Title
Grannie Mae: A Sale-Leaseback Annuity Mortgage

Author
Rosen, Kenneth T.

Publication Date
1986-06-01

Peer reviewed

Institute of
Business and
Economic Research

University of
California,
Berkeley

CENTER FOR REAL ESTATE AND URBAN ECONOMICS

WORKING PAPER SERIES

WORKING PAPER 85-105

GRANNIE MAE: A SALE-LEASEBACK ANNUITY MORTGAGE

BY

KENNETH T. ROSEN

GRADUATE SCHOOL OF BUSINESS ADMINISTRATION

CENTER FOR REAL ESTATE AND URBAN ECONOMICS
UNIVERSITY OF CALIFORNIA AT BERKELEY

The Center was established in 1950 to examine in depth a series of major changes and issues involving urban land and real estate markets. The Center is supported by both private contributions from industry sources and by appropriations allocated from the Real Estate Education and Research Fund of the State of California.

INSTITUTE OF BUSINESS AND ECONOMIC RESEARCH
J. W. Garbarino, Director

The Institute of Business and Economic Research is a department of the University of California with offices on the Berkeley campus. It exists for the purpose of stimulating and facilitating research into problems of economics and of business with emphasis on problems of particular importance to California and the Pacific Coast, but not to the exclusion of problems of wider import.

GRANNIE MAE: A SALE-LEASEBACK ANNUITY MORTGAGE

by

Kenneth T. Rosen
University of California, Berkeley

Working Paper 85-105
December 1985
Revised June 1986

This paper is meant to describe the sale-leaseback concept. We urge you to consult your own legal and tax advisor to determine if the sale-leaseback is appropriate for you. This paper in no way guarantees the tax or economic consequences described.

Presented at the American Economic Association, December 1985

Abstract

In the past decade there has been substantial academic research and consumer interest in the topic of home equity conversion for elderly households. Simply put, home equity conversion involves the transformation of the housing wealth of an elderly household into current income through a variety of techniques.

Grannie Mae was founded in 1984 to develop a national home equity conversion product that would have a number of unique features. These features included: 1) an ownership arrangement that would maximize tax advantages to participating parties, 2) an ownership arrangement that only involved a family-based transaction (children or other close relatives assisting elderly parents), so as to reduce potential abuses by non-related parties and reduce psychological barriers to participation by elderly households, 3) a mortgage that was conventionally underwritten and that would be accepted by traditional originators, the secondary market and mortgage insurers, 4) a partially indexed income guarantee to the elderly households by large, reputable, third party financial institutions, and 5) a virtually ironclad guarantee of lifetime occupancy, even in the case of mortgage default.

This paper examines the economic, tax, and market advantages and limitations of the Grannie Mae concept.

I. Introduction

In the past decade there has been substantial academic research and consumer interest in the topic of home equity conversion for elderly households. There are innumerable elderly homeowners strapped for cash, who possess significant equity in their homes but are unable to tap that equity with traditional second mortgages because there is insufficient income to repay the loan. There is growing social awareness and concern for the plight of senior citizens who are unable to stretch their social security income to cover even basic necessities. Simply put, home equity conversion involves the transformation of housing wealth of elderly homeowners into current income through a variety of techniques.

Guttentag, through several articles [5,6], has been the pioneer research proponent of home equity conversion in the U.S. Additional researchers, Weinrobe [10,11] and Capozza [1], have further explored the potential for home equity conversion. Several non-profit organizations, including the San Francisco Foundation and the National Center for Home Equity Conversion [8,9], and several profit-making organizations, such as the American Homestead Plan and the Fouratt Corporation [4], have attempted to introduce the home equity conversion concept into the marketplace.

The Sale-Leaseback Annuity Mortgage

The Grannie Mae concept [3], a name for the sale-leaseback annuity mortgage, was developed in 1984, by the Family Backed Mortgage Association, Inc. to provide a national home equity conversion program with unique features: 1) a sale and leaseback ownership arrangement that maximizes tax advantages to participating parties, 2) a transaction involving only children, or other close relatives, assisting their elderly family members, to eliminate potential abuses by non-related parties and to reduce psychological barriers to participation by elderly households, 3) a conventional mortgage accepted by traditional lenders, secondary markets and mortgage insurers, 4) a partially indexed, guaranteed income to the elderly household in the form of an annuity issued by large, reputable, financial institutions, and 5) a virtually ironclad guarantee of lifetime occupancy.

This paper examines the economic, tax, and market advantages and the limitations of the Grannie Mae concept.

II. Economics of the Grannie Mae Transaction

In a typical Grannie Mae transaction, a child purchases his/her elderly parent's home at fair market value using conventional mortgage financing. The sale proceeds are used by the parent to purchase a lifetime, partially indexed annuity or a monthly payment certificate of deposit (CD). The parent receives monthly payments from the annuity or CD and is given a lifetime lease which safeguards tenancy. The child receives rental payments, pays mortgage payments and most ownership costs, and is therefore entitled to the tax benefits of real estate investment.

A. Economics for the Elderly Household

The economics of a sale-leaseback transaction depend on five critical parameters: 1) amount of home equity available after transactions costs and taxes; 2) rate of interest on the annuity or certificate of deposit investment; 3) life expectancy of the parents; 4) savings in ownership expenses such as property taxes, insurance and maintenance for the elderly household by switching from owner to renter status; and 5) rental cost of the property leased back. In addition, a Grannie Mae transaction provides for an indexing of annuity or CD payments and rents to maintain a steady stream of income -- though the indexing is normally fixed in advance.

1. Value of Home Equity

The elderly household's home equity value is determined by a fair market value appraisal by an MAI appraiser. The appraised value less any existing debt on the property, any transactions costs, and any capital gains tax liabilities equals the equity available for conversion.

Determination of fair market value is especially important to guarantee advantageous federal tax treatment. If fair market value is substantially different than the "purchase price," the transaction may be construed as either a loan, gift, or sale of a remainder interest in the property with a term reserved.

For federal tax purposes, any gain on sale qualifies for the $125,000 once-in-a-lifetime exclusion for homeowners over age 55 who have lived in the residence for three out of the last five years. Any gain in excess of the $125,000 is taxed as long-term capital gain.

2. Annuity or Certificate of Deposit

Two basic investment products could be used in a Grannie Mae transaction. The first, an indexed, certain period or life annuity, with rights of joint survivorship, is offered by major insurance companies. The payments from this immediate annuity are indexed to increase between one and three percent per year and to continue for the actuarial life (as determined by the insurance company) or actual life of the seller or surviving spouse, whichever comes last. Full payments continue to the estate for the remainder of the actuarial life if both spouses die before their actuarial life expectancy. This feature provides a major financial institution as the source of guaranteed life-time income, indexed to meet rent increases, for the life of the elderly household. The annuity payment stream guarantees constant nominal income after housing expenses. Only large, highly rated insurance companies are included as writers of this Grannie Mae type of annuity.

The second investment vehicle is the Monthly Payment Certificate of Deposit (MPCD). MPCD is a fixed-period, fixed-interest rate, fully amortizing certificate of deposit. The fixed-period is determined by the actuarial life of the seller. Unlike a conventional certificate of deposit, which pays out all of the principal in a lump sum at maturity, the MPCD pays principal and interest monthly until maturity. At maturity, principal and interest have been fully paid out. To protect the seller, an extremely conservative amortization schedule, actuarial life plus five years, is assumed. This type of investment is not commonly available; however, most major lenders can provide individualized investment vehicles such as the MPCD.

The MPCD, like most savings accounts, is insured up to $100,000 by the Federal Deposit Insurance Corporation (FDIC) or the Federal Savings and Loan Insurance Corporation (FSLIC).

Tax treatment for annuity or MPCD income is straightforward. Payments received from annuities or MPCDs are partially a return of the original investment, and partially a payment of interest. The portion of payment representing return of the original investment is not subject to tax, the portion considered interest is taxable as ordinary income.

Both the Grannie Mae annuity and the MPCD are investment instruments that provide maximum safety to the elderly household and a certain monthly income stream to meet the required rental payments under the sale-leaseback arrangement. Fixed rental payments are especially important to lenders, the secondary market, and mortgage insurers as a means of underwriting the mortgage on the property. Certainty of rental payments is further enhanced by allowing the insurance company to deduct rent payments from the annuity and pay the rent directly to the owner of the property (the child or, in the case of foreclosure, the mortgage holder). Thus, as long as the elderly household is in residence or has a valid annual lease in force, rental payments are made on the property.

Alternative arrangements have been considered that would allow elderly households complete flexibility in their investments. However, such flexibility precludes conventional mortgage funding.

3. <u>Actuarial Life of Household</u>

In theory, determination of actuarial life of the household members should be fairly straightforward; in fact, choice of actuarial tables is critical to the amount of payments received. An aggressive pricing policy assumes that shorter actuarial lives increase payments to the household. A conservative pricing policy assumes that longer actuarial lives reduce payments to the household. In the end, pricing of a Grannie Mae type of annuity is fairly conservative, using the IRS actuarial tables (Tables 1 and 1A). As more annuity writers enter the market, annuity payments should rise.

4. Property Tax, Insurance, and Maintenance Cost Savings

By switching from ownership to rental status, elderly households save substantial cash expenditures. Renters are not responsible for property taxes, homeowner's insurance (versus renter's insurance), and major maintenance and repair expenditures. These savings can amount to two percent of the market value of the house annually.

5. Rental Payments

The final factor in determining the economic impact of the Grannie Mae concept is the rent on the newly leased property. Since the property is rented to a related party it is mandatory that a fair market rental be charged if the tax benefits of rental property investment are to be claimed by the purchaser.

Fair market rent for each transaction is determined by examining market comparables in the geographic area where the property is located. While there is substantial geographic variance, nationally, rents generally run, on average, six percent

TABLE 1

ANNUITY TABLES
IRS Reg. §1.72-9

ORDINARY LIFE ANNUITIES—ONE LIFE—EXPECTED RETURN MULTIPLES

Ages		Multiples	Ages		Multiples	Ages		Multiples
Male	Female		Male	Female		Male	Female	
6	11	65.0	41	46	33.0	76	81	9.1
7	12	64.1	42	47	32.1	77	82	8.7
8	13	63.2	43	48	31.2	78	83	8.3
9	14	62.3	44	49	30.4	79	84	7.8
10	15	61.4	45	50	29.6	80	85	7.5
11	16	60.4	46	51	28.7	81	86	7.1
12	17	59.5	47	52	27.9	82	87	6.7
13	18	58.6	48	53	27.1	83	88	6.3
14	19	57.7	49	54	26.3	84	89	6.0
15	20	56.7	50	55	25.5	85	90	5.7
16	21	55.8	51	56	24.7	86	91	5.4
17	22	54.9	52	57	24.0	87	92	5.1
18	23	53.9	53	58	23.2	88	93	4.8
19	24	53.0	54	59	22.4	89	94	4.5
20	25	52.1	55	60	21.7	90	95	4.2
21	26	51.1	56	61	21.0	91	96	4.0
22	27	50.2	57	62	20.3	92	97	3.7
23	28	49.3	58	63	19.6	93	98	3.5
24	29	48.3	59	64	18.9	94	99	3.3
25	30	47.4	60	65	18.2	95	100	3.1
26	31	46.5	61	66	17.5	96	101	2.9
27	32	45.6	62	67	16.9	97	102	2.7
28	33	44.6	63	68	16.2	98	103	2.5
29	34	43.7	64	69	15.6	99	104	2.3
30	35	42.8	65	70	15.0	100	105	2.1
31	36	41.9	66	71	14.4	101	106	1.9
32	37	41.0	67	72	13.8	102	107	1.7
33	38	40.0	68	73	13.2	103	108	1.5
34	39	39.1	69	74	12.6	104	109	1.3
35	40	38.2	70	75	12.1	105	110	1.2
36	41	37.3	71	76	11.6	106	111	1.0
37	42	36.5	72	77	11.0	107	112	.8
38	43	35.6	73	78	10.5	108	113	.7
39	44	34.7	74	79	10.1	109	114	.6
40	45	33.8	75	80	9.6	110	115	.5
						111	116	0

TABLE 1A

ANNUITY TABLES
IRS Reg. §1.72-9

ORDINARY JOINT LIFE AND LAST SURVIVOR ANNUITIES--
TWO LIVES--EXPECTED RETURN MULTIPLES

Ages		Multiples
Male	Female	
60	60	26.0
65	65	22.0
70	70	18.3
75	75	14.9
80	80	11.9
85	85	9.3

of value. For contracts entered into in 1985, rents were set to increase at three percent per year for the life of the contract. The lease granted to the elderly household is automatically renewed annually. A memorandum of lease is recorded to protect the seller's tenancy until his or her death. This tenancy is protected even in the case of sale of the property or foreclosure. A tenant can be evicted in only the most extreme case of waste. Provisions for hospitalization, subletting, or moving are made in the lease.

6. Summary of Economic Benefits to Elderly Households

While the economic benefits of the Grannie Mae concept depend on the specific parameter assumptions discussed earlier in Section II A., Tables 2 and 3 show annual net benefits to elderly households in two different interest rate environments, August 1984 and November 1985. The assumed annual rent is six percent of home value and two percent for annual savings in property tax and insurance payments. Gross annuity payments are based on actuarial life assumptions and interest rates available from the insurance underwriters during November 1984 and November 1985.

Gross annuity payments from insurance underwriters are complicated by changes in two variables -- actuarial assumptions and interest rates. But, analysis of a monthly payment amortized certificate of deposit reveals more of the net benefits of a sale-leaseback arrangement. Table 4 shows annual gross payments on amortized monthly payment certificates of deposit per $100,000 of home equity. Clearly, both the interest rates available and the amortization period chosen, greatly influence the amount of payments. For purposes of illustration, the

TABLE 2

ANNUAL NET BENEFIT
ANNUITY LESS 6% RENT PLUS
2% TAX AND INSURANCE SAVINGS
(August 1984)

Equity	BASED ON JOINT SURVIVORSHIP FOR COUPLE FROM TABLE 1A					
	AGE					
	60	65	70	75	80	85
50,000	$ 3,195	$ 3,379	$ 3,672	$ 3,983	$ 4,455	$ 5,287
75,000	4,798	5,073	5,513	5,980	6,689	7,937
100,000	6,400	6,768	7,354	7,978	8,923	10,588
125,000	8,003	8,463	9,196	9,975	11,157	13,238
150,000	9,606	10,158	11,037	11,973	13,391	15,889
175,000	11,208	11,852	12,879	13,970	15,625	18,539
200,000	12,811	13,547	14,720	15,968	17,859	21,190
225,000	14,414	15,242	16,562	17,965	20,093	23,841
250,000	16,017	16,936	18,403	19,963	22,327	26,491

TABLE 3

ANNUAL NET BENEFIT
ANNUITY LESS 6% RENT PLUS
2% TAX AND INSURANCE SAVINGS
(March 1986)

Equity	BASED ON JOINT SURVIVORSHIP FOR COUPLE FROM TABLE 1A					
	A G E					
	60	65	70	75	80	85
50,000	$ 2,044	2,224	2,500	2,878	3,454	4,396
75,000	3,066	3,336	3,750	4,317	5,181	6,594
100,000	4,088	4,448	5,000	5,756	6,908	8,792
125,000	5,110	5,560	6,250	7,195	8,635	10,990
150,000	6,132	6,672	7,500	8,634	10,362	13,188
175,000	7,154	7,784	8,750	10,073	12,089	15,386
200,000	8,176	8,896	10,000	11,512	13,816	17,584
225,000	9,198	10,008	11,250	12,951	15,543	19,782
250,000	10,220	11,120	12,500	14,390	17,270	21,980

TABLE 4

ANNUAL GROSS PAYMENTS ON AMORTIZED MONTHLY
PAYMENT CERTIFICATE OF DEPOSIT
($100,000 of Equity)

Interest Rate (Percent)	Amortization Period (years)					
	5	10	15	20	25	30
9%	$24,920	$15,210	$12,180	$10,800	$10,080	$ 9,660
10%	25,500	15,860	12,900	11,590	10,910	10,540
11%	26,100	16,540	13,640	12,390	11,770	11,430
12%	26,700	17,220	14,410	13,220	12,640	12,350
13%	27,310	17,920	15,190	14,060	13,540	13,280

amortization period chosen is the actuarial life plus five years. The interest rate is set at 11 percent. Table 5 shows annual net benefits, after deducting rent and adding property tax savings, of a sale-leaseback with the proceeds invested in an amortized CD.

To completely avoid the risk of outliving the CD payments, a non-amortized monthly payment CD can be selected. This choice substantially reduces payments to very old households with actuarial lives of less than ten years. However, the effect on households with long actuarial lives is small. Net benefits of a sale-leaseback with a non-amortized CD at 11 percent interest are $7000 per $100,000 of equity regardless of age. The same six percent rent and two percent property tax and insurance savings are assumed.

Clearly, whatever investment vehicle is chosen, the basic spread between the equity investment interest rate and the rental rate of return determines the economic benefit of the sale-leaseback arrangement. Amortization of home equity further adds to the cash flow benefits of the elderly household.

B. Economics for the Child/Purchaser

The child/purchaser in a sale-leaseback arrangement enjoys most of the economic and tax treatment of a rental property. Key variables are 1) rental payments, 2) costs of ownership (property taxes, insurance, maintenance, and mortgage payments), 3) tax benefits of rental property (deductibility of operating losses and depreciation without limit against other income), and 4) appreciation of the property.

In the following analysis of economic impacts on pruchasers

TABLE 5

ANNUAL NET BENEFIT
11% CD RATE LESS 6% RENT
PLUS 2% TAX AND INSURANCE SAVINGS

Equity	AGE					
	60	65	70	75	80	85
50	3,726	3,850	4,030	4,195	4,638	5,096
75	5,588	5,774	6,045	6,293	6,957	7,643
100	7,451	7,699	8,060	8,390	9,276	10,191
150	11,177	11,549	12,090	12,585	13,914	15,287
200	14,902	15,398	16,120	16,780	18,552	20,382

of sale-leaseback arrangements only mortgage payments, tax benefits, and appreciation are developed. The other elements are discussed in previous sections.

1. Mortgage Payments

Purchasing property in a Grannie Mae sale-leaseback arrangement usually involves an 80 percent mortgage loan. The remaining portion of the purchase price is typically paid in cash.

The mortgage arrangement for Grannie Mae is unique for home equity programs. The Grannie Mae transaction protects the seller's lifetime tenancy and is approved by the Federal Home Loan Mortgage Corporation (FHLMC) for secondary market purchase (with mortgage insurance) at owner-occupied interest rates. In addition, Drexel Burnham Lambert, Inc. provides lenders with a private market in jumbo (over the $130,350 FHLMC limit) Grannie Mae type of mortgages.

2. Tax Benefits

The child/purchaser can deduct certain expenses from taxable income and enjoy substantial tax shelter from federal income tax liabilities.

The child/purchaser is entitled to unlimited interest expense deductions where the rental property is held as a trade or business. Rental property is generally considered to be held as a trade or business unless expenses incident to owning the property that are normally attributable to a business enterprise (e.g. maintenance, repair and insurance premiums) are less than 15 percent of rental income from such property. A Grannie

Mae sale-leaseback is designed to insure that the investment qualifies as a trade or business. If the transaction does not meet the above criteria, and falls into the so-called "net lease" category, then interest deductions are limited to $10,000 over other investment income.

Property tax expenses are deductible in the period when expenses are paid, without limit. In addition, maintenance and repair expenses that are ordinary and necessary to keep the residence from deteriorating are deductible when paid.

Finally -- and most importantly -- the child/purchaser can depreciate the cost of the building (not the land) acquired in the sale-leaseback using either a straight-line or a declining balance method not to exceed 125 percent of the straight-line rate, provided that the dwelling has a useful life of at least 20 years. It is important to note that in a sale-leaseback of real property placed in service (rented to seller/parent) prior to 1981, the child/buyer is not entitled to the generally more favorable Accelerated Cost Recovery Method if the seller/parent continues to live in the residence for more than three months subsequent to the consummation of the sales transaction.

3. Appreciation

The final way the child/purchaser receives a return on investment is from appreciation on the property. While no one can predict economic gain from resale, a fair assumption is that a sale-leaseback property will have an end-period appreciation rate similar to other renter and owner-occupied single-family properties. Capital gains taxes are due on gains from appreciation during the holding period. Indeed, the tax on capital gains is the one financial disadvantage to families using a Grannie Mae sale-leaseback. In a straight, owner-occupied situation, all capital gains escape taxation on death due to a step-up in basis on the assets of the estate.

4. Summary of Economic Benefits to Purchaser/Child

Economic benefits to the child/purchaser are summarized in a seven-year cash flow analysis provided in Table 6. Results show a substantial negative cash flow before tax advantages because rental income does not cover mortgage and property tax payments. After federal tax, there is a small negative cash flow. Finally, taking into account capital appreciation on final resale, the child/purchaser receives a reasonable and safe 9.13 percent internal rate of return on the initial cash investment.

III. Conclusion

Table 7 compares the characteristics of the various home equity conversion plans. Grannie Mae is generally a more flexible and financially valuable technique. It is quite clear that the Grannie Mae sale-leaseback concept offers substantial benefits to the parent/seller and the child/purchaser. For children with high taxable incomes considering a financial arrangement with their parents, the Grannie Mae concept offers the best economic benefit to the entire family unit of any home equity conversion plan.

TABLE 6

CASH FLOW ANALYSIS

FOR BUYER/CHILD

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7
BEFORE-TAX CASH FLOW COMPUTATION							
[1]RENTAL INCOME	6,000	6,180	6,365	6,556	6,753	6,956	7,164
[2]PROPERTY TAXES AND INSURANCE	(2,000)	(2,040)	(2,081)	(2,122)	(2,165)	(2,208)	(2,252)
[3]TOTAL MORTGAGE PAYMENT	(9,507)	(9,507)	(9,507)	(9,507)	(9,507)	(9,507)	(9,507)
[4]OUT-OF-POCKET CASH FLOW (PRE-TAX)	(5,507)	(5,367)	(5,222)	(5,073)	(4,919)	(4,759)	(4,595)
AFTER-TAX CASH FLOW COMPUTATION							
[5]OUT-OF-POCKET CASH FLOW (NO TAXES)	(5,507)	(5,367)	(5,222)	(5,073)	(4,919)	(4,759)	(4,595)
[6]LESS DEPRECIATION	(5,000)	(4,688)	(4,395)	(4,120)	(3,862)	(3,862)	(3,862)
[7]PRINCIPAL PAYMENTS	323	363	407	456	511	573	643
[8]TAXABLE INCOME OR (LOSS)	(10,183)	(9,692)	(9,210)	(8,737)	(8,270)	(8,048)	(7,814)
[9]TAX SAVINGS 50.0% TAX BRACKET	5,092	4,846	4,605	4,368	4,135	4,024	3,907
[10]AFTER-TAX CASH FLOW BEFORE SALE	(415)	(521)	(617)	(705)	(784)	(735)	(688)
POTENTIAL GAIN FROM SALE IF HOUSE INCREASES IN VALUE 5% PER YEAR							
[11]SELLING PRICE (PROPERTY VALUE)	105,000	110,250	115,763	121,551	127,628	134,010	140,710
[12]SELLING EXPENSES 6%	(6,300)	(6,615)	(6,946)	(7,293)	(7,658)	(8,041)	(8,443)
[13]MORTGAGE BALANCE	(79,677)	(79,314)	(78,907)	(78,451)	(77,940)	(77,366)	(76,724)
[14]TOTAL SALES PROCEEDS (PRE TAX)	19,023	24,321	29,910	35,807	42,031	48,603	55,544
[15]CAPITAL GAINS EACH YEAR	2,700	11,635	20,817	30,258	39,970	49,969	60,267
[16]ORDINARY TAXABLE INCOME DUE TO SALE	1,000	1,688	2,082	2,202	2,064	1,927	1,789
[17]TOTAL TAXES DUE ON SALE	(1,040)	(3,171)	(5,204)	(7,152)	(9,026)	(10,957)	(12,948)
[18]TOTAL AFTER TAX CASH PROCEEDS FROM SALE	17,568	20,629	24,088	27,950	32,221	36,910	41,908
[19]INTERNAL RATE OF RETURN							9.13%

This analysis was prepared with the following assumptions:

$100,000.00	is the purchase price and market value of home in the first year.
80.00%	is the amount of purchase price the house itself represents, excluding land value, establishing depreciation available to buyer.
$80,000.00	is the amount of the mortgage loan.
11.500%	is the interest rate on the loan.
30	years is the loan term.
0.00%	are the loan origination fees and closing costs, as a percent of the loan.
$1,500.00	is the annual property tax on the home.
$500.00	are the insurance costs per year.
6.00%	is the percent of value to be charged as annual rent.
3.00%	is the annual rate of increase in rent.
50.00%	is the buyer's marginal tax bracket.
12	are the number of months in the first year of the transaction.
5.00%	is the annual appreciation rate for property market value.
$105,000.00	is the market value of the home in the first year.

TABLE 7

COMPARISON OF HOME EQUITY CONVERSION PLANS

Issues	Grannie Mae	RAM	Prudential/Bache Century Plan
Net Cash Payment per $100,000 Equity	• 6-11% of value per year • based on age and amount of equity • payment each month for life • annual increases • $6,000-11,000 per year	• 3-5% of value per year • payment each month, 3-12 years • balloon payment due • maximum loan 80%	• 3-5% of value per year • based on age and present value of house • up to $700/month
Restrictions	• over 55 • must have buyer • house must be debt free or only small mortgage • available in most states	• maximum income • maximum value of home • over 65 • house sold at discount • available only in limited areas	• 65 or older; if more than one, both 65 • only in New Jersey and 5 Pennsylvania counties • house debt free and in good condition
Safety of Income	• guaranteed by insurance company for life • annual increases • no repayment	• limited to length of loan • no increases • must be repaid or refinanced	• risk of default • until death or if homeowner moves • no increases
Safety of Occupancy	• guaranteed for life under lease	• limited to life of loan • risk of eviction	• limited to life of loan • risk of eviction (must live in house)
Repayment of Loan by Senior and Title Holder	• none • title in name of children • all appreciation goes to children	• must be repaid • title in name of owner so appreciation retained	• must be repaid at 100 or 40 years maximum • interest rate tied to appreciation and time of sale • 50-100% of future appreciation in name of Century Plan
Estate Planning	• family retains house value minus equity consumed income	• family retains house value minus loan	• Century Plan takes 50-100% of appreciated value of house
Taxation	• Buyer pays real estate taxes	• pay own real estate taxes (or postponement in some areas)	• pay own real estate taxes
—Income	• favorable rate on annuity income	• no taxes on loan	• no taxes on loan
—Inheritance	• asset transferred to buyer, therefore less estate taxes	• full rate applies • reduces basis	• if portion of asset transferred, less estate taxes • reduces basis

References

[1] Capozza, Dennis R. "The Reverse Annuity Mortgage in Canada: Snake Oil or Orphan Drug," Research in Urban Land Economics, Working Paper #18, University of British Columbia, June 1983.

[2] Chen, Alexander. "Alternative Reverse Mortgages: A Simulation Analysis of Initial Benefits in Baltimore," Housing Finance Review, October 1983, pp. 295-308.

[3] FBMA, Inc. "Grannie Mae: Unlocking the Equity in Your Home," 1984.

[4] Fouratt Corporation. The Fouratt Senior Citizen Equity Plan, 1980.

[5] Guttentag, Jack M. "Creating New Financial Instruments for the Aged," New York University Center for the Study of Financial Institutions Bulletin 1975-5.

[6] Guttentag, Jack M. "Reverse Annuity Mortgages: How Savings & Loans Can Write Them," Alternative Mortgage Instruments Research Study, Volume III, Washington, D.C.: Federal Home Loan Bank Board, 1977.

[7] Jacobs, Bruce. "An Overview of the National Potential for Home Equity Conversion into Income for the Elderly," University of Rochester Public Policy Analysis Program, Discussion Paper 8025, March 1982.

[8] Scholen, Ken. "New Developments in Private Sector Home Equity Conversion Loans." Mimeo., February 14, 1981.

[9] Scholen, Ken, and Chen, Yung-Ping. Unlocking Home Equity for the Elderly. Cambridge, Mass.: Ballinger Publishing Company, 1980.

[10] Weinrobe, Maurice. "The Renegotiable Reverse Mortgage," Clark University, Worcester, Mass. Institute for Economic Studies, Working Paper 5.1, January 1981.

[11] Weinrobe, Maurice. "The Financial Structure of a Residential Sale-Leaseback: A Consumer's Guide for the Seller," Mimeo., November 1983.