



USSR: Outlook for Meat Supplies



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An Intelligence Assessment

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An Intelligence Assessment

This assessment was prepared by 
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Key Judgments*Information available
as of 4 October 1984
was used in this report.*

Despite a poor grain crop, Soviet meat production in 1984 is almost certain to reach a new peak for the second consecutive year. Indeed, output probably will exceed Moscow's goal of 16.8 million tons by several hundred thousand tons. With more than two months remaining in this year, the range of our production estimate is still relatively wide—16.7 to 17.3 million tons—because of uncertainty concerning production of feedstuffs and possible changes in Soviet livestock management policies. Our best estimate of 1984 meat production, taking account of all risk factors, is 17.0 million tons—roughly 3 percent more than in 1983. This year's boost in meat production is largely attributable to a record harvest of forage crops last fall; a second consecutive mild winter, which reduced the demand for feedstuffs; livestock inventories that are at an alltime high; and near-peak grain imports.

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Domestic production of 17.0 million tons, combined with probable net imports of 900,000 tons, means a 2-percent increase in per capita availability of meat in the near term, permitting the leadership to claim some progress toward achieving Food Program goals. Nonetheless, continued growth of income—up 3 percent this year—coupled with unchanged state retail prices probably will widen the gap between meat supply and demand. The informal rationing of meat and lengthy queuing experienced by consumers are likely to continue at least through next year, contributing to worker apathy.

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We estimate that meat production next year is likely to be between 16.7 and 17.7 million tons. Our baseline forecast—17.2 million tons—assumes trend grain and forage crops and normal grain import and animal husbandry policies. Meat production growth next year will be constrained by the impact of this year's reduced grain crop and a forage crop that is not expected to exceed the 1983 record. If our baseline estimates for 1984 and 1985 meat production and imports are correct, annual production for the 1981-85 Plan period will average over 9 percent above the level for the 1976-80 period. More important, the availability of meat per person for the current five-year period would be 8 percent above the average for the earlier period, reflecting recent high levels of imports.

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Preface

This report is the second of two DI assessments of Soviet agricultural performance in 1984. The first [Redacted] assesses Moscow's need for grain imports during the marketing year that began on 1 July 1984. The assessment at hand looks at the 1984-85 period using two complementary models of the Soviet grain-livestock sector that use calendar-year data to explore prospects for meat supplies and their implications for the leadership and consumer. [Redacted]

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Introduction

Food accounts for nearly half of Soviet household expenditures. Consequently, the quality of the diet—especially the availability of meat—is a key criterion by which Soviet consumers judge their well-being. This assessment presents estimates of meat production in 1984 and 1985, taking account of uncertainties in the production of feedstuffs and possible changes in livestock management policies. It then discusses the implications of these estimates for the consumer and the Soviet leadership. Meat output projections in this study are based on two complementary models of the Soviet livestock sector that rely on calendar-year data only. One of these models (SOVAG) uses estimates of grain output, other feedstuff availability, and grain imports; the other (SOVMON) uses official data on monthly meat production on state and collective farms.¹ [Redacted]

Background

During 1979-82, meat production lagged below the 1978 peak. Only by importing record quantities of meat—about 900,000 tons (net) annually during the 1980-82 period—did Moscow maintain per capita meat availability. Imports remained high in 1983 even though meat production surged to a record 16.4 million tons. [Redacted]

Nonetheless, meat supplies continue to be very tight in the USSR. This results from the lengthy period of relative stagnation in the growth of meat availability, steady growth in disposable income, and, perhaps most important, the leadership's policy of maintaining stable, relatively low prices for livestock products in state retail stores, where most meat is sold. Consequently, extensive queuing has imposed a serious economic drain on workers' time and consumers' morale. Local rationing and special distribution systems, however, have tended to shift some of the problem from workers in higher priority sectors to those groups such as pensioners and service workers

[Redacted]

that are less able to protest effectively.² The most serious effect of limited meat supplies may be contributing to reduced growth of worker productivity. One prominent Soviet economist has estimated poor worker morale caused more than half the slowdown in the growth of labor productivity that occurred prior to 1983. [Redacted]

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To constrain the growing excess demand for many goods and services, Soviet officials have waged a continuing effort to bring income into line with supplies. This has been accomplished primarily by slowing the growth in money incomes. In the case of food products, however, special attention has been given to increasing supplies. In May 1982, Leonid Brezhnev announced a Food Program designed to spur agricultural production and to reduce waste in the production and distribution of farm products.³ Both Chernenko and his predecessor, Andropov, publicly supported the central elements of the Food Program. This program has been slow to get under way and, therefore, will have limited impact on meat production during the remainder of the 1981-85 period.⁴ [Redacted]

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Outlook for 1984 Meat Production

Meat production is almost certain to reach the plan target for the second consecutive year. Indeed, output probably will exceed Moscow's goal of 16.8 million tons by several hundred thousand tons. Feedstuff availability and Soviet livestock management policies during the rest of the year can still affect the final outcome. The range of possible production is 16.7 to 17.3 million tons. [Redacted]

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Factors Affecting Annual Meat Output

Even with the highly visible support of the Food Program, meat production in the Soviet Union depends upon many factors that introduce major uncertainties into any estimate. The most important sources of uncertainty are feed availability, feed requirements, and policy decisions affecting the feed-livestock sector. Policy decisions, such as those determining livestock feed rations, animal slaughter rates, and the level of grain imports, can affect the stability and trend of yearly meat production. [redacted]

Feed Availability. Even with the 1984 crop season nearly completed, uncertainty regarding grain production remains. We estimate the grain crop will come in at about 180 million tons—15 million tons less than last year's estimated output and 25 million tons below the average 1976-80 annual grain harvest. Uncertainty about weather during the final harvest period combined with uncertainties about total area planted, the distribution among the various grains, and possible late-season abandonment of grain area suggests the grain crop could go as low as 170 million tons or as high as 185 million tons. [redacted]

The impact of weather conditions and other factors on harvested roughages—hay, silage, and so on—is less pronounced partly because some of these crops are harvested several times during the growing season and partly because the harvest extends over a longer period. We estimate total roughage availability this year will be roughly the same as last year. [redacted]

Feed Rations and Slaughter Rates. Choices regarding feed rations (which affect the rate of weight gain) and weight at time of slaughter as well as the rate of monthly slaughter provide Soviet farms with some flexibility in meeting annual meat production and livestock inventory goals. In times of severe feed shortages, plans for herd size and production of meat can be and have been altered by central decisions [redacted]

In 1975, faced with a very poor grain crop, the Soviets undertook distress slaughter of hogs and poultry. This action reduced feed requirements and gave a short-term boost to meat production, but it took its toll in the longer term. Meat production dropped by nearly 10 percent in 1976 and did not regain trend levels until 1978. Similarly, it took two years for poultry numbers and four years for hog numbers to regain 1 January 1975 levels. Since 1977, the Soviets

have chosen to keep herds intact and growing even in years of relatively constrained feed supplies and at the cost of declining productivity. [redacted]

We believe the emphasis on herd maintenance and growth in recent years is evidence of a genuine long-term Soviet commitment to provide the population with more meat. Plans for 1985 indicate the emphasis is shifting from herd building to productivity increases to reduce the high cost of production as well as to increase meat output. This strategy will increase the dependence of the livestock sector on consistent availability of adequate feed supplies. Meat production for 1984 is fairly well established, barring a sudden, sharp increase in animal slaughter, a highly unlikely event. Because the average slaughter weight of livestock has been increasing since about mid-1982 and because livestock herds have also been increasing, Moscow is in a better position than in previous years to keep meat production increasing despite feed shortfalls arising from this year's reduced grain crop. Growth in production for 1985 is less assured, in part because the impact of lesser overall feed supplies will be felt in the first half of the year. [redacted]

Grain Imports. Forecasting Soviet grain imports, in general, is a risky business because although imports are the major means of ameliorating a shortfall in grain supplies, Moscow has other alternatives, such as reducing feed rations. Our uncertainty about 1984 imports is small, however, because more than three-quarters of the year is completed and purchases for shipment during the rest of the year indicate that scheduled imports are already at near-peak demonstrated levels. [redacted]

Soviet grain imports for calendar year 1984 are expected to be about 46 million tons. These imports include 500,000 tons of rice and 2.5 million tons of grain and flour purchased by Moscow for delivery to client states. Direct grain deliveries to the USSR during the first nine months of 1984 are estimated at 28 million tons, and scheduled shipments from grain exporters indicate that deliveries to the USSR during the final quarter will be almost 15 million tons. Imports at this rate will require Soviet grain handling facilities to operate at peak levels during October-December, making it highly unlikely that imports will exceed 46 million tons during the year. [redacted]

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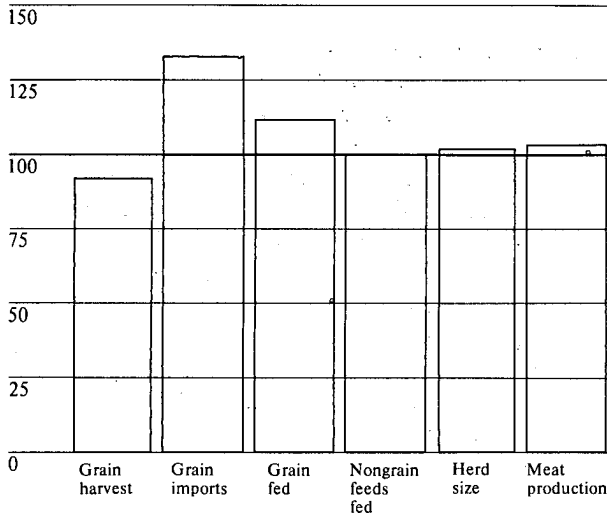
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Figure 1
USSR: Indexes of Best Estimates of
1984 Key Inputs and Meat Production

Index: 1983=100



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The growth in meat production this year is due largely to a record harvest of forage crops in 1983; a second consecutive mild winter, which reduced the demand for feedstuffs; livestock inventories that are at an all-time high; and near-peak grain imports. Our baseline estimate of meat production—17.0 million tons—reflects these factors and a 180-million-ton grain crop (15 million tons less than last year's estimated harvest) and no change from the record 1983 level in roughages fed livestock (figure 1).

Bounding This Year's Best Estimate

Because of uncertainties about the weather and other factors affecting feed availability and about Soviet policy during the rest of the year, our best estimate of meat production is bounded. In particular, if both the grain crop and roughages fed livestock were somewhat greater than we currently estimate, grain imports were unchanged, and the monthly livestock slaughter rates for the rest of the year were somewhat

higher than normal, meat production could reach 17.3 million tons:

Case	Million tons			
	Grain Output	Roughages Fed (feed units)	Monthly Slaughter Rates	Meat Production
Baseline	180	281	Normal	17.0
Upper bound	185	287	Above normal	17.3
Lower bound	170	272	Normal	16.7

On the downside, if the grain crop and the roughages fed livestock were about 5 and 3 percent lower, respectively, than our best estimates, but grain imports and slaughter rates were unchanged, meat production would only be about 16.7 million tons—roughly 1 percent above output last year.

Implications for the Consumer

If meat production reaches our best estimate and meat imports are maintained at last year's level, per capita meat availability could increase 2 percent (figure 2). Because actual per capita meat consumption in the USSR is low and only slowly improving—compared with that in the United States and even Eastern Europe, consumer discontent with the state of meat availability is unlikely to disappear soon. Even with record meat production this year, the informal rationing of meat and lengthy queuing experienced by consumers are likely to continue at least through next year, contributing to worker apathy.

The degree to which gains in total Soviet meat availability this year are being translated into gains for the consumer is not clear. Last year, with both meat production and imports at new highs—up nearly 7 and 6 percent, respectively—per capita meat availability could have risen by about 6 percent. Officially reported per capita meat consumption (including slaughter fat), however, increased only 2.5 percent, suggesting Moscow may have replenished low inventories of meat. With a lesser increase in supply expected this year and with rebuilt inventories, all the gain may go to consumers.

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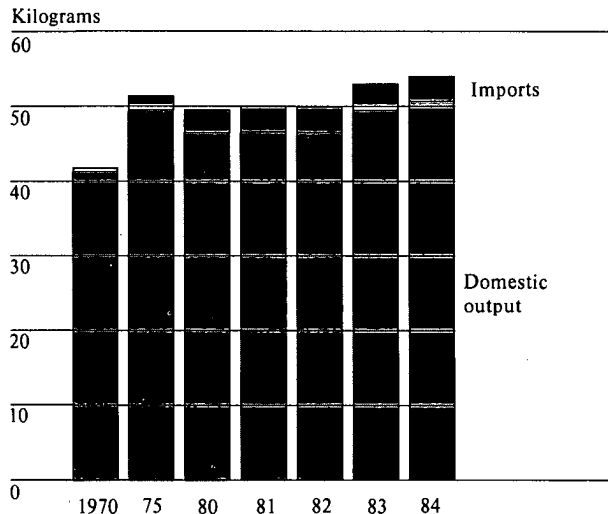
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Figure 2
USSR: Per Capita Meat Availability,
1970-84



Note: The figures for 1970-83 are officially reported and those for 1984 are estimates. Soviet official statistics on meat production are adjusted to conform to Western definitions (trim, including slaughter fat and bone is removed). The figure for 1984 assumes meat production of 17.0 million tons and meat imports of 900 thousand tons.

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Implications for the Leadership

The leadership apparently realized that maintaining meat consumption was crucial after worker protests linked to meat shortages occurred during the late 1970s and early 1980s. Moscow boosted net meat imports from about 150,000 tons in 1978 to 780,000 tons in 1980 and to about 900,000 tons in 1981 and 1982. This increase maintained per capita meat availability despite the stagnation of meat production during 1978-82. Even with the 1983 recovery in domestic production, meat imports continued to increase to a record 960,000 tons. This policy cost the Soviets over \$300 million in hard currency in 1983 alone.

One of the goals of the Food Program is to ensure a more varied Soviet diet while reducing dependence on the West for grain and other agricultural imports.

Increased Soviet hard currency purchases of grain alone in 1984 will cost Moscow \$1.5 to \$2.0 billion more than it paid last year. Reduced purchases of other agricultural goods, however, will partly offset the cost of increased grain imports.

Outlook for 1985 and the 11th Five-Year-Plan Goals

Soviet policies toward agriculture, weather-related fluctuations in crop and livestock product output, and availability of adequate supplies of viable seeds, various chemicals, and equipment all add uncertainty to estimating meat production in 1985, as indeed they do in each year. Considering a reasonable range of possibilities—including a mediocre 1985 grain crop—the range for 1985 meat production is 16.7 to 17.7 million tons.⁵ Our baseline forecast for 1985 is 17.2 million tons—slightly above that for 1984. This forecast assumes trend growth of grain production and availability of nongrain feedstuffs, grain imports of 35 million tons, small growth in herd size, constant feeding rates, and normal monthly livestock slaughter rates. If our baseline estimates for 1984 and 1985 prove accurate, annual meat production for the 11th Five-Year Plan will average more than 9 percent above the level for the 10th Five-Year Plan period (figure 3) but about 6 percent short of the planned target. Assuming meat imports of 900,000 tons in 1985, meat availability per capita would remain unchanged next year, although the annual average for the 1981-85 period would be 8 percent above the average for 1976-80.

⁵ This range in 1985 meat production is based on a plus-or-minus 6-percent range around our baseline estimate for aggregate feed supplies and on a small range around our baseline rate of growth in herd inventories.

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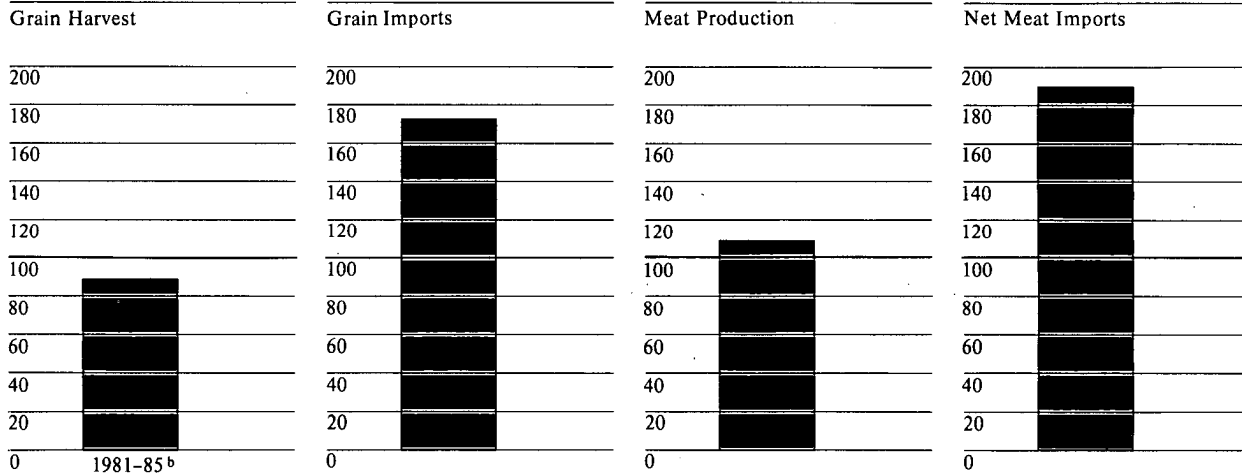
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Figure 3
USSR: Indexes of Five-Year-Plan Performance for Key Inputs
and Meat Availability, 1981-85^a

Index: 1976-80=100



^a Average annual levels.

^b Estimated figures for 1981-85 assume baseline grain output, grain and meat imports, and meat production for 1984 and 1985.

[Redacted]

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