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**STRUCTURE AND PERFORMANCE OF
THE HOUSING SECTOR
OF THE CENTRALLY PLANNED ECONOMIES:**

USSR, Hungary, Poland, GDR and Yugoslavia

by

Hanna Matras

October 1989

DISCUSSION PAPER

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The author of this report is Ms. Hanna Matras. She received a degree in econometrics from the University of Warsaw and is currently a doctoral candidate at the University of Pennsylvania. She is very grateful for the analytical comments she received from Bertrand Renaud, who suggested this study and contributed to its progress from its inception to its conclusion. In addition, the author would like to thank Andras Blaho and Miroslaw Gronicki, both of whom took the time to review the work periodically and offered valuable suggestions.

As part of the preparation of this paper a comparative database was developed. The database is described in a separate INURD working paper under the title: The Database on the Structure and Performance of the Housing Sector of the Centrally Planned Economies: USSR, Hungary, Poland, GDR, and Yugoslavia. The Lotus 123 database for the five countries is available from the INURD division in diskettes.

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THE USSR, HUNGARY, POLAND, THE GDR, AND YUGOSLAVIA

ABSTRACT

i. This paper discusses some of the generic issues of the housing sector in the Centrally Planned Economies in the context of attempted economic liberalization. The issues stem from the fact that the state has for decades been the agent vested with the primary responsibility for the housing production and distribution. This situation may change, as the CPE's implementor plans the reforms which will, in all probability, turn the housing sector into a "mixed economy" with both state and market components.

ii. The paper shows historic trends in demand and supply of housing, and the gap between the two that has persisted over the years. It examines the prevailing subsidy system for both housing construction and housing stock maintenance and looks at the changes that the new policies are likely to introduce. The housing industry of Poland is used as the example of possible impacts of the reforms on housing industry organization.

iii. Important: Please note that a major component of this paper consists of a comparative database. Part II of this paper describes the database in detail by means of tables. For convenience, it is published separately as an INURD Divisional paper under the title: Structure and Performance of the Housing Sector of the Centrally Planned Economies: USSR, Hungary, Poland, GDR, and Yugoslavia. Part II: The Database.

iv. The Lotus 123 database for the five countries is also available from the INURD division in diskettes for a fee.

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IN CENTRALLY PLANNED ECONOMIES:

THE USSR, HUNGARY, POLAND, THE GDR, AND YUGOSLAVIA

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I. INTRODUCTION

1.01 The persistence of housing shortages in the Soviet Union and the Eastern European socialist countries is one of the most pressing social and economic problems for these countries and a striking manifestation of the inefficiency of their highly distorted economic system. Even though, some progress has been achieved over the years, it is clear that housing conditions constitute a strong argument for the continuation of economic reforms--without this continuation, any further significant improvement of the housing situation in this group of countries is unlikely to happen. Distorted prices with extensive subsidies, the absence of financial mechanisms to facilitate the development of a free market and administrative control over housing investment cannot solve the problem made worse by the economic slow-down of the 1980s.

1.02 Even though the existence of acute housing shortages in CPE's is common knowledge, the literature treatment of their housing sector is scarce and fragmented and the data frequently unavailable beyond the most basic categories. To some extent, this reflects the fact that the approach to housing in CPE's differs from the one used in market economies. Socialist economies treat housing as a "non-productive" sector, and as such it is excluded from national income statistics. This approach affects both the performance of the sector and its statistical reporting system, but it has also resulted in very limited interest of CPE's economists in the subject of housing. Aside from problems related to data, they lack effective analytical tools for the purpose.

1.03 As the literature originated outside of CPE's is also limited, relatively little is known about issues that explain the permanent housing crisis in these countries, in particular issues related to shifts in housing policies that have been taking place since 1980. The changes in housing sector are part of ongoing policy reforms aimed at increasing the efficiency of economies which, since the late 1970s, have experienced a general slow-down. They involve changes in financing of housing investment and maintenance and in incentive structure of building industry.

1.04 The shifts in housing policies indicate that central planners are beginning to openly recognize such macroeconomic effects and issues related to housing shortages and housing subsidies as distorted consumption structure, inflation, low labor mobility and budget deficits. They also mean that housing sector will continue to play an important role in the process of economic liberalization.

A. Economic Development of CPE's: Recent Trends

1.05 The following section presents a short overview of changes in economic situation in USSR and Eastern European centrally planned economies that have taken place since the 1970s and the difficulties, both internal and external, that these countries are experiencing.

The Economic Slow-Down of the Late 1970s and the 1980s

1.06 After World War II until the beginning of the 1970s, centrally planned economies of Eastern Europe and USSR experienced stable economic growth. However, by the mid-1970s it was clear that the previous decade's high growth rates would be difficult to sustain. The average percentage changes in net material product fell from 7.4 percent for COMECON Eastern European countries and 5.6 percent for USSR in 1971-1975 period to 3.4 percent and 4.2 percent, respectively, in 1976-1980. In 1980, Poland and Hungary both registered negative growth rates; the average rate for Eastern Europe was 0.4 percent. In 1987, the rate for Eastern Europe was 3.2 percent, the lowest aggregate rate since 1982. The slow-down was particularly noticeable in the USSR, which recorded the growth rate of only 2.3 percent, one of the lowest for the two decades (see Table 1).

The External Factors of the Economic Slow-Down

1.07 External factors have played a role in mounting economic difficulties. Climbing energy prices, worsening of the terms of trade and the onset of the recession in the West affected centrally planned economies' state budgets and foreign trade accounts. Even though CPE's consumers were shielded from a direct impact of external disturbances by controlled prices and CPE's enterprises additionally so by state monopoly on foreign trade, the impact of restricted and higher cost imports and increasing difficulties in earning foreign currency through exports made itself felt in the economy.

1.08 Faced with these problems, CPE's succeeded, during the second half of the 1970s, to secure hard-currency funds for import financing through raising debt on international financial markets. The burden of servicing the debt is now compounding the economic problems of Eastern Europe.

The Internal Factors: The Difficult Transition to "Intensive" Growth

1.09 The widely recognized internal factor contributing to CPE's economic slowdown has been their inability to move from an "extensive" to an "intensive" form of economic growth. "Extensive" growth is achieved by increasing physical quantities of inputs, while the source of "intensive" growth is the increase of inputs productivity through technological and organizational improvements. The CPE's hit the barrier of physical inputs, experiencing both labor shortages (most acute in Hungary and GDR) and shortages of material resources due to, among other factors, restrictions on import. As capital productivity declined, growth has become more expensive and growth of labor productivity stagnated or declined (see Table 1). In 1987, capital productivity growth rates in GDR, Hungary, Poland and the USSR were still negative and labor productivity growth rates declined further with the exception of Hungary where after the plunge in 1985 to -0.2 percent, the growth rate increased to 3.7 percent.

Economic Reforms

1.10 Central planners of most CPE's have recognized that a shift to "intensive" growth and improved economic efficiency can only be achieved through more flexible methods of economic management, but the economic system as a whole

Table 1: ECONOMIC SLOWDOWN IN THE CENTRALLY PLANNED ECONOMIES IN THE 1980'S

ECONOMIC GROWTH FACTORS 1/

(Average annual/annual percentage change)

	1966-1970	1976-1980	1983	1984	1985	1986	1987
GDR							

Net Material Product	5.2	4.1	4.6	5.5	5.2	4.3	3.6
Labor Productivity	5.2	3.6	4.2	5.2	5.1	4.5	3.6
Capital Productivity 2/	0.3	-1.5	0.3	1.6	0.7	0.1	-0.4
HUNGARY							

Net Material Product	6.8	3.2	0.3	2.5	-1.4	0.9	2.3
Labor Productivity	5.3	4.1	0.7	3.0	-0.2	2.0	3.7
Capital Productivity 2/	1.1	-3.2	-3.9	-0.2	-4.3	-3.0	-0.5
POLAND							

Net Material Product	6.0	1.2	6.0	5.6	3.4	4.9	2.0
Labor Productivity	4.1	1.3	6.9	5.9	2.9	4.6	2.5
Capital Productivity 2/	-0.1	-6.6	3.4	2.8	0.3	2.7	-0.5
USSR							

Net Material Product	7.7	4.3	4.2	2.9	3.5	4.1	2.3
Labor Productivity	6.7	2.7	3.7	2.5	3.2	3.6	2.4
Capital Productivity 2/	-0.4	-2.9	-2.3	-3.1	-2.0	-1.1	-2.5
YUGOSLAVIA							

Gross Material Product	n/a	1.5	-1.0	2.0	0.5	3.6	-0.5

1/ Both productivity indicators in the material sphere.

2/ Capital productivity figures for 1987 are estimates of the UN ECE Secretariat.

Source: Economic Survey of Europe, UN ECE, 1987-1988 and earlier editions, and the Database, section A (the macroeconomic indicators).

is rarely seriously questioned. As a result of the strong opposition to any systematic change, the economic reforms have so far fallen short of giving the economy the anticipated boost. Even in Hungary, where the institutional changes have been substantial, the reform cannot be called a success. Hungary embarked on the next step of economic reforms at the beginning of 1989.

1.11 The most important shortcoming of economic reforms in CPE's is the treatment of prices. As there are still restrictions in free allocation of capital, most prices do not reflect relative scarcities. Through the non-convertibility of the currency and planning mechanisms, domestic prices are still insulated from world prices in most CPE economies with the exception of Yugoslavia and, to a large extent, Hungary. Explicit and implicit subsidies play a major role in CPE's. Resource pricing distortions contribute to continuing low productivity, low quality of output and chronic shortages. Transaction costs are very high due to the extensive interaction between politico-administrative decisions and economic decisions. Mechanisms to guide resources away from low-value activities to high-value ones are ineffective. The housing sector is a major case of such distortions which deeply affect the household sector and savings mobilization in addition to leading to intense public dissatisfaction in many CPE's.

B. Basic Political and Economic Tenets of Housing
Sector Operations in CPE's

"Welfare" Housing

1.12 In CPE's, housing is a consumer good excluded--partly or fully--from a distribution according to consumers' preferences and purchasing power. Instead, it is allocated administratively according to non-market rules set by central planning authorities. The original principles of housing policy in a CPE could be summarized as follows:

- (a) because of the prime importance of housing for the welfare of the community, the conditions should be created in which the housing needs of every member of the community should be satisfied regardless of that member's ability to pay;
- (b) such conditions can only be created if housing construction is directed by centrally conceived plan; and
- (c) as housing ceases to be a commodity and therefore a source of investor's profit, individual housing construction activities motivated by profit must also be abolished.

1.13 The above approach to housing which had been formulated in the Soviet Union in the 1930s lasted until the end of the 1950s in its more rigid form in all CPE's. It reflected the highly centralized management of the Soviet economy and was characterized by an extensive involvement of state in housing construction, the administrative distribution of dwellings and low rents.

1.14 Economic policy toward the housing sector has remained relatively unchanged in USSR. On the other hand, the evolution of planning and management methods in some Eastern European socialist countries has altered their policies and the organization of the housing sector, especially since the middle-1970s.

1.15 Yugoslavia changed its housing finance policy already in the 1960s; in Poland and Hungary the housing provision systems have also departed considerably from the Soviet model.

Housing Markets in CPE's

1.16 In Western market or mixed-economies, it is important both analytically and for policy formulation to distinguish two housing market components: a market for housing services from the existing stock and the housing investment market where new units are produced. Neither of them exists in a centrally planned economy in the same sense as they do in a market economy--nor are the links between them similar.

1.17 As stated above, the socialist doctrine does not accept the situation in which housing becomes a source of profit for an individual through rental to others--hence the regulation restricting private ownership to one dwelling occupied by its owners.^{1/} This automatically eliminates, at least in principle, the private rental sector. A very small such sector exists in a few countries such as Poland and Hungary but it is rent-controlled and owners' rights are limited. Nevertheless, in most CPE's, an owner occupant can, however illegally, choose to rent out his dwelling or part of it, in which case it yields a substantial money income. An owner-occupied housing unit constitutes an investment. In fact, except for durable goods, it may very well be the only capital asset that an individual can ever own and inherit. For these reasons, it becomes even more attractive in the presence of two-digit inflation.^{2/}

1.18 In contrast with socialist doctrine, dwellings can also be sold or exchanged effectively at "free" market prices. Some of these transactions are channeled through the "second economy" and that is why the size of the "free" market is difficult to assess.

^{1/} In Yugoslavia, the ownership of two dwellings is officially permitted (see P. Bossin, 1984).

^{2/} Three forms of inflation are simultaneously present in CPE's--open, hidden and repressed. The first is measured by the consumer price index and registers only part of price increases, while other increases remain hidden. Repressed inflation is not strictly defined and it manifests itself through queues and shortages which are the socialist equivalent of price inflation in market economies. J. Winiecki uses the term to describe these and various other phenomena related to permanent excess demand (for discussion, see J. Winiecki, 1988).

Table 2: HOUSING IN CPE'S CURRENT BUDGET EXPENDITURES

A. POLAND

	1966	1977	1980	1981	1982	1983	1984	1985	1986
Housing 1/ as % of current budget expenditures 2/	2.2	2.6	3.2	3.0	4.7	5.0	7.0	6.0	7.0
in which:									
Subsidies for interest payments & other subsidies rel. to h. loans (%of c.b.e.)	n/a	n/a	1.8	1.8	1.4	2.3	3.9	2.7	3.6

1/ For 1966, housing and communal sector.

2/ State budget is of course very large as a share of NMP compared to market economies.

B. GDR

	1975	1979	1980	1981	1982	1983	1984	1985	1986
Housing 3/ as % of total budget expenditures	3.2	4.6	4.3	4.9	4.8	4.9	5.5	6.0	6.3
Subsidies for interest payments & other subsidies rel. to h. loans (% of h.subs.)	n/a	27.9	28.0	26.1	26.6	27.8	24.3	22.2	21.6

3/ Housing include all state investment expenditures as opposed to 'housing ' category in table A.

C. SHARE OF HOUSING MAINTENANCE COSTS IN SOCIAL CONSUMPTION FUND 4/

	1970	1975	1980	1981	1982	1983	1984	1985	1986
GDR	7.1	7.9	11.5	12.6	12.9	13.6	15.2	16.6	17.3
HUNGARY	3.4	2.4	1.8	1.7	1.5	1.5	1.4	1.4	1.3
POLAND	2.6	3.9	6.1	5.4	6.4	6.5	6.6	6.5	n/m
USSR	5.3	5.4	5.9	6.0	6.1	6.2	6.3	6.3	6.4

4/ Social consumption funds are disbursed directly by the state budget and also the budgets of all state and cooperative enterprises and organisations for the collective and individual consumption of material goods and non-material services. The goods and services are provided either free of charge or at a fraction of the actual cost.

Source: CMEA Statistical Yearbook, 1987 and earlier editions, also Database, Section B

1.19 As already indicated, the rental market means mostly state-owned rental units with highly subsidized rents, allocated through bureaucratic distribution systems. Once a household is assigned its dwelling unit, it tends to stay there, even though the flow of housing services from the state stock typically decreases quickly because rents may not cover even maintenance costs. Occupancy rights for these units are very strong and often transferable to children.

1.20 Using modern analytical concepts it is possible to integrate distorted prices and subsidies to evaluate the resource cost of housing in CPE's. The ratio between "user cost of renting" and the "user cost of capital in housing," however difficult to estimate accurately for CPE's, has important implications for housing investment as well as investment decisions in other sectors, made by central planners. While this ratio converges to one in market economies, this is far from being the case in CPE's. Increasing pressures for policy reforms come from the fact that capital grants and stock maintenance subsidies put an increasingly heavy burden on state budgets (see Table 3) and so do interest subsidies, particularly when interest rates are kept much below inflation rate.^{3/} On the other hand, the high costs of private housing could absorb population savings, lessening the inflationary pressure and curbing the demand for consumer durables especially those with high foreign exchange contents.

^{3/} For example, in Hungary the interest rate on preferential housing loans is 3% while the inflation level in 1988 was 17%. In Poland where the interest rates are 3% for individual and 1% for cooperative housing, the inflation rate in 1987 was 26% (see Economic Survey of Europe, 1988).

Table 3: POPULATION AND URBAN POPULATION GROWTH

	Population total (1000)	Population urban (1000)	Index total	Index urban

GDR				
1950	18.4	13.0	100.0	100.0
1960	17.2	12.4	93.5	95.4
1970	17.1	12.6	92.9	96.9
1980	16.7	12.8	90.8	98.5
1986	16.6	12.8	90.2	98.5

HUNGARY				
1955	9.8	3.8	100.0	100.0
1960	10.0	4.1	102.0	107.9
1970	10.3	5.2	105.1	136.8
1980	10.7	6.1	109.2	160.5
1986	10.6	6.3	108.2	165.8

POLAND				
1955	27.6	12.1	100.0	100.0
1960	29.8	14.4	108.0	119.0
1970	32.7	17.0	118.5	140.5
1980	35.6	21.0	129.0	173.6
1986	37.5	22.8	135.9	188.4

USSR				
1960	216.3	107.9	100.0	100.0
1970	242.8	151.3	112.3	140.2
1980	265.5	171.0	122.7	158.5
1986	281.7	186.0	130.2	172.4

YUGOSLAVIA				
1950	16.3	3.1	100.0	100.0
1960	18.4	5.1	112.9	164.5
1970	20.4	8.1	125.2	261.3
1980	22.3	9.6	136.8	309.7
1986	23.0	n/a	141.1	.

Source: National statistics, Database Section B

II. HOUSING DEMAND IN THE USSR AND EUROPEAN CPE'S

2.01 The USSR, Poland, Yugoslavia and the German Democratic Republic (GDR) suffered an extensive destruction of their housing stock during the war. Furthermore, housing shortage problems were also inherited from the 2nd world-war period--only in the GDR could the urban areas' housing stock be described as adequate in comparison with other Central European countries. Consequently, the USSR and European CPE's all entered the post-war decades with moderate to severe housing shortages.

A. Demographic Factors: Population Growth and Rural to Urban Migration

2.02 The post-war marriage boom, rural-urban migrations and migrations produced by changes of political borders in Eastern Europe resulted in sharp increases in demand for housing. Poland, Yugoslavia and the USSR, registered the most dynamic population growth. The average annual population growth rates in these three countries during the 1950-1970 period reached 1.35 percent, 1.13 percent and 1.55 percent respectively (see Table 3).

2.03 The demographic pressure caused a particularly difficult situation in the first two countries, where housing construction could not keep pace with increasing demand and where housing deficits grew in absolute numbers.

2.04 The shortages in urban areas were especially acute. With the exception of GDR, the remaining countries started the post-war period with a predominantly agricultural economy and the low levels of urbanization. The dynamic growth of industry brought about intensive rural to urban migration. The population growth in cities, high marriage and divorce rates and disintegration of multigenerational households created a demand for housing that far exceeded the resources designated for housing by the national plans under the absolute priority of industrialization. By 1960, the number of households surpassed the number of self-contained dwelling units by percentages ranging from 14 percent in Yugoslavia to 29 percent in the USSR, with 16 percent and 17 percent in Hungary and Poland and 25 percent in GDR (see Table 4).

2.05 In the 1970s the national demographic pressure subsided and housing supply conditions improved; the housing shortage fell in all socialist countries. Poland was an exception ^{4/}--the ratio of households to dwelling units remained the same in 1970 as it was in 1960.

^{4/} Between 1966 and 1970, the sharp rise in number of contracted marriages created a leap in demand that was not met by the sufficient increase in housing construction: the share of housing investment in total investment outlays actually fell and so did the growth rate of housing investment.

Table 4: ESTIMATES OF HOUSING SHORTAGES

A. 'Statistical' Housing Shortage: Ratio of Households to Dwelling Units

	1960	1970		1980	1986
	total	total	urban	total	total
GDR	1.25	1.09	n/a	1.02	n/a
HUNGARY	1.16	1.10	1.14	1.08	n/a
POLAND 1/	1.18	1.16	1.20	1.18	1.06
USSR	1.29	1.23	1.28	1.12	n/a
YUGOSLAVIA	1.14	1.07	1.07	1.02	0.96

1/ Last figure based on 1984 Microcensus

B. Current Housing Deficits: Ratio of New Dwellings to Marriages and Divorces

	1960	1970	1975	1980	1983	1986
GDR	0.42	0.48	0.77	0.95	1.07	1.14
HUNGARY	0.55	0.67	0.77	0.82	0.73	0.58
POLAND	0.55	0.62	0.67	0.63	0.37	0.6
USSR	0.90	0.76	0.63	0.56	0.55	0.57
YUGOSLAVIA	0.40	0.63	0.71	0.71	0.71	0.72

Source: National Statistics, Database Section B

2.06 By 1986, according to their national statistical sources, the ratio of dwelling units to households reached unity in GDR, Yugoslavia and Hungary. For Poland, the ratio was 1.06 in 1984 and for the USSR the data was not available. However, at the same time, in all the countries--with the exception of the GDR--the number of completed dwellings lags behind the number of new households formed through marriages and divorces. Clearly, these numbers present conflicting evidence, a source of which might be different in each of the countries. In Yugoslavia, for example, there is a substantial quantitative shortage of housing in cities whereas the surplus exists in rural areas. Most likely, however, is the situation in which an underestimation of number of households needed for the purpose of estimating housing shortage occurs in national census calculations. Such a situation arose in Poland in 1984 census (see W. Litterer-Marwege, 1986). The figures indicate the 50 percent decrease in what Litterer-Marwege calls statistical housing deficit in cities since 1978 when actually the deficit increased substantially during this period.^{5/} The problem is embedded in census definition of household which allows for different interpretation of the term shared expenses. Thus, married children sharing the dwelling unit with parents may declare themselves members of the same household, particularly if the arrangement has become stable, like it has in the case of many doubled-up households. Unmarried adult children are even more likely to declare themselves members of their parents' household.

2.07 The Litterer-Marwege analysis of 1984 census confirms this cause for underestimated number of households. It is possible that similar problems exist in the household census statistics of other CPE's.

B. Income Growth: Change in Demand Structure

2.08 The steady growth of per capita real incomes (see Table 5) has increased the populations' expectations with regard to housing. While quantitative shortages still persist, there is also a growing demand for larger and better equipped units. The increasing presence of market forces brought about by economic reforms is making for a growing income diversification, which has had a strong effect on the structure of demand.

2.09 Because of large pricing distortions, the highest demand exists for low-priced state rental housing. In Hungary, Poland and Yugoslavia, access to public rental housing is restricted by household income level.^{6/} It takes anything from 6 years in the GDR to well over 20 years in Poland for a household to be assigned a flat. Meanwhile, young married couples share dwellings with parents or other relatives and those with higher incomes sublet flats from owners or main tenants who are temporarily away.

^{5/} Between 1978 and 1984 housing construction in Poland fell from 8.1 dwellings to 5.3 dwellings per thousand of population.

^{6/} In Hungary, eligibility income thresholds for public rental housing in Budapest are following: families with one child up to 2500 Forints per capita, two or more children 3000 Forints per capita, pensioners 3500 Forints, singles over 35 years of age up to 2500 Forints (A. Blaho, 1988).

Table 5: INDEX NUMBERS OF REAL NET PERSONAL INCOME OF POPULATION

(1970 = 100)

	GDR	HUNGARY	POLAND	YUGOSLAVIA	USSR
1971	104	104	114	106	104
1972	111	108	128	107	108
1973	118	110	141	103	114
1974	125	118	148	109	119
1975	131	123	155	108	124
1976	138	125	164	111	129
1977	146	130	174	115	133
1978	152	134	165	121	137
1979	158	137	170	121	141
1980	162	138	176	112	146
1981	162	141	182	106	151
1982	176	143	149	104	151
1983	180	144	149	93	154
1984	190	146	152	87	158
1985	199	148	161	90	162
1986	209	152	164	n/a	167
1987	n/a	152	n/a	n/a	170

Source: National Statistics and Economic Survey of Europe, UN ECE

2.10 Surveys conducted in USSR, Hungary and Poland^{7/} indicate that market does play a role in distribution of state rental units, as household income turns out to be positively and significantly correlated with occupancy of units of higher quality. Because of illegal but tolerated exchange, or simply corrupted bureaucratic procedures, high income households do gain access to housing provided for supposedly low income tenants. If there is no restricted access, they manage to secure the best units. Thus, high income groups unfairly benefit from state subsidies and in effect lower income groups subsidize the housing for the well-to-do, while their housing needs fail to be satisfied. This situation suggests that bribes and other side-payments are wide-spread in the system.

2.11 The subsidized prices of state rental housing create shortages and raise the prices of housing units that appear on the free market^{8/} in countries where such market exists. The size of the private markets vary from country to country and the sales statistics are not easily available so the demand is difficult to assess. In Poland the highest income groups have access to free market housing. The effective demand is high even though the prices may be well in excess of 20 times average annual salary, the transfer taxes are high and the private transactions cannot be financed.

2.12 The high demand for privately owned dwellings may be partly explained by the fact that housing constitutes just about the only capital asset that can substantially appreciate in time and is transferable to the next generation. The existence of the two implicit if not explicit housing markets has to be taken into consideration when discussing housing demand and housing deficit in CPE's.

^{7/} See Zs. Daniel, 1983, also J. Dangschat, 1986 and M.V. Alexeev, 1987.

^{8/} The impact of state housing prices on private (and cooperative) housing prices depends on generosity of subsidies and differences in supply elasticities between the sectors. In the Soviet Union, for example, the generosity of subsidies for state housing is such as to render cooperative housing relatively unattractive. In 1982 the government actually reduced the minimum down payment for cooperative housing from 60% to 30% of construction cost (see Alexeev, 1987).

III. HOUSING SUPPLY IN CPE'S

A. Investment Outlays and the Provision of Housing

3.01 The allocation of resources to all sectors is determined by five-year and yearly plans. The plans stipulate capital investment in housing, production of building materials and the amount of credit available to state, cooperative and private builders.

The Level of Housing Investment

3.02 The share of housing investment in total investment outlays for the 1950-1986 period shows, in most CPE's, cyclical changes reflecting both changes in policy making and the economic conditions during this period (see Table 6).

3.03 In terms of overall economic policy the most important factor was the long practiced priority, in resource allocation, of "productive" sectors--especially heavy industry--over "non-productive" sectors (including housing) which were "under-invested." As the result of these investment priorities, housing construction in CPE's (excluding USSR) during the 1950s, the period of rapidly growing housing demand, remained at half the level for the European market economies as measured by number of units per 1000 of population. The policy continued throughout the 1960s, with the productive sector investments increasing at a much higher rate; in fact, housing investment lagged behind all other investment and its share in total outlays continued to drop (see Table 6). Between 1960 and 1970, housing investment share dropped from 13.6 percent to 6.8 percent in the GDR and from 20.8 percent to 13.7 percent in Poland.

3.04 In the decade of the 1970s the conditions, both political and economic, were more favorable for housing and by 1976 the output reached uniformly high levels, only to decline in subsequent years. In Poland, which entered a period of severe economic crisis, the housing construction fell sharply in 1980, from 7.9 to 6.1 dwellings per 1000 of population and continued to decline throughout 1986.

3.05 It has to be noted that between 1980 and 1986 in four of the five surveyed countries the volume of housing investment increased at a faster (or fell at a slower) rate than the volume of investment in "productive" sectors (see Table 7), indicating that a strong public pressure for better housing conditions may have finally produced a shift of priorities in economic policy.

Table 6: HOUSING INVESTMENT

A. Share of Housing Investment in Total Investment Outlays

	GDR	HUNGARY	POLAND	USSR
1955	13.1	21.8	15.1	18.9
1965	9.2	16.3	16.1	16.9
1970	6.8	15.9	13.8	16.4
1971	7.2	17.3	13.9	16.0
1972	8.2	18.7	13.2	15.5
1973	8.8	18.6	13.5	15.3
1974	8.9	18.3	13.1	14.7
1975	9.0	17.6	13.5	14.2
1976	9.3	17.2	13.9	14.0
1977	9.1	17.2	14.9	13.9
1978	10.0	16.1	16.1	13.5
1979	10.2	16.1	19.4	13.3
1980	10.6	17.8	22.2	14.0
1981	11.0	17.9	22.5	14.4
1982	11.1	19.0	24.9	14.8
1983	11.7	19.5	25.4	15.1
1984	12.4	21.5	23.6	15.7
1985	12.9	21.1	22.7	15.6
1986	13.1	20.7	21.7	15.9
1987	n/a	18.9	23.2	n/a

B. Share of Housing Investment in Net Material Product

	GDR	HUNGARY	POLAND
1965	2.3	4.7	3.8
1970	2.1	5.9	4.2
1971	2.2	6.7	4.3
1972	2.4	6.9	4.3
1973	2.7	6.6	4.6
1974	2.7	6.9	4.7
1975	2.7	7.2	5.0
1976	2.9	6.8	5.3
1977	2.9	7.2	5.9
1978	3.1	6.8	6.0
1979	3.1	6.5	6.0
1980	3.1	6.5	6.3
1981	3.1	6.0	4.8
1982	2.9	5.9	6.0
1983	3.0	5.9	6.0
1984	2.8	6.2	6.0
1985	2.9	6.0	6.0
1986	2.7	6.1	6.0

Table 7: INDEXES OF HOUSING INVESTMENT AND INVESTMENT IN 'PRODUCTIVE' SECTORS

	1980	1981	1982	1983	1984	1985	1986
GDR							
Housing	100	102	108	109	117	114	100
Productive Sectors	100	101	97	97	91	94	101
HUNGARY							
Housing	100	93	95	93	97	90	89
Productive Sectors	100	95	92	87	82	80	80
POLAND							
Housing	100	79	74	82	86	87	87
Productive Sectors	100	76	63	68	77	84	88
USSR							
Housing	100	106	113	122	129	133	146
Productive Sectors	100	103	107	112	114	117	125

Source: National Statistics

Housing Investment Value and Physical Housing Sector Output

3.06 The CPE's exhibit considerable differences in terms of changes of housing investment levels and corresponding rate of new dwellings built in various periods (see Table 8).

3.07 In countries like Poland and Hungary inflation in the building industry tends to be higher than that in remaining industries. A steep upward trend of cost per square meter of space in residential housing has been present in most CPE's^{2/}. The trend can be partially explained by the better quality of new dwellings but other factors may play a more important role--for example, long average periods of project completion and cost overruns typically absorbed or even encouraged by the incentive system in the industry.

3.08 As Table 8 shows, the higher investment rates in Hungary and Poland did not lead to similar increases in housing construction and in the USSR increased investment spending corresponded to decline in number of units built. However, the intercountry comparisons in the area of cost trends may be difficult due to differences in construction methods and dwelling quality but mainly to the fact that prevailing administrative pricing systems make it practically impossible to attempt real cost calculations (and comparisons to market-economies).

B. Institutional Ramifications of CPE's Housing Supply System

Housing Investors

3.09 Three housing sectors coexist in European centrally planned economies--state, cooperative and individual--each of them with different access to inputs, different methods of construction financing and stock management (see Table 9).

3.10 The State Sector. The state housing is mostly limited to rental units, though in Hungary the sector offers new dwellings for sale as well. The rental units are located in multi-story buildings and concentrated in urban areas. The new construction is carried out with the use of industrialized, large panel technologies by state enterprises. The state investors--public bodies supervising construction projects--are administrative authorities of various regional and communal levels, socialist enterprises and other organizations, sometimes established by the state specifically to perform this function.^{10/}

^{2/} For example, in Poland the official inflation rates for 1985 and 1986 were 15% and 17.5% respectively while the corresponding figures for prices in multi-family urban housing industry were 25.1% and 25.0% (see Instytut Gospodarki Przestrzennej i Komunalnej, 1988).

^{10/} The example of such organization in the GDR is Hauptauftraggeber or HAG, the main developer who supervises housing investment projects and hires the general contractor to carry out the construction work (see G. Staemmler, 1984).

Table 8: PERCENTAGE INCREASE IN HOUSING INVESTMENT AND HOUSING CONSTRUCTION

	Percentage increase in total housing investment	Percentage increase in number of dwellings built
GDR	1960-1976	1.9
	1980-1986	1.3
HUNGARY	1960-1976	1.6
	1980-1986	0.8
POLAND	1960-1976	2.8
	1980-1986	0.9
USSR	1960-1976	1.7
	1980-1986	1

Source: H.W. Morton, 1979, Database, Section 8

Table 9: HOUSING STOCK OWNERSHIP IN CPE'S

		Housing Stock Ownership		
		State	Cooperative	Private 1/
GDR	1971	23.0	9.0	68.0
	1980	27.7	9.8	62.6
HUNGARY	1970	27.0	1.0	72.0
	1980	25.6	1.8	72.6
POLAND	1970	34.8	7.4	57.8
	1978	32.2	16.9	50.9
	1984	32.4	21.8	45.8
USSR	1970	56.0	n/a	44.0
	1980	65.0	3.0	32.0
YUGOSLAVIA	1970	18.0	n/a	n/a
	1980	20.1	0.9	79.0
	1984	22.8	n/a	n/a

1/ Individually owned stock

Source: National Statistics, Database Section B

3.11 The state investors also manage the existing stock. The degree of independence of these agents from central authorities (in terms of planning, decision making and resource accumulation) varies from being a strictly supervised manager of state budgetary funds (USSR) to being an autonomous policy maker (Yugoslavia, to an extent Hungary).

3.12 The public enterprise housing can be allocated only to employees, mostly on a rental basis. The enterprises are owners and managers of their rental housing stock. In Yugoslavia, the funds accumulated by enterprises in proportion of workers' earnings are used for purchasing of apartments which can then be either rented or sold to workers on the long-term credit basis (20 years at 2 percent interest). In Hungary, the enterprises also sell dwellings to their employees providing credit on favorable terms. Other arrangements, in which enterprises are not housing investors, involve various forms of financial help for employees, usually in the form of low-interest or interest-free credit for a downpayment and lump-sum subsidies, often conditional on remaining with the enterprise for a set number of years.^{11/}

3.13 The enterprise involvement in housing is higher in countries, regions and industries experiencing labor shortages, with the exception of the GDR where this form of housing provision does not exist.

3.14 The Cooperative Sector. It is within this sector that differences among the CPE's are the most pronounced regarding the functions performed by cooperatives and the ownership rights of their members. Some cooperatives are ownership cooperatives where the rights to any particular dwelling are transferable so it can be sold, but in most cooperatives ownership rights are more limited. The dwellings are allocated to shareholders for permanent use; this right can be inherited by the next generation, but it cannot be subject to market transactions. Cooperatives may be permanent bodies and act as an investor only (USSR), as manager of buildings sold by the state (Hungary up to 1971) or they may perform both functions.

3.15 There are also differences in ways housing cooperatives organize themselves and act as legal bodies. Generally, cooperatives are voluntary organizations of people who want to obtain housing by building apartment buildings, using their pooled resources and government credit. Even in the USSR--as M.V. Alexeev comments (M.V. Alexeev, 1987)--housing cooperatives are based on fairly democratic principles and the members have a substantial amount of control over decisions regarding housebuilding activities. In Poland, on the other hand, the evolution of the housing cooperative movement has led to the situation in which a cooperative has changed from being a private economic enterprise to yet another bureaucratic office. Cooperatives are mainly passive administrators of their housing stock and financial resources, and have no incentives to control the effective use of resources (see E. Radziewicz, 1988).

^{11/} For example, in Czechoslovakia, the worker who obtains the enterprise housing subsidy has to remain its employee for five to 10 years, depending on age, and cannot sell the house or apartment for 10 years (see F. Gliszczynski, 1985).

3.16 In some countries, "temporary" cooperative associations are created to facilitate approval and access to subsidized public resources and dissolve after the construction process has been completed (e.g., single-family housing in Poland and Hungary).

3.17 New multi-story cooperative flat buildings are typically built by state building enterprises. Single-family projects usually involved contracting private enterprises.

3.18 From the viewpoint of cooperative members, a cooperative membership is an option more expensive than that of state housing but may nevertheless be preferable to private housebuilding. As already indicated, cooperative building may mean easier access to building materials and credit (also lower interest rates); in some cases speedier completion of projects. Therefore, one can say that private ownership is a residual high cost tenure choice because of low private access and full cost pricing of resources or even higher pricing due to distortions.

3.19 The Private Sector. Individual investors are private persons or groups of private persons engaged in construction of single family houses or small multi-family houses mostly in rural areas and in small towns. It is not only limited availability of land that restricts private housebuilding in big cities. In Soviet Union, for example, the law prohibits building private dwellings in cities with population over 100,000. As Alexeev points out, private housing is still considered ideologically somewhat "incorrect," hence strict regulations are imposed on it (Alexeev,1987). Such attitudes may still exist in other CPE's.

3.20 No family can own more than one dwelling (two in Yugoslavia) fit for year-round occupancy, summer housing such as dachas are therefore marginal to housing policy issues. The construction is carried out with use of family labor, but also requires services of private building enterprises.

3.21 Besides individual investors conforming to local building codes there is some "informal" construction carried out without building permits in rural but also urban areas (is has been estimated that in Yugoslavia around 1976 informal housing constituted up to 30 percent of all single-family units--see P. Bossin, 1984).

3.22 A small part of individual housing stock is formed by dwelling units built by the state and sold to individuals.

Changes in Relative Market Share of Investors

3.23 The Soviet housing model, based on the prevalence of state forms of construction, distribution and maintenance of urban housing now dominates only in its country of origin, where 83 percent of total construction is still carried out by state investors. GDR, which was following this pattern up until the beginning of the 1970s, has since moved toward solutions used in other CPE's.

3.24 The share of socialized versus private construction reflects not only the housing policy favored by a given country, but also to some extent its level of urbanization, and the size distribution of cities. State and cooperative investors operate mainly in bigger cities.

3.25 The share of investors in CPE's, except in the USSR, has followed a somewhat similar pattern over time (see Table 10).

- (a) In the 1960s the share of individual construction was relatively high (even in USSR - 47.9 percent). This was a result of still low levels of urbanization, and state investment priorities, focused on industrialization efforts. In most of the countries, the urbanization rate lagged significantly behind the industrialization rates due to the combined effects of labor migration controls and capital intensive policies in industries and labor intensive policies in agriculture which maximized rural population retention.
- (b) The 1970s were a decade of socialized (state and cooperative) housing construction. Both the volume and the proportion of socialized construction increased. In the countries where housing cooperatives play an important role, this was also the decade of expansion in cooperative construction which in Poland became the primary form of housing provision. The cooperative housing, with members paying a significant share for their dwellings, was a definite departure from "housing as a social service" notion. The mid-and end of the 1970s brought about the wave of economic reforms which reinforced this trend.
- (c) As Table 10 shows, in the 1980s the share of individual housebuilding increased in all countries with the exception of the USSR, where it actually declined. In Hungary, private construction in 1986 constituted 86 percent of all housebuilding compared with 59 percent in 1970; in the same period, private construction share went from 3 percent to 15 percent in the GDR, from 28 percent to 31 percent in Poland, and from 60 percent to 64 percent in Yugoslavia. These statistics raise important questions about organization, structure and performance of the housing building industry in terms of the relationship between the public and private sector.

Table 10: CHANGING SHARE OF INVESTORS IN CPE'S HOUSING CONSTRUCTION

A. Share of Socialized 1/ Housing in Total Housing Construction							
	1956	1960	1965	1970	1975	1980	1986
GDR	75.0	94.5	89.7	96.7	88.3	84.2	85.5
HUNGARY	n/a	31.7	41.0	41.1	38.2	34.1	11.0
POLAND	61.0	58.4	74.0	72.4	76.7	74.3	74.1
USSR	47.1	51.3	67.8	76.0	79.8	83.6	81.9
YUGOSLAVIA	38.9	47.1	36.5	34.5	38.4	35.5	33.5
B. Share of State Housing in Total Housing Construction							
	1956	1960	1965	1970	1975	1980	1986
GDR 2/	60.1	38.1	57.0	75.8	50.1	49.6	58.3
HUNGARY	n/a	31.7	41.0	41.1	38.2	34.1	11.0
POLAND	60.7	48.1	54.4	23.5	33.5	18.6	19.9
USSR	47.1	51.3	67.8	76.0	79.8	83.6	n/a
YUGOSLAVIA	38.9	47.1	36.5	34.5	38.4	35.5	33.5

1/ Socialized housing includes state, enterprise and cooperative housing

2/ New construction and modernisation of existing units

Source: National Statistics, Database Section B

Basic Trends in Housing Sector Performance

3.26 In spite of the fact that in most CPE's the housing situation is still difficult, considerable progress has been made (see Table 11). Crowding decreased in all the countries, with USSR and Yugoslavia registering the greatest reductions. The newly built dwellings had larger living space and better amenities, so that the quality of housing stock improved, particularly in the urban sector. The differences in supply of ancillary facilities are primarily the differences between countries of high degree of urbanization, such as GDR, and countries with relatively higher proportion of rural population, such as (from the group on question) Yugoslavia. Still, most of the eastern European CPE's need to allocate more resources in order to increase the quantity of self-contained units. Expanding the supply of housing services through improving stock quality may be done most effectively through launching extended repair and modernization programs, like the one in the GDR, where in 1986 almost 45 percent of completed dwellings were dwellings repossessed through modernization activities. In the case of the GDR, this pattern is linked not only to cost effectiveness considerations, but also to end of urbanization processes.

Organization of the Building Industry in a Centrally Planned Economy:

The Case of Poland

3.27 Cross-country evidence on the building industry in CPE's is difficult to obtain. To understand some of the main issues, basic features of the building industry in Poland are presented as a starting point. The discussion focuses on changes introduced during the period following the Reform Act of 1981 (Ustawa o Reformie).

3.28 Poland was chosen because of the readily available information but also because both the pre-reform organization of the industry, in its most general characteristics, resembles those of other CPE's (except Yugoslavia). In addition, the economic reforms currently being implemented or planned in other CPE's raise the question whether the reforms will affect the industry in a similar way, i.e., with more autonomy and greater decentralization of organizations.

3.29 Two decrees^{12/} constitute a foundation for changes in the industry--one about the socialist enterprise, making it independent and self-financing and the other about local administrative authorities (state councils), granting them substantial decision-making power in the area of geographical jurisdiction.

^{12/} Ustawa o Przedsiębiorstwie, 1981 and Ustawa o Radach Narodowych, 1982.

Table 11: IMPROVING QUALITY OF CPE' HOUSING STOCK

	Dwellings per 1000 population	Average size of dwelling	Dwellings equipped with (in percentage)		
			piped water	indoor plumb.	bath/ shower
GDR					
1960	318	n/a	66	33	22
1970	355	55.0	82	39	39
1986	416	64.3	n/a	68	76
HUNGARY					
1960	277	n/a	22.7	16.1	17.0
1970	302	61.5	35.1	26.4	30.8
1987	366	n/a	77.7	67.2	73.7
POLAND					
1960	236	n/a	18.8	10.3	6.2
1970	248	54.3	47.3	32.9	29.5
1984	277	67.9	78.9	65.4	63.9
USSR 1/					
1960	n/a	n/a	n/a	n/a	n/a
1970	235	46.8	78.9	75.8	60.7
1985	252	55.5	91.8	89.7	82.8
YUGOSLAVIA					
1961	220	44.8	n/a	n/a	n/a
1971	245	49.6	33.6	26.2	24.5
1984	290	60.7	70.0	n/a	54.2

1/ Installations: urban housing stock only

Source: National statistics, Database Section B

3.30 Building Industry before the Reform: Central Regulation of Supply and Demand. Prior to the reform during the long period 1950-1981 the socialist building industry was highly centralized. Once the central planner made the production decisions about the allocation of budgetary funds, the command line was set up so that the intermediary institutions (the national bank, sectoral and branch administrative offices, central distribution office for building materials, etc.) provided building enterprises--the investment implementors--with inputs needed to complete the projects. The national bank played a passive role of a credit disbursing.

3.31 Most enterprise functions were centrally regulated. Decisions regarding the enterprise product, output levels and prices, technologies to be applied, wage rates and final uses of revenues not remitted to the state budget were made outside of the enterprise. Accounting and financial analysis were geared primarily toward reporting on conformity with regulations and had little or no impact on enterprise performance standards. No incentives to raise productivity existed; the deficits of unprofitable enterprises were routinely covered by the state budget.

3.32 Provisions for contracts between suppliers and consumers of building services were also regulated. The socialist investor could only contract for the services of the socialist enterprise, as the allocations of building materials were provided to the project implementor (public construction company) and not to investor. Quantity allocations were more important than prices, which were set and didn't play an active role in the contract negotiations as both the enterprise and the investor had soft budget constraints.

3.33 The small and residual private building industry was catering uniquely to individual private investors. The regulations explicitly excluded private enterprises from the list of possible contractors to a socialist investor. Furthermore, other regulations made it impossible for these enterprises to compete in the market with socialist building enterprises. With legal limits of employment and very high taxes, the private building industry consisted of a large number of very small firms, employing on the average, 2 to 3 workers and unable to undertake any big projects. Secondly, private firms had a limited access to building materials as they were outside the planned distribution system, which is a critical constraint as there are continuous shortages of building materials on the market. Finally, private firms dealt in market prices, much higher than the regulated prices of the socialist sector.

3.34 As a result of this situation, there existed two separate and totally dissimilar building industries--socialist and private. The links between the two were those of "second economy"--mostly in the form of the illegal redistribution of building materials.

3.35 The Economic Reform and Building Industry. The economic reform initiated in 1981 has been expected to raise the low productivity levels in the economy by limiting and, eventually, phasing out the use of command-distribution system in favor of economic incentives (production factor prices, interest and tax rates, amortization rate, foreign currency exchange rates, etc.) and market mechanisms as activity regulators for independent and self-financing enterprises.

3.36 The reform policy of decentralization of management structure is especially relevant to the building industry which is oriented toward local markets and uses locally produced inputs for the most part. The regionalization of the industry also will ultimately mean transferring the major functions of regulating, planning and administration of the industry from central planner to local authorities. The initial reform formulations have aimed at giving local authorities a right to establish an administrative and planning structure that would best fit regional needs, a right to own building enterprises and establish regional banks and the ability to draw up regional fiscal and credit policies. These policies would affect the entire building industry in a region, breaking away not only from the centralized model, but also the system of regulations based on sectoral and branch affiliations of economic organizations.

3.37 Six years after the reform was initiated the productivity in building industry remains very low (between 1981 and 1985, labor productivity in the Polish socialized building sector has actually been falling by an annual average of -0.6 percent--see I. Herbst, 1985). Two groups of factors have been contributing to this poor performance. First, regarding the institutional factors, the implementation of the reform has been hindered by a plethora of inconsistent regulations that increased uncertainty and diverged from or even went explicitly against the new policies formulated in the 1981 Reform Act.

3.38 The second group of factors is related to worsening general domestic and external market conditions in Poland.

3.39 Impediments to Decentralization of the Building Industry Management. In Poland, local government authorities are designated to be the critical component of economic liberalization of the building industry.

3.40 Meanwhile, the regionalization of the industry has been hampered mainly by the lack of legal powers which would make it practically possible for regional authorities to exercise their new responsibilities. They still haven't been granted legal personality, and, consequently, cannot hold property, establish regional banks or credit cooperatives or even receive loans from the only existing national bank (The National Bank of Poland). They have limited capabilities to shape the implementation of regional building policy.

3.41 Formally, local authorities (Rady Narodowe) have jurisdiction over all building companies in their regions. In fact, their current legal status allows for only two changes in their previous roles.

3.42 They can now intervene in cases of distortions brought about by regulations inconsistent with legal acts of a higher order. As already mentioned, after the 1981 Reform Act several regulations hindering the liberalization process have been issued and implemented. An example of such regulation has been a decree issued in 1982, commanding unification of administrative structure for building industry in all regions which meant re-establishing of central priorities over regional needs and goals. This decree has only been revoked by the beginning of 1988. Many such regulations, frequently branch-specific, can now be overruled by local authorities. This gives them some leverage in determining both level and structure of supply.

Table 12: PRICES AND COSTS FOR SINGLE- AND MULTI FAMILY APARTMENT BUILDINGS IN POLAND

Type of construction	Cost per m2 of space in zl	Price per m2 of space in zl	Average price apartment in 1000 zl	Average monthly wage / price of m2 of space	Price index for inputs /previous year=100/
Finished multi-family for urban population					
1982	10,258	10,423	558.7	1.12	262.6
1985	24,815	27,215	1,496.8	0.74	125.1
1986	30,503	33,003	1,844.9	0.73	125.0
1987	39,061	41,985	2,388.9	0.69	128.9
Multi-family for rural population at beginning of construction					
1982	n/a	21,806	1,336.7	0.53	n/a
1985	n/a	33,338	2,156.9	0.60	n/a
1986	n/a	33,547	2,194.0	0.72	n/a
1987	n/a	46,915	3,049.5	0.62	n/a
Finished single-family for urban population					
1982	n/a	19,580	2,044.2	0.59	n/a
1985	n/a	37,244	4,303.6	0.54	n/a
1986	n/a	40,104	4,392.0	0.60	n/a

Source: Instytut Gospodarki Przestrzennej i Komunalnej, 1988

3.43 Local authorities are also a mediator between "their" enterprises and the National Bank of Poland, central offices for distribution of building materials and other higher administrative offices for the building industry. They can negotiate contracts, tax rebates, additional supplies and credit conditions.

3.44 Currently, several regulations that have brought actual departure from the trend toward decentralized market solutions back to command/distribution system are still in effect. The use of market mechanisms coexist with command methods and limits of building supplies. The Ministry of Building and Industry of Building Materials makes final decisions about the distribution of inputs produced within a given region among the enterprises administered by regional authorities. This situation undermines the local authorities' initiative, weakening their already limited impact on regional industry performance.

3.45 State Building Enterprises and the Reform. Building enterprises still operate under a soft budget constraint. The deficit-producing ones are fully subsidized and all can negotiate various tax rebates and preferential credit conditions based on non-economic criteria.

3.46 Between April and June 1988 the prices in the socialist sector became "contractual" prices, negotiated between the supplier and consumer of building services. The national bank puts a cap on the price (per 1 square meter of space in residential housing) making credit available conditional on keeping price within this limit. Nevertheless, the soft budget constraint of a socialist investor combined with a producer's market has prompted a sharp upward trend in prices. Contractors can effectively make investors pay for losses incurred by ineffective use of inputs and market conditions. No incentives exist for enterprises to lower costs or increase output as they can often increase revenues by raising prices. Furthermore, neither socialist investor nor the bank have a tool for evaluating the efficiency of investment projects. An old efficiency formula, devised in 1974, incorporates macroeconomic criteria and is not very useful for self-financing self-financing and autonomous economic agents.

3.47 The interest rate hasn't become an active instrument of credit policy as was originally proposed in the 1981 Reform Act. Up until January 1988, credit conditions differed for various investors according to non-economic criteria.

3.48 So far, the reform hasn't changed the operations of private building enterprises. The goal with regard to the private building sector has been to achieve a significant increase of output by changes in fiscal and credit policy and also by increasing access of private firms to both rationed and non-rationed inputs. None of the current regulations is actually promoting this goal. Even though the ceiling on the employment level was relaxed from the limit of 4 to 20, the very low threshold for a steep progressive revenue tax works against increasing employment. Enterprises have no incentives to increase production and the average employment of a private building firm in 1987 remained 2.1. While formal barriers for establishing links between private and socialist building sectors were abolished, cooperation is limited by the size of private enterprises and, primarily, by their still very difficult access to building materials. As was the case during the period preceding the 1981 reform, the

greatest part of private firms' productive capacities is utilized through the "second" or informal economy.

3.49 All impediments to implementation of reform policies in the building industry are compounded by the crisis conditions in the economy. They are specifically compounded by the continually decreasing production potential of the socialist building sector caused by shortages of labor and building materials as well as progressive decapitalization, depreciation and obsolescence of fixed assets. In the current situation of severe market disequilibrium, the central planner chooses to reallocate the shortages administratively so as to keep control over output and prices in the politically most important sectors.

3.50 This overview of the Polish case cannot be assumed to be directly applicable to other CPE's. However, the key regulatory, supervisory and pricing issues remain quite similar.

IV. FINANCING OF HOUSING CONSTRUCTION AND
RESIDENTIAL INFRASTRUCTURE

A. The Subsidy Systems in Housing Construction

4.01 Housebuilding is financed differently within the three sectors involved in the provision of housing. Even though there are substantial differences across CPE countries, they all share one feature: housing construction is heavily subsidized in both direct and indirect ways.

4.02 The following section gives basic stylized facts regarding the subsidy system as it applies in the state, cooperative and private housing sector:

State Housing: Cost Borne by State

4.03 The investors are either local authorities or state enterprises. In the first case, the capital costs are entirely borne by the state and the funds are allocated out of the central budget. In the second, the construction is most often financed through the enterprise special fund with the help of a loan, which may come from a bank or directly from state budget, in which case funds are provided at below-market interest rate. In Poland, Yugoslavia and Hungary, the enterprises involved in housing construction are given additional indirect subsidy through tax exemptions linked to these funds.

Cooperative Housing: Capital Grants and Interest Subsidies

4.04 The cooperative sector receives direct subsidies in the form of capital grants and indirect ones through below-market interest rates on state-provided loans. Initial capital grants may cover over 50% of construction costs (Poland and Czechoslovakia); the interest rates are as low as 0.5% in USSR and 1% in Poland; 4% rates in GDR are partially reimbursed by local budgets.

ANNUAL INFLATION RATES IN POLAND AND HUNGARY

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Poland	9.9	6.9	8.0	21.2	104.5	21.4	14.8	14.9	17.5	25.9	69.0
Hungary	4.6	8.9	9.1	4.6	6.9	7.3	8.3	7.0	5.3	8.4	18.0

The repayment periods are usually long--from 25 years in USSR to 60 years in Poland.

Table 13: EXAMPLES OF FINANCING OF NEWLY CONSTRUCTED HOUSING IN BUDAPEST, 1985

A. Moderate quality, 60 m2 dwelling. Cost: 1,070,000 Ft. Household income 8000-14000 Ft. per month			
	Cost in Ft.	Cost distribution %	Monthly payments in Ft.
Social aid (3 children)	230,000	21	
Preferential loan, mortgage 35 years, 3%	440,000	40	1,696
Loan from employer	100,000	9	400
Down payment	300,000	30	
TOTAL	1,070,000	100	2,096
B. High quality, 85 m2 dwelling. Cost: 1,600,000 Ft. Household income 12000-16000 Ft. per month			
	Cost in Ft.	Cost distribution %	Monthly payments in Ft.
Social aid (2 children)	105,000	7	
Mortgage 35 years, 3%	380,000	24	1,464
Loan from employer	10,000	6	400
Young people's loan	300,000	19	1,100
Bank loan 15 years, 12 %	300,000	19	3,600
Down payment	415,000	25	
TOTAL	1,600,000	100	6,464

Source: S. Kadas, 1989

4.05 There are also individual subsidies provided to households aimed at reducing the down-payment, mostly in the form of low interest or interest-free loans. General down-payment subsidies have been introduced by some countries to counteract the rapid increases of building costs. Poland changed, in 1972, the down-payment amount from a percentage of cost basis to a flat rate, but returned to cost-based method in 1983 as fiscal deficits persisted. In GDR, the differences resulting from cost increases are covered by the budget in the cases of both cooperative and individual housebuilders.

Private Sector: Interest Subsidies and Real Estate Tax Exemptions

4.06 Differences in assistance given to individual construction in CPE's are quite considerable. Hungary, where private construction is the prevailing form of meeting the housing needs, has developed the most elaborate system.

4.07 The subsidies, depending on the country, may cover up to about 50% of construction costs. The bulk of them differentiate building cost according to the level of incomes and family size, but some are also introduced to promote a certain type of construction (usually condominiums vs. single family housing) or carry preferential treatment for building in designated locations (e.g., urban vs. rural in USSR). The interest rates may be as low as 1%, but most often are set in the 2-3% range.

4.08 In the countries with rising share of cooperative and individual housing construction the interest subsidies are rapidly becoming the greatest budgetary support for housing. It is already so in Hungary, where the amount was 8.6 billion forints in 1986 and is expected to rise to 20-25 billion annually in ten years (J. Guttentag, 1987). The situation is similar in Poland, where interest subsidies are estimated to be nearly as large as capital grants for cooperative housing (S. Mayo, 1986), currently the largest on-budget housing subsidy. This burden to state budgets may increasingly limit the further expansion of housing loans.

4.09 Another form of indirect subsidy for private house building with a potentially strong impact on land use is the partial or total exemption from real estate taxes (temporary or permanent). In Hungary the exemption extends for a period of 15 years, in GDR it is permanent.

4.10 Subsidies intended to foster employment and other regional sectoral economic policies are sometimes channeled through enterprises. They can take the form of assistance to individual housebuilding activities or realized as a result of an agreement between a cooperative and an enterprise regarding the allocation of housing for its employees.

Subsidies for Land Development and Infrastructure

4.11 Apart from subsidies related to the cost of structure, subsidies are also granted in the form of land provided free of charge or leased at a low cost (in Yugoslavia urban land was nationalized and house owners are given the right to use but not to own the land). Furthermore, land development costs with all the related technical infrastructure is likely to be covered in large part by municipal budgets.

4.12 In the case of private housebuilding, individual investors are more likely to pay full market price for land (developed or undeveloped), although there are often allocated plots through enterprises for a fraction of this price or get it virtually free.

B. Other Vehicles for Financing Housing Construction and Related Infrastructure: Municipal Bonds

4.13 Municipal bonds sold to individuals, state enterprises and other state institutions are an unlikely means for investment financing in the economic practice of socialist countries. The GDR experimented with bond use during the period of 1958-1970 and eventually phased them out, as general population found them an unattractive instrument for savings.

4.14 A more current experiment began in Hungary in 1981, when Hungarian National Savings Bank issued bonds (in 10 locations) with the purpose of financing several residential infrastructure projects (the interest rate is 6% and the maturity is 5 years). Other obligations were issued by the National Development Bank and the Union of Petroleum and Gas Industries; the proceeds will be used to expand the gas pipe networks. Beginning in 1983, the right to issue obligations has been extended to other public bodies and enterprises.

V. FINANCING OF HOUSING STOCK MAINTENANCE

5.01 Under the present CPE systems, resources for financing housing stock maintenance may be mobilized either within the housing sector itself through rents and other fees, or generated in other sectors of national economy and disbursed in the form of subsidies.

5.02 Among the CPE's of Eastern Europe, only in Yugoslavia does the housing sector have a substantial financial base.

5.03 In line with the principle that housing is not a commodity and therefore not subject to market mechanisms, a fee paid by a tenant of socialized sector dwelling is not a commercial rent. Consequently the finance system for financing the housing stock's maintenance is independent of the system of construction financing. Both the replacement and the increase of housing stock is treated as a one-time social cost--there is no cost recovery of investment. Even though, in the spirit of economic reforms of the countries that are implementing them, economic arguments have gained more weight in determining the rent levels, the socio-political considerations still constitute a decisive factor against direct full-cost recovery from occupants.

5.04 Certain characteristics with respect to rents are still shared by most eastern European CPE's. These include:

A. Low Share of Rents in Family Budget Expenditures

5.05 The share of housing rental expenditures is much lower than that in non-socialist countries of comparable per capita income. On average, this share rose from about 1-3 percent of expenditures in the fifties to 2-3.2 percent at the beginning of the eighties, 3.2-7 percent if utilities such as fuel and electricity are included (see Table 14). The figures for Poland and Hungary are slightly higher. In Hungary rent amounted to 3.2 percent of the average household income in 1981 and is supposed to constitute about 5.4 percent of that income by the end of 1988. In some of the countries (Poland and Hungary), the rents are further reduced for low- and fixed-income social groups--increasingly so in countries implementing rent reforms.

B. Stability of Rent Levels Over Long Periods of Time

5.06 None of the CPE countries has set a mechanism by which periodic rent reevaluations could be performed to adjust the levels to inflationary increases of costs. Rents have remained stable, in some instances (Bulgaria and Czechoslovakia), since the mid-sixties and in the USSR since 1928. No example could better illustrate the static nature and limited role of pricing as incentive in CPE's.

Table 14: LOW SHARE OF RENT AND UTILITIES IN NET EXPENDITURES
OF HOUSEHOLDS IN THE MIDDLE OF THE 1980'S

	share in percent		
	Rent and Utilities	Rent	Utilities
GDR	5.0	2.5	2.5
HUNGARY	5.4	3.2	2.2
POLAND	4.3	1.8	2.5
USSR	5.0	2.7	2.3
YUGOSLAVIA	6.2	4.5	1.7

Source: W. Dominiak, 1986, Database Section B

C. Erratic Relationship of Rent to Value of Housing Services

5.07 As could be expected, rents relate imperfectly to the quality of a unit. The basis for rent calculation in a state rental sector is the fixed price for 1 square meter. Otherwise, there is not much differentiation in price range between dwellings of higher and lower quality, and various factors critical to housing such as location and neighborhood amenities are often disregarded in calculations. For example, the 1983-86 rent reform in Poland increased the number of factors pertaining to the quality of dwelling itself while at the same time eliminating those related to its location.^{13/} However, recent studies of Budapest report an increase in the impact of location on land prices (Kadas, 1989). In the GDR, the dwelling-quality-based differentiation of rents is low, but basic rates per square meter are higher in the capitol city of Berlin. In the USSR, rents are uniformly low; the greatest differentiation exists in Hungary where, apart from other basis for rent calculations, the location of the dwelling within the town can substantially affect the rent level (+25 percent to -25 percent with regard to the basic rate).

5.08 The unwarranted differences in rent levels among dwellings of comparable quality happen also as a result of rent adjustments limited to a particular segment of a housing stock.

D. Inadequacy of Rental Revenues with Respect to Cost of Housing Stock Operation and Maintenance

5.09 The difference between the actual cost of housing stock maintenance and revenues from rents and other charges is covered by funds from state budget. This is done directly through the appropriations from state budget to administrative offices in charge of public housing or, in case of enterprises, indirectly through subsidies of enterprises' budgets. Generally speaking, the cost to rent ratio is estimated to be between 3:1 and 2:1 (USSR, GDR and Poland being on the higher side of the spectrum).

5.10 The costs referred to here are the maintenance costs of public housing stock. In terms of this category of costs the cooperative housing sector is supposed to be self-sufficient (unless, like in USSR, it is managed by public authorities). In Poland, since 1982, inflationary pressures have necessitated inclusion of cooperative housing in the stock maintenance subsidy system.

^{13/} Differentiation of rents is based on type of construction, technical amenities in dwelling and its location within a building. The age of construction, size of the settlement and location does not enter the calculations.

VI. THE MAIN DIRECTIONS OF CPE'S HOUSING REFORMS

A. Evolution of the Housing Finance Policy: Increasing Mobilization of Population Savings

6.01 Most CPE's share the following traits of the housing finance evolution:

- (a) The financing of housing has undergone considerable changes since the 1950s, with the exception of USSR where changes have been relatively small. The earliest to reject the Soviet model was Yugoslavia. Yugoslav housing construction relies almost entirely on enterprise housing fund accumulation and population savings.
- (b) It has become in a few countries, especially in Hungary, a very complicated system balancing the socio-political considerations with economic objectives and using increasingly varied instruments. A growing number of various market transactions can now be financed by state credit institutions. Loans with different interest rates and different maturities are available. The privatization of old units and sales of new state dwellings to individuals has altered the relationship between the shares of initial investors and the financing patterns.
- (c) Clearly, housing finance since the late 1970s reflects the growing efforts of the state to mobilize the resources of population. In countries with ongoing economic reforms, the subsidies are increasingly being shifted from the supply side and instead focused on households in need of assistance.
- (d) Heavy subsidies, both general and individual, of direct and indirect character, prevail for state, cooperative, and--to some extent--individual sector.

B. Rent Reforms: Departure from Low-Rent Policy

6.02 Aside from macro-economic policies aimed at curbing inflation, specifically in construction sector, the reduction of stock maintenance subsidies can be accomplished mainly in three ways:

- (a) increasing the rent levels;
- (b) increasing the share of cooperative and individual housing in new construction; and
- (c) encouraging the sales of public housing to individual households (both newly constructed dwellings and older ones).

6.03 All three methods have been used. The last one has long been an important part of housing provision system in Yugoslavia, but Hungary is the only other country in which it plays a more significant role.

6.04 The currently undertaken rent reforms (mainly in Hungary and Poland) share the following characteristics:

- (a) The concept of economic rent gained little in recognition, as the cost of major maintenance work and, notably, amortization and interest are still not included. (Yugoslavia accepted the economic rent in early sixties, but experienced problems with implementing the successive rent increases--see, for example, U.N. "Major Trends in Housing...", 1980). Efforts are made, nevertheless, to strengthen the link of rents to actual costs. The rent proceeds are supposed to cover full costs of administration, operation and maintenance of stock.
- (b) No provision has been made for periodic rent adjustments. It is already obvious that in Poland high inflation has made the reform benefits rather short-lived.
- (c) Rent is set to reflect to a greater extent the real value of housing services associated with a given dwelling.
- (d) Rent increases are accompanied by wider use of means-tested targeting of rent subsidies, making rents more tied to income levels of tenants. The last two instruments are expected to result in a closer match between real housing needs of households and the level of housing services represented by their dwellings.

VII. CONCLUSION

7.01 As of now it is difficult to say how fast and how effectively the economic reforms will change the current discouraging trends in the CPE's housing production to any significant degree. In Hungary and Poland, which have embarked on the most far-reaching reforms, the impact of these reforms on the housing sector cannot yet be assessed. If the reforms in CPE's continue in the same direction, one of the more important issues for the housing sector will be the co-existence of the state and market systems within the sector. With general subsidies replaced by means-tested subsidies, the state sector will presumably start to behave in a socially more just way. The state sector negative, price-rising impact on the market sector should gradually disappear easing the current unfair competition between the two. Also, the volume of subsidies should eventually decline as more market housing becomes more available. However, the development of the prosperous private housing market will rely heavily on the restructuring of the financial institutions and the introduction of the financial intermediation which so far is taking place only in Hungary.

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