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**PRIVATE SECTOR DEVELOPMENT OF HOUSING
EASTERN EUROPE**

Housing Development Project - Hungary

**A DESCRIPTION OF THE
HOUSING PRODUCTION SYSTEM**

Prepared for

**United States Agency for International Development
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A

Executive Summary

This report constitutes an analysis of the status of housing development and construction finance in Hungary and is based on two trips to Hungary in winter/spring 1995 by the Residential Development Specialist. The consultant conducted meetings with developers, builders, and municipalities building on the work of the local consultants and working with them to analyze the gathered data. Recommendations are provided at the end of the report.

1. Housing production in Hungary declined from 44,000 units in 1990 to 20,000 units in 1994. This was primarily due to poor macro-economic conditions, as well as the withdrawal of the state's role in construction and financing in the housing sector. In the same period, the formal construction work force decreased from 23,000 to 17,000 employees.
2. Housing costs are very high in relationship to family income. A modest-sized condominium unit of 60 square meters costs approximately \$45,000. This is about 10 times the median Hungarian family income (including 30 percent for unreported income). For the families in the 75th percentile income group, which tends to be urban and represents the bulk of effective demand, a modest unit would be six times annual income. In western countries, these ratios would tend to be in the two to four range. Reported incomes have been increasing at a rate of about 10 percent per year, but this is not in pace with the costs of construction, which are increasing at a rate of 20-25 percent per year. Unreported income gains do close the gap.
3. Housing costs include a 25 percent value-added tax (VAT) (on the structure) imposed by the central government on the reported sales value or cost of the housing unit. When VAT, fees, social security on labor, and other taxes are included, as much as 40 percent of the selling price of the housing unit can end up being paid to the state, if all the reporting and required payments occur.
4. Given the poor macro-economic conditions, housing finance is not available on affordable terms. One bank, the OTP, provides more than 90 percent of the construction loans and 100 percent of the mortgage loans. As a consequence, there is little incentive to be competitive with regard to lending rates and borrowing conditions. Currently, mortgage and construction loan interest rates are 32 percent. At these rates, a family can only afford to finance approximately 15 percent of the actual cost of a house. Last year, 45,000 units were mortgage financed with a loan-to-value ratio of 25 percent on the reported — not actual — cost of the unit. Assuming the 20,000 newly constructed units received mortgage financing, then at least 25,000 older units were sold and purchased. Most likely, the majority of these were the old, state-built, high-rise, privatized apartment units that were sold by the families purchasing a better single-family or condo unit. The equity from these privatized units represents a substantial portion of the financing for the new units.
5. The state provides a one-time subsidy for newly constructed housing. The amount of the subsidy is based on the number of children. If the family has three children, this subsidy

can provide up to 35 percent of the cost of a housing unit. However, in March of this year, the state rightfully imposed restrictions on the qualifying conditions for this subsidy. This significantly reduced its use among families who were potential buyers and reduced the positive impact it was having on housing production. The result of these conditions is that a home buyer has to personally finance between 50 percent and 90 percent of the costs of a unit during its construction. As a consequence, most families cannot afford to purchase a new housing unit.

6. The middle class is, in most cases, unable to mobilize the necessary funds to purchase a flat or condo. Therefore, most families build or subcontract the construction of their houses over an extended period. Over 80 percent of the 20,000 units produced annually are now constructed in this manner. There is no accurate data on the cost of this self-help housing, but assuming the cost of a typical single-family house of 100 square meters is \$30,000, it represents 6.5 times the median family income (including 30 percent for unreported income).
7. There is a small market with an effective demand for high-priced units in the \$100,000-\$300,000 range. These families are not concerned with financing conditions, since their transactions are in cash. This group currently keeps quite a few builders employed.
8. Fortunately, there is not a major housing shortage in the country; however, there are a significant number of flats that are 50-100 years old where maintenance has been deferred. Financing for rehabilitation is very difficult to obtain, even though attractive subsidies are available. Furthermore, new construction of rental housing for the average income family is nonexistent, since no incentives are provided for either their development or renting.
9. Design standards, building codes, construction practices, technology, building materials, and the availability of land are **not** significant problems for the production of housing. In the near future, particularly in secondary cities, the availability of serviced land will become an issue.
10. There are approximately 8,000 companies registered in the construction business. Approximately half of these companies produce 90 percent of the sector output. Of this number, there are approximately 800 companies performing residential construction. Over half of these companies have fewer than 20 employees. In the building materials business, 103 joint venture companies with foreign companies have been founded in the last three years, bringing more western technology to Hungary. Therefore, there are sufficient numbers of qualified builders and support industries to produce the number of units required. From the builders' perspective, the biggest problem, other than the limited effective demand, is the inaccessibility of construction financing. Almost all construction financing is provided by one bank, the OTP. Its qualifying conditions are so onerous that only a few firms obtain construction loans. Since the state subsidizes the interest rate on construction loans, this effectively precludes this subsidy from assisting the majority of builders and home buyers.

11. Hungary requires approximately 40,000-50,000 units a year to replace its deteriorating stock and to meet the new demand (particularly in major urban areas). Current conditions won't allow production of the required scale to occur. The lack of governmental policy, lack of a governmental body, and lack of an effective institutional framework responsible for the sector are serious matters. The government should restructure its subsidy programs for construction, mortgages, rehabilitation, and rental units. Its current policy appears to be to de-emphasize housing while keeping in place some ineffectual subsidies. Unfortunately, the absence of both industry and government groups that could address the issues makes it difficult for USAID to advise and assist on overcoming the problems.

The Construction Process

A. Production Levels and the Builders

Housing either for sale or rent is no longer being provided by the state and an insignificant amount is being provided by the municipalities. Consequently, essentially all the housing currently being produced for sale and ownership is constructed by private firms and individuals. Other than the few units being produced by the municipalities (228 units in 1994), no rental housing is being produced. No data is available on individual rental of flats. Approximately 20,000 units are being produced annually, and approximately 80 percent of these units are constructed and/or subcontracted by the individual home owner. The other 20 percent are built by builder/developers and are typically 2- to 3-story condominium units. 30 percent of the annual production occurs in the greater Budapest metropolitan area.

Housing Production 1986-94

Year	Total # Units	Publicly Built	Private Builders	Individually Built	Budapest Production
1985	72,706	12,956	21,875	37,875	13,220
1990	43,771	3,461	9,740	30,570	6,985
1991	33,135	1,550	7,242	24,343	4,816
1992	25,807	902	4,409	20,496	3,829
1993	20,925	431	2,439	18,055	3,553
1994	20,947	228	data not available		

1993 Housing Production by Type of Unit

Size	# Units	Area (sq.m.)
1 Bedroom	1,898	50
2 Bedroom	6,391	82
3 Bedroom	12,636	96

There are a few builder/developer companies that produce more than 100 units per year, but the majority are small to mid-size companies producing 10-30 units a year. Most of the previously state-owned companies are gone. In the 1970s, 10 housing factories were established with a capacity to build 35,000 concrete panel multi-family units annually. Only one or two of these companies still exists and they are no longer producing any housing of significance. The few remaining are now joint stock-owned companies. For example, the Ingatlan, a stock-owned company of the state bank (OTP) and others, produces approximately 200 units a year on a national scale. Most, if not all, other companies produce at the local metro area level. The joint stock companies are able to survive by picking up some of the limited infrastructure projects funded by municipalities and one or two are still producing

housing funded by the OTP. The companies have undergone cutbacks in labor and overhead costs, but additional reductions will be required if they intend to remain competitive.

There are approximately 8,000 firms registered in Hungary in the construction industry. Approximately half of these produce 90 percent of the sector's business. Of this number, there are about 800 firms registered as being engaged in residential construction; over half of these employ fewer than 20 workers. The number of small private construction companies increased from 74 in 1985 to 4,600 in 1992, but the overall employment level during the same period decreased by 33 percent. The number of building employees in 1985 was 27,500; in 1993, this number was down to 17,000.

The subcontracting practices employed by individuals and most builder/developers consist of using unreported black market labor to avoid paying the social security tax, which can be as much as 45 percent. The labor unions are no longer a factor in the housing production sector. In addition, to avoid high state taxes, it is not uncommon for a subcontractor to be a registered skilled-labor, one-person company. All building contractors are licensed and registered at the national level.

Construction by an individual can take up to several years depending on the financial resources and skill of the individual. A builder typically completes a small project of 10-20 houses in 12-18 months. A representative schedule for a typical builder is presented in Annex A.

Housing Stock as of 1994

Total # of Units	3,954,932
# of Public Units	484,931
# of Private Units	3,470,001
# of Units with Water and Bathroom	2,966,541
Occupancy	2.6 persons per unit
# of Households	3,890,000

There is a substantial number, particularly in Budapest where demand for housing is higher, of multi-family units that are 80 years old or more and are in need of major rehabilitation. There does not appear to be a serious housing shortage now, but as employment trends continue to shift with the movement toward an integrated, market economy and preferences and growth centers change, there will be a substantially higher demand for new and rehabilitated housing. An estimate of the annual production required to replace and refurbish the existing stock is at least 20,000 units, plus the annual production to meet the existing new demand is roughly 20,000 units and, to satisfy the demand caused by shifting population centers, another 10,000 units are needed.

B. Building Materials and Suppliers

For moderately priced housing, most, if not all, of the building materials are produced and are readily available in Hungary. For higher-cost housing, the percentage of imported

materials increases, with the highest-cost housing using only brick tile blocks, steel reinforcement, and cement from Hungary; all other materials are imported, primarily from Austria and Germany. In the last few years, many joint venture companies producing construction materials have been established (in the last three years, 103 joint venture material companies were established); however, material costs remain high. This has helped increase the supply of these materials in-country, but their costs have remained high.

The typical type of construction for both single-family detached (SFD) and multi-family units is to use steel reinforced concrete foundations, columns, floors, ceilings, and roof beams, along with clay tile bricks or blocks as in-fill for the walls and floors. An insulating stucco finish is applied to the exterior and plaster on the interior. The use of wood or lightweight structural members or panels for walls and trusses is insignificant primarily due to home buyers' preference and perception, and the builder's and subcontractor's traditional practices. Individual unit gas-fired heating and water heaters, double-glazed, wood-framed windows, and tile flooring and roofing are standard, along with steel and copper plumbing.

C. Construction Financing

The smaller builders/developers and most mid-sized builders/developers do not use construction financing because essentially only one bank, the OTP, provides this type of financing and their lending practices are extremely conservative and onerous.

To obtain a construction loan from the OTP, the builder/developer must have an account with the bank, the land for the project has to be acquired, the land use and project design have to be approved by the municipality's chief architect, 50 percent of the units have to be pre-sold, and the developer/builder must have 30 percent equity in the project. In addition, depending on the experience and financial position of the builder/developer, as well as on the viability of the project, the OTP requires collateral equal to at least 50 percent and sometimes as much as 200 percent of the loan value. The average collateral is 150 percent, which may include fixed assets, capital, and project land costs. The OTP's construction loan approval and the amount of collateral required is determined by an evaluation of which 70 percent is objective (based on the project and credit review) and 30 percent is subjective. Therefore, a special relationship between the builder and the OTP can effect the rating. The OTP has its own development company and it will sometimes use that company to review the technical and cost aspects of the proposed project. A few other banks provide construction financing, but usually only to longstanding customers and with equally onerous lending conditions as the OTP. In the review of builders outside of the Budapest metro area, not a single builder who had been able to acquire construction financing was interviewed.

The current interest rate charged is 32 percent; however, the OTP can adjust that rate by plus or minus 3 percent depending on their assessment of the project and the borrower. If the builder can complete the project in one year, the interest rate is reduced by 75 percent and, if completed in two years, by 60 percent. This interest rate subsidy is provided by the state on residential construction. Unfortunately, for the reasons already mentioned, most companies do not get the benefit of these highly favorable subsidized construction loans. Finally, just 2 percent of the OTP's construction lending is for residential construction.

Smaller projects are reviewed and approved at the branch level; larger projects have to be submitted to the central office. Other banks do not yet provide residential construction financing on a significant level because of their inexperience with real estate appraisals and other sector practices and their conservative banking policies. Furthermore, with the government paying 32 percent on T-bills, much of these banks' resources, as well as the OTP's, are used to finance the government's needs. Banks are paying 16 percent on short-term deposits and the country's inflation rate is roughly 20 percent. It is anticipated to climb to 25 percent this year.

D. Land Availability

The municipalities inherited serviced land and have recently acquired loans from the central government and the OTP to service sufficient additional land to be able to accommodate the near-term effective residential demand. Serviced land in the secondary cities is not as available and will in the near future, depending on the level of housing production, be in short supply. Some of this land is designated for individual SFD housing and others for row and low-rise, multi-family condominium housing construction. The cost of the land is determined by the municipal council and priced at the prevailing market value.

At the discretion of the municipality, the land can be purchased by the individual or a builder/developer with 60 percent down and the remainder to be paid in 2-4 years at 0 percent interest. In some cases, the amount of down payment can be reduced even further. The source of the funds for land purchases is derived from the savings and financial resources of the individual or the company of the builder/developer.

Land use and housing standards and codes are approved by the municipal chief architect and building inspection and code compliance are the responsibility of the municipal building department.

E. Source of Funding and Construction Costs

Construction costs are high in Hungary and, because of the poor macro-economic conditions that prevail in the country, financing is not readily available. Typically, after the land is acquired, the majority of housing is built by individuals who organize the construction through a combination of self-help and subcontracting activities using their own funds. These funds are in large part mobilized from extended family savings. In a small percentage of cases, loans representing 5-10 percent of the construction cost are provided by the buyer's employer. Presently, an additional source of financing available from the state is the social allowance (subsidy) fund. This fund provides a one-time subsidy for the construction of new housing. The amount is dependent on the number of children and becomes significant when two or more children are involved. The payment from the fund can represent 30-40 percent of the construction cost. However, the state has just imposed restrictions on the qualifying conditions for this subsidy, which will significantly reduce its applicability and its positive (however irrational) impact on housing production. Further, the state last year re-imposed the value-added tax on new construction, which is a major deterrent, since it requires the owner to pay a 25 percent VAT on the reported house construction cost. It seems as though the

government is deliberately reducing its emphasis on — and financial commitment to — housing. As a consequence, a significant number of families who are able to buy a condominium unit from a developer use funds from the sale of their privatized unit, which they previously obtained from the state. Information from the OTP supports this premise, since for each new unit built and sold and financed with a partial mortgage, one-and-a-half older units are sold and are, in turn, partially financed with an OTP mortgage.

As already stated, most smaller builders and developers who construct from 10-100 units per year cannot obtain bank construction financing. Typically, they acquire the land, obtain the approvals on land use and project design, and then pre-sell as many units as possible. Usually, at least 50 percent of the units are pre-sold. A 25 percent down payment is required, plus installment payments are made during the course of construction. Before the builder/developer starts construction on the remaining project units, construction on the first 50 percent will be close to completion and the down payments for the remaining 50 percent will have been made. When the builders are first starting their business, they advertise their planned projects in the newspapers, on the radio, and sometimes on television. Realtors do not play a significant role in marketing. As the builders develop a reputation, they no longer rely on media advertising, but rather “word of mouth” becomes their principle marketing tool.

The installment payments required during construction normally include (if available) the subsidy payment, which is paid to the builder by the state. If the buyer qualifies and applies for a long-term mortgage, this loan will be used for an installment payment toward the end of the construction process. Due to the high (35 percent) interest rate on mortgages, provided only by the OTP, the average buyer finances only approximately 20 percent of the sales price. Therefore, depending on the amount a family can obtain from the subsidy fund and mortgage financing, a family will usually self-finance from 60-80 percent of the sales price.

F. Costs

Construction and selling costs are difficult to determine. For example, the Ministry of Industry and Trade has neither analyzed nor collected detailed cost data in the past five years, even though it is this Ministry’s main responsibility as a member of the Inter-Ministerial Committee on Housing to be cognizant of construction costs. Information from the builders and municipal officials interviewed suggest that construction costs in U.S. dollars per square meter are as follows:

Self-help and subcontracted SFD units	\$250-\$400
Modest-priced, contractor-built SFA and condos	\$500-\$800
Higher-priced, contractor-built SFA and condos	\$900-\$1,300
Luxury-priced, contractor-built units	\$1,500-\$2,200
Modest-priced units	50-100 square meters
Higher-priced units	100-200 square meters
Luxury-priced units	200 square meters and up

Building costs are inflating at about 20 percent a year. The national statistics office reported the following average residential construction costs:

- 1991 - 24,984 forints/sq.m.;
- 1992 - 30,650 forints/sq.m.;
- 1993 - 34,762 forints/sq.m.; and
- 1994 - 43,900 forints/sq.m.

The location and cost of the land are significant factors affecting the price variations, as well as the quality of the construction materials.

Based on information made available from many interviews with builders and professionals in the field, the approximate cost breakdown for residential construction is the following: 20 percent land; 29 percent profit, design, and overhead; and 60 percent construction (of which 60 percent is material and 40 percent labor). For the luxury units, profit, design, and overhead can be as high as 40 percent. It is difficult to determine why costs are so high without a detailed cost analysis including quantity take-offs, etc. USAID offered to fund such a study with the Ministry responsible, but they were not interested.

G. Affordability

The median yearly income for a family in 1995 is approximately \$3,600. The income of a family in the 75th percentile income group, which is more representative of the Budapest metro area, is approximately \$6,050. It is generally accepted that incomes are 30 percent higher than these figures due to unreported income. Therefore, the median and 75th percentile levels are \$4,680 and \$7,860. A modest unit of 60 square meters would cost approximately \$45,000. The respective ratios of housing cost to real income are 9.6 and 5.7. In most western countries, the same ratios would tend to range from 2.0 to 4.0.

Assuming each income level will pay 25 percent of their income to a mortgage loan of 25 years, the median income group could afford a loan of \$3,654 at 32 percent interest rate, which represents 8 percent of the value of the modest-priced unit, and the 75th percentile group could afford a \$6,110 loan, which represents 14 percent of the unit value. Thirty-two percent is the prevailing mortgage interest rate. If an interest rate of 28 percent is used, which is a subsidized rate sometimes available, then loans of \$4,174 and \$6,978 would be affordable. These numbers represent 9 percent and 16 percent, respectively, of the sale amount. The use of a deferred payment mortgage will increase the amounts that can be borrowed. As a consequence, a family has to fund approximately 85 to 90 percent of the value of the house during its construction period. It is interesting that the OTP reports that, on their mortgage loans, the average loan-to-value ratio is 24 percent. Either the family is paying substantially more than 25 percent, which is doubtful, or the value of the house is reported as substantially lower for tax reasons, which is probably the case. If the family can sell their older unit for \$25,000, which is a good market value on these concrete panel units, then they need to self-finance 30 to 35 percent of the new unit sales value on top of taking out a mortgage.

H. The Governmental and Regulatory Influences

The responsibility for housing has been dispersed among several entities, leaving no effective leadership or spokesman for the sector. The Ministries of Industry and Trade, Environment, Interior, and Finance, as well as the municipalities, are involved in the sector, but the primary determining factor appears to be the current macro-economic condition of the country. Therefore, the Ministry of Finance is the most important player.

There is an Inter-Ministerial Committee on the sector, but it has not been actively supporting an improvement of current conditions. The same can be said for the Housing Committee in the Parliament. Consequently, there is currently no national body which is charged with — or interested in — the issues facing the sector. There is a National Alliance of Building Contractors, which is well organized, but they have been totally ineffectual in getting the government's attention on issues such as incentives to strengthen the activities in residential construction. It appears that until some of the more demanding issues associated with the national economy are addressed, housing is going to take a back seat with the national government.

I. Codes

The building and design standards and codes are not, in the judgment of the builders and municipalities interviewed, a significant obstacle to the production of housing. The major problem with housing production is the high cost and lack of available construction financing and long-term financing. The solution to these problems is dependent on macro-economic conditions and on political perceptions of the importance of the provision of new housing.

J. Training

Training opportunities for the construction industry with regard to government regulations and OTP financing are not currently available, but neither the government nor the industry sees a need for such training. This is unfortunate, since training for the industry on OTP construction financing procedures, construction management techniques, and project marketing and planning would be useful. For example, some training on new construction technologies has been provided by the National Alliance of Builders and it may be possible to broaden their education efforts.

K. Recommendations

It is important to facilitate the availability of construction financing. Therefore, if the Housing Guarantee Loan is provided, then the participation of at least three or four more banks in the provision of construction and mortgage loans and the limiting of housing project sizes (less than 50) to encourage more builders to participate should be conditions for approving the loan. Since this loan at the prevailing local interest rates can only finance a small portion of the housing cost, the effective demand for the loans should be adequately justified by the participating banks.

USAID should continue to try to get the government's attention on restructuring the subsidies that are provided so that they have the most beneficial effect. The child subsidy program for new housing is not assisting the neediest group or the production of housing. The subsidy on construction financing is available only to a handful of builders and does not necessarily assist in the provision of housing to the lower-income group. There is a subsidy program for rehabilitation, which is badly needed, but the program as currently structured is almost unworkable.

USAID should work with municipalities that have land assets and determine if a combination private-municipal redevelopment corporation project using the commercial potential of the sites, the possibility of making the rehab subsidy workable, and the Guarantee Loan in combination can be a catalyst for changing the sector and improving the production of housing. With the proper incentives, the Hungarian construction sector has the capacity to respond. The local USAID representative has explored this possibility with some municipalities and districts. If there is interest, then U.S. consultants who have hands-on experience with urban redevelopment projects and municipal officials should be engaged in further determining the feasibility of such a project in the locale selected.

If the Ministry is interested, USAID should assist it in performing a detailed cost analysis. The construction industry has both the capacity and capability to respond to an effective demand once the financial issues have been addressed. Therefore, no technical assistance on construction practices or materials is needed. However, there should be follow-up with the National Alliance of Building Contractors on the development and instruction of courses on construction management, etc.

Annex A

Typical Builder Planning and Construction Program

- Month 1 Identify site and the market group; prepare preliminary budget
- Month 2 Contract for preliminary design
- Month 5 City chief architect approves pre-design and land use for proposed site and project size
- Month 6 Initiate marketing program
- Month 8 Purchase land, finalize design, and get city approvals
- Month 9 Pre-sell units up to 50 percent with 10 percent down payment as a minimum
- Month 12 Additional 30 percent down payment required; initiate construction
- Month 15 Unit shell and roof completed, 40 percent additional payment required from buyers (and subsidy fund if family is eligible) or, if available, construction financing provided
- Month 19 Final payment made, complete units, city inspection and approval, 5-year warranty provided
- Month 20 Occupancy permit issued by the city

Annex B
Data Sources
National Statistics Office OTP
Central Budgets
Hungarian Household Survey 1992-94
National Alliance of Building Contractors

Technical Input
MRI
A-B Associates

Meetings List

Banking

OTP	Construction lending office
OTP	Branch office

Builder/Developers

Quadrat	Developer
Ingatlan	OTP developer
Firts	Developer
Keviterv Akva	Builder
BIC	Developer
GLOBEX	Developer
Stahl Limited	Builder
Interco-MV	Builder
Elsó Magyar	Builder
Sorhaz	Builder
Veritas	Builder
National Alliance of Building Contractors	

Government

AID	
Ministry for Trade and Industry	
Habitat for Humanity	Sponsor
Budapest District 8	Chief architect
Szolnok	Deputy mayor
Veresegyhaza	City mayor

Research Institutes

MRI	Research institute
A.B.	Housing consultant firm