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HOUSING AND IMPUTED RENTS IN THE USSR

by Michael Alexeev

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(continued on reverse)
Expenditures on Privately Rented Housing and Imputed Rents in the USSR

Michael Alexeev
George Mason University

1. Introduction.

The purpose of this paper is to estimate the imputed rents on owner occupied housing in the urban areas of the USSR in late 1970s. The CIA, in their estimates of the Soviet GNP accounts, calculates the imputed rent on urban private housing as the product of midyear stock of such housing and the average rental rate of state housing. The state housing rents, however, are heavily subsidized so that they do not even cover the operating costs of housing.

While it is obvious that the state housing rents underestimate the cost of housing to individual and cooperative housing owners, it is not an easy task to estimate the correct imputed rents with a reasonable degree of precision. In international practice the imputed rents

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1To a large extent the estimates as well as some of the arguments in this paper are similar to those in Alexeev (1990 a,b). These two previous papers, however, focused on a different set of issues and the subject of imputed rents was only tangential to their main topics.
Privately Rented Housing

for owner occupied housing are equal to the market price of rental housing. The private rental housing market in the USSR in the late 1970s, however, was severely restricted and the transactions in that market were often illegal. Under these circumstances it may be useful to estimate the cost of housing to its owners based on the price of the dwelling at purchase, and attempt to infer the imputed rent from these data. In what follows I will provide estimates of the private rental rates in the Soviet cities and of the cost of privately owned housing. I will also estimate the expenditures of the Soviet urban residents on summer houses. It will be difficult, however, to allocate these expenditures between the incomes of urban and rural residents.

The estimates derived in this paper present special interest in light of the current economic reforms in the USSR. An important component of these reforms is housing market reform. The state has started to sell off its housing stock to private individuals and enterprises and organizations. So far the process has been developing extremely slowly but it is accelerating.² The estimates of

²In 1989 the state sold 37,000 apartments (or .1% of all single family apartments in state-owned housing stock) which brought in 164 million rubles in revenues (Zhilischnye ..., 1990). In 1990 the sales of state-owned apartments went up to 75,000 for "over 300 million rubles" (Ekonomika i zhizn', no. 5, January 1991). The average
the market-determined rents prior to reforms can help us to anticipate the market situation after housing reform.

The main data source used for these estimates is the Berkeley-Duke family budget survey conducted among the Soviet emigres who left the USSR in the late 1970s and early 1980s. The 1,061 families were questioned about their incomes and expenditures prior to emigration including those earned and spent in the second economy. The summary data about the survey can be found in Treml (1986). The potential biases, particularly with respect to housing, are discussed in Alexeev (1988).

2. Estimates of Expenditures on Privately Rented Housing and Imputed Rents.

According to the Soviet sources, 2.9% of all urban households in the USSR rented housing privately in 1989. The breakdown of these figures by republic is shown in

prices of these apartments were slightly over 4,000 rubles. Sales continued to increase in 1991 but at a slower rate (see Goskomstat, press-vypusk 124, 7/24/91 which reported the sales of apartments from state and "public" housing stock for 1990 and the first half of 1991). Interestingly, the average official prices of the apartment sales have been declining since 1989.

Table 1. Privately Rented Urban Housing by Republic (% of all urban housing)

<table>
<thead>
<tr>
<th>Republic</th>
<th>Private Rentals</th>
<th>Republic</th>
<th>Private Rentals</th>
</tr>
</thead>
<tbody>
<tr>
<td>USSR</td>
<td>2.9</td>
<td>Lithuania</td>
<td>6.2</td>
</tr>
<tr>
<td>RSFSR</td>
<td>2.3</td>
<td>Moldova</td>
<td>4.8</td>
</tr>
<tr>
<td>Ukraine</td>
<td>3.6</td>
<td>Latvia</td>
<td>2.4</td>
</tr>
<tr>
<td>Byelorussia</td>
<td>4.4</td>
<td>Kyrgyzstan</td>
<td>5.2</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>1.8</td>
<td>Tadjikistan</td>
<td>2.4</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>4.3</td>
<td>Armenia</td>
<td>2.5</td>
</tr>
<tr>
<td>Georgia</td>
<td>4.9</td>
<td>Turkmenistan</td>
<td>2.8</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>5.0</td>
<td>Estonia</td>
<td>2.7</td>
</tr>
</tbody>
</table>


The figure for the Russian republic as a whole is somewhat higher than the percentage from the Berkeley-Duke survey (see Table 2) but the difference is relatively minor.

According to official statistics, the percentage of families from Moscow and Leningrad (St. Petersburg) living

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4 Private information.
in privately rented housing, however, are substantially lower than the corresponding data from the Berkeley-Duke survey. I suspect that this discrepancy is due to the understatement in the Goskomstat RSFSR data. Normally, landlords are not afraid to report renting out housing space since private renting in itself is legal. The illegal aspect of the rental transaction is usually the price.

According to the law in effect in the 1970s, the rental charges for privately rented housing ought not exceed the landlord's costs. In the case of a state-owned apartment this cost was equal to the state-controlled rent and utility charges. In Moscow and Leningrad the situation is different in that it is difficult to obtain a propiska (residence permit) in these cities. Without the propiska the household does not have a legal right to reside in the city. Many of the actual private rentals in Moscow and

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5The propiska system may be revamped or even abolished in the near future. According to the Soviet newspaper Izvestia (October 14, 1991), the Soviet Committee of Compliance with the Constitution (Komitet konstitutsionnogo nadzora) proclaimed the institution of propiska unconstitutional. While registration of residence may still be required, the citizens do not have to obtain permission for residence anywhere outside of military bases and border settlements. The Committee decision concerns only the Union legislation. In order to obtain real force this decision has to be confirmed by the republican legislatures.
Leningrad go unreported because the renters cannot obtain propiska.\(^6\)

Table 2. Summary Data on Privately Rented Housing

<table>
<thead>
<tr>
<th>Subsample</th>
<th>Number of households in subsample</th>
<th>Average monthly rent (rub.)</th>
<th>Average living space (sq.m.)</th>
<th>Monthly rent per sq. m. (rub.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moscow/Leningrad</td>
<td>357</td>
<td>45.8</td>
<td>21.2</td>
<td>2.32</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(9)</td>
<td>(10)</td>
<td>(9)</td>
</tr>
<tr>
<td>Other N. Republics</td>
<td>343</td>
<td>41.4</td>
<td>34.5</td>
<td>2.04</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(8)</td>
<td>(10)</td>
<td>(8)</td>
</tr>
<tr>
<td>Southern Republics</td>
<td>361</td>
<td>63.3</td>
<td>28.4</td>
<td>2.40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(10)</td>
<td>(10)</td>
<td>(10)</td>
</tr>
</tbody>
</table>

Note: The figures in the parentheses indicate the number of observations used to calculate the average.

Source: Berkeley-Duke survey.

The average annual rent paid by the Berkeley-Duke survey respondents on privately rented housing was equal to 26.8 rubles/sq.m.\(^7\) Normalization by the amount of housing space

\(^6\)For some examples of risk associated with renting out a state-owned apartment and the attempts to obviate the law see Sotsialisticheskaiia industriia, 11/12/85, p. 3.

\(^7\)This average was calculated in 1977 rubles. The adjustment coefficients came from Treml (1986). No normalization of the data was performed for this estimate. The average was derived from the 27.9 rub/sq.m. in the Moscow/Leningrad subsample, 24.4 rub/sq.m. in the rest of the Northern republics, and 28.7 rub/sq.m. in the Southern republics. The Northern republics in this classification consist of RSFSR, Ukraine, Kazakhstan, Byelorussia, and the Baltic republics. The Southern republics include all other Soviet republics. The Berkeley-Duke survey does not have representatives from every Soviet republic. The respondents from some of the republics are assumed to
in the regions yielded the adjusted average rent of 24.9 rub/sq.m. The normalized share of housing space rented privately was about 3%. These estimates imply that the Soviet urban dwellers paid (and received) close to 1.5 billion rubles for privately rented housing in 1977.

Perhaps a more important implication is that the imputed rent on owner occupied housing in the urban areas of the USSR should be close to 25 rub/sq.m. rather than the 1.46 rub/sq.m. used by the CIA in the Soviet GNP accounts. The resulting total imputed rent for 1977 would be 9.69 billion rubles. Note that this number includes the costs of represent other republics in the category. For example, the majority of the respondents from the Southern republics category came from Armenia. Moscow and Leningrad are put in a separate category due to the fact that many respondents were from these two cities, and because Moscow and Leningrad have vastly different from the rest of the Northern republics housing markets.

In order to normalize I assumed that the survey average rents and shares of housing rented privately were applicable to the entire regions. I weighted these averages by housing space figures for each region obtained from Narkhoz 1977.

This estimate resulted from multiplying 24.9 rub/sq.m. average rent by the total amount of living space in individually owned and cooperative urban housing. The amount of useful housing space in privately owned urban housing in 1977 was equal to 491 million sq.m. (Narkhoz 1977). The cooperative housing accounted for approximately 4.5% of all urban housing which adds another 90 million sq.m. (Alexeev, 1988,c). The share of living space was approximately .67 of useful housing space (Treml, 1986). Therefore, the individually and cooperatively owned living space can be estimated at 401 million sq.m.
maintenance and repairs since the 24.9 rub/sq.m. rate presumably included these costs, i.e. the renters normally would not be responsible for maintenance. Unfortunately, the Berkeley-Duke survey provides no information on the ownership of privately rented housing. If all privately rented housing was state-owned then the 1.5 billion rubles rental payments constitute a part of the population's income separate from imputed rents. If all of these rentals were in privately owned dwellings then 1.5 billion rubles would completely "overlap" with the imputed rents and should not be included separately in total income. As a first approximation I assume that identical shares of private, cooperative, and state-owned housing were privately rented. This assumption implies that about 29% or 433 million rubles in rental payments went to individual and cooperative housing owners with the rest appropriated by the residents of state-owned housing.

The 24.9 rub/sq.m. estimate may overstate the housing rents which would exist in the Soviet housing market if it was unrestricted and if state housing subsidies were eliminated. The illegal nature of many private rental transactions must generate a risk premium which adds to the rental rate. In addition, private rentals are probably more prevalent in the cities with particularly acute housing shortages. Naturally, rents would be higher in these
markets. The overstatement, however, may not be very large. Notice that the average rents in Moscow/Leningrad subsample are not much higher than those for the other northern republics and are even lower than the rents in the South. Meanwhile, Moscow and Leningrad probably present the highest risks since it is not only the rental rate that is illegal, but also the fact of renting to a household without propiska which I suspect is often the case. In addition, the housing shortage in Moscow and Leningrad in the late 1970s probably was one of the severest in the country.

In the parent population the payments for privately renting housing must be equal to the receipts of the landlords. The same must hold true for a representative sample from this population. The Berkeley-Duke survey contains a question which permits a check on whether or not such balance exists in the survey sample. The respondents were asked to state their household income from renting out an apartment, room, dacha, garage, parking space, garden plot. Since this question includes income other than from housing rental the unbiased sample should result in a higher total for this question over all respondents than for total household payments for rental housing. Table 3 provides the comparison for income from and expenditure on private rentals.
Table 3. Income from and Expenditure on Private Rentals

<table>
<thead>
<tr>
<th></th>
<th>Exp. on Rented Housing</th>
<th>Income from Renting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of renters</td>
<td>Average Sum</td>
</tr>
<tr>
<td>rent</td>
<td>rent</td>
<td></td>
</tr>
<tr>
<td>Moscow/Leningrad</td>
<td>10</td>
<td>490.1</td>
</tr>
<tr>
<td>Other N. Republics</td>
<td>9</td>
<td>504.5</td>
</tr>
<tr>
<td>Southern Republics</td>
<td>10</td>
<td>759.7</td>
</tr>
</tbody>
</table>

Source: Berkeley-Duke survey.

In Moscow/Leningrad and in the other northern republics subsamples we have a discrepancy which suggests presence of a representation bias. The renters are overrepresented compared to the landlords. This discrepancy, however, is rather small for the other northern republics subsample. For the southern republics subsample the numbers are consistent with the absence of this kind of a bias.

Finally, I would like to address the issue of dachas, the Soviet summer houses. The concept of a dacha is rather broad and vague. This is how Smith (1976) described it:

Dacha is one of those magical elastic words in Russian that conceals more than it reveals. ... For a dacha can mean anything from a little, oversized toolshed or a one-room cabin on a tiny plot of ground, surrounded by a development of identical little cabins with no privacy, to a modest but pleasant four-room country cottage without plumbing in a plain Russian village, to a
grand mansion taken over from the old aristocracy or a more up-to-date, rumbling country villa built in the forties by German prisoners-of-war (p. 47).

As a rule the country houses have virtually no amenities common in urban areas.

Some dachas are owned by the state or an organization and are used free-of-charge or for a token payment by the officials. Others are privately or cooperatively owned, and can be bought or sold in a rather free by the Soviet standards market. The owners often spend weekends, vacations, and even some weekdays at their dachas. Many urban households rent dachas during the summer. The imputed rents for owner-used dachas ought to be calculated as well. According to "Sotsial'noe ..." (1989) the Soviet population uses 6.3 million suburban dwellings for "temporary living." Out of this number almost 6.2 million are houses located on garden plots and 103,000 are dachas. The number for dachas includes 12,000 units which are simply abandoned rural houses. The survey summary data on dacha are shown in Table 4.
Table 4. **Summary Data on Dacha Rentals**

<table>
<thead>
<tr>
<th>Subsample</th>
<th>Number of households in subsample</th>
<th>Average monthly rent</th>
<th>Average length of rental (months)</th>
<th>Average season's rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moscow/Leningrad</td>
<td>357</td>
<td>263.9</td>
<td>2.7</td>
<td>739.3 (97)</td>
</tr>
<tr>
<td>Other N. Republics</td>
<td>343</td>
<td>261.1</td>
<td>2.4</td>
<td>707.6 (39)</td>
</tr>
<tr>
<td>Southern Republics</td>
<td>361</td>
<td>207.3</td>
<td>1.6</td>
<td>424.9 (56)</td>
</tr>
</tbody>
</table>

Note: The figures in the parentheses indicate the number of observations used to calculate the average.

Source: Berkeley-Duke survey.

Normalizing the data in Table 4 by the number of households in the respective regions I estimated the total amount of rents and other expenditures paid by Soviet urban residents for dachas in 1977 at 5.7 billion rubles. It is not clear, however, what part of these payments went to urban dacha owners and to rural landlords. I presume that the lion's share actually went to rural dacha owners because in the Berkeley-Duke survey only 26 households owned dachas while almost 200 respondent families rented them. Unless the survey is seriously biased toward dacha renters, this discrepancy indicates that most often urban residents rent dachas from rural residents.

The 26 dacha owners in the survey translate into much higher rate of dacha ownership than the data from
"Sotsial'noe ..." (1989) imply even though they relate to January 1, 1988. These Soviet data, however, are difficult to interpret since the difference between a dacha and a "house on a garden plot" is far from obvious.\textsuperscript{10} It is quite possible that the Berkeley-Duke survey respondents did not differentiate between the two, especially since they were not asked about the garden plot house. In any case, the 1988 figures imply very little about the dacha ownership rates in 1977. For these reasons I decided to assume that the respondents did not differentiate between various suburban dwellings and that the survey ownership rates were representative of the rates in the respective geographical regions.

Normalization by the number of households in each region yielded an estimate of 2.48 million dachas (or suburban dwellings) in the USSR in 1977. Out of this number 2.45 million belonged to the residents of the northern republics and only 0.03 million were located in the southern republics.\textsuperscript{11} Using the average rates for the season from Table 4 I estimated the 1977 imputed rents for dachas in

\textsuperscript{10}According to Kosareva et al (1990), garden houses are "not, strictly speaking, dwellings but an attribute of an additional work place at the fruit or vegetable garden."

\textsuperscript{11}Such a lopsided distribution of dachas is generally consistent with the data in "Sotsial'noe ..." (1989) where the southerners owned only 1,000 out of 103,000 dachas and only 98,000 out of 6.2 million houses on garden plots.
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the USSR at 1.74 billion rubles in the northern republics and 12.7 million rubles for the southern republics.\(^\text{12}\)


The small number of observations on privately rented housing in the Berkeley-Duke survey did not permit to obtain reliable information on the dynamics of rental payments from the survey. It is possible, however, to make educated guesses about the extent of inflation in rental payments and imputed rents since the late 1970's using other data.

Consider first the general price index. According to the official data, the inflation of state and cooperative retail trade prices during 1980-1989 period came to 13.2\%.\(^\text{13}\) The inflation of foodstuffs prices on the kolkhoz markets for the same period reached 22.5\% (out of which for meat and meat products the inflation rate was 43.7\%).\(^\text{14}\) The Soviet official price indexes are notorious for

\(^\text{12}\) Using seasonal rates appears to be quite appropriate since only 3.5\% of the suburban dwellings were equipped for all-year living, see "Sotsial'noe ..." (1989).

\(^\text{13}\) Calculated based on Narkhoz 1987 and 1989.

\(^\text{14}\) Narkhoz 1989.
underestimating real inflation in the economy. According to Khanin (1989), the official wholesale price index underestimated inflation rate by more than 3-fold.\(^{15}\) Some Soviet authors estimate annual inflation rate in the late 1980 at over 10\%.\(^{16}\) Inflation seems to have significantly accelerated in 1990. \textit{Vestnik statistiki} (no. 3, March 1991) reported that during 1990 kolkhoz price index rose by 29\%. Some black market prices were rising even faster. For example, the price of bricks went up by 60.4\% between August and December of 1990. During the same period prices of cement rose by 24.9\%. Prices of bricks and other construction materials obviously affect housing prices and rental rates.

The available information on housing prices suggests that inflation there may be even greater than in many other sectors of the economy. Alexeev (1988) quoted reports in Soviet newspapers on the per square meter side-payments taking place during apartment exchanges in 1986.\(^{17}\)

\(^{15}\)More discussion of Soviet inflation estimates could be found in Gaddy (1991).

\(^{16}\)For a summary of recent Soviet inflation estimates see Martanus (1990).

\(^{17}\)Soviet households have generally been allowed to exchange the state-owned apartments they rent for other state-owned apartments. (Incidentally, the exchange of individually-owned houses for state-owned apartments had been prohibited until the presidential decree "On the new approaches to solving the housing problem in the country
According to that information, in the city of Orenburg the unequal exchange used to be supplemented with a 100 rubles per square meter side-payment. The corresponding prices in Iaroslavl' ranged from 200 to 250 rubles. Perevedentsev (1990) reports that during such exchanges the side-payments in various cities ranged from 300 to 500 rubles.\textsuperscript{18} Apparently, prices more than doubled in less than 4 years.\textsuperscript{19}

Some recently reported housing prices imply an extremely high rate of inflation in the housing sector. In fact, prices at an auction reported in Argumenty i fakty (no. 23, 1991) were so high that one has to assume the existence of some special circumstances. According to this report, the rights to occupy a three-room municipal apartment on

and measures for their practical implementation\textsuperscript{6} published in May 1990.) Substantial illegal side-payments may often be necessary when such an exchange involves housing of unequal quantity or quality. The above mentioned decree also suggested that the state would compensate the households which are willing to exchange with the state a larger for a smaller one. The details of the compensation scheme have not been made clear, however.

\textsuperscript{6}Presumably, Perevedentsev's data refer to 1989, i.e. prior to the acceleration of inflation in 1990.

\textsuperscript{19}Morton (1980) reported side-payments of 100 rubles per square meter during apartment exchanges in Moscow in the 1960s. Moscow housing prices are, presumably, among the highest in the country. Therefore, if Perevedentsev's report is correct side-payments in Moscow must be close to 500 rubles per square meter, a 5-fold increase since the 1960s.
Rublevskoe avenue (shosse) were sold for 3.54 million rubles. Another apartment in the same area went for 4 million rubles. The auction, however, was open only to enterprises (presumably state-owned) and only 10 dwellings were offered for bidding. Most likely the participants could use the funds from their state bank accounts to purchase the rental rights for the apartments. The possibility to use the transfer rubles (beznalichnyi raschet) could to some extent explain the exceedingly high prices at the auction. Much more reasonable prices at the apartment auctions were reported by Boiko (1991). According to her, one-room apartments in the city of Novocheboksarsk went for 16,000 rubles, two-room and three-room apartments brought in 23,000-29,000 rubles and 30,000-36,000 rubles, respectively. At the first Tallinn housing auction in February 1991 the tree-roomers were sold for 150,000 rubles, two-room flats went for 82,000-110,000 rubles, and one-room apartments fetched 50,000 rubles.  

Assuming that private rental prices have kept pace with the side-payment accompanying exchanges (if not with the apartment prices discussed in the previous paragraph), the

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20Privatization of state-owned apartments has finally began in earnest in many Soviet republics. The prices used in that privatization, however, are determined by the municipal authorities and do not necessarily reflect the actual market situation in the localities.
imputed rents for individually owned housing in the USSR must have more than doubled, perhaps even tripled, between 1977 and 1990. This would imply that the estimated imputed rents in 1990 most likely exceeded 20 billion rubles and might have been over 30 billion rubles.
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