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Structural Contrasts and Convergence in Socialist
and Capitalist Agriculture

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Structural Contrasts and Convergence in Socialist
and Capitalist Agriculture^{*}

Philip M. Raup^{**}

J. G. Patel, then Governor of the Central Bank of India, remarked in a lecture in 1980 that he could see the attraction of "some form of collectivisation of agriculture, not so much because it is superior to a capitalist form of agriculture in terms of efficiency of production, but because it offers...better chances of disguising unemployment in a socially acceptable form." (The Economist, March 28, 1981, p. 47).

A parallel observation is that one advantage of a capitalist structure of agriculture is that it disguises exploitation of farm owner-operators in a socially acceptable form. The exploitation of course is self-imposed, resulting from two forms of reward: An income as worker and manager, and a potential increase in net worth.

If the laborer does not own the assets used in the job, all reward is confined to labor income. Any perception of well-being cannot include an increase in net worth represented by the appreciating value of the means of production. The worker cannot look forward to potential capital gains. This is the sharpest distinction to be made between a socialist and a capitalist structure of agriculture.

This provides a point of departure for a selective exploration of contrasts and convergence in socialist and capitalist agriculture. The discussion will focus on the Soviet Union and the United States. In geographic, demographic and agricultural dimensions they are more nearly alike than any two of the world's other major economies. Comparisons can be made that among other countries might be invalid due to differences in scale.

Great as the similarities may be, the more intriguing questions concern the differences. The major breaks with a capitalist tradition in the USSR involve space, and time. No rent is charged for land, and

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the rate of interest is not an adequate price of time. These are major determinants of managerial behavior affecting agricultural performance.

Another major difference is the absence of firm-to-firm markets. One of the shibboleths of socialism has been the middleman or the marketeer, who buys, sells and profits from the labor of others. To eradicate this evil, the state and its agencies are given monopsony power as the buyer of goods and services. Due to the spatial nature of agricultural production, this inhibits the exploitation of opportunities for regional specialization.

One consequence is that the production unit in Soviet agriculture attempts to remedy the absence of farm-to-farm or firm-to-farm markets by creating a unit large enough to insure availability of key production requirements. The huge grain farms that have been the symbol of Soviet agriculture are one result. An odd criterion of adequate size is control of a park of tractors and machinery large enough to insure that spare parts can be cannibalized from the farm's own equipment in periods of critical field work.

The need to guarantee supply of critical components is much greater in livestock production, leading to managerial units that combine grain producing and livestock producing units. A beef-feeding enterprise, for example, that must rely on official procurement for its feed supplies is at a great disadvantage when compared to one that produces its own feed.

A market economy reduces this risk exposure through efficient farm-to-farm markets. The feedlot can buy feed from farmers that produce grain only and feed no livestock. If the transport system is flexible, decentralized, and efficient, the feedlot manager has a wide range of choices in satisfying his feed demands. The division of labor that results enables the geographic separation of the three key parts of the beef-producing system: cow-calf units using grazing lands, grain-producing lands, and feedlot operations. Markets, and transport, are the critical variables.

Attempts to increase the production of red meats, and especially beef, place a great strain on an agricultural structure that lacks farm-to-farm markets, and that suffers from inadequate transport. These shortcomings are much less serious in an agricultural economy producing primarily grains, or bulk

commodities that are not processed on the farm. This characterized most of USSR agriculture until the 1970's.

The greater emphasis on meat production after 1970 in the USSR exposed the difficulty of organizing livestock feed supplies in a command economy. The problem is acute in beef production since the bulk of the supply of feeder cattle in the USSR still comes from the dairy sector. A range cattle industry based on beef-breeds is in its infancy in the Soviet Union. Its development is inhibited by the unfavorable location and quality of grazing lands, a lack of feeder cattle markets, and poor transport.

One result is that feeder-cattle production is difficult to separate from the dairy sector. The best insurance against a shortage of feeder cattle or feed is to create a command structure that includes grain and forage lands, proximity to a large dairy unit, and a feedlot. This leads to an unwieldy management unit, and forecloses many economies of geographic specialization. This is the current situation in many regions of the USSR.

The problem is less severe with pigs and poultry, primarily because their efficient production can be achieved with little or no dependence on forages. The feeds required are storable, and production centers can be served by rail transport. Replacement pigs or chickens can be produced in proximity to the units in which they will be fed to market weights. The potentials for spatial concentration of the entire production process from birth to slaughter are much greater than with beef cattle.

The root problem is that Soviet farm managers have few opportunities to decide to internalize or externalize procurement and production activities. It is safest to internalize, even at the sacrifice of economies of specialization. They are virtually precluded from opportunities to explore any economies of diversity, and are compelled to confine themselves to economies of size. As a result they provide the world's best examples of diseconomies of size in agriculture.

Recognition of this problem is possible only if managers have reliable information on real costs of production. Given the biological nature of agricultural production processes, it follows that time costs are critical. If the interest rate does not reflect the true opportunity cost of capital, then managers are

limited in their ability to make cost-minimizing decisions. This too is of particular importance in livestock sectors, and especially in beef.

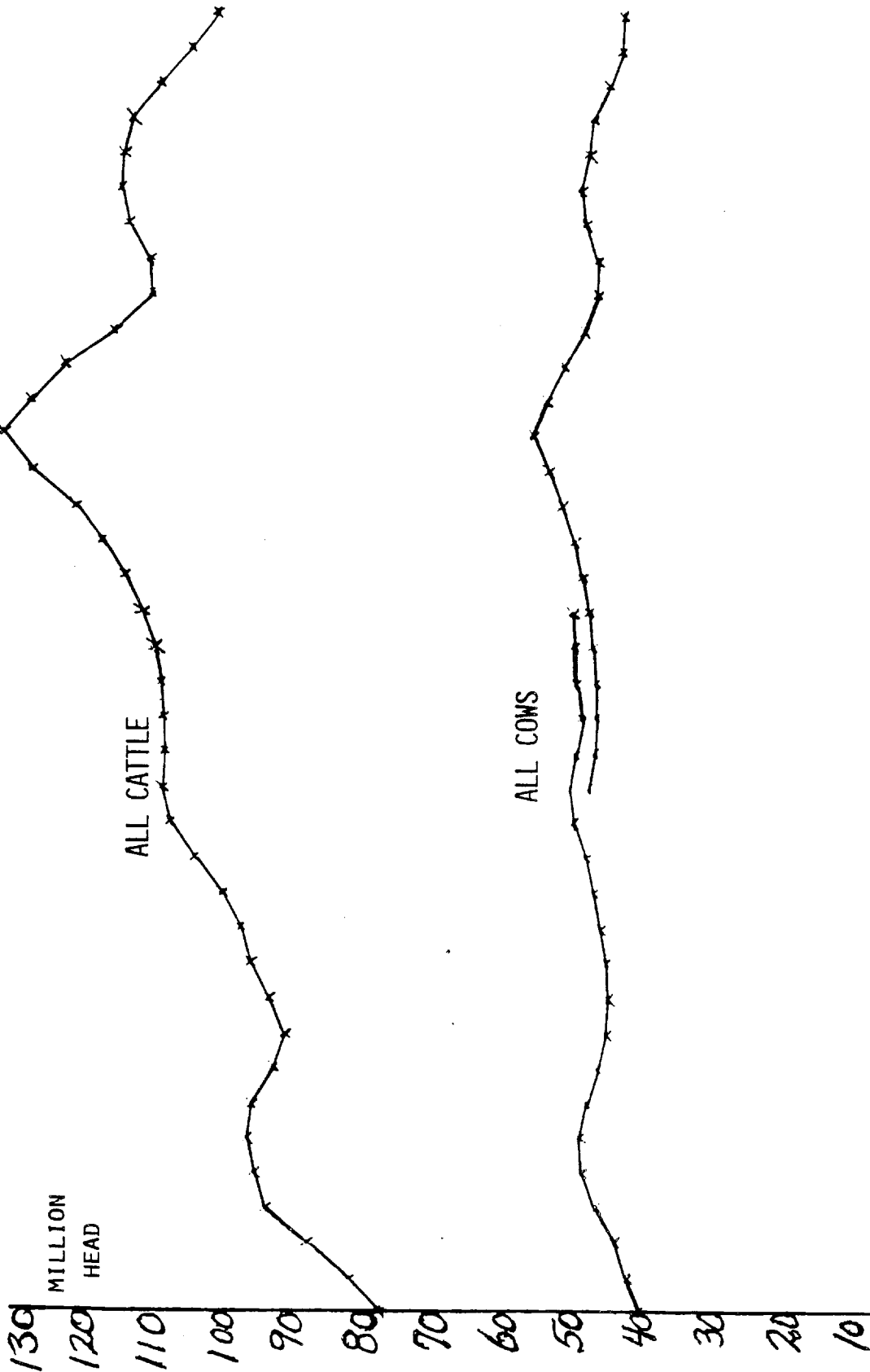
In efficient production units in the United States the time required from chick to finished broiler averages seven weeks; from piglet to fat hog takes on average six months; while the time-span from newborn calf to a slaughter-ready fat beef will average fourteen to eighteen months. An intensively managed chicken broiler producing unit can turn over the capital value of its flock five times in a year, and a hog producer twice a year. The capital involved in the comparable production cycle in fed beef will at best be turned over only about twice in three years. It is clear that the absence of realistic interest rates is a major handicap in organizing efficient beef production systems. Without a price on time there is no way to measure the costs or the rewards associated with variations in the time-cycle of production.

A basic problem in the Soviet livestock sector involves the maintenance of a livestock inventory that is excessively large in relation to the output of meat and milk. The following charts illustrate the magnitude of the problem, using comparative data for the USSR and the USA. Figures 1 and 2 show the trends since 1950 in the number of cattle and, among cattle, in the number of cows, using an inventory date of January 1 for both countries.

Several features stand out. The much greater year-to-year variability in cattle numbers in the USA is explained by the responsiveness of producers to shifts in market prices, production costs and consumer demand. There is little evidence of a similar "cattle cycle" in the data for the USSR. It is intriguing to note that in the USSR on January 1, 1987 there were 430 head of cattle per thousand of the population, and 410 per thousand in the USA. In both absolute and per capita terms, the Soviet Union has the larger inventory.

The ratio of cows to total cattle numbers is more interesting. In the USA in the 1980s the proportion of cows to total cattle has averaged about 43 percent, and has been increasing. In the USSR the similar ratio has averaged about 36 percent and is falling. This is one indication of the pervasive tendency to value the head-count in Soviet livestock enterprises, and to undervalue the capital costs of carrying animals to older ages. The absence of a meaningful rate of interest is manifest.

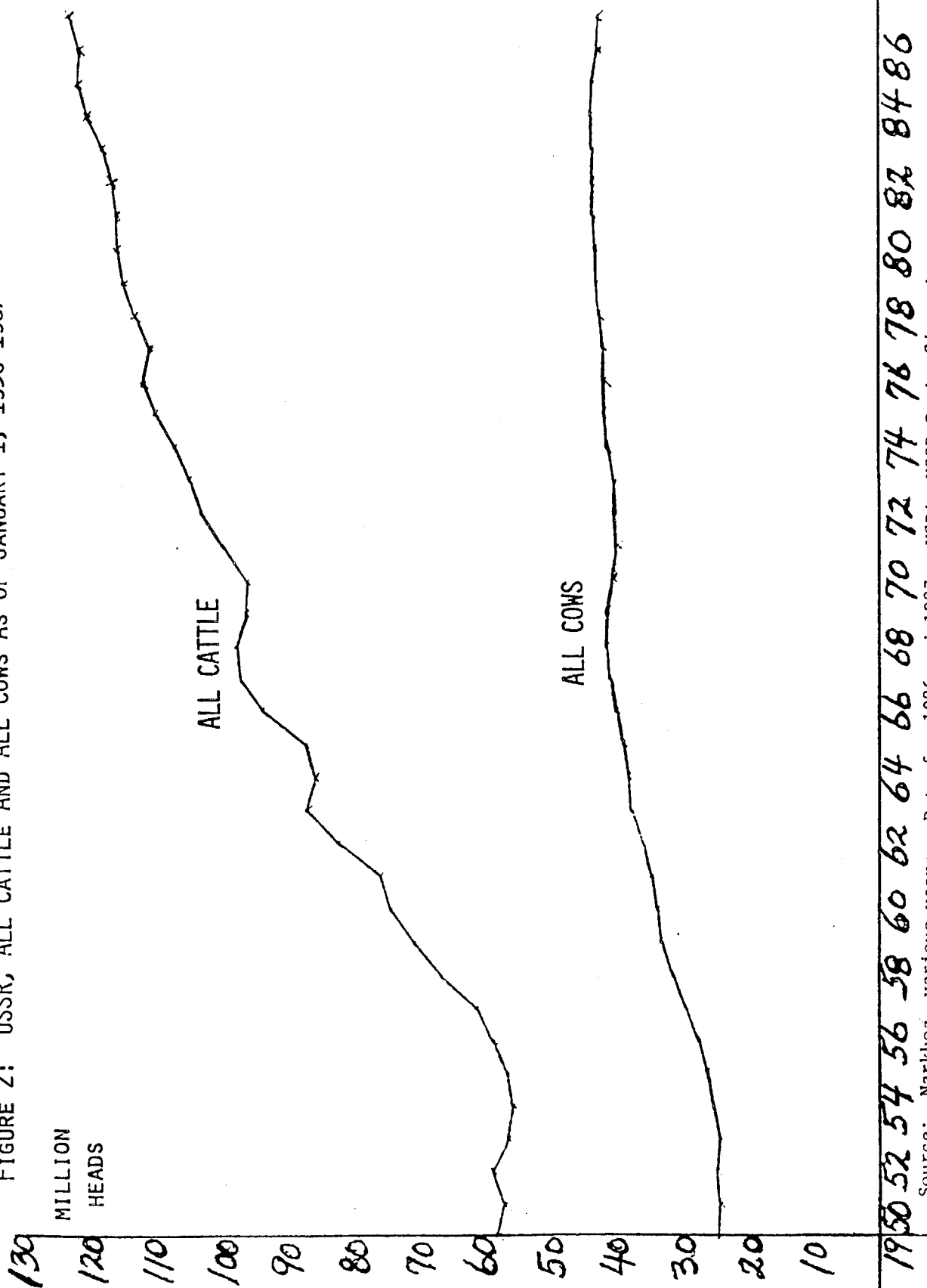
FIGURE 1: USA, INVENTORY OF ALL CATTLE AND ALL COWS AS OF JANUARY 1, 1950-1987



1950 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86

Source: U.S. Dept. of Agriculture, Agricultural Statistics, various years. Data for 1986 and 1987: USDA, Agricultural Outlook, March 1987.

FIGURE 2: USSR, ALL CATTLE AND ALL COWS AS OF JANUARY 1, 1950-1987



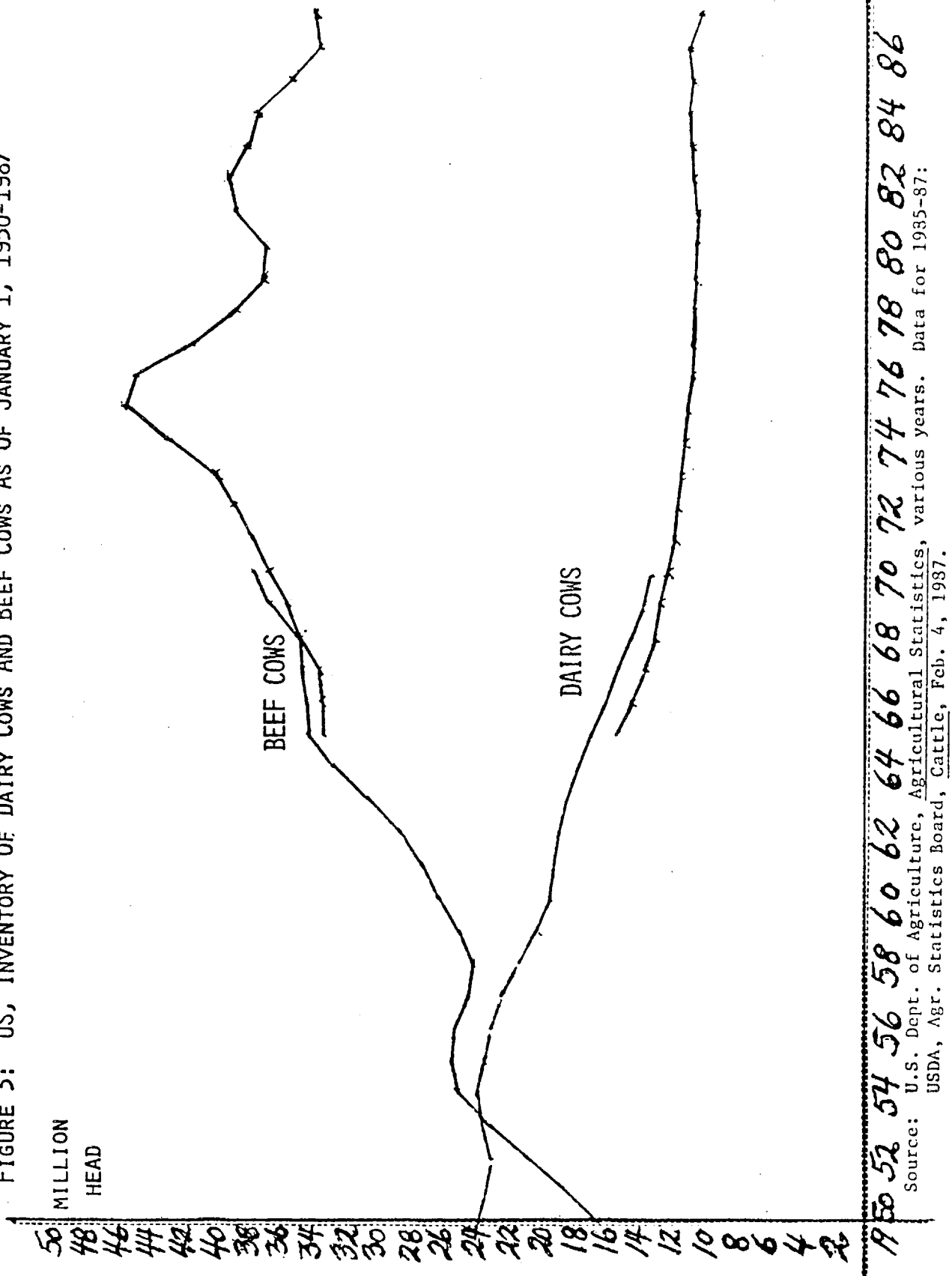
Source: Narkhoz, various years. Data for 1986 and 1987: USDA, USSR Grain Situation and Outlook, SC-2-87, Feb. 9, 1987.

Figure 3 disaggregates the cow inventory data for the USA into cows kept for milk, and "other" or beef cows. Available data do not permit a similar breakdown for the USSR. The remarkable feature of the transition in dairying in the USA has been the reduction of the dairy cow herd from 24 million in 1950 to just over 10 million in the mid 1980s while actually increasing the total production of milk. Higher milk yields per cow released breeding capacity and feed supplies that led immediately to increases in the beef cow herd. A least-squares trend line fitted to the increase in beef cow numbers after the 1950's would be a virtual mirror-image of the decreasing trend in dairy cow numbers. One message is clear. Less feed is required in the dairy sector to maintain dairy cow "frames", and more is available for the production of milk. Advances in milk yield per cow have released resources for the expansion of beef production.

Just how significant these increases in dairy cow productivity have been is shown in Figures 4 and 5. Figure 4 shows total production of milk from cows in the USA and in the USSR, 1950 to 1986. In terms of total output, the Soviet Union has clearly exceeded the USA since the mid-1960's. A precise comparison is made difficult by the fact that the US data are confined to cow's milk, while for the Soviet Union "Data on milk production include actual milked milk of cows, sheep, goats, mares, not depending on whether the milk is sold or a part of it is used by the farm for feeding calves and piglets" (Narkhoz, 1972, pp. 780). Although reliable estimates of milk produced by type of animal are not available for the USSR, it is clear that the Soviet Union has made substantial increases in total milk production for over three decades.

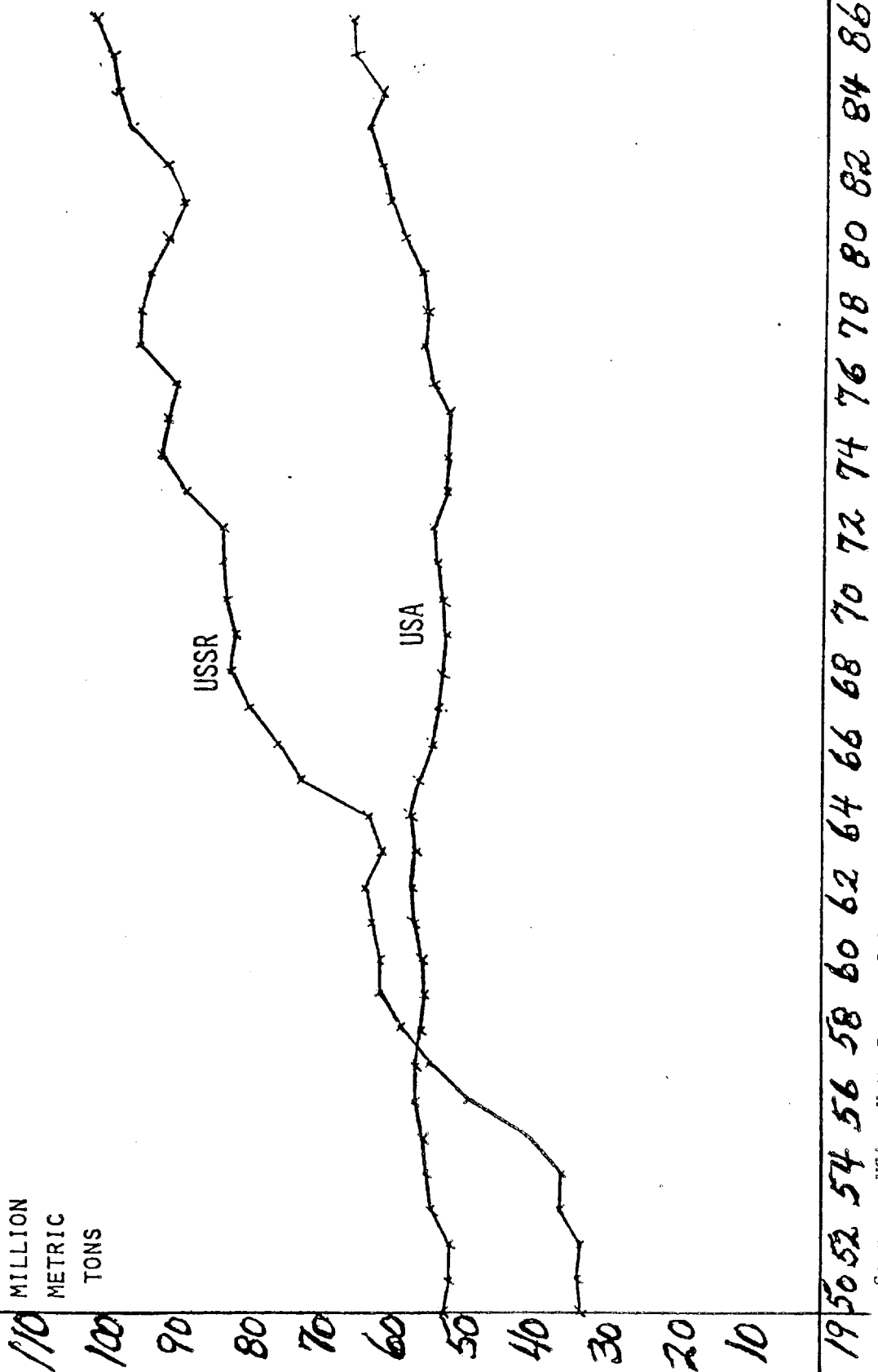
A different picture is given in Figure 5, showing the trend in milk production per cow for the two countries since 1950. Output per cow in the US rose almost without interruption, from 5,300 pounds in 1950 to 13,300 in 1986. Productivity per cow also increased in the USSR but the productivity gap between the US and the USSR has steadily widened. In 1950, milk output of 3,020 pounds per cows in the USSR was 57 percent of the level in the US. In 1986, the USSR output per cow of 5,380 pounds was only 40 percent of the US level.

FIGURE 3: US, INVENTORY OF DAIRY COWS AND BEEF COWS AS OF JANUARY 1, 1950-1987



Source: U.S. Dept. of Agriculture, Agricultural Statistics, various years. Data for 1985-87: USDA, Agr. Statistics Board, Cattle, Feb. 4, 1987.

FIGURE 4: US AND USSR, TOTAL MILK PRODUCTION FROM COWS, 1950-1987



Source: USA: U.S. Dept. of Agriculture, Agricultural Statistics, 1950-59; Agricultural Outlook, March 1987, 1960-1984; Agricultural Outlook, July 1987, 1985-86.
 USSR: Narkhoz, various years; USDA, USSR Grain Situation and Outlook, SG-2-87, Feb. 9, 1987 for 1986-87.

These productivity differences are repeated in the output of beef and veal, although here the gap has been slowly narrowing. Figure 6 shows substantial year to year variation in meat production from the cattle herd, in both the US and the USSR. Variability is especially marked in the US since 1972. The significance of the trends shown in Figure 6 becomes clearer by referring back to Figures 1 and 2. The 11 million metric tons of beef and veal produced in the US in 1985 came from a cattle herd of approximately 110 million head on January 1, 1985. Beef and veal production in the USSR of 7.4 million metric tons in 1985 came from a herd of 121 million head at the beginning of the year. With 10 percent more cattle in 1985 the USSR produced only 67 percent as much beef and veal as the US. This overstates the production performance in the USSR, since the US data are in terms of carcass weight, excluding offals, while the USSR data report slaughter weight, which differs slightly from carcass weight, and includes fats and offals.

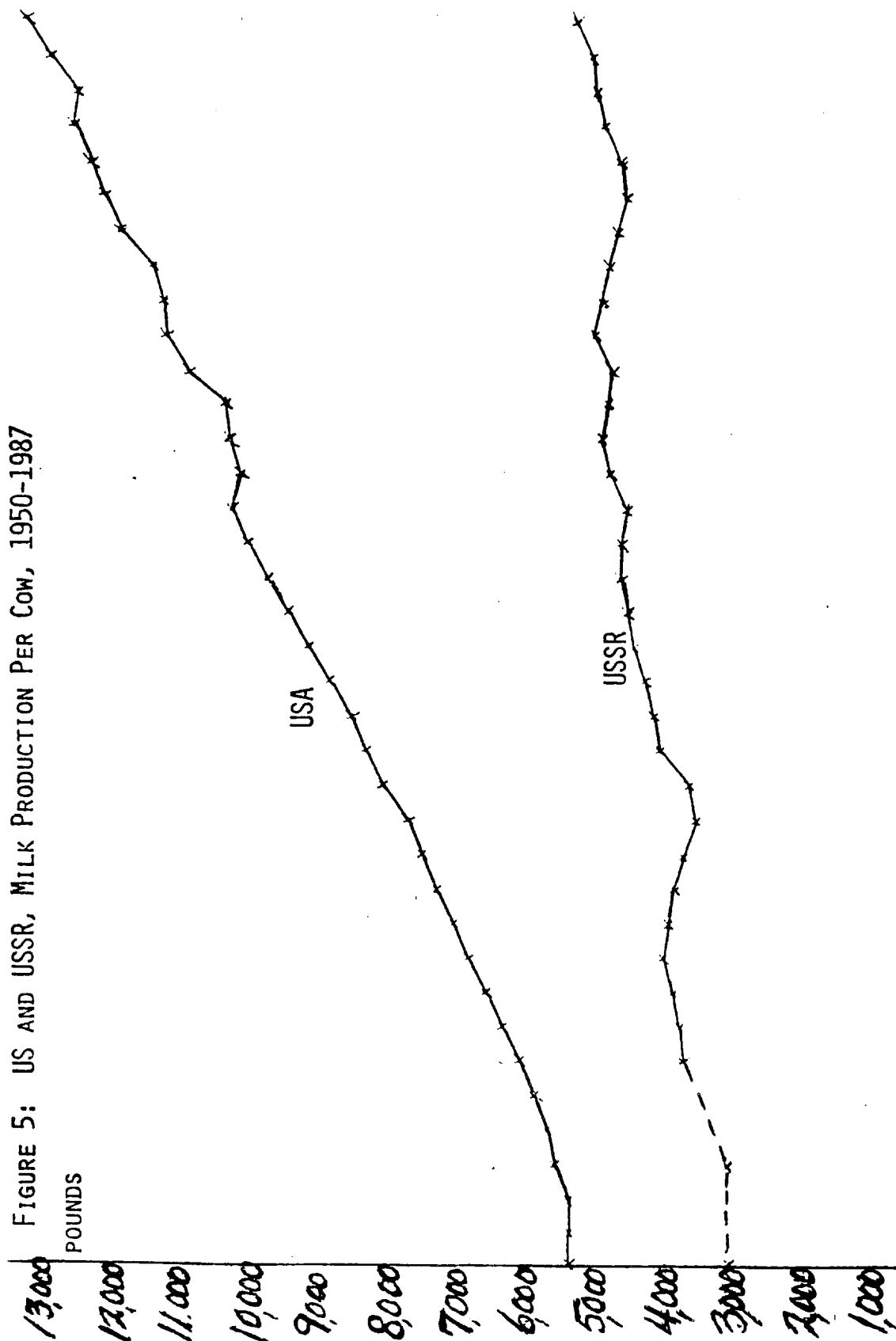
The major lesson from this series of charts is that the USSR has been increasing cattle numbers at the expense of productivity. Far too much feed is being used to maintain body weights leaving too little available for the production of milk and meat. This problem is intensified by a deterioration in the feed conversion coefficients in beef and milk production on state and collective farms and interfarm enterprises for at least the past 15 years. Table 1 shows these trends in the efficiency with which feed is used for selected years since 1970. The surprising fact is that a kilogram of beef produced in the socialized sectors in 1985 required 17 percent more feed than in 1970, and a kilogram of milk required 14 percent more input. Unfortunately, available data preclude comparable estimates of feeding efficiency in the private sector.

Table 1. USSR feed-conversion coefficients (kilogram of oat-unit equivalent/kilogram of output) for state and collective farms and interfarm enterprises.

Product	1970	1980	1983	1984	1985
Beef		11.5	13.4	13.2	13.5
Milk		1.4	1.5	1.55	1.6

Source: U.S. Dept. of Agriculture, ERS, USSR Situation and Outlook Report, RS-87-4, May 1987, p. 21.

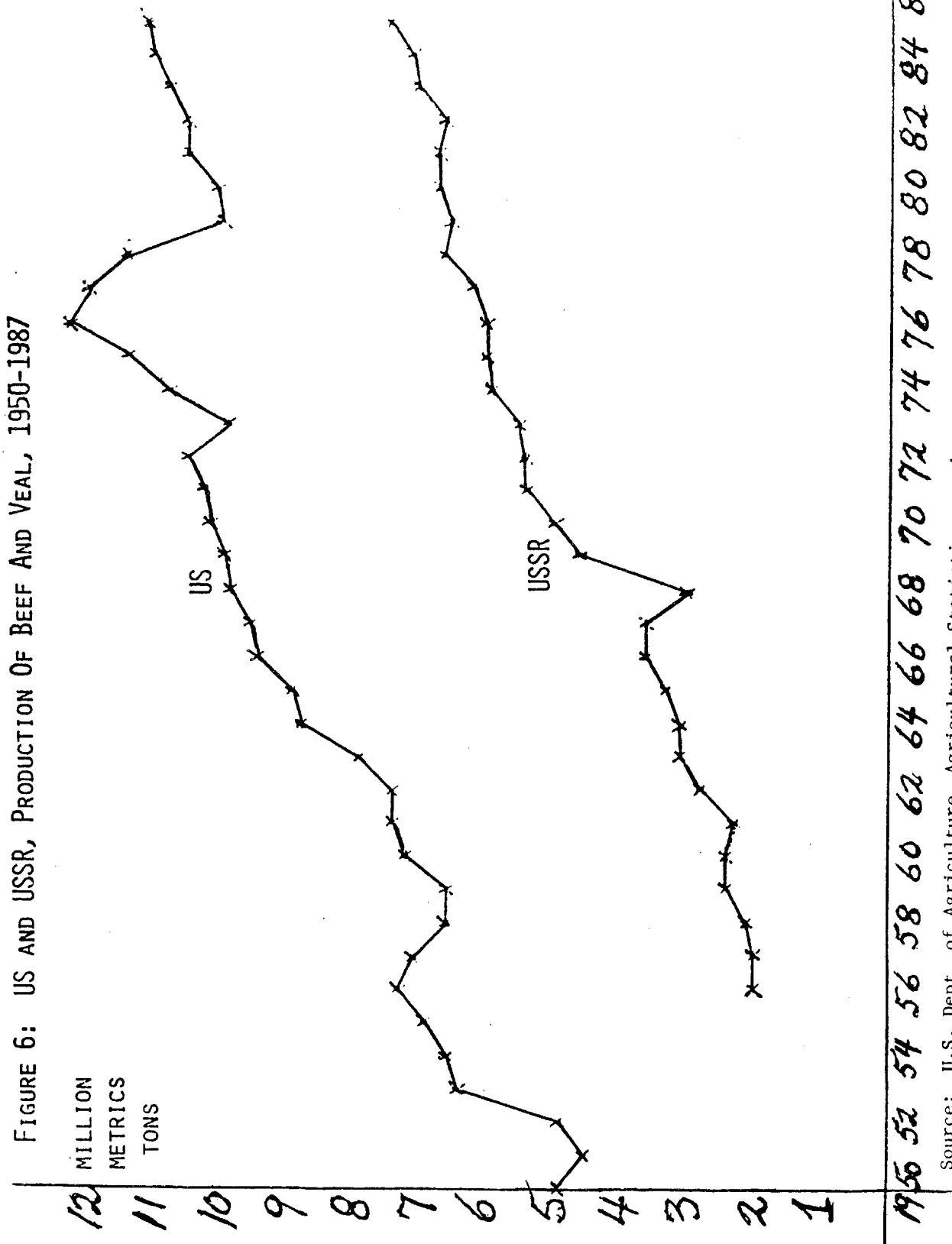
FIGURE 5: US AND USSR, MILK PRODUCTION PER COW, 1950-1987



Source: U.S. Dept. of Agriculture, Dairy Statistics Through 1960, Stat. Bulletin 303, Feb. 1982; Agricultural Outlook, March and July 1987.

USSR: Narkhoz, various years; for 1986, USDA, USSR Situation and Outlook Report, RS-87-4, May 1987.

FIGURE 6: US AND USSR, PRODUCTION OF BEEF AND VEAL, 1950-1987



Source: U.S. Dept. of Agriculture, Agricultural Statistics, various years. Data for US are carcass weights (excluding offals). USSR data are slaughter weights (including fats and offals).

The obvious conclusion is that the Soviet Union possesses unutilized reserves for the increase of meat and milk production without producing or importing additional grains. This is underlined by frequent references in Soviet publications to protein deficiencies in feed rations and to shortages of forage and fodder crops. The CPSU Central Committee in December 1986 specifically singled out the tendency for livestock managers to compensate for fodder shortages by feeding more grain (Pravda, Aug. 6, 1986). At a subsequent conference of the CPSU Central Committee called in January 1987 to deal explicitly with agriculture, Ye. K. Ligachev noted that "the Ukraine has changed from a supplier of grain for state resources to a consumer of grain" (Pravda, Jan. 25, 1987).

What explains this relative retardation in agricultural technology, in a country that has mastered space exploration? No simple answer provides a satisfactory explanation. One evident cause is the existence in planning circles of a motivation that Dyker calls "investment goods fetishism." He concludes that love of the gargantuan must be a large part of the explanation for decision to undertake giant hydro-electric projects or attempts at river diversions, even though they may be sharply opposed by Soviet technical experts (Dyker, 1970, and Dyker, 1983, p. 146).

The huge dairy farm or the mammoth livestock or poultry feeding enterprise is the agricultural equivalent of the big dam or steel mill. Perhaps nowhere in the world is the slogan "big is better" enshrined more securely in economic policy than in the Soviet Union. The consequences were apparent in the initial drive to mechanize grain farming. They now emerge as a significant brake on the rationalization of livestock production. Livestock units are driven to internalize the supply of all critical production inputs, especially feeds and young animals. This creates units that are simply too big to be managed efficiently.

In a narrow sense, the large livestock enterprise offers some economies of size. The efficiency of feed conversion in large concentrated Soviet poultry enterprises is clearly better than in the more diffuse production of beef or pork. It is in a larger sense of more rational land use that the inefficiency of the large Soviet livestock enterprise becomes apparent. Some parts of the USSR are suited to grazing land uses. Other parts are best suited to grain production. Still other parts can produce both forage and grain

crops efficiently. If a livestock enterprise must internalize its supply of feeders, feeds and forages it may achieve some superficial efficiency in feed conversion ratios, but at the expense of regional efficiency in land use.

The relevance of this unresolved problem is emphasized by a joint resolution of the CPSU Central Committee and the USSR Council of Ministers of August 6, 1986, stressing the policy of "satisfying farms' internal fodder-grain needs primarily through internal production" (*Pravda*, Aug. 6, 1986). The uneconomic consequences of attempting to create self-sufficient livestock producing units in an economy that straddles both the temperature and the rainfall margins of crop cultivation should be apparent. In the peculiar conditions of farm management planning in the USSR, this may be the only feasible solution. Feed mixing can certainly be monitored more carefully in a big unit than in many small ones. Lacking farm-to-farm markets or good truck transport, a Soviet livestock manager may logically opt for a do-it-yourself solution to the supply of feeds or young stock. The USSR has a long military tradition of fostering regional self-sufficiency. The current trend in livestock producing units is a micro-version of what must be regarded as fundamental Soviet survival policy.

In addition to an agricultural version of "investment goods fetishism" there is another similarly intangible reason for the Soviet emphasis on the "body count" in livestock farming. In market economies at early stages of development livestock have traditionally served a function in the financial system. First as a form of money, providing a relatively standardized unit of exchange and capable of adaptability in velocity of circulation. Second, as a substitute banking system, in that livestock can serve as a storehouse of value, and ease the transition to a money economy. Wealth in cattle country is measured in livestock. Although this wealth is not private in the USSR, it is no less real. The Soviet farm manager can effectively privatize it by his ability to manipulate administrative and party structures to enable him to exercise and retain control.

In 1975 the distinguished anthropologist Walter Goldschmidt proposed the creation of national livestock banks to rationalize the economy of tribal pastoralists (Goldschmidt, 1975). Although focused on Africa, this has intriguing significance for the Soviet Union. Livestock do substitute for a banking

system when other forms of savings and investment are precluded. The Soviet stress on livestock numbers is deeply embedded in the total economic structure, reflecting an unusable interest rate and a defective system of bank financing. A more rational banking system is essential for an improved Soviet livestock sector, using a rate of interest that penalizes managers for holding capital in agriculture too long. Over-aged livestock herds are the agricultural equivalent of the unfinished construction projects that infest Soviet cities. The remedy is the same in both cases: Charge realistic interest rates on underutilized capital.

The development of socialist agriculture is not only hampered by the absence of a functional price on time, it must also struggle with unpriced natural resources, of which land is the most critical example. **With no rent charged for land, a farm manager is compelled to externalize land costs.** The more serious consequences arise at the regional or national level, since planning and policy-making bodies have no quantitative measure of alternative costs when land use is involved. In a critique of Soviet investment policy, Dyker points out that:

"The most long-suffering third party in cost-externalization is agriculture.... More often, of course, it is directly through the transfer of land out of agricultural use that agriculture is affected...." (Dyker, 1983 p. 47).

An unrealistic interest rate and the absence of land rent guarantee that livestock and land are effectively unpriced. The importance of this defect has accelerated in the last three decades, in both industry and agriculture. In capitalist market economies the decline of labor costs in industry is dramatic. Peter Drucker, the doyen of U.S. management consultants, recently observed that:

"If you're working on improving labor productivity you're wasting your time. Very few companies have more than 10% labor costs." (The Wall Street Journal, July 28, 1987, p. 23).

The unremarked corollary is that this same observation can be applied to modern agriculture. Very few capital-intensive farm enterprises have labor costs in capitalist economies that are above the 10-15% range. The potential for capital/labor substitution in agriculture is nearing exhaustion. This is slowly being recognized in capitalist agriculture, but is no less significant for the USSR. Defects in the pricing

system for land and capital are compounded by an ideological stress on labor's contribution in production. At a time when capital costs are increasingly dominant in agriculture, the Soviet Union is denying itself the tools by which a rational calculation of capital's contribution to production can be made.

This failure to measure the significance of accelerating capital intensity is paralleled in the USSR by the difficulty in abandoning an emphasis on extensive agriculture. An unsettling shift in thinking is involved in the transition from expansion of the cultivated area to an emphasis on increased intensity of land use. The shift typically involves a time-span measured in generations. This shift is well under way in U.S. agriculture, but perception of its significance is still impeded. U.S. farmers and their advisers still tend to think of farm size in terms of acres. A reduction in acre size associated with an increase in the economic size of the farm business seems to be a contradiction in terms. This mode of thinking is slowly changing in U.S. agriculture, and has only just begun to change in the USSR.

One manifestation of the response to a need for change is reflected in the tendency to construct new facilities rather than to modernize existing capacity. This tendency is strong, in both the U.S. and the USSR. The reasons may be quite different--but they may have similar results. In the U.S. the hope for capital gains through appreciating real estate values is a powerful motivating force. This is not relevant in the USSR.

What drives the Soviet preference for new capacity instead of the intensification of existing capacity? One plausible answer is that the rent-seeking drive of Soviet planners and bureaucrats is a substitute form of the search for capital gains. Denied rewards through increased real estate values, Soviet officials and managers who opt for new facilities may be using the only channel open to them to benefit from the increase in value of the national stock of land and structures. The gain comes from enhanced managerial responsibility and the ability to appropriate a portion of the power and prestige that comes from building something new. They can receive rent, not in money, but in jobs and status.

The USSR has created property rights in jobs on a vast scale, supplanting conventional property rights in tangible property. This system gives "rent seeking" top priority, by default. There is no other rent to seek, except the rent from bureaucratic jobs. This puts the reform proposals of Gorbachev in a

different light. He is proposing a "land reform" in the only way it could be proposed in the USSR, i.e. by expropriating some of the property rights in jobs held by entrenched bureaucrats. This is as threatening in the USSR as a proposal to expropriate landed property held by an elite would be in a more capitalistic economy.

A threat to "expropriate the rent seekers" is also implied in the growing pressure in the USSR to permit firms to fail. Bankruptcy is a sophisticated capitalistic concept. It is closely related to accounting practices that rely upon a rate of interest in determining present values of income streams, and relative rates of return on investments. The extension of the concept of bankruptcy to agriculture is an indicator of the degree to which agriculture has entered the money economy. This leads to some crucial questions: **Can socialist farms fail? What are the measures of failure? What are the social costs of failure?**

The fact that it was not possible to raise these questions until quite recently has been one measure of the difference between socialist and capitalist approaches to the organization of agriculture. If socialist farms can fail, and if there is general agreement on the indicators of failure, then this is one measure of the extent to which socialist and capitalist agricultural systems are converging.

The absence of any charges for land rent plays a major role in explaining why it has been difficult for socialist systems of agriculture to acknowledge failure. To appreciate this it is important to understand that land values provide a shock-absorbing function, as well as a source of capital gain.

An agricultural system that includes the prospect that the farm operator can become a land owner creates a powerful work incentive when land values are rising. When land values fall, asset values are wiped out but the cost is a private cost. The capitalist farm can fail at a low social cost. The effect of an exhaustion of economic rent is to impoverish land owners, but there is no direct effect on public sector revenues. There may of course be severe indirect effects through declining tax revenue and rising welfare costs.

A reduction of economic rent in a socialist system comes at the expense of state revenues. The state has been receiving economic rent, usually through manipulation of commodity prices paid producers, and any reduction is felt directly by the state. This is one reason why it is difficult in socialist

economies for the state to acknowledge economic failure or bankruptcy. If the state guarantees jobs, then the cost of failure must be paid directly by the state.

If the cause of failure is bad management, and the state is the ultimate manager, then admission of failure is unmistakable evidence of incompetence in the public sector. The state may be unwilling to acknowledge this political cost of failure.

Inability to rely on falling land values as an indicator of economic imbalance thus deprives the socialist state of the shock absorbing capacity represented by a decline in private sector asset values in a market economy. The typical reaction to economic adversity in a socialist system is to deny that it exists, postpone recognition of any need for change, and prop up declining enterprises or sectors. Both the economic and the political costs of admitting failure appear to be too high. As a result, there is a strong motivation to resist change.

This analysis of some of the differences between the structure of agriculture in the US and the USSR can validly be presented in the present tense. These differences still persist. But what can be said about the future? There are clear signs that key Soviet leaders are aware of the limitations imposed by the use of unrealistic interest rates, the failure to price land, and the absence of firm-to-firm markets. Resolution of any one of these problems will disturb ideological commitments that are fundamental to the Soviet system. This insures that any reform will be a long and contested affair. The rather surprising evidence is that the issues are now being raised at the highest levels of the Soviet command structure.

Recent proposals to permit firm-to-firm contracts have focused primarily on the industrial sector. The "Law on State Enterprises" enacted by the Supreme Soviet on June 30, 1987 explicitly states that factories will be able to buy some supplies directly from each other, by-passing state procurement agencies (Pravda, July 1, 1987, pp. 1-4). The significance of this change could be especially great in the livestock sector. The development of farm-to-farm markets is probably the single most important step that could be taken to promote a rational use of total feed supplies and to reduce Soviet dependence on imported grains.

A similar step is implied in the recent proposals to introduce reforms in the banking structure (The Economist, July 4, 1987, p. 46). It is unclear that this will include the introduction of more realistic

interest rates, but it is difficult to see how any significant banking reform can avoid this step. Here again, the agricultural impact of interest rate reform will be most profound in the livestock sector.

The realistic pricing of land will generate the most severe ideological conflicts. The most likely route will be through expansion of the current practice of contracting with farm production brigades. Responsibility for a specific assignment of land, equipment, and livestock, and an obligation to deliver a part of the output to the parent collective or state farm, will approximate a lease. If the contracted amount is specified in quantities of product, the arrangement will resemble a cash lease, with all risk borne by the tenants. If the contract provides for delivery of a proportion of the crop or product, it will resemble a share lease, with risk spreading between the contracting brigade and the parent farm.

In either case, negotiations over the delivery amount will involve an implicit rent for the use of resources, and especially land. This seems to be the most likely route by which realistic charges for land use will be introduced into the Soviet agricultural system.

In a remarkable review of the need for reform in the Soviet income tax system. S. Shatalin and V. Grebennikov recently proposed that:

"...tax rates for income from personal auxiliary farm plots must take into account the current food situation and ensure an interest in the sale of surplus output from such plots on the side. It may be necessary to allow individual producers to retain some part of the rent income" (Ekonomicheskaya Gazeta, No. 42, October 1986, p. 4).

The appearance of proposals of this nature in a national journal is no guarantee of action. It does underline the change that has taken place in Soviet discussion of sensitive issues. Speaking of her own work, the sociologist T. I. Zaslavskaya recently defended her argument for higher meat and milk prices by pointing out that:

"The possibility of an open discussion in the press of complex problems of the country's economic and social development in itself stimulates creative work. A few year ago, it would simply have been impossible for my latest articles to appear" ("The Personality of a Scholar and Restructuring," Argumenty i Fakty, March 21-27, 1987, p.1).

In reviewing the prospects for Soviet agriculture in the 1980s, Johnson argued that "until labor is adequately rewarded most other changes will have little effect" (Johnson and Brooks, 1983, p. 113). The thesis of this paper is that the route to a more adequate reward system for labor lies through the realistic pricing of agricultural capital and land. The possibility of progress on this front is one of the most intriguing promises of the Gorbachev era.

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