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LABOR MARKETS IN THE USSR

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INTRODUCTION

The basic approach taken in theoretic, as opposed to institutional, western economic writing concerning the USSR and Comecon countries can be characterized as managerial. It addresses the question of which mechanisms have been developed, and with what success, to handle the coordination problems that are dealt with through the marketplace in an idealized free enterprise system.

An alternative approach is to inquire as to the consequences which arise from the combination of values (i.e., the social welfare function) held by the political leaders of the country. This approach is concerned with problems of trade-offs among objectives; it slights the issue of the choice of mechanisms intended to deal with problems common to all developed economies, and instead concentrates upon choices made (or forced) in order to achieve a very specific set of objectives. The best example of this approach in the western economic literature is the debate initiated by Alec Nove as to whether, given the goal of rapid economic development and the political environment of the end of the 1920's, "Stalin was necessary."

This paper is an example of the second approach. It starts from the hypothesis that the social welfare function of Soviet leaders during the postwar period has given great importance to the attainment of all three of the following objectives:

(1) A level of unemployment -- defined as consisting of those who wish to work for income but are not in fact doing so -- which is below that

commonly defined in the west as consistent with "full employment." Moreover, actual unemployment is intended to be at or below this level at all times (although not in all small geographic regions) rather than simply on average over time.

(2) The creation and preservation of property rights to existing jobs. The individual employee is virtually guaranteed the right to work at his existing trade and in his existing enterprise as long as he wishes to do so. This does not mean that he may not be subject to forces which attract him to leave and to work elsewhere, but rather that such pressures for change should be entirely of a "pull" rather than "push" character.

(3) The degree of inflation in the market of consumer goods should be kept to a level below what has come to be regarded as customary in developed capitalist economies of the postwar period.

The above three desiderata constitute a very demanding set. Capitalist economies have not done well in combining (1) and (3), and it is only very recently that (2) has begun to be seriously set forth as an objective.[1] Yet the Soviet record along all three dimensions throughout the postwar years has been extraordinarily good.

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[1]Japan may appear to be an exception in this regard, but such a view would be erroneous. In Japan, (2) applies only to government employees and to the class of employees in private business who are male, permanent workers, under a given age (generally 55 years), and employed by large enterprises. This constitutes a highly selective treatment of job rights compared with the Soviet pattern.

The question to which this paper is directed is the following: What are the trade-offs (i.e., sacrifices) among other Soviet objectives which have been made as the price of achievement of the above set? I shall find the answer to lie in productivity incentives within the socialist sector, in the inability to achieve either consumer or leader-desired mixes of individual products within broad product groupings, and in the sharp development of non-socialist markets (the second economy) far transcending the traditional collective farm markets.

For the reader who is only casually interested in the Soviet Union or in socialist economies in general, the significance of this paper lies in the fact that the above three Soviet objectives are increasingly shared by developed capitalist societies. The Soviet experience may teach us something as to the price currently paid by one country for achieving all three of them in a high degree.

Since this paper is intended for a Woodrow Wilson Center colloquium, I have attempted to write it using a terminology appropriate to a general audience of social scientists rather than to economists in particular. Furthermore, I have not documented my factual assertions. Finally, I must warn the reader that -- although I believe my factual assertions to be all roughly correct -- the current state of my notes has prevented me from carrying out the detailed checks which would be required in a finished work.

I

I believe economists would generally hold that, in a competitive capitalist economy, there exists in equilibrium no trade-off between the level of unemployment[2] and the degree of inflation. (I.e., the Phillips curve is at most strictly a disequilibrium phenomenon.) The level of unemployment is here determined solely by "real" rather than by monetary causes, and is characterized as the "natural rate of unemployment." It is only in disequilibrium -- which, after all, is the virtually-universal state of any actual economy -- that monetary phenomena can influence the observed level of unemployment. This they do through affecting the anticipations of those supplying and demanding labor power, and a negative relationship does exist at any moment of time between the level of unemployment and the rate of increase in the existing degree of inflation. The significance of this analysis is that in a competitive capitalist economy, which like all actual economies is subject to macroeconomic shocks from external forces, it is at best only through accepting a constantly increasing rate of inflation that the unemployment level can be maintained at or below the "natural rate of unemployment."

Contemporary analysis of the "natural rate of unemployment" is carried out through a combination of examination of structural unemployment (which

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[2] By "unemployed" I shall mean throughout this paper those who are either searching for work or who can be characterized as "discouraged workers"--i.e., are not engaging in search only because they believe that no jobs exist in their occupations. In the Soviet Union, the major examples of discouraged workers are married women living in towns that provide employment in a disproportionate ratio to male occupations (e.g., steel and coal towns).

treats different labor skills as complementary), analysis of impediments to competitive labor markets (e.g., minimum wages which may increase the "natural" rate of unemployment of teenagers), and models of "job search." The last of these three elements relates to frictional unemployment; such unemployment is higher the greater the degree to which workers are motivated to quit their jobs and refrain from taking the first other job available, in the hope that a "search" will more than compensate them for their period of unemployment by yielding a new job with a sufficiently better mix of earnings, fringe benefits, and working conditions. An important mechanism through which rising rates of inflation may influence unemployment -- i.e., through which monetary causes have "real" effects -- is by shortening the period of job search due to workers believing that the real purchasing-power earnings offered to them in a given job are higher than is in fact the case.

The above analysis of a competitive capitalist economy should also apply to the Soviet economy, at least since 1956. Soviet employers (enterprises) are responsible for recruiting and retaining their own labor forces. Both ministries and enterprises are motivated in their hirings to employ only those personnel whose work yields them a value of output more than some multiple, which is greater than one, times the wage costs. Partly this is because enterprise managements are evaluated and rewarded to a degree in terms of profitability results; but far more significant is the fact that a ministry or enterprise, in any given year, has available to it a total wage fund -- expressed in rubles as a function of its output -- over the disposal of which it has a great deal of discretionary power. Within the bounds of its wage fund, it can increase or decrease per-worker earnings: primarily through the twin devices of piece rates and of bonuses which are paid from the wage fund. Thus the employment of additional workers whose work will not provide a compensating expansion of output would mean the reduction of (or, more normally, the failure to expand) the earnings of the existing staff. Across years but within the bounds of a given five-year planning period, the linkage of increases in per-worker planned wage fund to the past year's improvement in labor productivity is weak but leads to a similar result. Therefore, Soviet employers' hiring policies should reflect not only external shocks (e.g., limits on the raw materials they can expect to receive) but also the structural characteristics of the labor market available to them. In this respect, their position is quite similar to that of competitive capitalist enterprises.

Soviet workers also respond to labor market conditions in a fashion comparable to that of their counterparts in competitive capitalist markets. Although some of them (recent graduates of specialized secondary education and of higher education) are assigned to jobs for a limited number of years, the vast bulk of the remainder are free to quit their jobs on two weeks' notice. They engage in job search on a scale which -- for those twenty years and older -- is probably even greater than is the average in the United States or western Europe. True, their search process is limited by the difficulty of gaining permission to reside in many cities and of finding housing in other potentially-attractive areas, but such constraints have no effect on search concentrated within traveling distance of their present homes.

What, then, might be the reasons for expecting the Soviet economy "naturally" to operate with a lower level of unemployment than do capitalist economies when both function with "neutral money" policies? A minor factor on the labor-supply side has already been indicated. On the labor-demand side, there is the obligation placed upon enterprises to hire locally-determined quotas of partially-disabled workers and, more important, of youth searching for their first jobs. Furthermore, there is the virtual prohibition -- through a combination of legislation and custom -- on dismissals (see 2 above). But there is no compulsion placed upon the enterprise to hire healthy workers other than youth leaving school. Since Soviet estimates are that the national quit rate in industry is about 19 per cent per annum, and that the total percentage of the labor force leaving for any reason is in the order of 30 per cent, and since these figures are probably even higher in the non-industrial portion of the State sector, the three factors above should presumably be evaluated as having a significant but decidedly minor combined effect.

Soviet economists would, at least officially, describe the key reason as being the centrally planned nature of the Soviet economy. But certainly this cannot consist of the absence of external shocks; if nothing else, unexpected weather conditions operate as a major source of shock because of the importance of agriculture and agrobusiness. Nor would the most Pangloss-type Soviet economist deny that significant planning mistakes occur which themselves create imbalances in the economy. Finally, Soviet planners do not have a peculiarly good record in predicting behavior controlled by individuals; in the field of regional labor markets, the projected net labor force movement to Siberia and the Far East during the 1950's and 1960's was doomed to serious disappointment. Rather, central planning must refer to the absorption and offsetting, rather than to the avoidance, of shocks.

But here we are immediately thrown back to the puzzle of the very low level of wage inflation which has characterized the Soviet economy. Absorption of shocks to employment would be most readily achieved through providing enterprises with excess wage funds so that they might serve as a ready source of jobs for those frictionally unemployed while engaged in job search. Evidence against the existence of this type of excess fund is found in the fact that in 1973, in the USSR as a whole, employers failed to hire some 26 per cent of those who were searching for work through the medium of the labor offices and who were sent by these offices to prospective employers who had earlier indicated that they had job vacancies. Moreover, if such excess enterprise wage funds were created, given the flexibility which enterprises have in the disposal of their wage funds, we would expect considerable earnings-inflation for those occupations most in demand by enterprises, with an inevitable extension of such inflation to other occupations on grounds of equity, and then or sooner to goods sold to consumers. This we do not see. Unless we are willing to credit the Soviet Union with the ability to enforce wage controls, when these run sharply counter to market forces, to a degree immeasurably transcending the experience of capitalist economies, it seems to me that we are forced to search elsewhere than in central planning for the Soviet success with unemployment. We are still faced with the question: How, with "neutral money", has the Soviet economy done so much better in keeping down unemployment than have capitalist economies using the device of increasing rates of inflation?

II

One potential answer, which we must dispose of here, is the existence of an employer-of-last-resort in the form of the collective farms. It is true that until the late 1950's the collective farms constituted a dual labor market of massive size, in which earnings were sharply differentiated downward from those of unskilled labor in the State sector, and that even today both the size and the differentiation is impressive. Not only have these collective farms not ejected labor, but they have also absorbed all children of members who wished to remain. Furthermore, members until recently have been legally restrained from leaving their collective farms and searching elsewhere for work without individual permission.

Unquestionably, this system of dual labor markets was historically important in containing what would otherwise have constituted structural urban unemployment -- created by a disproportion between available labor and its necessary complement of urban productive capital. But this was a transitional problem finally resolved by capital accumulation in the urban areas; it seems no longer to exist on a national level.

More to the point, the collective farms never appear to have acted as employers-of-last-resort in the sense that their active membership rose and fell in response to temporary shocks affecting the urban labor market. (An exception is with regard to collective farm members engaged in seasonal work under contract between their collective farm and a state enterprise. This whole question, however, requires further exploration.) Thus, while the functioning of the collective farm sector has been important historically in explaining the absence of longrun structural unemployment, it offers no explanation as to Soviet unemployment performance in comparison with developed capitalist economies that do not suffer from this sort of structural problem.

III

A significant contribution to the avoidance of structural unemployment in general, and to the minimization of those wage-push pressures which have been its modern accompaniment in the West, has been made by the combination of Soviet educational policy with the strong official disapprobation of lengthy job search.

The capital structure of the Soviet economy is such that it still continues to be best utilized by a labor force which, even in urban areas, has a very high proportion of its members engaged in occupations requiring only minimum skills. Yet by 1970, 90 per cent of the youth had at least 8th grade education, and by 1975 a rather similar proportion had at least 10th grade (complete secondary). Moreover, beginning in the 1960's, there was a huge increase in the proportion of urban youth receiving two- to three-year vocational education for skilled manual trades.

The result of this lack of fit between occupations and education is that in the urban areas (agriculture is a different story) a substantial proportion of those under the age of thirty must be engaged in occupations and specific tasks which require much less training than they in fact possess. One illustration of this is the case of natural science and engineering junior-college graduates (tekhniki) working in industry, some one-third of whom were employed in 1975 as manual workers. A second illustration is the age-composition of different skill grades within manual occupations; skill-grade is strongly positively correlated with age, which has the effect that it is negatively correlated with level of formal education.

In other societies, such trained manpower might be expected to engage in extensive job search in a full-employment economy -- thus suffering largescale and lengthy frictional unemployment. The absence of unemployment benefits in the Soviet Union helps to prevent extensive search; such search is also obviated by the official and unofficial attitude toward voluntary absence of employment which gave rise to the anti-parasite laws that, at the extreme, penalize such behavior by banishment to work-camp areas. The result is that educated manpower works at the jobs which are available.[3/]

This pattern implies, of course, considerable wasteage of educational resources to the degree that these should be regarded as strictly an economic investment in human capital. But as a consequence, the problem of structural balance among complementary labor skills is that of relative oversupply of the more trained -- who can be employed in less skilled tasks. This situation minimizes the structural unemployment that might be seen if the relative oversupply were of the least educated who were incapable of filling the available jobs.

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[3] Some married mothers -- on whom the pressure of attitudes toward non-employment does not bear heavily -- may well be "discouraged workers" in the sense that they are unwilling to accept jobs below their qualifications. However, the high proportion of married mothers who do work suggests that the number of such discouraged workers cannot be great.

Furthermore, the pattern results in an absence of pressure upon enterprise managers to bid up the earnings of skilled personnel. If such personnel quit their jobs, they can usually be replaced with relative ease by others already working in the enterprise at lower-paid tasks. Thus wage-push market pressure on the enterprise is concentrated on low-skill jobs. On the one hand, national policy for two decades has been that of wage equalization -- operating in the same direction as market pressure and requiring no maintenance of differentials. On the other, enterprise managers are compelled to resist large wage increases for such jobs; a sufficiently high proportion of the enterprise's labor force is typically employed in comparable positions so that large increases would be impossible to finance out of the enterprise's wage fund.

IV

The previous section has dealt with the Soviet treatment of structural employment. We must now turn to the means by which shocks to the labor market are absorbed without effects on employment and without allowing wage-push inflation.

Here we must return to examination of the wage fund, which is the basic Soviet macroeconomic instrument of control over the labor market. The starting point in planning the wage fund for any enterprise is an elaborate matrix of pay scales established on a national level at periodic intervals over a decade apart, with more frequent modifications only as a consequence of increases in the minimum wage. This matrix consists of rates set for each sector of the economy by trade and by skill-grade, and is added to by a system of supplements designed to take account of such factors as the regional location of the workplace and whether the work performed is heavy or dangerous.

Basic wages are complemented by substantial above-norm piece rate earnings and by bonuses, met primarily out of the enterprise's wage fund but also -- mainly for white collar personnel since 1965 -- out of an additional fund linked to enterprise performance. Since basic wages remain constant for relatively long periods, while earnings are expected to rise annually, the proportion of the wage fund used to pay above-norm piece rate earnings and bonuses rises sharply in years between revisions of basic wages, and falls precipitously in years of wage revisions.

The wage fund for a given enterprise at the beginning of a five-year plan is determined on the basis of the planned number and skill-occupation mix of the employees, multiplied by the matrix of basic pay scales cum supplements, and then multiplied once more by 100 per cent plus the percentage of above-scale payments common to the economy as a whole. This result is modified somewhat to take account of the existing above-scale payments in the given enterprise during the previous year.

On the basis of this wage fund, a projection is made as to changes in the planned number and skill-occupation mix of enterprise employees throughout the five year plan, and future annual wage funds are projected on the basis of this plus centrally-determined improvements in per-capita earnings during the period. What is critical to note is that, up to this point, both labor productivity and planned productivity improvements are irrelevant -- almost entirely for the first item, and completely for the second -- to the determination of the per-capita wage fund of the enterprise.

It is only at this stage that achieved productivity improvements enter into the calculation of the per-capita wage fund. During the five-year-plan period, annual planned per-capita wage fund figures for the enterprise will be set higher or lower than the projected levels according to whether the annual enterprise plans are based on higher or lower productivity levels than those projected in the five year plan, and the realized per-capita wage fund will differ from the annual plan figure according to how actual labor productivity has differed from that forecast in the annual plan. Thus labor productivity improvements within the enterprise can influence the per-capita wage fund in two fashions: across years during the entire five year period through the mechanism of the level set in the annual plan for the per-capita planned wage fund, and within a given year through the difference between the annual-plan and the actual wage fund.

In the actual evolution of wage funds, it appears that the second (within year) reward for productivity improvement is real, but that the first (across years) reward is largely fictitious. Thus improvements of labor productivity within a given year in an enterprise lead to monetary rewards for the enterprise's employees, but such rewards largely disappear at the end of the year and must be rewon by further improvements in the following year.

This rather complex pattern of determining earnings has the following key features:

(1) The system's point of departure is a nationwide system of base rates whose relative level reflects conceptions both of equity and of response to supply-demand forces on the labor market.

(2) Resulting earnings are updated annually through a multiplicative factor reflecting national decisions as to rates of improvement in per capita earnings. In this fashion, the elaborate process of determining relative rates need not be repeated too frequently.

(3) Inevitably, these national rates will fail to reflect local labor market conditions at the moment of promulgation, and they will depart increasingly from equilibrium levels as time elapses and as the demand and supply of particular trades and skills changes. The management of the individual enterprise, charged with responsibility for the recruitment of its own labor force, can respond to changes in demand and supply of particular labor skills by varying the relevant workers' above-norm earnings. However, since such a management has a fixed total wage fund at any moment of time, it can increase the earnings of one occupation only at the expense of another.

(4) Since the annual wage funds are set on the basis of a planned increase in per-capita earnings nationally, it is possible (although technically difficult) for the nationwide planned annual wage fund to be in equilibrium with the planned output of consumer goods sold at existing prices. (I put to one side the complication of demand by collective farmers which is financed from earnings derived by sales to the state.) If above-annual-plan productivity improvements during the year are similar in consumer-goods and producer-goods sectors, then unplanned productivity changes will not upset this balance. In any case, the following year's wage fund plans can compensate for whatever aggregative imbalances have developed; thus such imbalances are damped across years rather than allowed to explode.

It is through this procedure that wage-push inflation can be avoided. The aggregative planning task is clearly highly demanding, but the virtue of the situation is that the problem is essentially technical rather than political-social as in wage-constraint measures adopted in capitalist economies. The success of the Soviet macro-financial planners in executing this technical task is shown by the fact that in postwar years they have been able to restrain the rate of inflation (by western calculations) to one to three per cent per annum.

(5) The theory of wage-fund planning calls for changes within a five year period in per-capita earnings within an enterprise as a function of that enterprise's above-plan improvement in labor productivity. In fact, it appears that there is only a very limited functional relationship of this type across years, and that the relationship is a strong one only within the bounds of a single year.

V

It is the enforcement upon the enterprise management of the constraint of keeping its wage spending within the bounds of its wage fund which is the key to the restraint of wage-push inflation. But what is the key to the absorption of shocks to employment?

The writer can see only one solution to this puzzle. The suggested solution lies in (5) of the previous Section: that productivity improvements for an enterprise as a whole yield only a very shortterm increase in earnings. We must hypothesize that such an increase in earnings is insufficient to make attractive to the labor force those sorts of productivity changes which are achieved by additional effort (as opposed to those attained purely through improved machinery or organization), since the additional effort must be maintained in the future without the supplementary compensation. Moreover, the labor force does not object to the reduction within limits of above-norm earnings during a single year when this is accompanied by a reduction of work effort both in the present year and in the future. It is this last phenomenon which operates when some enterprises are forced to cease their hirings because of external shocks, and which allows others of the region to expand their hirings abnormally out of the ever-revolving group of frictionally unemployed.

The principal positive evidence in support of this hypothesis is the Shchekino experience. An experiment was begun in 1967 in which a limited number of enterprises were guaranteed a predetermined total wage fund for each year of a three to five year period, regardless of the number and mix of personnel actually employed. Here was the promise of a substantial expansion in the earnings rewards for above-plan productivity improvement. This experience has been constantly and almost universally hailed since its initiation; yet the number of workers engaged under the scheme is still limited. Moreover, per capita earnings in the enterprise which originated this movement and was its showcase, during the first four years when its labor productivity grew three times as fast as in the next quinquennium, and starting from an average earning level which was the lowest in its subbranch, increased by only 2.3 per cent per annum faster than did average earnings in all industry.

What has held back the Shchekino experience? I would suggest that its development would be fundamentally irreconciliable with the maintenance of the low levels of unemployment which are characteristic of the Soviet economy. If it were to become both extremely widespread, and were to offer very substantial increases in earnings over a period of years to those enterprises successful in improving productivity through increased worker effort, then enterprises would no longer be willing to expand their labor forces when employment diminishes in neighboring enterprises through the cessation or slowing down of new hires. This would be in unacceptable conflict with the social welfare function of Soviet leaders whose existence was hypothesized at the beginning of this paper.

A second piece of evidence is the result of the introduction in 1973 a major alteration in the reward system for white collar personnel; for the first time, rewards financed outside the wage fund were linked directly and substantially to improvements in the enterprise's labor productivity. The first thing to be noted here is, to quote Conan Doyle, that the dog did not bark: i.e., that the rate of growth in labor productivity did not increase. The second item to be noted is that the rewards were directed to those who would least bear the brunt of permanent increases in work effort on the shop floor. It should be no surprise that there is no indication of a resulting increase in frictional unemployment, and it would not seem overbold to suggest that there were those among the macroplanners who made sure that the 1973 change was designed as it was.

A third piece of evidence -- which at first sight seems contradictory to the hypothesis and which indeed may eventually turn out to be so -- is a Soviet study of enterprises during 1968-69 which indicates a lack of relationship between an enterprise's ability to recruit its planned number of personnel and its ability to fulfill its annual output plan. Clearly, labor productivity improves -- and there is little time for this to occur except by extra effort -- in those enterprises where the labor force is below plan. The answer to this anomaly is that enterprises are allowed temporarily to increase per capita earnings as payment to workers taking over part of the job task of an unfilled worker position, while the number of worker positions -- on which the wage fund is based -- is not reduced in the following years. Thus, unlike the usual situation in Soviet enterprises, additional effort is demanded only as long as it is paid for in supplementary earnings. Here we find support for the view suggested by various observers that Soviet work effort is commonly at a fairly low level and could be increased by a suitable reward system. To quote one of the informants of Hedrick Smith in The Russians, "They pretend to pay us and we pretend to work."

In short, it is the absence of incentives to increased work effort at a total enterprise level which provides the key to the fact that shocks to employment levels in some enterprises can be readily absorbed by other enterprises, with this occurring on a fairly free labor market without the creation of wage inflation. Thus productivity improvement is sacrificed -- and necessarily so, I would suggest -- to obtain the complete set of desiderata hypothesized at the beginning of this paper.

Another type of productivity loss -- this following from the inability to follow centrally-desired regional location policy -- results from the wage-fund mechanism which has so successfully restrained wage-push inflation. Throughout the last three decades, Soviet leaders have been unable to attract a net movement of labor to Siberia, the Far East, and the Far North. Given the natural resource base of these regions, this failure has had serious productivity costs for the national economy.

What is striking in regional labor policy is the timidity with which Soviet authorities have acted in offering financial incentives to those who work in these undesirable regions. Substantial incentives have been provided for those working in mining and in resource-based industries, but it was only in 1968 that employees in all other sectors of the economy were offered regional premiums which are sufficient even to compensate for the higher cost of living in these areas. The result of this very limited and one-sided financial reward system is that workers attracted to the resource-based sectors have found themselves in an environment with a total lack of amenities, and so have tended not to remain long. But there is little that Soviet authorities have been able to do to provide such amenities, given their inability to attract a labor force which would produce them.

Why this curious limitation of financial incentives to workers in resource-based sectors? I would suggest that it has been forced upon the central planners by their system of ministerial wage funds.

For resource-based ministries, output plans could not be met except by expansion in those areas where the rich resources lay. Thus, if the ministries were to meet their production targets, they were forced to spend their wage funds according to central design: i.e., heavily in the eastern regions.

The same, however, has not been true for those ministries which are not resource-based. Construction, trade, health, education: all these could meet their targets on a national and even on a republic level by concentrating on activities outside of these eastern and northern areas. If they had been provided with wage funds sufficient to meet very large regional wage supplements, there would have been no guarantee against such funds being substantially diverted to finance wage-push inflation in the western areas of the Soviet Union. (There are no convincing indications in Soviet history to suggest that the central government is able to exercise strong enough control over its ministries to prevent this.) Thus a substantial and universal real-wage premium for work in the eastern regions would have represented a major threat to the anti-inflationary objective realized through the wage fund system.

VI

An additional sacrifice, this time in the market for goods and services, seems required by the desideratum of the creation and preservation of property rights in existing jobs. The argument is too complex to be presented here, and reference can only be made to another article of the writer.[4] But the conclusion is one which we need for the following Section. It is that prices must be set centrally for long periods, and thus inevitably be out of equilibrium with supply and demand conditions throughout most of the lifetime of such prices. With some ten million or so different kinds of goods being produced and sold, enterprises will be strongly motivated to produce -- at least within subgroups of products -- a different mix of specific products than that desired either by user enterprises or by final consumers. The cost of achieving the objective of virtually guaranteeing workers their existing jobs is the production of a detailed product mix of goods which satisfies neither central planners, final consumers, nor intermediate users.

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[4]"Soviet Use of Fixed Prices: Hypothesis of a Job-Right Constraint" (forthcoming).

VII

A third sacrifice -- in terms of the values of Soviet leaders -- lies in the creation of two powerful elements promoting the large and apparently expanding second economy. These elements are both on the demand and supply side.

The inability of the first economy -- the socialist economy -- to satisfy the desired mix of products purchased either by intermediate producers or by final consumers leads to a willingness to obtain purchases through other channels. In the case of intermediate producers, the use of "pushers" to obtain raw materials -- with the accompanying gray markets of semi-barter as well as those of outright bribery -- has a long history. As to final consumers, the major expansion in their demand during recent decades -- beyond the foodstuffs supplied on the legal collective farm markets, mainly by private-plot production -- is a result of the growing per capital income levels. As real income levels have risen, it is not surprising that many consumers have been able to indulge their preference for goods, and especially for services, which are unavailable through either the socialist sector or through the collective farm market.

Although no quantitative date on this matter are available to me, one would suspect that much of this demand must be concentrated in the area of household services. Household services produced by the state sector -- which include as their major items shoe repair, garment repair, laundry and drycleaning services, barbering, all maintenance of houshold durables and of the three million privately owned automobiles, and home and apartment repair -- totalled in 1975 only 25 rubles (something like $37) per capita per annum.

It is difficult to believe that this can be other than a modicum of the household services actually consumed by the Soviet population.

On the supply side, the failure of the socialist sector to expand more sharply its supply of household services must partly result from the absence of a sufficiently rapid pace of development of national labor productivity: this absence has kept Soviet leaders from believing that they would be warranted in increasing employment in this service sector to a level corresponding to that found in developed capitalist economies. (Only about 2 1/2 million people are employed by the state in this sector.) The absence of a sufficient national productivity growth rate results in part from the weakness which was elaborated above in work incentives. But probably even more important in explaining the low volume of state-supplied household services are the peculiar difficulties in operating such a sector effectively without the existence of work incentives, since such services constitute very much of a tailor-made product produced in small work units. (This characteristic of the work place makes it difficult to supervise the work done -- while the relevant workers do not have the professional ethos of physicians or teachers or research scientists -- and thus to achieve at least minimum standards through disciplinary rather than incentive means.) One might well argue that the better part of valor on the part of Soviet authorities is to keep such a sector small; how else explain the fact that only about two per cent of Soviet manpower is employed in it?

Most important on the supply side is the source of inputs into the second economy. One source is theft from the state sector: both of the traded goods themselves and of materials further processed within the second economy. But much of the inputs consists of labor time (e.g., in the household service sector) that would otherwise appear in the economy as leisure.

For those engaged in most occupations in the socialist sector, there is no opportunity for moonlighting in other socialist jobs. (In the mid-1970's, only about 1/2 of 1 per cent of all those working in the productive sectors of the economy in the Russian Republic engaged in such moonlighting.) Even more significant, those who wish to work at greater intensity than they customarily do in their fulltime socialist jobs find no effective (i.e., paid) demand within the socialist economy for such higher intensity of labor. In short, there must be many in the labor force -- particularly males who do not choose to engage in the social activity demanded of Communist Party members or in evening educational efforts -- who find that the marginal leisure value to them of their off-work hours is low. A fair proportion of these must possess skills of the types for which there is a high demand, and thus high marginal earnings, in the second economy.

Thus we see that the set of desiderata elaborated at the beginning of this paper provides a strong base for the development of a healthy and substantial urban second market in a society with a rapidly growing level of disposable income.

CONCLUSION

Sections V--VII have elaborated the national trade-offs which are de facto made in the Soviet economy so as to achieve the set of objectives embodied in overfull employment, the right of the worker to his existing job, and the avoidance of a high level of inflation. One might well ask whether Soviet political leaders will continue to find this trade-off acceptable.

Marxist doctrine itself pushes for change in the social welfare function adopted by the leadership. The growth of the second economy in the urban sector, combined with its continuation in the production and marketing of foodstuffs by the rural population, can be viewed as a transformation of a socialist society into a new economic N.E.P. (the Soviet economy of the 1920's). Marx's view that a progressive socio-economic relationship of the means of production breaks the fetters on production imposed by an older form of relationship suggests a test for the "progressivity" of internationally-competing system: this test lies in the relative rates of expansion of production.

The 1980's and first half of the 1990's will be a period of only about 0.4 per cent growth in the labor force per annum. (Regional factors in population change further accentuate labor shortage in the industrialized regions of the country.) The degree to which production growth can be achieved through extensive development -- increased mobilization of the potential labor force and expansion of investment -- is recognized by Soviet thinkers to be constantly diminishing; only increased rates of productivity improvement can maintain even the existing rates of per capita production growth. This change in the economic environment within which the Soviet leaders function, combined with doctrinal pressures, might well lead to a reversal of the present acceptance of the terms of the national trade-off.

Thus it would not surprise this writer if the 1980's should see some sacrifice in the employment-inflation set of values resolutely pursued up to this time. In a period when western Europe is increasing the degree to which workers are granted property rights in their existing jobs, the Soviet Union may begin to accept the weakening of such property rights, higher levels of frictional unemployment, and higher levels of inflation. This is an area in which we may begin to see some degree of international convergence.