperatives unable to organize their production on a scale commensurate with the demands of specialization and concentration.

The consequences of the directives were most interesting. Cooperatives, state farms, and farm-related service enterprises established joint enterprises specializing in specific functions, such as egg, hog, or poultry production, and formed groupings engaged in various forms of contractual relations providing pools of agricultural technology—especially useful during harvest time. Steps were taken toward more complex forms of cooperation involving joint planning and managing crop and animal production. In some cases full-scale centers of mechanization were established providing greater concentration of



The directives declaring that interenterprise cooperation was a priority path, more passable and acceptable than enterprise merging, had another, rather unexpected, consequence. An avalanche of enterprise merging over-shadowed interenterprise cooperation. Available records indicate an exceedingly speedy acceleration of cooperatives merging in 1972-75. Merging took place at a very high rate in each of the country's ten regions, and in each of the major categories by size—small, medium, and large. Huge farm enterprises were established with an area of several thousand hectares of agricultural land, in which the former cooperatives became component parts in the form of production units.

What actually occurred was an apparently spontaneous action by cooperatives, not intended by Party and government authorities, to merge enterprises of all sizes in a great rush. From the end of 1970 to the end of 1975 the number of cooperatives sharply declined (from 6,270 to 2,747); the number of state farms declined from 317 to 251. Virtually all the decline took place in the last four years of this period—a decrease of over 3,500 cooperatives. The average size of a cooperative increased to 1,525 ha (3,768 a), not quite near enough to the 251 state farms' average of some 5,740 ha (14,186 a).[6]

Cooperative farmers and state farm employees preferred merging their enterprises (frequently merging large enterprises, entailing considerable risks) for a number of reasons. Merging involved fewer financial and economic risks, and less uncertainty about working and living conditions and personal benefits than interenterprise cooperation. Interenterprise cooperation was largely an affair of functionaries and not of the ordinary cooperative farmers and state farm employees. Fearing the uncertain fate of their enterprise as an autonomous agricultural unit under interenterprise cooperation—formed with the support or at least consent of the majority of members of the cooperative concerned—the rank and file opted for merging their enterprises, even though the announced conception of public policy emphasized interenterprise cooperation.

Other reasons probably influenced the accelerated drive for

most likely, was the perception that interenterprise cooperation was a measure whose final aim was merging. Furthermore, the district agricultural administrators probably found it easier to focus on fewer enterprises in their domain, and perhaps even welcomed the decrease from 56 in 1970 to 26 in 1975 in the average number of unified cooperatives per district.

To determine the concerns and problems of the new policy among farming people, the administrators used public opinion polls and surveys. The results indicate the extent to which the farming population recognized, understood, and appreciated the policy. In one such survey more than 50 percent of farming people said, "I don't know," when asked about the significance of interenterprise cooperation, and only 30-39 percent had positive views.[7]

If success in farming is measured by production, then Czechoslovakia showed considerable success in the 1966-74 period. Compared with the less satisfactory results in the fifties and early sixties agriculture has emerged as one of the more vigorous sectors of the national economy since the mid-sixties.

A most satisfactory growth was achieved in average yield of cereals per hectare. It went from less than 22 q in the 1960-65, to 27.7 q in 1966-70, to 35 q in 1973, and to nearly 39 q in 1974. The 1974 record grain production of 10.63 million tons was twice as much as ten years before. Significant growth was also achieved in animal, poultry, and dairy production.[8]

Increased agricultural production derived from the policy emphasizing systematic application of the results of scientific and technological knowledge, as well as improved working and living conditions for the farm population. By the end of 1974 the average monthly income of the members of unified cooperatives was about equal to the average income of state farm employees, and was about the same as that of industrial workers. Provisions for social care of eligible members of farm families were equivalent to those in other sectors of the national economy.

When the Communist Party unveiled the policy of socialist transformation in agriculture late in 1948, more than 2.2 million persons were engaged in farming, with the great bulk in



ture was down to 990,000, or 12 percent of the total labor force, with only 59,000 persons in small-scale private farming, 671,000 persons in cooperative farming, and 252,200 persons employed by state farms.[9] Through mid-1975, the unified agricultural cooperatives maintained a position of prominence at the operational-management level directly in charge of production as the basic and substantial component of the agricultural structure. In view of the government's plans for Czechoslovakia to achieve self-sufficiency in its basic food supplies, the performance of unified cooperatives will be critically important in the years to come.

**Prospects for 1976-80**

By and large, Czechoslovakia's political leaders appear to be satisfied with agriculture's quantitative growth rates in the 1971-75 period, and expect a repetition of this satisfactory performance in the 1976-80 plan period. Their emphasis is on moderate growth in the volume of production, and on maintaining agriculture's status as an important component of life support systems and a stabilizing factor of the national economy. Because they view agriculture as a crucial sector of the national economic development, the farm people's role in increasing the standard of living is generally recognized. Political leaders also stress agriculture's contribution in the sphere of external relations, i.e., as a component helping to solve tasks of external economic character in the context of the larger socialist economic consortium.

For these reasons, it is very likely that every effort will be made toward increasing agricultural production, with the objective of gradually attaining self-sufficiency in grain production, along with improving export capabilities in selected agricultural products. Compared with 1971-75, agricultural production is projected to grow by 14-15 percent in 1976-80, and crop production by 16-17 percent—neither of which seems to be an excessively high target. Increased grain production remains a high priority task. Assuming normal weather patterns and a stable political climate, the achievement of average yields of 41-42 q/ha is not an unrealistic target.[10]

It would appear that the goal of self-sufficiency in grain

production can be attained if three conditions are met. First, income and other incentives in the sphere of agriculture must remain reasonably attractive to farm people. Second, considerable expansion of grain storage capacity must take place. Third, a more satisfactory grain utilization policy must be devised to decrease the proportion of grains fed to animals.

It also appears that the production of sugar beets and potatoes must be given greater attention in 1976-80, because the production of both was less than planned for 1971-75. Sugar is an important export product, and Czechoslovakia's government is most reluctant to import potatoes. Furthermore, to satisfy consumer needs, the production of fruits and vegetables will also have to be increased. An increase of survival production by some 13 percent would be a significant move towards self-sufficiency.

To solve these and related tasks in the 1976-80 plan period will require an even greater emphasis on scientific research and technological development than the previous five-year period. It will also require considerable growth in labor productivity, as the number of persons in the farm sector is expected to decline further by about 100,000 persons.

The most important problem of agricultural development will remain the question of significantly increasing the number of educated and well-qualified persons in agriculture, both in managerial positions and in farm production. The outlook for meeting this problem adequately seems to be considerably brighter in the seventies than it was in the early sixties. Under the impact of the policy to improve working and living conditions of the farm population, many young people have found agricultural occupations less undesirable in recent years. The level of managerial skills was significantly improved after 1965, along with the educational profile of the rural labor force. By the mid-seventies, material and other advantages of rural life, along with improvements in farm production, infused agriculture with rising prestige. Because no major reforms or new departures of any consequence are contemplated for the farm economy in the 1976-80 plan period, it is very likely that agriculture will be held in even higher esteem than in the preceding decade.



To a great extent, the evolution of new policy trends will depend on the outcome of the present policy of production concentration, specialization, and interenterprise cooperation. The results of concentration are expected to help solve the problem of specialization. Both activities are viewed as main elements of agricultural development, and as a decisive prerequisite for further development, because they should facilitate fuller application of up-to-date scientific and technological knowledge in agriculture.

The policy of planned production concentration means fewer, bigger, and more specialized operations with particular emphasis on sophisticated production techniques. Specialization is a matter of both agricultural enterprises and districts choosing one main source of revenue and limiting the range of production without specialization in a specific direction. This question remains unanswered: Will the agricultural sector generate the massive infusion of investment required to maintain a high rate of growth in agriculture, anticipated by the policy of concentration and specialization, or will it rely on a steady flow of resources from other sectors of the economy?

Structural reorganization by means of interenterprise cooperation is expected to bring about new sets of relationships and interactions among cooperatives, between cooperatives and state farms, and among individual branches and activities in the whole food and agriculture complex. Will the policy of interenterprise cooperation succeed in the years to come in overcoming existing differences between the two sets of socialist institutions—cooperatives and state farms? Will the new links between cooperatives and state farms evolve into unbreakable relationships and sustained interactions? Will the cooperatives and state farms develop those relationships in a harmonious blending of the two sets of institutions? Will they gradually approach each other's structure and become more alike? It the answers are affirmative, then there will be no need for implementing an alternative course of action, consisting of administrative measures for unification of cooperatives and state farms on the basis of one or the other's structure. In any case, the long-term aim of the policy of structural reorganization ... to be a transformation of the two sets of institutions

What about the short-run results—other than the growth in crop and animal production—of the policy of production specialization and concentration? While available records are incomplete, it appears that significant progress has been made in applying various elements of scientific and technological knowledge in agriculture on a broader scale than in the 1960s. Furthermore, considerable strides have been made in systematic, advanced studies of agricultural production capabilities with the help of mathematical methods, econometric models, and computers. Finally, while the state, the scope, and the level of services are not commensurate with the demands of an advanced agricultural sector, services related to agriculture were increased and became a more significant component of the food and agriculture complex.

To maintain and improve the effectiveness of the food and agriculture complex, the process of political socialization and recruitment will be critically important. In particular, the socialization and resocialization of farm population will be critical because the outcome of the policy of interenterprise cooperation will depend on the support of the policy. A large segment of the people working on farms seemed to have some doubts that the policy was the best course to protect and promote their interests.

The policy of planned reorganization is linked with close cooperation with the Soviet Union and other socialist countries. Soviet experience in modifying the collective farm system, along with promoting interenterprise cooperation between collective farms and state farms as part of an evolving food and agriculture complex, is an important source for possible application in Czechoslovakia. Intensified cooperation and economic integration within the CMEA framework is a much emphasized element of the Party's conception of public policy.

The leading domestic sources of policy in the agricultural sphere are linked with those external forces. Because external forces contribute to the quality and content of public policy, and because their contribution imposes strong constraints on alternative courses of action, the external forces are at least as



ture as are the domestic situations or structures of events at the operational-management level.

**Conclusion**

Agriculture in Czechoslovakia achieved substantial progress in the 1966-75 plan period. This achievement stands in contrast with the performance in the fifties and the early sixties when the rate of agricultural progress was very slow. Agriculture did not bring about the increased supply of basic food items needed to meet the growing demand for food until reforms were introduced in the mid-sixties to stimulate agricultural development. In view of the government's plans for Czechoslovakia to achieve self-sufficiency in its basic food supplies, it is very likely that every effort will be made in the 1976-80 plan period to increase per capita food supply by maintaining a satisfactory rate of agricultural progress. Assuming normal weather patterns and a stable political climate, the outlook is for significant progress toward decreasing the country's dependence on food from abroad by the end of the 1976-80 five year plan. However, unfavorable weather patterns resulted in less than satisfactory crop harvest in 1975 and 1976, and if climatological disturbances intensify in the five-year period, efforts to achieve the planned rate of agricultural growth could be seriously disrupted.

Moreover, the image of Czechoslovakia's agriculture as an important stabilizing and dynamic factor of economic development depends on external forces—such as the application of the new CMEA pricing structure and the state of global economic security and economic growth. In view of the past record, the task of ensuring continuous progress in the sphere of food and agriculture faces very difficult hurdles.

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## Conclusion

Agriculture in Czechoslovakia achieved substantial [illegible] in the 1966–75 [illegible] period. [illegible] contrast with the [illegible] performance in the [illegible] decade [illegible] when the rate of growth and progress was very slow and [illegible] bring about the [illegible] supply of [illegible] items needed [illegible] the growing demand for food [illegible] [illegible] development [illegible] the government's Czechoslovakia to achieve [illegible] in its basic supplies. It is very likely that every effort will be made to [illegible] to increase [illegible] food [illegible] rate of agricultural progress [illegible] [illegible] toward decreasing the country's dependence on food imports by the end of the [illegible] year plan. However, unless the country's [illegible] terms resulted in [illegible] [illegible] country [illegible] 1976, and if climatological disturbances [illegible] year period [illegible] to achieve the planned rate of growth could be seriously disrupted.

Moreover, the image of Czechoslovakia's agricultural [illegible] and dynamic [illegible] of economic development depends on external forces such as the application of the new CMEA pricing structure and the state of global economic [illegible] growth. In view of the [illegible] [illegible] in the system of trade and agriculture [illegible] very difficult [illegible]

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**Labor Employed in Agriculture as a Percentage of All Labor in the Economy - Central and East European Countries. From <u>Agrarian Policies in Communist Europe</u>. Karl-Eugen Waedekin, 1982.**

from Agrarian Policies in Communist Europe: A Critical Introduction.
by Karl-Eugen Waedekin
edited by Everett M. Jacobs

Table 8.8 Labor Employed in Agriculture as a Percentage of All Labor in the Economy, According to Various Sources and Statistical Calculations

| | Year | CMEA annual averages[a] | Doleshel | Elias and Rapawy | FAO: economically active population |
|---|---|---|---|---|---|
| USSR | 1960 | 38.7 | 38.3 | 41.4 | 41.9 |
| | 1974 | 23.2 | 23.0 | 29.2 | 20.5 (1975) |
| | 1978 | 20.9 | .. | .. | 18.1 |
| Albania | 1960 | ca. 57[b] | .. | .. | 71.4 |
| | 1975 | ca. 50[b] | .. | .. | 63.3 |
| | 1978 | .. | .. | .. | 61.5 |
| Yugoslavia | 1960 | 56.9[c] (1961) | .. | .. | 63.7 (71.5[d]) |
| | 1970 | 44.6[c] (1971) | .. | .. | 49.8 (64.5[d]) |
| | 1978 | .. | .. | .. | 39.8 |
| Rumania | 1960 | 65.6[e] | 65.4 | 68.1 | 64.5 |
| | 1974 | 40.0[e] | 39.8[f] | .. | 51.6 (1975) |
| | 1978 | 32.8[e] | .. | .. | 49.0 |
| Bulgaria | 1960 | 55.5 | 54.7 | 57.1 | 56.5 |
| | 1974 | 30.1 | 29.6 | .. | 39.7 (1975) |
| | 1978 | 25.2 | .. | .. | 35.7 |
| Poland | 1960 | 44.2 | 43.0 | 44.5 | 48.2 (48.0[c]) |
| | 1974 | 31.1 | 30.5 | .. | 34.6 (1975) |
| | 1978 | 30.8 | .. | .. | 32.0 |
| Hungary | 1960 | 38.9[g] | 37.9 | 38.9 | 38.1 |
| | 1974 | 23.3[g] | 22.2 | .. | 19.9 (1975) |
| | 1978 | 21.7[g] | .. | .. | 17.3 |
| Czechoslovakia | 1960 | 25.9 | 24.2 | 25.9 | 25.7 |
| | 1974 | 15.7 | 14.4 | .. | 13.2 (1975) |
| | 1978 | 14.5 | .. | .. | 11.4 |
| GDR | 1960 | 17.2 | 16.6 | 17.6 | 17.6 |
| | 1974 | 11.5 | 10.9 | .. | 11.2 (1975) |
| | 1978 | 10.6 | .. | .. | 10.2 |

[a] Including forestry. The CMEA data are not uniform as to the methods of statistical accounting in individual countries, and therefore are not wholly comparable among each other.

[b] Author's own estimate, to make the Albanian data comparable to those for Soviet agriculture. It is based on the Albanian share of rural in total population (69.1 percent in 1961, and 66.3 in 1970), on the assumptions that this share contains some non-agricultural employees among rural inhabitants and that the degree of agricultural underemployment was sizable. The Albanian newspaper, *Zeri i popullit*, on 25 May 1975, p. 2 (according to *ABSEES* 6:4 [October 1975], p. 141) indicated that the "peasantry," presumably excluding state farm workers and other state employees in agriculture, made up 49.4 percent of the active population.

[c] According to the Polish statistical yearbook *Rocznik Statystyczny 1976* (Warsaw, 1976), p. 554.

[d] Yugoslav census results of 1960 and 1969 (instead of 1970). Current Yugoslav data (67.5 percent for 1960, 60.0 for 1970, 53.0 on the average for 1975-77) are also higher than those of FAO and the Polish source because they include those only seasonally employed.

[e] As of 31 December.

[f] This percentage does not fit with Doleshel's own absolute figure of 6.233 million.

[g] At beginning of year, including apprentices, and water management workforce.

Source: *CMEA statistical annual, 1976* and *1978;* O. Doleshel, *op.cit.*, p. 531; FAO *Production Yearbook, 1975* (Rome, 1976), Table 6 and *1978*, Table 3; Andrew Elias, "Magnitude and Distribution of the Labor Force in Eastern Europe", *Economic Development in Countries of Eastern Europe*, Joint Economic Committee, U.S. Congress (Washington, D.C., 1970) pp. 216, 224-225; Stephen Rapawy (for USSR only), *Estimates and Projections of the Labor Force and Civilian Employment in the U.S.S.R. 1950 to 1990*, Foreign Economic Report no. 10, U.S. Department of Commerce, Bureau of Economic Analysis, Washington, D.C. (September 1976), pp. 40-41 (Table 13); for Yugoslavia: *Statisticki godisnjak, 1970*, p. 87, *1974*, p. 141, and *1978*, p. 119; *Statisticki bilten*, no. 720, p. 17, and no. 866, pp. 11-11-12.