Chapter 3. The Economy



A potter, one of many artisans practicing their trade in modern Bulgaria

FROM THE END OF WORLD WAR II until widespread revolution in Eastern Europe swept aside most communist governments in 1989, the Bulgarian Communist Party (BCP) exerted complete economic control in Bulgaria. The party's ascent to power in 1944 had marked the beginning of radical economic change for Bulgaria. After World War II, Bulgaria followed the Soviet model of economic development more closely than any other East Bloc country. The new regime shifted much of the labor force from the countryside to the city to provide workers for new large-scale industrial complexes. At the same time, the focus of Bulgarian international trade shifted from Central Europe to Eastern Europe.

These new policies resulted in impressive initial rates of growth. But this was partly because the country was starting from a low level of economic development. Throughout the postwar period, economic progress also was assisted substantially by a level of internal and external political stability unseen in other East European countries during the same period and unprecedented in modern Bulgarian history.

Nonetheless, beginning in the early 1960s low capital and labor productivity and expensive material inputs plagued the Bulgarian economy. With disappointing rates of growth came a high degree of economic experimentation. This experimentation took place within the socialist economic framework, however, and it never approached a market-based economy.

In the late 1980s, continuing poor economic performance brought new economic hardship. By that time, the misdirection and irrationality of BCP economic policies had become quite clear. Finally, on November 10, 1989, a popular movement toppled Todor Zhivkov, long-time party leader and head of state, and orthodox communist dictatorship ended. But unlike the communist parties in most other East European states, the BCP retained majority power after the transition in Bulgaria by winning the first free national elections in June 1990. By that time, however, changes in party leadership and reduction of the BCP's power base permitted economic reorientation toward a market system. This difficult transition combined with political instability to seriously worsen economic conditions during 1990.

Bulgaria's success in transforming its economy from central planning to a market-based system remained unmeasured in 1991. Undoubtedly, any form of Bulgarian government faced a daunting task at that point. Because its financial and productive resources had been allocated ineffectively for many years, the economy urgently needed major reforms. The manufacturing sector was uncompetitive in world markets, was technologically outmoded, and consumed energy and materials at enormously wasteful rates. The agricultural sector, once the most productive sector of the Bulgarian economy, had degenerated to the point that the country could scarcely feed its own people. A new trade regime with traditional partners would strain already low hard currency reserves, restricting access to raw materials and sophisticated technology. External and internal debt was enormous when Zhivkov fell. Inflation was high, environmental problems were severe, and skilled labor was insufficient.

Several factors complicate the quantification of socialist economies from a capitalist perspective. Prices in socialist economies serve primarily an accounting function; they do not reflect relative scarcities and demand for a product as they do in capitalist economies. Hence, comparisons of value indicators are difficult. In addition, some socialist statistics simply are calculated differently. For example, the socialist equivalent of national income, referred to as net material product (NMP—see Glossary), excludes the value of most services, including government, that are unrelated to physical production.

Accurate assessment of Bulgarian economic policies and performance under communist regimes also is complicated by incomplete, inaccurate, or misleading statistics. Some Western economists have attempted, however, to extrapolate data based on a combination of Bulgarian statistics, various economic assumptions, and statistical techniques.

Resource Base

Bulgaria is relatively poor in both quantity and quality of natural resources. This situation has been an important factor in planning the national economy and foreign trade. The primary indigenous mineral resources are coal, copper, lead, zinc, and iron ore.

Coal and Minerals

Lignite, by far the most prevalent form of coal, is mined chiefly in the Maritsa-zapad (West Maritsa) and Maritsa-iztok (East Maritsa) sections of the Maritsa Basin (see fig. 10). The main source of other grades of brown coal is the Bobov Dol deposit in the Rila Mountains of southwest Bulgaria. There is little bituminous coal in the country. Copper is mined chiefly in the Sredna Gora (central hills) in the western Balkans, and at Chelopets in south-central Bulgaria. There are also large deposits of lead, zinc, and iron ore,



Source: Based on information from Klaus-Detlev Grothusen (ed.), Bulgarien, Göttingen, Gerrany, 1990, 16.

Figure 10. Energy and Mineral Resources

the largest of which are at Kremikovtsi. Bulgaria became selfsufficient in the production of pig iron in 1987. Manganese, uranium, gold, salt, and chromium also are mined. Small amounts of oil are extracted offshore in the Black Sea and inland near Pleven.

Agricultural Resources

In 1987 approximately 56 percent of Bulgaria's total land mass of 11,055,000 hectares was used for agriculture. Of that total, 3,825,000 hectares, or 35 percent of the total land mass, was arable. Although natural conditions are very good for some crops, not all of the land is ideal for agricultural purposes. Large portions of the western uplands are suitable only for tobacco and vegetable cultivation. Grain fields on the rolling plain to the north of the Balkan Mountains receive limited rainfall and experience periodic droughts.

Environmental Problems

Although Bulgaria has had serious environmental problems for some time, they were not openly discussed until the overthrow of Zhivkov. Ecological groups were at the forefront of anti-Zhivkov demonstrations in 1989, when an all-European ecology conference focused world attention on Sofia. After acknowledging the problem, post-Zhivkov policy makers rated degradation of the air, water, and soil as one of the most serious problems facing Bulgaria. In April 1990, the Ministry of Public Health declared the cities of Asenovgrad, Dimitrovgrad, Kŭrdzhali, Panagyurishte, Plovdiv, Ruse, and Vratsa ecologically endangered regions and announced that residents of these regions would be given medical examinations. But after forty years of touting heavy industry as the pathway to national advancement, Bulgaria could not easily remedy the intense pollution emitted by chemical plants in Ruse and Dimitrovgrad or the copper smelters at Srednogorie without further damaging its already shaky economy. Likewise, the Kozloduy Nuclear Power Plant on the Maritsa River, provider of over 20 percent of the country's electric power but a persistent emitter of radiation, could not be closed without severe impact on the economy. Radiation from the 1986 Chernobyl' accident in the Soviet Union also remained an environmental hazard in 1991 (See Environment, ch. 2).

Labor Force

Because of a low birth rate, labor shortages began to appear in Bulgaria in the 1980s. Then in 1989, deportation of 310,000 ethnic Turks created critical shortages in certain economic sectors. The dislocation caused by the large-scale economic reform that began in 1990 introduced high rates of unemployment and social insecurity to a system that nominally had no unemployment under the central planning regime. A period of protracted readjustment of labor to enterprise needs was expected to begin in 1991.

Factors of Availability

The total labor force in Bulgaria was 4.078 million in 1988. Of that total, 35.9 percent were classified as industrial workers, 19 percent as agricultural workers, and 18.9 percent as service workers. In 1985 some 56 percent of the population was of working age (16 to 59 years old for men and 16 to 54 for women); 22.9 percent were under working age, and 21.1 percent were over working age. These figures indicate that the population had aged demographically since 1946, when 30 percent of the population was under the working age and only 12 percent was over. Small growth rates and occasional declines of the Bulgarian labor force increasingly inhibited economic growth in the 1980s. The meager growth in the labor force was caused primarily by a birthrate that began declining before World War II.

Declining population growth did not affect Bulgarian economic planning and performance for a number of years. In the 1950s and 1960s, the expanding labor requirements of industrial growth were accommodated by a steady influx of peasant labor from the countryside and by the nationalization of artisan shops in 1951. This migration slowed, however, and complaints of an industrial labor shortage were common by the late 1960s. The situation was exacerbated in 1974 when the government reduced the work week from 48 to 42.5 hours (see Agriculture, this ch.). By the early 1980s, Bulgaria's urban working-age population had begun to decline in absolute terms. Then in May 1989, ethnic strife caused thousands of ethnic Turks to leave Bulgaria for Turkey. In August Turkish authorities finally closed the border, but only after 310,000 ethnic Turks had left the country, taking with them a substantial chunk of the Bulgarian work force. In addition, a significant "brain drain" threatened in 1990 when large numbers of young, highly educated Bulgarians applied to leave the country. In the first four months of 1990, at a time when the country desperately needed its professional class to restructure society and the economy, 550,000 such applications were received.

Labor statistics reflect a distinct change of economic priorities from agriculture to industry under communist regimes. From 1948 to 1988, the shares of labor in industry and agriculture shifted dramatically. Industry's share rose from 7.9 to 38 percent, while agriculture's share fell from 82.1 to 19.3 percent. Among other sectors, in 1988 construction, transportation and communications, and trade respectively accounted for 8.3, 6.7, and 8.7 percent of employment.

Labor and Economic Reform

Under communist rule, unemployment officially was nonexistent. Like many other Soviet-style economies, however, the Bulgarian system included much underemployment and hoarding of surplus workers, particularly in industry. While in power, the BCP set wage and work norms. Average annual earnings rose from 2,185 leva (for value of the lev, see Glossary) in 1980 to 2,953 leva in 1988. Earnings were highest in the research, state administration, construction, transport, and finance sectors, in that order. Agriculture and forestry were among the lowest paid sectors.

After the overthrow of Zhivkov, reasonable use of industrial capacity was expected to maintain a tight labor market for the foreseeable future because the labor force had ceased to grow. Women already accounted for approximately 50 percent of the labor force in 1988; therefore, little additional growth was expected from that part of the population. Similarly, little growth was expected from among voluntarily employed pensioners and invalids. However, the tight labor supply was not the most pressing concern of the first post-Zhivkov economic planners. The economic transformation from centralized planning to a market economy meant increased influence by market factors on wage and unemployment rates in the future. This transformation also made high unemployment likely as state enterprises closed and generation of goods and services shifted to an expanded private sector. But this intermediate dislocation was thought necessary to achieve correlation between wages and productivity.

Unemployment, which stood at 72,000 at the beginning of 1991, was expected to jump to at least 250,000 by the end of that year because of the planned transition to a market structure. In 1990 the interim government of Petur Mladenov created a national labor exchange to assist in placing unemployed workers. Unemployment assistance remained a state responsibility, but the state had very little money for this purpose in 1991. Plans called for eventual contribution by private employers to a designated unemployment fund.

Economic Structure and Control Mechanisms

Until late 1989, Bulgaria had a command economy based on centralized planning rather than on market forces. In such a system, crucial economic decisions such as allocation of output, rates of expansion of various sectors, values of goods and services, and the exchange rate of the national currency were made administratively, not by the market. Bulgaria's faithful adherence to the Soviet model of economic planning included rapid industrialization, large-scale investments, and other resource allocation to heavy industry at the expense of light industry and agriculture, higher rates of spending for capital investment than for consumption purchases, and forced nationalization of industry and collectivization of agriculture.

The Centrally Planned Economy

Proponents of centrally planned economies (CPEs) maintained that the advantages of such systems far outweighed the disadvantages. They believed that in many respects economic competition wasted society's resources. In other words, what Marx called the "anarchy of the market" led producers and consumers to expend resources in activities that became unnecessary when they worked in harmony rather than in competition. Planning could give priority to social goals over economic ones. Should the government decide that the development of health professionals was important to society, for example, it could earmark funds for that purpose. Proponents of CPEs also claimed that they could insulate their economies from the ups and downs of the business cycle, a phenomenon that Western economies never have been able to avoid. Theoretically, CPEs were designed to be immune to economic (and social) losses such as reduced output and unemployment associated with economic downturns. (As their national economies became more interrelated with international markets, however, CPE proponents admitted the difficulty of isolating themselves from swings in world economic conditions.) Another theoretical advantage was that economic decisions could be based on long-range goals because the financial losses of any individual enterprise or industry could be offset by profits in other areas of the economy. And, since the organization of the entire industrial and agricultural base was determined administratively, economies of scale could easily be incorporated into the planning process.

Western economists were generally critical of the CPE, however. Their criticisms had two essential components. First, central economic planners often were unable to plan an economy efficiently; and second, even when they could plan well, they were unable to achieve the goals they planned. These general assertions proved true regarding specific aspects of Bulgaria's command economy, and they had ramifications for efforts to reorganize that economy in the 1990s.

The CPE induced enterprises to seek low production targets, concealing productive capacity and never overfulfilling the plan by too much, lest higher targets be set in the next plan. The result was underutilized resources. Plans tended to stress quantity over quality. Simply requiring a particular level of output was insufficient if that output were of such poor quality that no one bought it, or if there were no need for such a product in the beginning. The consumer had no effective control over the producer when quality was low, and the artificial price structure prevented price signals from alerting producers to consumer preferences. Also, because enterprises were judged on their fulfillment of the plan, producers geared production levels for satisfying the plan, not consumers.

The CPE could induce technical progress from above, but it could not stimulate it from below. The plan discouraged enterprise innovation, because innovation meant interrupting current production, hence jeopardizing plan fulfillment. The system also encouraged waste and hoarding of fixed and working capital, and the wage system failed to encourage workers to work harder or managers to economize on labor. Under Zhivkov, Bulgaria attempted to deal with these problems by a series of reforms in both industry and agriculture. These reforms included alternately centralizing and decentralizing economic management; adding and deleting economic ministries and committees: revising the economic indicators for plan fulfillment; and encouraging or discouraging elements of private enterprise. Despite such experimentation, however, Bulgaria remained faithful to the general Soviet model for over four decades. In the years after the end of communist rule, the CPE remained the predominant structural element in the Bulgarian economy, especially in large enterprise management.

The Planning System

Prior to 1990, the planning hierarchy in Bulgaria included several levels. The ultimate economic authority was the BCP. The party determined general economic policies, identified economic reforms and their structure, and monitored economic activity. Planning and control were the responsibility of the Council of Ministers, which was roughly equivalent to a Western cabinet. The most important planning committee within the Council of Ministers was the State Planning Committee (SPC). Within the Council of Ministers were specialized economic ministries, such as the Ministry of Finance and the Ministry of Foreign Trade, and various governmental committees and commissions. The composition and authority of the ministries underwent frequent change. In 1986, for example, six ministries with economic powers were eliminated and five cabinet-level "voluntary associations" were formed. The aftermath of these changes, however, showed few new power relationships. In the later Zhivkov years, the prime responsibilities of ministry-level agencies included forecasting development of their industries, assessing development bottlenecks, and generally overseeing state development policy. However, the ministries were not to participate actively in planning. That was a function of the associations.

The associations, also known as trusts, were an intermediary organization between the ministries and the lowest level of the planning hierarchy, the enterprise. The association integrated production, research and development, design, construction, and foreign trade functions. Unlike associations in the Soviet Union, which were merely an intermediary link in the chain of economic command, Bulgarian associations retained several essential decisionmaking prerogatives and were in direct contact with centers of economic power such as the SPC, the Ministry of Finance, and the Bulgarian National Bank (BNB). At the bottom of the economic hierarchy, enterprises were distinct economic entities that operated under an independent accounting system. They were expected to earn a planned amount of profit, a portion of which went to the state as a profits tax.

In the Bulgarian command economy, almost all economic activity was directed toward plan fulfillment. Economic directives were outlined extensively in the plans, which were not merely guidelines but binding, legal documents. The best known of these was the Five-Year Plan, although planning was done for longer and shorter periods as well. Most important for the day-to-day operations of enterprises were the annual and monthly plans.

One of the most important tasks of central planning was what was referred to as *material balances*—planning for correspondence between supply and demand of goods. At the draft plan stage, this required that supply (planned output, available stocks, and planned imports) equal demand (domestic demand and exports) for every industry. When demand exceeded supply, planners could increase planned output, increase imports, or reduce domestic demand. The SPC usually favored the last alternative. This manipulation limited the flow of inputs to low-priority industrial branches, which most often made consumer items, resulting in shortages of those goods.

The party began the planning process by providing priorities and output targets for critical commodities to the SPC, which reconciled them with required inputs. A draft plan then was created by a process of negotiation and information exchange up and down the planning hierarchy. After negotiating with the SPC on targets and resources and formulating specific guidelines, the associations then negotiated with their individual enterprises to establish final figures. The output targets then went back to the SPC for a final negotiation with the associations.

The final version of the plan was submitted to the Council of Ministers for approval or modification, after which the approved targets were sent down the hierarchy to the individual firms. Thus enterprises were informed of their binding norms for a planning period, including volume and mix of output, procurement limits, level of state investment, foreign currency earnings, foreign currency limits for imports, and wage rates. An important element of the plan fulfillment stage was manipulation of resources by ministries and the SPC to ensure fulfillment of priority targets and minimize bottlenecks. Occasionally, reforms allowed enterprises rather than higher echelons to make many of these decisions. For most of the communist era, however, this was not the case.

Economic Policy and Performance

Bulgarian postwar economic development can be divided into four phases: the revolutionary period (1944 through 1948); the development of socialism (1949 through 1960); the age of intermittent reform (1961 through 1989); and the transformation to a market economy (beginning in 1990).

Postwar Economic Policy

After the BCP came to power in 1944, the transition to socialism began slowly. Before World War II, the Bulgarian economy had been agrarian and decentralized; as a result, the industrial base was relatively undeveloped (see The Interwar Economy, ch. 1). Following the Soviet model, the BCP first sought control over as many facets of the economy as possible. Thus, restructuring included collectivizing agriculture, confiscating private enterprises, nationalizing industry, and enacting various fiscal and monetary measures.

In the 1940s, the BCP viewed the agricultural sector as a major obstacle to the transformation of the economy. Although collectivization proceeded slowly at first, state power in the agricultural markets was quickly established by nationalizing internal and foreign commodity trade. To accomplish this, the BCP used the wartime organizations that had overseen distribution of major crops.

Industry continued to decentralize from 1944 until 1947. In those years, the majority of labor leaving the military and the farms entered small factories and unmechanized artisan shops. These small enterprises were quite the opposite of the modern, large-scale industry that the BCP was committed to creating. Small enterprises also competed with state enterprises for scarce raw materials and skilled labor. Labor discipline also was a major problem during this phase; unexcused absences, sporadic strikes, and high labor turnover plagued the new state enterprises. In September 1947, a decision to accelerate the nationalization of industry was taken at a meeting of the Communist Information Bureau (Cominform see Glossary). As a result, in December 1947 trained groups of party members entered all the approximately 6,100 remaining private enterprises, seized their capital, and announced their immediate nationalization. This act effectively erased Bulgaria's small class of private industrial entrepreneurs. Also in 1947, government monopolies were established over all items of retail trade. By the end of 1948, 85 percent of the means of production were run by the state.

Although Bulgaria had few private banks when the BCP came to power, by December 1947 those few were merged with the BNB. The BCP also enacted a series of fiscal and monetary measures to gain control over Bulgaria's financial resources by the end of 1947. Monetary reform froze all bank accounts over 20,000 leva, and a tax was imposed on the remaining accounts. These actions reduced the money supply by two-thirds. The new policy also levied high taxes on private income and high profits to absorb any potential new deposits.

This first phase of postwar economic development included a tentative Two-Year Plan (1947-48) that foreshadowed later policies. Aimed principally at speedy recovery from wartime stress, the program began large-scale industrialization and electrification; it sought to raise industrial production by 67 percent and agricultural production by 34 percent over prewar levels. The first plan disproportionately allocated funds away from agriculture and encountered severe organizational and technical problems, mistakes by inexperienced management, and shortages of energy and production equipment—problems that would continue in ensuing development phases.

The First Five-Year Plans

The next phase of Bulgarian postwar economic development included the First Five-Year Plan. This plan made an important contribution to the pattern of Bulgaria's socialist economic development by creating the institutional apparatus for long-term industrial planning. Already in 1945, the wartime Directorate for Civilian Mobilization had been replaced by a Supreme Economic Council that extended the previous organization's authority over resource allocation. Now the state's existing economic ministries were subdivided into one ministry for each branch of production. By January 1948, a separate and politically powerful State Production Committee (SPC) was established. By October 1948, representatives of the new SPC and the existing Main Directorate for Statistics had set out the criteria for calculating plan fulfillment.

The announced targets for the First Five-Year Plan (1949-53) confirmed the economic priorities indicated by the previous Two-Year Plan. Agriculture was to receive 17 percent of new investment and industry 47 percent. Gross industrial output was to grow by 119 percent, primarily because of a 220 percent increase in heavy

industry. Light industry and agriculture were to raise output by 75 and 59 percent, respectively. The rapid collectivization and mechanization of agriculture were expected to achieve the last target while freeing labor for industry, construction, and transportation. Because about 25 percent of the country's national income was invested in the economic infrastructure, the standard of living remained low.

In 1952 the plan was declared fulfilled a year ahead of schedule, but statistics on the period were too incomplete and contradictory to evaluate its actual results. Substantial bottlenecks existed in material inputs and outputs. Agriculture received less investment than planned (only 13 percent) and showed no growth through the period (see table 12, Appendix). The effect of low agricultural output rippled through other sectors of the economy, hindering production in related industries. Substantial material and technical aid came from the Soviet Union, but with a steep price: Bulgaria was expected to sell products to the Soviet market at below-market prices, and the arrogance of Soviet economic advisers caused serious resentment.

Continuing problems with excessive labor turnover forced the regime to cut back the targets for heavy industry in the Second Five-Year Plan (1953-57), and average annual industrial growth fell from 20.7 to 12.7 percent during that period. This was the first of several dramatic swings that characterized Bulgarian economic development throughout the postwar period. The average annual growth rate of agriculture increased from negative 0.9 percent to 4.9 percent in the Second Five-Year Plan, but the same indicator for the overall NMP dropped from 8.4 to 7.8 percent. The industrial share of the NMP exceeded that of agriculture for the first time in this period.

Two important economic events occurred at the Seventh Party Congress of the BCP, which met in mid-1958. The party declared that Bulgaria was the first country besides the Soviet Union to achieve full collectivization of agriculture (estimates put the figure at 92 percent at this time), and it announced the goals for the Third Five-Year Plan. That plan, which began in 1958, set relatively moderate initial quotas that included substantially more production of consumer goods. In 1959, however, a BCP decision to make a "Great Leap Forward" (borrowed by the press from Mao Zedong's concurrent program for the Chinese economy) drastically raised quotas: by 1965 industrial output was to be three to four times the 1957 level, and by 1961 agriculture was to produce three times as much as it had in 1957. To achieve the latter goal, agriculture was again reorganized. Amalgamation of collective farms cut their number by 70 percent, after which average farm acreage was second only to the Soviet Union among countries in Eastern Europe. The grandiose Zhivkov Theses, as the quota program came to be known, were tempered noticeably by 1961, when the economy's inability to achieve such growth was obvious to all.

Meanwhile, throughout the late 1950s urban unemployment had been a major problem. The new collectivization drive brought another wave of peasant migration to urban centers. Compounding this problem was a cutback in Soviet imports of industrial inputs, which created some excess capacity in heavy industry. Thus, the intensified industrialization of the Third Five-Year Plan also aimed at absorbing surplus labor.

Trade relations with the Soviet Union and Eastern Europe also played a large role in the investment priorities of the Third Five-Year Plan. Food processing and agriculture were earmarked for greatest growth because these sectors, together with chemical fertilizers and small electric equipment, were now areas of Bulgarian responsibility in the plans of the Council for Mutual Economic Assistance (Comecon—see Glossary) for greater East European trade. After a reduction in 1955, Bulgaria faced greatly increased export obligations to the USSR, Czechoslovakia, and the German Democratic Republic (East Germany) in the late 1950s. The latter two could provide badly needed industrial machinery in return, and the USSR provided vital raw materials and energy.

The party leadership initially resolved to fulfill the third plan, like the first, within three or four years; although none of its goals were reached, the party declared fulfillment in 1960, and Zhivkov survived the popular disillusionment and economic upheaval caused by his totally unrealistic theses. At that point, the twelve years of the second phase of Bulgarian postwar economic development had wrought major structural changes in the Bulgarian economy. Industry's share of the NMP increased from 23 percent to 48 percent as agriculture's share fell from 59 percent to 27 percent. By 1960 the value produced by heavy industry matched that of light industry, although food processing for export also grew rapidly. Throughout the second phase, budget expenditures consisted primarily of reinvestment in sectors given initial priority. Meanwhile, the completion of collectivization had shifted 678,000 peasants, about 20 percent of the active labor force, into industrial jobs. The average annual increase in industrial employment peaked at 11.5 percent between 1955 and 1960.

The Era of Experimentation and Reform

The first full five-year plans proved the Bulgarian system's capacity for extensive growth in selected branches of industry, based on massive infusions of labor and capital. In the first postwar decades, that system was much more successful in reaching goals than were the command economies in the other East European countries, largely because Bulgaria had started with a much more primitive industrial infrastructure. By the early 1960s, however, changes to the system were obviously needed to achieve sustained growth in all branches of production, including agriculture. Specific incentives to reform were shortages of labor and energy and the growing importance of foreign trade in the "thaw" years of the mid-1960s. Consequently, in 1962 the Fourth Five-Year Plan began an era of economic reform that brought a series of new approaches to the old goal of intensive growth.

Industrial Decentralization

In industry the "New System of Management" was introduced in 1964 and lasted until 1968. This approach intended to streamline economic units and make enterprise managers more responsible for performance. In June 1964, about fifty industrial enterprises, mostly producers of textiles and other consumer goods, were placed under the new system. Wages, bonuses, and investment funds were tied to enterprise profits, up to 70 percent of which could be retained. Outside investment funds were to come primarily from bank credit rather than the state budget. In 1965 state subsidies still accounted for 63 percent of enterprise investment funds, however, while 30 percent came from retained enterprise earnings and only 7 percent from bank credits. By 1970 budget subsidies accounted for only 27 percent of investment funds, while bank credits jumped to 39 percent, and retained enterprise earnings reached 34 percent. The number of compulsory targets for the Fourth Five-Year Plan was cut to four: physical output, investment funds, input utilization, and foreign trade targets. The pilot enterprises did very well, earning profits that were double the norm. By 1967 two-thirds of industrial production came from firms under the new system, which by that time had embraced areas outside consumer production.

Another distinctive feature of the Bulgarian economy during the 1960s was the high level of net capital investment (total investment minus depreciation). The average of 12 percent from 1960 to 1970 was the highest in all of Eastern Europe. As in the past, investment in heavy industry received the lion's share—over 80 percent of total industrial investment. Capital accumulation (net investment plus net inventories) averaged 29 percent from 1960 to 1970, also a very high level.

Industrial Recentralization

Before the end of the 1960s, however, Bulgarian economic planning moved back toward the conventional CPE approach. Many Western analysts attributed the Bulgarian retreat from the reforms of the 1960s to tension caused by the Soviet invasion of Czechoslovakia in 1968. International events may well have played a role, but the timing of the retreat and the invasion suggest another component: dissatisfaction among the BCP elite with the results and ideological implications of the reform. For example, in July 1968, one month before the invasion of Czechoslovakia, Bulgaria's unorthodox, three-tiered pricing system was eliminated. The party leadership had never accepted the concept of free and flexible pricing for some products, which was an important Bulgarian departure from centralized planning in the 1960s. Resistance to reform was further encouraged by a series of cases in which major enterprise directors used newly decentralized financial resources to line their own pockets.

Despite the general retreat from reform, two important measures remained intact, one each in agriculture and industry. The first involved new operating procedures introduced on the larger collective farms in the early 1960s. To better exploit the new equipment introduced during the consolidation of the late 1950s, farms were assigned more agronomists and labor was specialized by establishing fixed brigades. Production target negotiations between the Ministry of State Planning and the agricultural collectives also were simplified.

The industrial reform that survived retrenchment in 1968 gave associations, not ministries, responsibility to supervise the new system of supply contracts between enterprises. This system continued to grow, with prices determined on the basis of enterprise bargaining rather than ministerial fiat. Interenterprise allocations clearly functioned more efficiently with this arrangement.

Larger Economic Units

Just as most reforms were being rescinded, the BCP began the last phase of postwar agricultural restructuring. Prompted by the labor shortage, the new streamlining of collective farms that began in 1969 introduced the so-called agricultural-industrial complex (*agrompromishlen kompleks*—APK). The new structure was to industrialize agricultural production, boost the value-added component in Bulgarian exports by processing more agricultural goods, and raise the food supply to cities without diverting labor back from industry. In the late 1960s, relatively poor agricultural performance Craftsman working at lathe, Plovdiv Courtesy Sam and Sarah Stulberg



Spice vendor, Bachkovski Manastir Courtesy Sam and Sarah Stulberg



under the existing structure had prevented those goals from being reached.

The idea of combining existing enterprises into a smaller, presumably more manageable number of units spread quickly from agriculture to industry. By the end of the 1970s, the number of associations into which industrial enterprises were grouped was reduced by half. The sixty-four new, larger associations were granted the authority to make decisions for their enterprises about new investments, bank credits, and budget subsidies. Within an association, the larger enterprises (called subsidiaries) still could sign their own supply contracts and maintain their own bank accounts, but they ceased to be legal entities. Smaller enterprises (called subdivisions) became fully dependent on their association.

The main advantage of this streamlined organization was seen as economy of scale through increased specialization and a simplified flow of information. Associations also were assumed to be better able to make investment decisions and oversee material and labor distribution than either a small number of ministries or a large number of enterprises. The new structure would link specific industrial enterprises with scientific institutes in the same way as the agricultural complexes had linked them.

These reforms proved disappointing. Reformed planning techniques continued to leave unused industrial capacity, and quality control failed to improve. Both Western and domestic customers remained dissatisfied with the quality of many Bulgarian manufactures. New planning indicators that set norms for cost reduction actually reduced quality in a number of cases. Individual members of institutes could not convey their ideas to associations or ministries, where decisions to import or to invest in new technology were made. Thus the new framework only accentuated the dangers of socialist monopoly. Party meetings and the press criticized monopolistic abuses resulting from irrational decisions at the top and poor implementation of rational policies at the enterprise level. By the end of the 1970s, a new set of reforms was prescribed.

The New Economic Model

Initiated in 1981, the next program of reforms was designated the New Economic Model (NEM). This program involved both agricultural complexes and industrial enterprises. Goals of the NEM included updating the technical infrastructure of Bulgarian industry and improving the quality of Bulgarian exports to raise hardcurrency income. Centralized planning now was relegated to setting gross profits and overseeing the national scientific program. In 1982-83 the NEM's principal instruments were financial incentives and accounting regulations aimed at all levels of management, but especially at the smallest unit of labor, the brigade. Brigades, each containing thirty to fifty workers, now would set labor and material input levels and dispose of finished products. In an effort to remedy the chronic distribution problems of the central economy, higher economic institutions became financially accountable for damage inflicted by their decisions on subordinate levels.

Several important initiatives were launched in 1978. The longstanding limits on enterprise investment were lifted. In their place, a new investment plan was based on the enterprises' contractual obligations and credits with the BNB. The bank monitored the cash balance of enterprise contracts with customers and suppliers, granting credits only when required. Three separate reinvestment funds received first claim on the net income of the enterprise. Although budgetary subsidies were not eliminated, the NEM directives assigned responsibility for financial losses to all levels of enterprises. Self-financing became the watchword for all economic organizations.

Another major change eliminated the automatic first claim of salaries and wages on gross enterprise income. This meant that wages could rise only after an increase in labor productivity, and then only by 50 percent of that increase. Moreover, management salaries could be cut by as much as 20 percent if the complex or enterprise failed to meet its norms for production and productivity. The formula for sanctions against management salaries changed several times. Finally, binding performance criteria were limited to five financial indicators for agricultural complexes and industrial associations, and to four for individual enterprises. Profit criteria were set only for the complexes or associations. Complexes and associations were given explicit freedom to sign their own contracts with suppliers and customers at home and abroad.

The BNB was granted some flexibility in restricting its terms of lending and in charging interest rates above the nominal 2 percent. These measures were designed to bestow greater rewards for efficiency and to reduce the number of unfinished or unprofitable new projects. The latter accounted for 57 percent of all Bulgarian investment as late as 1976. A provision for joint ventures with foreign firms met little enthusiasm from abroad.

The Last Round of Zhivkov Reforms

By 1982 economists and the party leadership admitted that the NEM had not led to the anticipated upturn in overall productivity and efficiency. Even upwardly skewed official statistics indicated that aggregate economic growth had dropped to its lowest postwar level. Under the NEM, enterprises could still get approval from state pricing authorities for price increases with marginal or nonexistent quality improvement—an important factor in evaluating official figures.

The differences between the Western concept of gross national product (GNP—see Glossary) and NMP make performance comparisons problematic. However, a Western economist who calculated growth rates for the Bulgarian economy according to the conventional GNP standard used in market economies determined the official Bulgarian growth rates between 1961 and 1980. The calculated rate for 1981-2 was 2.9 percent.

The Bulgarian response to declining growth rates under NEM was to initiate a second set of NEM reforms. Measures in 1982 and 1983 concentrated almost exclusively on financial incentives and prices. Net income was identified as the major basis for judging plan fulfillment. The only other targets were tax payments, domestic and imported input limits, and minimum export levels. The emphasis on self-supporting net income was extended downward to the brigade and upward to the associations. Guarantees of a minimum wage were removed for workers and all levels of management. Ministers themselves now were subject to salary reductions if their industrial association failed to meet the streamlined list of targets. Ministry access to budgetary subsidies for new investment was drastically cut and limited to a fixed term. Most investment capital outside net income had to be procured from the BNB. The bank's increasingly independent guidelines included the authorization to hold regional competitions for investment funds. Interest rates remained low however, ranging between 2.5 and 8 percent.

All these reforms did little to invigorate economic growth. In the Eighth Five-Year Plan (1981-5), the NMP growth rate dropped to 3.7 percent, its lowest postwar level. Officially, industry grew at a rate of 7 percent and construction at 5.4 percent, but agriculture declined by 3.9 percent per year.

In 1985 Mikhail S. Gorbachev visited Bulgaria and reportedly pressured Zhivkov to make the country more competitive economically. This pressure led to a Bulgarian version of the Soviet *perestroika* program (see Glossary). New Regulations on Economic Activity took effect in January 1987. These directives, intended to stimulate "socialist competition," allowed enterprises to retain a much greater share of their profits and also required them to compete for investment capital from newly formed commercial banks. In June 1987, in response to widespread dissatisfaction and confusion over the measures, a decree on collective and individual labor activities made it possible for state economic organizations to lease small trading and catering facilities to private individuals by offering contracts at public auctions. The auctions were an abject failure, however, because of high taxes, high rents, restricted access to capital, uncertain supplies, the short duration of the contracts, and legal insecurity. The idea was quietly abandoned.

Finally, in January 1989, the party issued Decree Number 56. This decree established "firms" as the primary unit of economic management. Theoretically, four types of firm could be created: joint-stock firms, firms with limited responsibility, firms with unlimited responsibility, and citizens' firms. The differences among the first three types of firms were small. But citizens' firms offered the potential of individual, collective, and associative ownership arrangements. In a fundamental departure from the socialist prohibition of private citizens hiring labor, as many as ten people could now be hired permanently, and an unlimited number could be hired on temporary contracts. A wave of reorganizations produced new, larger firms, depriving numerous enterprises of their self-management status. Nonetheless, hundreds of private and cooperative firms were authorized by Decree Number 56.

Other elements of the decree allowed firms to issue shares and bonds and pay dividends, with a number of restrictions. Some clauses sought to encourage foreign investment in the country. Stateowned enterprises that were transformed into joint-stock firms now could have foreign shareholders. Although tax incentives and legal guarantees were provided for joint ventures, little foreign investment was stimulated. In 1989 and 1990, only 117 joint ventures were consummated, totaling US\$10 million in Western capital. In all probability, low labor costs were not enough to attract foreign investment given remaining organizational disadvantages, poor infrastructure, low political credibility, the nonconvertability of the lev, and close economic ties to the Soviet Union.

This last round of reforms by the Zhivkov regime confused rather than improved economic performance. Statistics on growth for 1986-88 indicated a 5.5 percent annual rate, up from the 3.7 percent rate achieved during the previous five-year plan. However, these statistics were internally inconsistent and widely disputed in the press. Expert observers speculated that they were the minimum growth the regime could tolerate given the 6 percent target rate in the five-year plan.

Ultimately, the reforms failed to radically change the economic conditions in the country. Public discontent increased, and, finally, emboldened by revolutions throughout Eastern Europe, the public erupted in a popular revolt that ousted Todor Zhivkov in November 1989. By early 1990, the first attempts were being made to establish a market-based economy.

Economic Sectors

Bulgaria's consistent emphasis on developing heavy industry at any cost created raw material demands well beyond the country's domestic resources. This problem was compounded by the inefficient industrial use of energy and raw materials: Bulgaria used more energy per unit of NMP than any Western economy. For this reason, one of the most salient aspects of the Bulgarian postwar economy was reliance on imported Soviet natural resources.

Fuels

In 1989 Soviet imports supplied Bulgaria with 95 percent of its coal, 90 percent of its crude oil, and 100 percent of its natural gas (see fig. 10). Although Bulgaria imported the majority of its raw materials for energy and industrial requirements, some domestic fuels and minerals were available. A small supply of hard coal was depleted rapidly in the 1980s; in 1987 only 198,000 tons were mined. More ample deposits of low-quality lignite yielded 31,400,000 tons in 1987, but those fuels were relatively inefficient energy producers and high polluters. In 1990 the Maritsa Basin in south-central Bulgaria was expected to remain the prime source of lignite for the foreseeable future; yearly production at its Maritsa-iztok open-pit mines was projected to reach forty million tons after the year 2000.

Energy Generation

In 1988 Bulgaria produced approximately 43 billion kilowatt hours of electricity (in contrast to 384 billion for France and 83.5 billion for Yugoslavia). At that point, planners expected power consumption to increase by about 3.5 percent per year through the year 2000. The 1988 Program for Energy Development through 1995 and in Perspective until 2005 set general long-term goals for the Bulgarian power industry, including more effective integration of machine building and construction industries into power projects. improved balance between supply and demand of energy, and more effective use of low-quality coal and local hydroelectric plants. In 1988 Bulgaria and the Soviet Union signed a bilateral agreement for scientific and technical cooperation in thermoelectric, hydroelectric, and nuclear power generation. That year 59 percent of Bulgaria's electricity came from thermoelectric plants (primarily coal-powered); 35 percent came from nuclear reactors, the remainder from hydroelectric stations. Total generating capacity in

1988 was 11,300 megawatts (in contrast to 103,400 for France, 20,000 for Yugoslavia).

Conventional Power Generation

About 1,500 megawatts of Bulgaria's thermoelectric generation capacity were idle in the late 1980s because of inefficient fuel delivery or equipment breakdown. About half the capacity of local heat and power plants, relied upon to supplement major electrical plants and provide heat for industries and homes, was unavailable for the same reasons.

In the early 1990s, Bulgarian energy planners faced serious dilemmas. At the Maritsa-iztok-1, Maritsa-iztok-2 and Dimo Dichev thermoelectric plants, located in the Maritsa-iztok coal fields, long-term plans called for gradual replacement of old generating equipment in existing stations. But most such projects were far behind schedule in 1990. The 1990 decision not to complete the Belene Nuclear Power Plant meant increased reliance on Maritsa-iztok coal for heat and power generation. In 1990 that source provided 70 percent of the country's coal, and its three power stations contributed about 25 percent of total power generation.

The Maritsa-iztok Industrial-Power Complex (with its machine building and repair enterprises one of the largest industrial centers in Bulgaria, employing 22,000 people in 1991) had been in operation since 1951; by 1991 the quality of its coal and the reliability of its infrastructure were steadily declining. But at that crisis point in the national economy, funds were unavailable for capital investment, especially to buy expensive foreign technology (see Market Reform, this ch.). At the same time, industry authorities acknowledged burning high-sulfur coal and strip mining at Maritsa-iztok as a severe environmental problem whose amelioration would cost at least a billion leva, mostly hard currency.

Hydroelectric power generation was concentrated in southwestern Bulgaria, but few Bulgarian rivers offered large-scale hydroelectric potential. The major hydroelectric project in the Ninth Five-Year Plan (1986–90) was completion of the Chaira station, which would add 864 megawatts of generating capacity. Development of local hydroelectric stations on small streams was a planning priority for the 1990s.

Nuclear Power

Nuclear power provided Bulgaria a way of easing its dependence on imported fuels, although the Soviet Union and Czechoslovakia provided the expertise and equipment on which Bulgaria built its nuclear power industry. Lacking hard currency to buy enough oil, and reaching the toleration limit for pollution by coal-burning plants, Bulgaria increasingly made nuclear power the center of its energy policy in the 1980s. In 1974 the first nuclear power plant was opened at Kozloduy north of Sofia on the Danube River. After completing the original four-reactor complex in 1982, Kozloduy added a fifth unit in late 1987. This was the first 1,000-megawatt reactor in Eastern Europe outside the Soviet Union. A sixth unit was installed in 1989. At that point, Bulgaria ranked third in the world in per capita nuclear power generation, and the extent of its reliance on a sole nuclear power plant was unsurpassed in the world.

The Bulgarian nuclear power industry was beset with major problems from the beginning. The Kozloduy station had a history of technical difficulties and accidents, many of which were related to the low quality or poor design of Soviet and Czechoslovak equipment. The fifth reactor, a constant source of trouble, was out of commission for several months in 1991 because of extensive turbine damage. This setback put the entire country on a brownout schedule that shut off electricity two out of every four hours.

The Chernobyl' disaster in 1986 made nuclear safety a sensitive political issue in Bulgaria, and by the late 1980s public opinion, now a much more significant factor for policy makers, had turned strongly against the nuclear industry. A second nuclear power complex was started at Belene, to add six 1,000-megawatt reactors by the end of the Tenth Five-Year Plan. But construction was halted in 1989 by public opposition and disclosure that both Kozloduy and Belene were located in earthquake-prone regions. Long-term plans for nuclear heat generation also were shelved at that time. In 1991 the government's Commission on Nuclear Power Supply reported that the supply system was poorly organized and managed, and that managers relied on expensive foreign technical help instead of available domestic engineers. The commission also reported that, once Soviet specialists left, a shortage of qualified personnel delayed activation of the sixth reactor at Kozloduy (considered a top priority once Belene was rejected), and that most monitoring instruments in the first four Kozloduy reactors were out of operation.

In mid-1991 the International Atomic Energy Agency (IAEA) declared the Kozloduy reactors unsafe. Two reactors were shut down. Meanwhile, also in 1991, the planned activation of the two newest reactors at Kozloduy raised the problem of nuclear waste disposal because the Soviet Union had begun charging hard currency to reprocess waste from East European reactors, formerly one of its functions under Comecon. In 1991 Bulgaria requested

European Economic Community (EEC—see Glossary) aid to build its first permanent domestic repository for nuclear waste.

The Bulgarian power transmission network was supplemented in 1988 when a high-capacity transmission line from the South Ukraine Nuclear Power Station in the Soviet Union reached the northeastern port city of Varna. But like Soviet fuels, imported Soviet electricity required hard currency in 1991, mitigating the advantages of the old Comecon agreement.

Industry

From 1956 through 1988, industrial production rose an average of 8.9 percent per year according to official figures, but the actual rates declined steadily during the thirty-three-year period. The annual average rate of industrial growth for the periods 1956-60, 1961-70, 1971-80, and 1981-88 was 15.5, 11.6, 7.5, and 4.4 percent, respectively. By the late 1980s, Bulgarian industry had completely exhausted the advantages it had used in earlier decades to post impressive growth statistics (see table 12, Appendix).

Industrial Policy

The cost of Bulgaria's industrial growth was substantial. Besides environmental problems, the commitment to heavy industry came at the expense of light industry—especially food processing and textiles—and agriculture. These were sectors in which prewar Bulgaria had relatively high production potential. But de-emphasis held the official annual NMP growth figures for light industry and agriculture to 7.5 and 2.8 percent, respectively, between 1956 and 1988.

In the postwar command economy, the chief beneficiaries of this emphasis were the chemical, electronics, and machinery industries. Their respective share of total industrial production rose from 1.9, 0, and 2.4 percent in 1939 to 8.8, 14.4, and 15 percent in 1988. Similar statistics indicate big drops in production shares for the food processing and textiles industries—from 51.2 to 23.3 percent, and from 19.8 to 5.1 percent, respectively, in the same period.

Besides the unchanging commitment to heavy industry, two other major trends appeared in postwar industrial policy. The first was steady and substantial support for a basic ferrous metals industry, regardless of cost, in order to reduce dependence on imports. The second was an effort to produce machinery competitive in international markets, with special emphasis on electrical equipment.

A result of the first policy was the Kremikovtsi Metallurgical Complex. In 1954 Soviet-supported geological surveys indicated major new deposits of higher quality iron ore that would support a second complex to supplement the existing V.I. Lenin Ferrous Metals Combine at Pernik. Although the deposits were actually found to be inadequate, the extremely expensive Kremikovtsi plant finally opened in 1963 and used Soviet iron ore to produce over half of the national production of steel and iron through 1978.

The Kremikovtsi complex brought numerous problems. By the mid-1970s, over 75 percent of its ore and coking coal was imported. Costs were inflated by premium wages paid to maintain the labor force and by delays in construction and delivery. Production at Kremikovtsi consistently failed to meet planned targets, and less than three-quarters of plant capacity was used. The enterprise never showed a profit; in 1989 it lost 99.5 million leva despite receiving 600 million leva in state subsidies. Using 15 percent of the country's total energy output, Kremikovtsi generated only 1 percent of national income in the late 1980s.

The strategy of heavy equipment production for export fared better than did metallurgy in the 1970s and 1980s. In fact, the most competitive Bulgarian industries were those most committed to export markets. The machine building and electronics industries averaged 16 percent growth between 1960 and 1980 while their combined share of export value jumped from 13 to 55 percent from 1960 to 1982. The primary exports in these sectors were forklift trucks and electrical hoisting gear produced by the Balkancar enterprise. Computer equipment and chemicals also showed improved export performance.

Bulgaria's postwar industrialization was clearly positive in some sectors. Two notable examples were the construction of electric power plants in the 1950s, which made possible the nationwide spread of industry and the development of an electrical equipment industry that produced exportable products. Nonetheless, as the 1980s drew to a close, it became increasingly clear that even the most competitive sectors had serious problems that the BCP's halfway reforms could not solve. After the initial postwar climb, four decades of socialist central planning had left the industrial sector in a very poor state.

Industrial Centers

Bulgarian heavy industries, mostly machine building, chemicals, and electronics, were concentrated in relatively few production centers. Important machine tool plants were the Bolshevik Tool Plant at Gabrovo, the Nikola Vaptsarov Combine at Pleven, and the Radomir Heavy Equipment Plant in southwest Bulgaria. The Electronic Materials Processing and Equipment Scientific-Production Combine was a combined scientific and industrial center at Sofia. Electronic instrument production centers were located at the Plovdiv Power Electronics Plant, the Shabla Electromechanical Plant on the northeast coast, the Stara Zagora Industrial Robot Plant, the Pravets Instrument Plant in the southwest, and the Petkov Instrument Plant at Tŭrgovishte. Major chemical and petrochemical producers were the Industrial Petrochemical Plant at Pleven (specializing in vehicle lubricants and oils), the Burgas Petrochemical Combine (plastics), the Vratsa Industrial Chemical Combine (chemical fertilizers), and four chemical plants at Dimitrovgrad (see fig. 10). Bulgaria also built large numbers of ships, many for Soviet customers, at its Ruse and Varna shipyards on the Black Sea. The Shumen Vehicle Plant assembled LIAZ-Madara heavy trucks in a three-way arrangement with the Liberac Auto Plant of Czechoslovakia and the Soviet Union.

Obstacles to Industrial Growth

In 1989 the domestic market still featured little or no competition. Over 80 percent of exports went to Comecon countries, and 75 percent of that total went to the Soviet Union. This situation insulated the computers, industrial robots, microprocessors, and other high-technology exports of Bulgarian industry from the market competition that would require backing by substantial investment in research and development. Bulgaria thus developed a practice of expending a small proportion of its national income on applied science, even compared with other East European states.

Falling productivity was a major problem in a number of key industries. Many of these industries were inherently uncompetitive, and attempts to raise productivity through large-scale production concentrated industrial and research facilities into enormous enterprises that further reduced industrial flexibility. Unprofitability made Bulgarian industry dependent on a system of widespread state subsidies. It was reported at the BCP Central Committee plenum in December 1989 that a quarter of all state companies had received state support during the year, totaling 7 billion levaalmost a quarter of the national income. Machine building, one of Bulgaria's key export industries, became a problem area for the economy in the 1980s. Because it was the chief consumer of the overpriced, low-quality output of the metallurgical industry, the machine industry eventually became unprofitable as well. In 1990 Balkancar, the country's biggest company, one of its most successful exporters, and another major customer of the metallurgy enterprises, lost money for the first time.

A critical economic policy decision in the late 1980s was Zhivkov's special emphasis on several energy-intensive industries, despite the

inadequacy of domestic energy supply. In the early 1990s, the new regime faced a choice of dismantling many of those enterprises, finding less expensive energy sources to keep them running, or acquiring enough hard currency to upgrade their technological level and make them less energy-intensive. To further complicate industrial policy, beginning in 1991 the Soviet Union began charging market prices in hard currency for its oil and gas.

Finally, emergence of a significant, fast-growing environmental movement cast the tradeoff of environmental quality for economic growth in starkly negative terms. Barring substantial technical aid (most likely from the West) to reduce industrial waste, public demand for environmentally sound economic policy stood as a formidable obstacle to industrial expansion.

Agriculture

Prior to World War II, agriculture was the leading sector in the Bulgarian economy. In 1939 agriculture contributed 65 percent of NMP, and four out of every five Bulgarians were employed in agriculture (see fig. 11). The importance and organization of Bulgarian agriculture changed drastically after the war, however. By 1958 the BCP had collectivized a high percentage of Bulgarian farms; in the next three decades, the state used various forms of organization to improve productivity, but none succeeded. Meanwhile, private plots remained productive and often alleviated agricultural shortages during the Zhivkov era.

Early Collectivization Campaigns

When the BCP came to power, Bulgarian agriculture consisted primarily of 1.1 million peasant smallholdings. The party saw consolidation of these holdings as its most immediate agricultural objective. It dismantled the agricultural bank that had been a primary source of investment for the agriculture and food processing sectors before World War II.

The first attempts at voluntary collectivization yielded modest results, partly because open coercion was impossible until a peace treaty was signed with the Allies. The labor-cooperative farm (trudovo-kooperativno zemedelsko stopanstvo—TKZS) received official approval in 1945. It closely resembled Soviet cooperatives in organization, although members were guaranteed a share of profits and membership was (nominally) completely voluntary. By 1947 only 3.8 percent of arable land had been collectivized. After the communists won the first postwar election and the peace was concluded in 1947, pressure on private landholders increased. Although most small farmers had joined collectives, by 1949 only



Source: Based on information from Sophie Gherardi, "Bulgaria No Longer Able to Feed Itself," Guardian Weekly [Manchester, United Kingdom], 143, No. 26, December 9, 1990, 16.

Figure 11. Principal Crops, 1990

12 percent of arable land was under state control—mainly because the collectivization program alienated many peasants. But between 1950 and 1953, the Stalinist regime of Vůlko Chervenkov used threats, violence, and supply discrimination to produce the fastest pace of collectivization in Eastern Europe. Sixty-one percent of arable land had been collectivized by 1952. The process was declared complete in 1958 when 92 percent of arable land belonged to the collective farms. This ended the first phase of Bulgarian postwar agricultural restructuring.

Farm Consolidation in the 1960s

At this stage, Bulgarian collectives were much smaller than the Soviet organizations on which they were modeled. To fulfill the ambitious goals contained in the Zhivkov Theses (January 1959) for the Third Five-Year Plan (1958–60), further consolidation was deemed necessary. This process reduced the number of collectives from 3,450 to 932, and the average size of a collective grew from 1,000 to 4,500 hectares.

In the late 1960s, an agricultural labor shortage combined with fascination for China's agrarian amalgamation to prompt further consolidation of collective farms into APKs. By the end of 1971, all of Bulgaria's 744 collectives and 56 state farms had been merged into 161 complexes, most of which were designated APKs. These units averaged 24,000 hectares and 6,500 members. The consolidation continued until there were only 143 complexes in 1977. Several complexes were larger than 100,000 hectares, and twentyfive were between 36,000 and 100,000 hectares. In the short term, they were to achieve horizontal integration by specializing in three or fewer crops and one type of livestock. In the longer term, they would be the basis for linking agriculture with manufacturing and commerce. On the political level, this consolidation was to be a symbolic merger of the agricultural and urban workers, who had remained quite distinct parts of the Bulgarian population since the nineteenth century in defiance of the theory of the unified socialist society.

The new organizations never met the higher agricultural quotas of the late 1970s, however. For some products, yield did not keep pace with investment. Overall growth in agriculture continued to fall after the creation of the APKs. And the goal of freeing farm workers to take industrial jobs was not reached. On the contrary, the annual reduction in agricultural employment dropped from 4 to 2 percent while farm labor productivity declined. As a result, agriculture's share of gross investment in fixed capital fell to 18 percent by 1976, a level last seen in the mid-1950s. In 1978 this failure triggered a new policy emphasizing smaller complexes. Reduced agricultural quotas in the Eighth Five-Year Plan (1981-85) were an admission that too much had been expected from the constant tinkering process.

Reform in the 1980s

By 1982 the total of old and new APKs reached 296, the average size was halved to 16,000 hectares, and the management hierarchy was simplified. Most importantly, the number of annual indicators of plan fulfillment was reduced from fourteen to four. The new, simpler approach also allowed greater freedom for APKs to negotiate prices on surplus production and to purchase their own supplies.

In the last Zhivkov years, the communist regime attempted other agricultural reforms, including autonomy for the collectives. At that point, the only funds the state received from agriculture were 60 percent of foreign currency from exports. Even then, government delivery prices remained so low that state foodstuff monopolies received only the absolute minimum supply. In 1989 the exodus of 310,000 ethnic Turks, many of whom had cultivated personal plots, also hurt agricultural output.

Despite these handicaps, the United States Department of Agriculture estimated that within Eastern Europe Bulgaria was second only to Hungary in agricultural trade surpluses through 1987. After that time, however, agricultural output dropped so far that the country could no longer feed its own people. In 1990 the first rationing and shortages since World War II were the most obvious indications of this situation. Because of domestic shortages, export of several agricultural products was banned in 1990.

Agricultural Products

Two long-term policies strongly determined priorities in Bulgarian agricultural production after 1960. First, livestock was promoted at the expense of crop cultivation, mainly to meet export demand. Between 1970 and 1988, the share of livestock in agricultural production rose from 35.3 to 55.6 percent. As a result, less land was available for crops in that period. Pig and poultry production increased the most, but large numbers of sheep also were raised. The second policy was a shift away from industrial crops (primarily tobacco and cotton), toward production of fruit (most notably apples), vegetables (most notably tomatoes), and grapes. Bulgaria remained an important exporter of tobacco, however, averaging 65 percent of East European exports of that crop in the 1980s. Grain production concentrated on wheat, corn,



Maize combine at work in Vratsa District Courtesy Sofia Press Agency Coal dredger, used in opencast mining, receives final adjustments at the Radomir plant. and barley, crops that are vulnerable to weather conditions. Poor harvests in 1985 and 1986 led to grain imports of 1.8 and 1.5 million tons, respectively. Sugar beets, potatoes, sunflower seeds, and soybeans also were important crops at the end of the 1980s. In 1990 Bulgaria was the world's largest exporter of attar of roses, used in making perfume (see fig. 11).

The Role of Private Plots

After 1970 the only consistent contribution to agricultural production growth was family farming on private plots leased from the agricultural complexes. These plots could not be bought or sold or worked by hired labor, but their yield belonged to the tenant. In 1971 special measures were instituted to increase the number and the availability of personal plots. Beginning in 1974, peasant households were permitted to lease additional plots and given free access to fertilizer, fodder seed, and equipment belonging to their agricultural complexes. To encourage this practice, the government extended loans and waived income taxes. More importantly, delivery prices increased for agricultural products. In the mid-1970s, a reduced work week for urban workers and relaxed requirements for plot leasing encouraged weekend cultivation of personal plots by the nonagricultural population. Plot size limits were removed in 1977.

By 1982 personal plots accounted for 25 percent of Bulgaria's agricultural output and farm worker income. In 1988 personal plots accounted for large shares of basic agricultural goods: corn, 43.5 percent; tomatoes, 36.8 percent; potatoes, 61.5 percent; apples, 24.8 percent; grapes, 43.2 percent; meat, 40.8 percent; milk, 25.2 percent; eggs, 49.4 percent; and honey, 86 percent. The sales from plots to town markets meant that despite low overall agricultural growth rates in the 1980s, the urban food supply actually improved in many areas during the early and mid-1980s.

Post-Zhivkov Agricultural Reform

In 1991 privatization of agriculture was a top priority of the government of Prime Minister Dimitŭr Popov. That spring the National Assembly passed a new Arable Land Law, revising the conditions for ownership and use of agricultural land. The law allowed every Bulgarian citizen to own as much as thirty hectares of land, or twenty in areas of intensive cultivation. Use of this land was at the complete discretion of the owner. Conditions were stated for voluntary formation of cooperatives by private landowners and resale of their land. With some limitations, landowners whose property had been incorporated into state farms were to receive
"comparable" plots elsewhere or other appropriate compensation. The state or municipality retained title to land not in private hands. Another provision described redistribution of land seized by the state from cooperatives and individuals during Zhivkov's several agricultural consolidations. A National Land Council under the Council of Ministers was to oversee land distribution and arbitrate disputes, aided by a system of municipal land commissions.

As was true for reform elsewhere in the Bulgarian economy, agricultural reform encountered stout resistance from entrenched local Zhivkovite officials. Pre-collectivization land ownership records were destroyed, and farmers were threatened or bribed to remain in collectives rather than seeking private farms. Although the Arable Land Law was widely hailed as an equitable and useful economic reform, its association with the Bulgarian Socialist Party (BSP, formerly the BCP) majority brought criticism from the opposition Union of Democratic Forces (UDF). Some farmers circumvented the law simply by seizing land. The government, meanwhile, announced that no state land would be redistributed before the 1991 harvest.

In early 1991, staples such as sugar and olive oil were unavailable in many areas; livestock feed rations had been cut by more than half; a grain shortfall of 1.7 million tons was expected; meat, withheld from markets until new government prices were announced, was very scarce and expensive in cities; and fertilizers for the year's crops were in very short supply. Western firms expressed interest in joint agricultural ventures in Bulgaria, but hesitated because of uncertainty about political and legal conditions for such projects. A new round of government price-fixing in February 1991 substantially raised food prices but did restore supplies of some items.

Transportation

The Bulgarian transportation system in 1987 was poorly developed compared with systems elsewhere in Europe. The rail system totaled 4,300 kilometers of track, of which 4,055 were standard gauge, 2,510 were electrified, and 917 were double track. In the 1980s, Bulgaria moved away from diesel engines toward electrical rail haulage. By 1988 some 83 percent of freight was moved by this method, compared with 60 percent in 1980. In 1987 the rails carried 83 million tons of freight and 110,000,000 passengers. In 1987 Bulgaria had 36,908 kilometers of roads, 33,535 of which were hard surfaced and 242 of which were classified as motorways (highways). In 1987 some 940 million passengers and 917 million tons of freight traveled by road. No major extension of the rail or the road system was built in the late 1980s.

In 1988 the freight system moved 103 billion ton kilometers (see Glossary) of freight, the majority (62.9 percent) by seagoing transport (see fig. 12). Of the dozen Bulgarian ports on the Danube, the most important was Ruse. The remaining freight was moved by rail (17.1 percent), road (16.9 percent), inland waterway (2.1 percent), and pipeline (1 percent). In 1988 the national airline, Balkan Airline, totalled 32 billion passenger kilometers (see Glossary). Rail provided 25.5 percent of passenger transport, roads 62.2 percent, and air 12.2 percent.

The Bulgarian transportation system suffered financial neglect through most of the communist era. Investment in this sector was never extremely high, but in 1988 overall investment fell almost 25 percent. The largest drops were in sea transport (96 percent), river transport (63 percent), pipeline transport (62 percent), and rail transport (18 percent). The Bulgarian State Railroad typified the neglect and overuse of the transportation system. In 1990 authorities estimated that 27 million leva would be needed to restore the railroads to satisfactory operating condition. Meanwhile, rail revenues fell by 10 million leva during the first five months of 1990 as a result of lower industrial production and equipment breakdowns. At that point, about one-third of Bulgaria's passenger railcars and two-thirds of railroad equipment were completely depreciated, and 78 locomotives and 3,500 freight cars were idle due to breakdowns. Some 300 kilometers of track were classified as urgently needing repair.

Communications

Throughout the communist period, the state controlled all media. In 1987 Bulgaria had eighty radio and forty-three television transmitters. Two television networks broadcast over nineteen stations in 1991, with 250 low-power repeaters extending coverage to rural areas. The radio system featured three networks with twenty longand medium-wave stations. Foreign-language programming in Albanian, Arabic, English, French, German, Greek, Italian, Portuguese, Serbo-Croatian, Spanish, and Turkish was broadcast from short- and medium-wave stations in Vidin, Stolnik, Kostinbrod, and Plovdiv. Bulgaria was a member of the Intervision East European television network, but in 1991 it had not joined the International Telecommunications Satellite Organization (Intelsat). In 1990 approximately 2 million radio receivers and 2.1 million television sets were in use. Some 2.23 million telephones were in operation in 1987 (see table 14, Appendix).



Figure 12. Transportation System, 1988

In 1991 Bulgaria began privatizing its communications sector. The Commission on Communications and Information Science, with the help of West European communications experts, developed a plan for formation of ten independent companies to operate in communications services, the equipment industry, construction, and other related areas. The companies would operate under authority of a state regulatory organization similar to those in Western Europe. This plan would mean gradually dismantling the national communications monopoly while retaining the unified national telegraph, postal, telephone, radio, and television services. Meanwhile, private companies outside the existing networks were to be encouraged to compete for new customers, and prices were to rise accordingly from the artificially low levels of the command economy period.

Banking and Finance

Under the Zhivkov regime, Bulgaria followed the customary communist pattern of a single state-run bank performing all banking and investment functions. Investment policy was the province of state planning agencies, with substantial input from the BCP and the national bank. Post-Zhivkov reform aimed at privatizing and compartmentalizing the banking system, a goal that would likely require years of gradual reform.

Currency and Exchange

The national currency of Bulgaria is the lev (plural, leva-see Glossary), which is divided into 100 stotinki (sing., stotinka). Throughout the communist era, the lev could be used only in domestic transactions because it was not convertible into foreign currency. Bulgarian nationals were prohibited from owning foreign currency, and the law prohibited citizens and foreigners from entering or leaving the country with leva. As was true for domestic prices, the value of the lev was administratively determined. This fact led to frequent overvaluing of the lev in terms of hard currencies and black market rates well below official exchange rates. Besides official rates, which were based on a gold parity developed after World War II. a commercial rate was used for business transactions and statistical purposes, and a tourist rate determined the amount received by foreigners in Bulgaria for their domestic currencies. None of these arbitrary rates reflected the relationship of domestic and foreign prices. Trade with Western countries was conducted in hard currency, while the transferable ruble, an accounting device with no convertible value, was primarily used to clear commercial accounts within Comecon. In 1990 the lev was devalued several times, finally settling at rates of about 0.76 lev to the United States dollar (official), 3 leva to the dollar (commercial), and 7 leva to the dollar (tourist). The black market rate fluctuated considerably, but ended 1990 at approximately 11 leva to the dollar. In mid-1991 the Bulgarian National Bank (BNB) issued conversion tables for the lev into major world currencies (see table 15, Appendix). The official value at that time was 18 leva to the United States dollar.

Banking System

As the chief financial instrument of economic policy making, the BNB assumed virtually all of the financial functions in the country under the centrally planned economy. Only the granting of foreign trade and consumer credits were separate functions, performed respectively by the Bulgarian Foreign Trade Bank and the State Savings Bank—both of which were subordinate to the BNB. The BNB worked with the Ministry of Finance to finance capital investments in the economy. The BNB also monitored the economic organizations that received investment funds to ensure their use for accomplishing plan targets. As enterprises became more selffinancing in the 1970s, a greater share of their investment capital was composed of bank credits granted by the BNB. Between 1965 and 1975, the BNB share of investment funds jumped from 7 percent to 54 percent; the trend then moderated as enterprises began to rely more on retained earnings to finance investments.

Like industry and agriculture, banking under the BCP experimented occasionally with decentralization but remained quite centralized until shortly before the overthrow of Zhivkov. A 1987 reform nominally split Bulgarian banking into a two-tiered system. The function of the BNB was restricted to money supply, although it also retained significant supervisory power. The reform also created several specialized banks including the Agricultural and Cooperative Bank, the Biochemical Bank, the Construction Bank, the Electronics Bank, the Transportation Bank, and the Transport, Agricultural, and Building Equipment Bank—each responsible for an industrial sector.

Post-Zhivkov banking reform began hesitantly but grew more comprehensive in 1991. In a controversial policy decision, the government first increased interest rates from 4.5 to 8 percent in 1990, then let them float freely beginning in 1991. Although the first private commercial bank was established in May 1990, a new National Bank Bill was not passed until June 1991. That law provided for a two-tier bank system independent of direct government control but accountable to the National Assembly. The first tier



Overpass loop in Tsarigradsko Highway, Sofia Courtesy Sofia Press Agency

of the new system was to be the Central Bank, the second a separate system of commercial banks and lending institutions serving private citizens and enterprises. Three-month bank credits would be available to cabinet ministries. The BNB was to issue monthly balance statements and report semiannually to the National Assembly.

Investment Policy

In choosing among alternative investment projects, Bulgarian planners in the Zhivkov era faced greater difficulties than investment decision makers in Western economies. True relative costs of labor and materials were masked by state assignment of prices, meaning that funding allocations among projects often were arbitrary. In most cases, investments were not based on efficiency criteria, but rather on plan goals. Artificially low interest rates also discouraged enterprises from efficient investment fund allocation.

The state budget also guided party economic policy under the old regime. Until the reforms of the 1970s, the budget was the primary source of funds for enterprise investment. Budget revenues were originally derived mainly from the turnover tax, a retail sales tax that was also used to regulate demand for various products. Beginning in the mid-1960s, budget revenues were derived progressively less from the turnover tax and more from taxes on net enterprise income.

Prices

Investments in inefficient operations and subsidies on consumer items often led to budget deficits. Often the state simply printed more money to cover its obligations. Eventually this practice led to circulation of excess currency compared with consumer goods and services available at prevailing prices. Because prices were administratively set, shortages and long lines occurred more often than inflation under the CPE. But party-directed general price increases such as the average 15 percent rise in 1979 usually were quite steep.

In the post-Zhivkov era, economic planners saw marketdetermined prices for most goods and services as their long-term goal. In 1990 the prices of 40 percent of goods and 60 percent of services were freed from administrative control. In the second half of 1990, price liberalization raised consumer prices an average of over 50 percent. In February 1991, price controls were removed from all goods and services except fuels, heat, and electricity. Immediately after this step, average food prices were nearly six times their 1989 level; housing was up 3.7 times, clothing three times more expensive. These levels, established by an independent trade union study, were above the level triggering new talks on compensation payments. (For the second consecutive year, a government indexation program was established to reimburse a share (estimated at an average 65 percent) of the higher cost of living caused by the new price policy in the first half of 1991.) In a twomonth period of early 1991, consumption dropped by over 50 percent, but total consumer spending still increased by 11.5 percent.

Foreign Trade

Membership in Comecon tied Bulgarian trade policy closely to the Soviet economic sphere following World War II. By 1991, however, trade policy was on the verge of significant diversification. With the trade protection of Comecon no longer available, Bulgaria aggressively sought new markets in the West while seeking to retain the most advantageous commercial relations with its former Comecon partners.

Postwar Trade Policy

The adoption of the Soviet economic model had direct and indirect impact on Bulgarian international trade after World War II. Among direct results was the decision to reduce dependency



Roses cultivated in Valley of Rose to produce attar of roses fo perfume industr Courtesy Sam and Sarah Stulber

Drying tobacco, one of Bulgaria major export crops, Melni Courtesy Sam and Sarah Stulber on prewar Western trade partners. This decision meant strong promotion of import substitution policies to bolster domestic production of goods previously imported. In 1960 Bulgaria's total foreign trade (exports plus imports) was 31 percent of NMP, quite low for a country with a small internal market and few natural resources. By the 1980s, however, this figure had risen to over 90 percent. Before World War II, Germany was well-established as Bulgaria's top trading partner. Postwar economic policy diverted trade from Central Europe to Eastern Europe, and primarily to the Soviet Union. The new domestic economic priorities dictated a revised foreign trade structure (see table 16; table 17, Appendix). The policy of promoting heavy industry, for example, required huge imports of machinery and raw materials (see table 18; table 19, Appendix). Beginning in the mid-1950s, imports of machinery accounted for approximately half the value of total imports, while fuels, metals, and minerals made up more than a guarter of this value. Lower postwar investment in agriculture eventually lessened the share of foodstuffs in total exports.

The state monopoly of foreign trade also changed the way decisions were reached on international allocation of goods. Trade decisions were reached administratively by planning authorities or negotiated with other members of Comecon. Overall control of foreign trade was shared among the Ministry of Foreign Trade, the Ministry of Finance, and the Bulgarian Foreign Trade Bank.

Import and export operations were conducted by foreign trade enterprises, most of which were affiliated with one or more associations but retained a legal identity outside the associations. Although reform measures by the Zhivkov regime gave associations some profit incentives in international trade, the producing enterprises themselves were completely isolated from the foreign customer. This situation meant that world quality standards had no influence on Bulgarian producers.

Bulgaria in Comecon

The most important event in postwar Bulgarian international economic relations occurred in 1949 when it became a founding member of Comecon. Comecon was an attempt by the socialist economies to simplify the planning process by synchronizing the five-year plans of member countries and, more importantly, by achieving what Marxists called an international division of labor. Countries within Comecon would specialize in the products they made most efficiently and export the surplus. Products that a country could not produce efficiently would be available from one or more of its Comecon partners. This design was intended to eliminate some redundancies inherent in the Soviet economic model where each country produced goods of all categories. Although the concept achieved isolated successes such as Bulgarian forklift trucks, broad growth was blocked by the uniform socialist preoccupation with heavy industry and the lack of a single convertible currency. The currency issue in particular made intra-Comecon trade a cumbersome process requiring negotiation of annual bilateral trade agreements for all member nations.

In the 1980s, exports to the Soviet Union consisted primarily of machinery, electronic components, and agricultural goods. These included forklift trucks, electric engines, telephones, tobacco, fresh fruits and vegetables, and wine. Imports from the Soviet Union were mainly energy and raw materials, including oil, natural gas, iron ore, ferrous metals, and cotton. In 1988 Bulgaria still relied almost entirely on Soviet oil and natural gas. East Germany and Czechoslovakia were the next most important Comecon trading partners, accounting for 5.2 and 4.6 percent of exports, respectively, and 5.9 and 5.4 percent of imports, respectively. Exchanges of goods between Bulgaria and these countries emphasized both exports and imports of machinery and the export of agricultural products.

In the initial years of Bulgaria's Comecon membership, the country benefited from energy prices below world levels, especially for oil, in two ways. The cost of developing otherwise inefficient industries was lower, and reexport of crude and refined oil for hard currency bought Western technology to upgrade the industrial infrastructure. Comecon members paid for their imports through bilateral clearing agreements, with no exchange of hard currency. In the initial stages of Comecon, Bulgaria exported mainly food, the price of which was lower in Comecon than on the world market. Later, however, Bulgaria paid for imported Soviet raw materials largely with machinery that was priced higher than on the world market.

Beginning in 1974, Soviet energy exports were based on a floating five-year average of world prices that rarely matched market prices at a given time. Even when Comecon prices were above the world level, Bulgaria benefited from the lack of currency exchange in the Comecon system. But dependence on Comecon trade, especially Soviet energy exports, damaged Bulgaria tremendously when economic reform swept through the Soviet sphere in 1989 and 1990. Of Bulgarian exports, 62.5 percent still went to the Soviet Union in 1988, and 53.5 percent of imports came from that country. The new trade system, established after reforms, required trade accounts to be cleared in hard currency at current world prices as of January 1, 1991. (Bilateral protocols for this procedure had not been signed by that time, however; Bulgaria still owed Hungary 87 million transferable rubles in 1991.)

After the political reforms in Eastern Europe, the Soviet Union announced cutbacks in energy exports to Eastern Europe. The cutbacks caused energy and raw materials shortages. In 1990 Bulgarian industry was forced to curtail production sharply; meanwhile, consumers endured severe shortages of gasoline as fuel prices doubled. A new set of export and import regulations adopted in mid-1991 removed import taxes from 200 types of raw materials and consumer goods in critically short supply. The same regulations set export price minimums to eliminate pricing below world market levels; export of crude oil, metals, grains, and textile raw materials was banned.

Trade with the West and the Third World

After 1960 Bulgaria's trade with the West increased, partly because Bulgaria needed Western machinery to supplement the outdated, overpriced manufacturing equipment supplied by Comecon. Between 1960 and 1975, the Western share of Bulgarian imports went from 13.6 percent to 23.6 percent. In the same period, however, exports dropped from 12.4 to 9.3 percent, creating an external debt problem with the West. Increased exports to Third World nations did little to help Bulgaria reduce this trade deficit because most Third World trade was not in convertible currencies.

Throughout the 1970s, Bulgarian trade balances alternated between solvency and high deficits. Although the trade deficit was eliminated in 1975, many short-term debts to West European banks remained. By 1976 Bulgarian debt was 13 percent of estimated GNP—the highest ratio in Eastern Europe at the time. Bulgaria greatly diminished this debt by reexporting Soviet oil to Western buyers in the late 1970s.

From that point, Bulgaria maintained trade surpluses in hard currency until 1985, when emergency imports of grain and coal created a deficit of US\$200 million. A series of poor harvests, high machinery imports in the investment push of the Ninth Five-Year Plan (1986-90), and sharply dropping oil prices deprived Bulgaria of hard currency and created a major new trade deficit. Libya and Iraq, the main Third World customers with which a surplus had been accumulated, also reduced their purchase of Bulgarian goods at this time.

The resulting trade deficits were financed by credits from Western banks. After the overthrow of Zhivkov, the government announced that the gross hard currency debt had reached US\$10.6 billion by



The shipyards at Varna Courtesy Sofia Press Agency

the end of 1989. Net indebtedness was somewhat lower at US\$7.7 billion, but much of the hard currency export credits that Bulgaria granted were to Libya and Iraq, who were likely to default on many of their deals. Bulgaria had arranged for Iraq to repay these loans with oil, but in 1991 the trade embargo and ensuing Persian Gulf War negated that agreement. In March 1990, the incoming Bulgarian government announced unilateral suspension of principal payments on outstanding debt, and later interest payments were suspended as well. Western lines of credit immediately were frozen, and Bulgarian hard currency holdings dropped to the minimal level of US\$200 million in May 1990.

Bulgaria's main Western trading partners were the Federal Republic of Germany (West Germany) before German unification in 1990, Switzerland, and Italy. Exports to these countries were relatively minor, accounting for between 1 and 0.7 percent of total exports. Imports from West Germany were 4.9 percent of the total, while Switzerland accounted for 1.4 percent of imports, and Italy 1.1 percent. Trade with the developed, Western economies resembled trade between an undeveloped country and an industrialized one. Bulgaria imported mostly machinery from those countries and sold them raw and semifinished materials and agricultural products.

The most important Third World trading partners, Iraq and Libya, purchased 2.8 and 2.3 percent of Bulgarian exports, respectively. These exports consisted mainly of major construction projects and agricultural goods. The overthrow of the Zhivkov regime revived talk of establishing a Black Sea Trading Zone that also would include Turkey and Greece and perhaps Romania. In establishing its new trade policy in 1991, Bulgaria faced a choice of expanding its traditional commercial ties with Germany and Germany's partners in the EEC or cultivating new ties with closer markets such as Turkey. In 1991 Turkey offered to invest US\$13 billion in Bulgaria's economy. An independent Union for Cooperation between Bulgaria and Turkey was founded to foster direct cooperation between enterprises of the two countries, and transportation links were solidified by ministerial agreements in 1991. Talks with the EEC early in 1991 vielded assurance of short-term EEC financial support through the PHARE (Polish and Hungarian Assistance for the Reconstruction of Europe) program and closer future ties, assuming that Bulgaria continued to make progress in its political and economic reform programs.

New Trade Conditions, 1990

The end of central planning opened the Bulgarian economy to world competition and began a wrenching transition for which it was ill-equipped in finance, industrial diversity, agricultural infrastructure, and available natural resources. The transition was made doubly difficult because the long years of privileged access to energy had fostered inefficient energy use in the Bulgarian economy.

Under the new economic conditions, imports would be purchased only in hard currency. Although Western firms and governments offered some credits and aid in 1991, Western investors preferred Poland, Hungary, and Czechoslovakia to Bulgaria. Those countries were more familiar to Westerners, and they had had relatively advanced market economies before World War II. For these reasons, in the early 1990s they received the lion's share of a rather meager Western investment in Eastern Europe.

Standard of Living

From the end of World War II until the 1960s, the Bulgarian standard of living experienced no significant improvements. A net decline may have occurred during some of the collectivization drives. The first improvements came when the government instituted a minimum agricultural wage as part of its reconciliation with the peasants after the Zhivkov Theses failed in 1960. Increases in

real incomes in agriculture rose by 6.7 percent per year during the 1960s. During this same period, industrial wages increased by 4.9 percent annually. Early in the 1960s, higher prices offset those wage increases; but by 1970, increased urban food supplies made improved urban incomes meaningful. According to official data, from the Fourth through the Eighth Five-Year Plans (1961-85), growth in real wages ranged from 5.3 percent (1966-70) to 0.5 percent (1976-80). The latter figure is low because a major price revision in 1979 raised prices of foodstuffs by 25 percent and consumer goods by 15 percent. Real growth in Bulgaria at that point was the lowest in Europe. Bulgarian statistics indicating real income growth often were inaccurate, however. A major distortion resulted from the failure of official figures to account for variations in availability of commodities or services or for government subsidies for food, housing, education, and health care-vital factors in evaluating standard of living and purchasing power.

In 1990 a Bulgarian economist made an independent attempt to construct a consumer price index for the period 1979 through 1989. Based on those findings, inflation during that period was 131 percent, or 8.7 percent per year. Official data showed a 9.0 percent increase in consumer prices between 1980 through 1988, or 1.1 percent annually. The same study compared the quantity of various food items that could be purchased with the average monthly salary in nine different countries, including four in the West (Austria, France, West Germany, and Britain). Of ten basic food categories, the lowest amount that average monthly earnings could purchase in the Western economies was 3.3 times the amount obtainable from average monthly earnings in Bulgaria. Even in comparison with the other socialist countries in the study, Bulgarian purchasing power was the lowest by at least 25 percent. A mitigating factor in the latter set of comparisons is that official encouragement of private plots spurred substantially greater availability (albeit at greater cost) than in most other East European economies.

Some improvement was achieved in the Bulgarian diet in the 1970s and 1980s. Wary of popular discontent, Zhivkov made a major speech in December 1972 in which he promised a ten-year program to raise living standards in general and to raise food consumption to the "scientific norms" set by the United Nations (UN). Zhivkov never was entirely successful in this effort, however. Bread and sugar were the only foods for which Bulgarian consumption rates reached or exceeded UN norms in the later Zhivkov years.

Availability of consumer durables significantly improved in the 1970s. According to official statistics, between 1965 and 1988 the number of televisions per 100 households increased from 8 to 100;

radios increased from 59 to 95; refrigerators from 5 to 96; washing machines from 23 to 96; and automobiles from 2 to 40. Available automobiles were primarily Soviet Fiats, some of which were manufactured in Bulgaria. Assembly of the Soviet Moskvich began at the Lovech Vehicle Assembly Plant in 1988.

Housing was one of the most serious shortcomings in the Bulgarian standard of living. Residential construction targets in the Five-Year Plans were regularly underfulfilled. Consequently, families often waited several years for apartments; in Sofia, where overcrowding was at its worst, the wait was as long as ten years (see Housing, ch. 2).

Market Reform

The first year of post-Zhivkov governance brought substantial political confusion and paralysis, despite the country's desperate need to concentrate on economic reform. The interim cabinet and parliament of 1990 provided only stopgap measures, not the longterm planning that all factions believed necessary. The coalition government of Dimitur Popov came to power at the beginning of 1991 with broad support but under the worst economic conditions since World War II (see Governance after Zhivkov, ch. 4). The Popov program planned first to use support from the International Monetary Fund (IMF-see Glossary), the European Bank for Reconstruction and Development (EBRD-see Glossary), and the EEC to achieve financial stability. The second phase of the plan was privatization of the Bulgarian enterprise system. The hard winter of 1990-91 began to break the policy stalemate between the ruling BSP and its increasingly powerful opposition, the UDF (see Nongovernmental Political Institutions, ch. 4).

Reform Mechanisms

Although both the BSP and the UDF agreed on the need for market-oriented reforms, disagreements on methods and timing continued in 1991. The BSP advocated slow transformation, to minimize economic dislocations and hardship (and also to preserve privileged positions for party members whenever possible). The UDF believed that a market economy could not be installed piecemeal, but could be effective only as a form of "shock therapy." The UDF saw free market features such as market prices and privatization as incompatible with socialist institutions such as large state-owned enterprises. The huge operating losses of such enterprises were largely responsible for a severe 1990 decline in NMP. The model advocated by the UDF was the renaissance of the Polish economy through private enterprise. This model justified severe, short-term social costs because only by inflicting them



Bulgarian Orthodox Church of St. George enclosed by courtyard of Balkan Sheraton Hotel, Sofia Courtesy Sam and Sarah Stulberg

could the economy be disentangled from the moribund apparatus that remained from the central planning era.

Progress was made on some fronts even before formation of the first coalition government in early 1991. In September 1990, Bulgaria's admission to the IMF promised access to hard currency loans and help in restructuring the economy. New agricultural banks began providing credit to private farmers tilling the land provided in the 1991 Arable Land Law; the first private bank was opened; and Bulgaria applied for membership to the General Agreements on Tariffs and Trade (GATT—see Glossary) and the World Bank (see Glossary) (see Agriculture, this ch.).

The Economic Policy Commission

By 1991 the Economic Policy Commission was the most important advisory body on economic reform for its parent body, the National Assembly. A number of economic proposals made in 1990 by the government of Prime Minister Andreĭ Lukanov were found inadequate and redrawn in 1991. A particularly difficult obstacle in establishing truly private enterprises was Decree Number 56, the 1989 formula that established semi-decentralized operating principles for firms and commercial organizations (see The Era of Experimentation and Reform, this ch.). In 1991 the National Assembly considered new laws addressing aspects of the transition to a market economy: the Commercial Law was to replace Decree Number 56 as the basic description of commercial enterprise operation: a complex of auditing and statistical laws were to put Bulgarian commerce on the same standards as potential Western investors. The Privatization Law was the last and most problematic item because, unlike the recipients of agricultural land under the Arable Land Law, private recipients of former state commercial enterprises had not been identified. The first goal of the Economic Policy Commission was to use tight monetary policy to eliminate unprofitable enterprises inherited from the CPE era; this would finally stabilize productivity after the precipitous fall that began in 1990 and accelerated in 1991. Once stability was reached, a fullscale privatization process would begin; the 1991 timetable called for the latter process to be well under way by early 1992.

Domestic and International Economic Policies in the 1990s

Whatever the pace of the Bulgarian economic transition, 1991 promised substantial dislocation before an upturn could be expected. In 1990 industrial production had fallen by 10.7 percent. Prime Minister Popov warned that as much as 25 percent of the population would require social assistance in 1991, an increase from the 20 percent of 1990. Although the Popov government launched a consensus economic reform plan, pending national elections in mid-1991 it remained only a caretaker government. Popov's commitment to tough financial measures and the political calm that prevailed during the crisis period encouraged foreign financial assistance. IMF loan requirements included liberalizing foreign trade policy, lifting price and currency controls, compensating for social dislocation that resulted from reforms, maintaining a low national budget deficit, eliminating centralized production and resource allocation, initiating privatization of small firms, and deemphasizing trade with Comecon countries.

In January 1991, the United States extended most-favored-nation status to Bulgaria; the United States Congress approved the move in April. The recently chartered EBRD committed between 100 and 120 million European currency units (ECUs—see Glossary) to Bulgaria in 1991 and 1992. Most of the money was to go through the PHARE program. Of that amount, 40 percent was earmarked for restructuring the economy, 25 percent for agriculture, 20 percent for health care, and 10 percent for the environment. In March 1991, the IMF approved US\$500 million in loans, and the EEC added a loan of US\$377 million. A request to reschedule part of

Bulgaria's international debt was denied in early 1991, however, Western aid was conditioned on visible evidence that the government remained in control of its reform program. The immediate goal of the reform program was to reduce inflationary pressure by removing the surplus money supply that had been caused by shortages. Prices would remain subject to the Regulations on the Control of Prices issued in February 1991, to limit price fluctuations and prevent monopolies from gaining huge profits. Meanwhile, privatization remained a potential political quagmire because, unlike many of the measures in the first phase, differences in approach and timing remained substantial among major political factions. The National Assembly still included many politicians from the Zhivkov years who would lose their power base if reform went too far. For that reason, the National Assembly delayed deliberation on several vital economic bills in 1991. For the same reason, many remaining Zhivkovite industrial managers opposed application of reforms to their enterprises. Advocates of reform hoped that the 1991 parliamentary elections would redistribute legislative power. enabling reform to continue and shortening the traumatic transitional period.

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Several English-language monographs provide useful information on the Bulgarian economy. Unquestionably, the most comprehensive is John R. Lampe's The Bulgarian Economy in the Twentieth Century, which covers economic structure, development, and performance and provides abundant statistics. Although somewhat dated and less inclusive, Growth and Reforms in Centrally Planned Economies by George R. Feiwel covers the same general field. Robert I. McIntyre's Bulgaria: Politics, Economics, and Society devotes a chapter to postwar economic development through the 1980s, and John D. Bell's The Bulgarian Communist Party from Blagoev to Zhivkov analyzes the theory and practice of Bulgarian economic planning from 1947 through 1985. The Statistical Yearbook of the People's Republic of Bulgaria (the English-language version of which is an abridgement of the Bulgarian state publication) provides comprehensive economic data. Periodicals such as the Radio Free Europe/Radio Liberty Report on Eastern Europe and Business Eastern Europe cover current economic issues. (For further information and complete citations, see Bibliography.)