

The Mortgage Bonds Market and Housing Finance in Italy

1. General Aspects of the Mortgage Bonds Market

In Italy, long- and medium-term credit is, as a rule, granted by specialized intermediaries; short-term operations are left to the commercial and savings banks. Over the last twenty years, in view of the accelerated growth of investment and, in general, the economic policies pursued by the authorities, the demand for medium- and long-term finance has increased considerably: for the period 1962-1973 the average annual rate of growth for special credit institutions was 17.6 per cent, whereas for banks the rate was 14.6 per cent (table 1).

LOANS GROWTH RATES
(average annual percentage values)

TABLE I

Period	Real-estate credit institutes	Total special credit institutes	Banks
1952-61	28.0	18.8	16.0
1962-66	23.6	17.5	13.8
1967-73	18.1	17.7	15.1
1962-73	20.5	17.6	14.6
1952-73	23.9	18.1	15.2

Within the area of special credit, those institutions operating in the field of housing finance are the ones which showed the highest rate of growth during the same period (20.5 per cent), owing to the increased demand for housing stemm-

ing from urbanization. The policies pursued by the monetary authorities have facilitated the expansion of the financial market and the activity of these intermediaries. The number of real-estate credit institutions increased from 13 in 1956 to 21 at the present time. The proportion of housing investment financed with credit granted by these institutions rose from 22 per cent in 1962 to 31 per cent in 1972 and to 41 per cent in 1973, a year in which these loans had an unprecedented growth (1). Twelve of which are creations of banks, particularly the savings banks and they thus utilize the organizational structures of their parent organizations.

The most important source of funds for the institutions we are examining consists in the issue of special securities called mortgage bonds (*cartelle fondiariae*). The average gross issue of mortgage bonds during the three-year period 1971-1973 amounted to over 1,400 billion lire, being equal to roughly a sixth of the entire issue of fixed-interest securities. Mortgage bonds circulating at the end of 1973 amounted to 8,011 billion lire, or 15.4 per cent of all bonds then in circulation; the corresponding figures for the end of 1961 are 916 billion lire and 13.4 per cent. (table 2) Their share of the market has remained almost unchanged over the last six years, characterized by an exceptional growth of the bond market, namely for the increasing Treasury recourse.

These securities differ from other categories of bonds because of some peculiarities concerning their issue, placement, and fiscal treatment.

In general, mortgage bonds can only be issued as counterpart to the granting of loans. There thus exists a close correlation between the issuing of these securities and the use they are issued for. It follows that the issuing institutions have no possibility of building up a supply of funds in times of high general liquidity, since this is linked to the fulfilment of their financial commitments to borrowers; on

(1) In the same years, the banks provided respectively 19, 12 and 14 per cent of housing investments through both short-term and long-term funds; the latter are granted by savings banks. For more details on the working of special credit institutions see: V. PONTOLILLO "Medium- and Long-term Credit in Italy" this *Review*, September 1972.

the other hand the institution has no problems of maturity transformation since the reimbursement of outstanding loans is equal to the redemption of bond circulation.

The maximum nominal interest rate on the issue, fixed by Ministerial decree, since January 1974 is 7 per cent (2), and is the same as the interest paid by the mortgage-holder, plus about 1 per cent for commission. Since the latter is applied to the original amount of the loan, for a thirty-year loan at 7 per cent it corresponds to an increase of 1.25 per cent of the annual rate for the borrower.

Mortgage bonds are redeemed by lot, in a period of time which must not be less than 10 and not more than 35 years; at present their maximum duration is 25 years (3). Redemption in advance is allowed in cases where the loan which originally gave rise to the issue of the bonds has been paid off in advance. Issues take place continuously, and there is no need for specific authorizations from the monetary authorities, in contrast to the practice in the case of institutions for industrial credit and private firms (4).

The purchaser of securities is guaranteed by the patrimony and by the mortgages on the property for which the finance is being provided; the interest he receives is exempt from income tax (5). Mortgage bonds may be allocated as collateral for advances from the Central bank; this facility helps to stimulate interest on the part of the banks.

2. Supply and Demand of Mortgage Bonds

At the end of 1973, 53 per cent of the bonds in circulation were held by private individuals, 37 per cent by banks, and the rest by other intermediaries (table 2). It may be

(2) In January 1970 the rate had been raised to 6 per cent after having stayed at 5 per cent since 1932. At present other institutions issue securities bearing 8 per cent coupon.

(3) On average, it works out at about 20 years.

(4) It is not permitted to exceed a certain proportion between the amount of securities in circulation and the patrimony of the issuing institute (usually not more than thirty-fold).

(5) Under the new tax law (in force from January 1974) 10 per cent is deducted at source for newly issued bonds; the same percentage is applied to coupons of bonds issued by industrial credit institutions.

useful to analyze the factors underlying the advantage to private individuals of holding mortgage bonds and also the ways in which these bonds are acquired.

MORTGAGE BONDS MARKET

TABLE 2

Period	Billions of lire		A/B × 100	Percentage purchase of bonds		
	Mortgage bonds A	Total bonds B		by banks	by public	by other investors
	Outstanding at end of period					
1951 dec.	75	1,088	6.9	23.0	54.2	22.8
1961 dec.	916	6,813	13.4	20.4	62.1	17.2
1966 dec.	2,511	15,977	15.7	33.6	51.2	15.2
1973 dec.	8,011	52,058	15.4	37.1	53.3	9.6
	Gross issues in the period			Net issues in the period		
1952-61	1,063	7,124	14.9	20.2	62.9	16.9
1962-66	2,104	12,213	17.2	41.1	44.9	14.0
1967-73	7,395	44,721	16.5	38.6	54.1	7.3

Source: BANCA D'ITALIA. - *Bollettino and Annual Reports*.

In theory the grant of a loan is effected by the delivery to the borrower of bonds of a nominal value equal to the amount of the loan; the borrower should then turn them into cash by selling them on the market. This would be extremely complicated for an ordinary person wanting a loan. In practice, therefore, what happens is that the institution sees to the placement of the bonds by buying them back from the borrower at a price which, according to the state of the market, may be considerably lower than that shown by the stock exchange. To make up for this "placement loss," the institution usually grants a supplementary loan, the redemption of which is added on to that of the main loan.

The cost for the borrower thus has three components: nominal rate of bonds, commission for institutions, and placements loss, which varies according capital market conditions.

For a borrower with a twenty-five year loan, the effective annual cost rises to 9.6 per cent in the case of a 10 per cent loss, and to 12 per cent if there is a 25 per cent loss (table 3). The cost in recent years has varied from 8.3 in 1967 to about 13 per cent in the first half of 1974.

COST FOR BORROWER
(percentage values)

TABLE 3

Duration (years)	Nominal interest rate	Commission on original amount	Placement loss	Cost for borrower (1)
25	7	1	10	9.6
25	7	1	15	10.3
25	7	1	20	11.1
25	7	1	25	12.0
15	7	1	10	10.2
15	7	1	15	11.2
15	7	1	20	12.4
15	7	1	25	13.6

(1) Net of fiscal charges (0.75 per cent of the borrowed sum).

The real-estate credit institution first of all places the issues with the participating banks, which in their turn use their branches to place them with the public. It follows that the issue of the bonds has its basis in the grant of the loans, but the demand for loans may, in turn, be satisfied to the extent that there is the possibility of placing the bonds, and this depends on the propensity of the public to buy them.

The placement therefore takes place by direct contact between the institutions or the participating banks and the savers. The savers turn to the same institutions when they wish to sell their bonds before redemption is due.

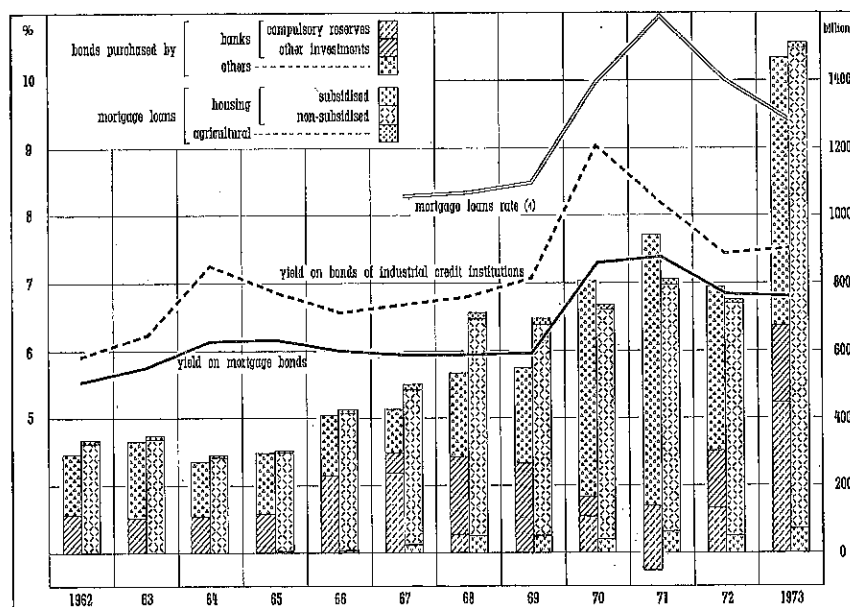
The securities of this type bought and sold on the stock exchange constitute a very small proportion both of bonds in circulation and of new issues; for this reason, the institutions find it possible to ensure the stability of the quotations of the bonds by means of limited interventions on the stock exchange, and by carefully adjusting the supply of new bonds. As a consequence, the market yield of these securi-

ties does not reflect the changes in the cost of loans, since bond prices on the stock exchange remain stable.

Mortgage bonds in fact have a much higher record of stability compared to other sections of the bond market; some prices have remained stable even in periods of great general instability (1969-70), thanks to the support consistently given by their issuing institutions.

The stability of these bonds constitutes a guarantee against capital loss, and has provided an incentive for private individuals to buy them, even though the yield has been lower than that of other fixed-interest securities (chart. 1).

BONDS, MORTGAGE LOANS AND INTEREST RATES OF THE REAL ESTATE CREDIT INSTITUTIONS IN ITALY CHART I
(net changes in billions of lire)



(1) Average rate acknowledged to institutions for subsidized operations.

Source: BANCA D'ITALIA. - Annual Report for 1973.

The propensity of private individuals has been influenced not only by the mortgage collateral, which is a typical feature of this sort of security, but above all by the certainty of being able to sell without capital loss. On the one hand, this characteristic brings the yield closer to monetary market

interest rates than to those of the bond market. On the other hand, it makes the mortgage loan institutions heavily dependent on the capital market situation and in general on the overall liquidity of the system.

When the market interest rates show a tendency to rise, savers find it more profitable to place their savings in bank deposits or other kinds of security, and not only do they stop buying newly-issued bonds but they tend to get rid of those they hold. Bringing mortgage bonds' yields into line with market interest rates is conditioned both by the nominal interest rate of issue (6), and specially by the policy of stability pursued by most of the institutions.

In these periods, the stabilization of quotations requires interventions both by the issuing agencies and by their parent banks. In particular, the latter intensify their purchases when the demand for the bonds by private individuals is slack. Obviously this support cannot be unlimited, since, when interest rates go up, the liquidity of the banks diminishes on account of the reduction of the money supply. This causes difficulties for the "pre-financing" of the investments by banks and indeed for the granting of medium- and long-term credit, with negative effects on the activity of the building industry, which cause the monetary authorities to intervene (7).

(6) Raising the effective yield from 7 per cent to 10 per cent would involve applying a differential of 22 per cent to the price of the security (if nominal interest rate and duration stay the same); it is worth remembering that bond yields now exceed 10 per cent, as already occurred in the past.

(7) A first econometric appraisal of the demand for mortgage bonds provides partial confirmation of these relations; the equation, tested on a quarterly basis for the period 1962-72, gives the following estimates (in billions of lire):

$$ENCF_t = -420.5 + 86.2 RCF_t + .07 \Delta DBR_{t-1} - 36.8 VCCF_{t-2}$$

(61.5) (10.3) (0.2) (28.6)

where ENCF = net issue of mortgage bonds

RCF = per cent rate of yield of mortgage bonds

ΔDBR = net increase of savings deposits with banks

VCCF = standard error of monthly average prices of mortgage bonds.

Values in parentheses are standard errors of the coefficients.

The inclusion of savings deposits within the independent variables since 1965 takes into account the possibility for banks to purchase mortgage bonds in order to meet their compulsory reserve requirements (see below). The impact of interest rate on bank deposit has not been tested because of the lack of omogeneous quarterly data.

3. The Interventions of the Monetary Authorities

The monetary authorities' interventions fall into two categories: those of a general character, and those specifically related to the mortgage bond market.

Among the former, the most important is the policy of stability of quotations for bonds, which has been pursued since the spring 1966 with the central Bank's purchasing and selling bonds on the market; this policy has been supplementary to the normal procedure of regulating the supply of securities through the granting of authorizations. The interventions of the central Bank, even if limited to certain categories of bonds, have nonetheless a positive rebound effect on the other sections of the securities market. Furthermore, the limitation, which is applied in certain periods, of supply to the public of those issues for which previous authorization is needed, constitutes an advantage for the real-estate credit institutions, which find increased opportunities of placing their bonds.

Specific instruments for real-estate bonds have been the classification of these securities as compulsory reserves and the increase of their yield through the State budget.

The former measure was adopted back in 1965, subsequent to the capital market's keen instability which had characterized the years 1962-64. Through it, the instrument of compulsory reserves is utilized to re-direct credit flows, since banks are allowed to fulfil, within certain limits, their compulsory reserve requirements by means of mortgage bonds, which offer a higher remuneration than cash deposits.

The modalities and the very possibility of so using these securities have undergone several changes (8). At end of 1973, banks held in their reserves more than 1,400 billion

(8) The compulsory reserve for commercial banks is equal to 22.5 per cent of their deposits (on demand and savings deposits); it is generally paid in cash and in short-term Treasury bonds. In all cases the payment in cash must not be less than 10 per cent of overall deposits. For savings banks, the regulations on compulsory reserves are slightly different, both as regards the coefficient (20 per cent) and the composition of the assets which may be classed as reserves.

The main measures concerning the inclusion of mortgage bonds into compulsory reserves are as follows:

- (a) in September 1965, with no change in the quota to be paid in cash, commer-

mortgage bonds, i.e. around one fifth of the outstanding nominal value. In the period 1970-73, mortgage bonds deposited in the reserves represented 22 per cent of net issues of real-estate credit institutes, a far lower proportion than could be invested in accordance with the current regulations. At the end of 1973, the margin not utilized by banks amounted to more than 900 billion lire. In July 1974, in order to facilitate placing of the mortgage bonds, the rigid distribution by issuing institutes which banks were obliged to follow in order to meet the reserve requirements was abolished, leaving any bank free to buy any mortgage bond, up to the limit of 50 per cent for bonds issued by the affiliated institute. Banks were also allowed to substitute with mortgage bonds the margin not utilized, subject to Central Bank authorization.

The second measure is of an exceptional nature; it was adopted subsequent to the cessation, in the summer of 1969, of the policy of stabilization by the Central Bank on account of the changed economic and financial situation, and in particular because of the increasing disequilibrium in the balance of payments and of price pressures. The instability of quotations increased the negative difference between the yield of mortgage bonds and that of other kinds of bonds and caused private individuals to abandon the bond market.

In such a situation, in order to avoid bondholders selling out their mortgage bonds, their yield was increased by insti-

cial banks were allowed to invest in mortgage bonds and bonds of agricultural credit institutes the reserve due against the increase of savings deposits since September 30th 1965. At the same date, it was allowed to invest in these bonds 25 per cent of the "special liquidity reserve" due by savings banks against the increases in deposits;

- (b) in September 1967, it was decided that reserves due against savings deposits increases from October 1st could be paid:
- up to 50 per cent, in mortgage bonds and agricultural credit bonds;
 - for the remaining 50 per cent, in securities of the "school building loan";
- (c) in December 1967, with no change in the 50 per cent proportion to be invested in the "school building loan", permission was given to pay the remaining proportion in mortgage bonds, agricultural credit bonds and/or bonds issued by CREDIOP (Credit Consortium for Public Works) to finance operations on behalf of the Treasury;
- (d) as from January 1970, commercial banks can only pay mortgage and agricultural bonds against the increase of savings deposits since November 1969, while savings banks must pay in mortgage bonds one fourth of their special liquidity reserve.

tuting a redemption premium, charged to the State budget, which varied according to the redemption date of the securities in circulation (from a minimum of 2 lire per cent at par for bonds drawn in 1970 to a maximum of 20 lire for those drawn after 1978). This measure corresponded in practice to raising the yield on mortgage bonds by 1.05 per cent.

From this picture it can be seen that, as is the case with other countries, the building industry credit feels the effects of the policies followed as regards the creation of money supply. However, there do exist instruments which can limit the undesirable effects; obviously the use of these instruments depends on the general economic situation, and in particular on the recognition of certain priorities in the distribution of credit flows towards individual sectors of the economy. In any case, such interventions by monetary authorities cannot ensure the means for the financing of investments if private investors reduce the propensity for long-term financial assets and in general for financial investments.

In the present situation, the high rate of inflation has reduced the demand for bonds by the public; this reduction was aggravated by the steep increase of interest rates, both on bank deposits and on other bonds. Issues of mortgage bonds thus came to a complete stop in the first half of 1974; private investors have not only stopped buying new issues, but have got rid of the securities held by them. Since the proposal for a premium on bonds in circulation charged to beneficiaries of loans gathered no official support, in July 1974 institutes had to abandon their policy of pegging, and mortgage bonds' prices now fluctuate like any other securities.

4. The Role of Long Term Credit in Housing Finance

During the years 1960-1973, fixed investments in housing varied between a quarter and a third of total investments. The ratio to national income reached its peak in 1964 (7.2 per cent), varied during the years following, and then dropped over the period 1970-1972; in 1973 it picked up slightly

(table 4). Investment decisions in the sector, as well as policies pursued by the public authorities with regard to production incentives, rent control legislation and tax treatment are affected by the availability of financing, and in particular by medium and long-term credit. The latter is more than a secondary factor in investment decisions, since it allows the product to be sold; without it, the households would find it difficult to buy houses, especially in view of the price increases in recent years.

INVESTMENTS IN HOUSING
(percentage values)

TABLE 4

Years	Growth rates		Implicit prices changes	Ratios with	
	current prices	constant prices		total fixed investments	GNP
1952-59	16.2	14.2	1.8	25.7	5.3
1960-69	12.0	6.6	5.1	30.4	6.3
1970-73	7.4	— 3.0	10.7	29.2	6.0
1960	4.2	1.2	3.0	25.4	5.6
61	12.7	9.3	3.0	25.0	5.7
62	24.4	15.4	7.8	27.0	6.3
63	22.0	12.0	8.9	28.4	6.7
64	17.5	5.9	11.0	33.1	7.2
65	— 5.8	— 6.4	0.7	33.5	6.3
66	— 0.4	— 1.1	0.7	31.6	5.8
67	9.3	5.8	3.2	30.2	5.7
68	15.3	12.0	2.9	31.1	6.1
69	25.1	14.8	9.0	33.9	7.0
1970	7.0	— 7.4	15.5	31.5	6.7
71	— 7.0	— 11.7	5.3	28.4	5.7
72	7.2	2.0	5.1	29.0	5.6
73	24.9	6.2	17.6	28.4	6.0

The evaluation of credit flows to housing investment financing is of considerable importance, mainly because it helps to determine the percentage of the economy's savings which will be invested in real goods and to study the motivations behind the investment itself.

With this aim in mind, we have constructed an annual matrix of financial flows relative to residential building; it distinguishes the sectors purchasing houses from the financing sectors. Although the matrix can be improved upon, it offers a fairly complete and innovatory picture of the inter-relations between the different sectors and institutions active on the market, as compared with the previous analysis (9).

From the matrix (table 5), it will be seen that most investments in housing are private initiatives and that the

HOUSING FINANCE FLOWS IN ITALY (1)
(billions of lire)

TABLE 5

Orderers Sources of funds	Public bodies		Insurance companies and pension funds		Households and enterprises		TOTAL	
	1972	1973	1972	1973	1972	1973	1972	1973
CAPITAL TRANSFERS (2)	72	100					72	100
LOANS	60	44	6	2	1,183	2,188	12,49	2,234
Special credit institutions	57	35	6	2	707	1,494	770	1,531
Commercial and Savings Banks					461	689	461	689
Insurance companies, pension funds and public bodies	3	9			15	5	18	14
SECURITIES MARKET . . .					38	61	38	61
SELF-FINANCING			273	258	2,240	2,184	2,513	2,442
of which: repayments of mortgage loans . . .					414	449	414	449
TOTAL (3)	132	144	279	260	3,461	4,433	3,872	4,837

(1) 1973 figures are provisional and partly estimated.

(2) Through special public housing agency (GESTIONE CASE PER LAVORATORI - Gescal).

(3) Amount of gross fixed investments in housing.

(9) See G. MONTEBRATELLI "Il finanziamento dell'edilizia per abitazioni in Italia," *Rassegna Economica* No. 5, Sept.-Oct. 1967, p. 1045 and BANCA D'ITALIA, *Relazioni Annuale*, 1970.

product is sold to the households, while the role of the institutional investors (insurance and social security institutes) who invest part of their assets is not substantial. The latter's house purchases, while still representing only a small part of the total (6 per cent in 1973), have registered a gradual growth, an indication that their interest increased as the profitability in real terms of investments in industrial securities fell.

Along with the increase in the portion of investments by institutional investors, there was a correspondingly much greater drop in public investments, which gradually declined from 22 per cent in 1959 to 3 per cent in 1973. The innovatory principles introduced under the «housing law» of 1971 concerning expropriation, use of the land and competent organs, far from stimulating public investment, prolonged the standstill in town planning and in the purchase and urbanization of areas, thus aggravating the problem of supplying new houses for lower income families.

Although cyclical fluctuations were present over the period 1951-1973, there was an increase in house purchases by the "economy" sector, most of these being made by the sub-sector "households" (chart 2). Investments were sustained not only by the sector's internal savings but also by the rise in financing obtained from the credit system and in particular from long-term lendings provided by the real-estate credit institutions (10).

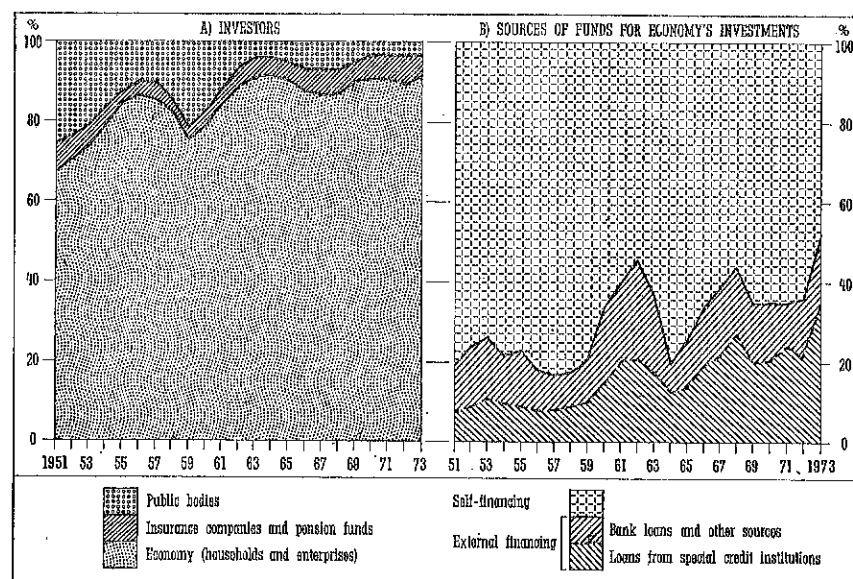
The contribution of the banks, which grant pre-financing while work is in progress as well as mortgages, has varied with the liquidity situation: in fact during periods of tension the banks cut back their loans to residential building more than to other sectors. The wide fluctuations in the rates applied to the sector's enterprises appear to confirm this observation.

The insurance companies and social security institutions mainly purchase houses by investing their capital and re-

(10) The real-estate credit system's contribution to investments during the year is in reality greater than appears from the matrix; it is represented by the volume of actual loans, that is, including refunds which, given these aims, have been considered as the public's saving invested in housing. In fact, the credit intermediaries' funds represent an investment in real assets of future saving of the debtor sectors.

FINANCING OF INVESTMENTS IN HOUSING
(percentage values)

CHART 2



serves. The economy's self-financing, obtained as a residual asset, registered large fluctuations within 50-70 per cent of total investments.

Self financing by the public, as defined in the matrix presented, offers a good approximation of the development of the economy's saving invested in housing, even though there are some reservations as regards the estimate, mainly because of lags between financial and real data. Moreover, the national accounts' definition of investment, which excludes the cost of the land, leads to an under-estimate of the economy's saving invested in housing.

As a proportion of net private saving, saving invested in housing covers around 28 per cent on average, reaching a peak during periods when the rate of inflation is higher (45 per cent in 1964). During the years 1965-1968, the average was 25 per cent; over the two-year period 1969-1970, in relation to the bond market crisis, it reached 28 per cent, whereas during the last three years there has been a falling-off. The inflationary pressures caused keen interest in real

goods; but the reduced supply of houses caused far greater price increases than in the other productive sectors, making it very hard to purchase houses. Nevertheless it should be pointed out that the ratio in these years is affected to a greater extent by elements which do not come under the present definition of saving invested in housing (cost of the land etc.).

The present situation stresses the importance of a normal supply of new houses also to avoid new inflationary pressures flowing from the increase in the price and the rent of houses. On the other side it is necessary to assure the financing and therefore to stimulate households' propensity to financial assets. The indexation of mortgage bonds and "savings for house" systems are possible lines of approach.

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