THE DISTRIBUTIONAL EFFECTS OF THE 1969–75 INFLATION ON HOLDINGS OF HOUSEHOLD WEALTH IN THE UNITED STATES*

Edward N. Wolff

New York University

Using a simple simulation model, this paper assesses the impact of relative movements in asset prices on the distribution of wealth during the 1969–75 period. Because of the strong negative correlation between wealth level and the ratio of debt to wealth, this particular inflation induced a substantial drop in the overall level of wealth inequality. Moreover, comparing the portfolios of different demographic groups, we found that middle-aged households gained relatively to younger and older ones, married couples gained relatively to singles, whites gained relatively to non-whites, and home-owners gained relatively to renters. The biggest gainers from this inflation were home-owners with large mortgages and the biggest losers the large stock holders.

Inflation has often been treated as an unmitigated social evil. Yet, it is the case that some social groups have been hurt less by inflation than others and, in fact, some groups have even benefited from inflation in real terms. This paper analyzes one aspect of this issue: the distributional impact of inflation on household wealth holdings. The paper focuses on one inflationary period in the United States, that of 1969 to 1975. Starting with sample household balance sheet information for 1969, a relatively simple simulation model is used to update the balance sheets to 1975. The relative gainers can then be determined as well as the "absolute" gainers. The overall impact of this particular inflation on the concentration of wealth can also be determined.

The term "inflation" must be used with some caution, since as we shall see below some asset values increased considerably more than others and some even declined during this period. We shall use the term simply to refer to changes in asset prices during the period. Moreover, we shall not be concerned with the cause of the price changes—whether from real events like a slowdown in the rate of productivity increase, from political events like the end of the Vietnam War and the actions of OPEC, or from monetary events like a change in inflationary expectations. For the purposes of this analysis, we are interested solely in the price movements, not their cause.

The paper, moreover, will focus exclusively on the distributional impact within the household sector. Several papers over the last 20 years have analyzed the redistribution of income and wealth among the household, business, and government sectors resulting from inflation [see Bach and Ando (1957), Bach and

^{*}An earlier draft of this paper was presented at the 1977 Conference of the International Association for Research in Income and Wealth. I would like to thank those present for their comments, particularly Raymond Goldsmith, who discussed the paper. I would also like to thank Richard Ruggles, Nancy Ruggles, Alex Cukierman, and Thad Mirer for their helpful suggestions and Dennis Bushe for his programming assistance. The work for this paper was partially funded by a grant from the National Science Foundation.

Stevenson (1974), and Budd and Seider (1971), for example]. This paper is not concerned with whether the household sector gained relative to (and at the expense of) other sectors but rather with what groups within the household sector gained relative to other groups.

The paper is divided into four parts. In the first part, the simulation model is discussed. In the second part the sample used in the study is briefly described. Part Three presents the results of the simulation. Several concluding remarks are presented in the last section.

I. THE MODEL

A straight-forward simulation model was used to assess the impact of asset price movements on the distribution of wealth. A database, described below, was obtained providing detailed asset and liability data as well as demographic information for a sample of households in 1969. Price changes were computed for each asset in the balance sheet. The portfolio of each household was updated to 1975 by multiplying the value of each asset by the change in its price index. The change in the average net worth of different demographic groups was then computed as well as the change in the overall concentration of wealth.

TABLE 1	1
---------	---

The Composition of Total Household Wealth in Current Dollars in 1969 and 1975 and the Composition of 1969 Wealth in 1975 Dollars

Asset (or Liability)	1969 Actual %	1969 Wealth in 1975 prices %	1975 Actual %
1. Land and Structures	22.4	29.5	25.9
2. Consumer Durables and Inventories	11.3	12.4	12.3
3. Currency, Demand Deposits, and Time Deposits	13.5	11.5	16.6
4. Government Securities, Bonds, Mortgages and			
Other Securities	5.4	3.8	4.9
5. Corporate Stock	17.6	13.0	9.0
6. Unincorporated Business Equity	14.7	19.5	17.2
7. Other Financial Assets	15.1	10.5	14.1
8. Household Liabilities	12.5	10.6	13.3

Note: The entries show the ratio of the total value of each item to total assets. *Source*: Ruggles (1977), Table 1a, and Table 3 below.

This simple procedure might be contrasted with a much more complex alternative, where not only asset price changes but the net change in real asset holdings are simulated. Table 1 shows the percentage composition of total household wealth in current dollars in 1969 and 1975 and the composition of 1969 wealth in 1975 dollars. The change in the overall composition of household wealth is thus due to both price changes and the net acquisition of asset holdings and liabilities during the period.¹ To model the full change appropriately, we

¹More explicitly, the total value of each asset in time 2 is equal to its value in time 1 less depreciation (in the case of tangible assets) plus new acquisitions of the asset less divestures plus the revaluation of the old asset holdings.

would have not only to re-value the assets held in 1969 but also to model the process of accumulating new assets (and debts). This would depend on household savings behavior as well as the relative movements in asset values. From this vantage point, our model is concerned simply with the distributive effects of the revaluation of existing assets.²

III. THE SAMPLE

A synthetic database, called the MESP database, was used for the simulation analysis. MESP is a sample of 63,457 U.S. households and contains demographic, income, and balance sheet information for the year 1969. The database is synthetic because it was created with statistical matching and imputation procedures.³ The sample frame is the 1970 Census 1/1000 Public Use Sample. Federal tax returns, drawn from the 1969 Internal Revenue Service Tax Model, were matched to each household in the Census file. Imputations were performed to value household durables and property and to capitalize financial flows into asset values, and the first-round valuations were further adjusted to align with national wealth totals for the household sector. The resulting household balance sheets contained the following entries:

- 1. owner-occupied home;
- 2. other real estate;
- 3. consumer durables;
- 4. currency and demand deposits;
- 5. time and savings deposits;

6. government securities (excluding state and local bonds), corporate and foreign bonds, mortgages, and other financial securities;

- 7. corporate stock;
- 8. farm business equity;
- 9. unincorporated non-farm business equity;
- 10. mortgage debt;
- 11. other household debt.

Of total household wealth holdings in 1969, 92 percent of tangible assets, 76 percent of financial assets, and 100 percent of liabilities were covered in the database.⁴

²This alternative simulation model is made even more complex by the following considerations. First, families themselves are changing over the period in question because of marriage, death, divorce, and births. One would thus have to model the change in household composition. Second, family savings behavior depends on income, household composition, and other demographic characteristics. It would also be necessary to have longitudinal data (either real or simulated) on income and other household characteristics. Third, part of the portfolio of each household is in real assets, like housing, and part in nominal assets, like currency. This compounds the problem of modeling savings behavior during inflationary periods, since both real and nominal household savings functions must be estimated.

³See Ruggles and Ruggles (1974) and Ruggles, Ruggles, and Wolff (1977) for a description of the sort-merge matching procedure used in the database's construction. Moreover, see the latter article for a test of the reliability of this matching technique.

⁴See Wolff (1977) and Wolff (1978) for documentation of the database. Moreover, see the latter paper for a comparison of wealth estimates generated from the MESP database with those from other sources.

Some mention should be made of the assets that were not included, since possible bias may be introduced into the results. Household inventories (semidurables), which are probably the most equally distributed of household assets, were not included. Also excluded were state and local government bonds and trust fund equity, which are probably the two most highly concentrated household assets. The final group of assets that was excluded was equity in insurance and pension funds, which is probably slightly more equally distributed than the included assets. As we shall see below, tangible assets appreciated considerably more during the 1969–75 period than financial assets. Thus, if anything, our results probably understate the relative gains of the poor compared to the rich and understate the relative gains in equity in the distribution of wealth induced by the 1969–75 inflation.⁵

III. RESULTS

A. The Composition of Wealth by Demographic Group in 1969

Since relative gains and losses due to inflation depend on the household's portfolio, this is shown first for selected groups in 1969 (Table 2). The average portfolio is shown in row H. Of the assets included in our sample, 21 percent was held in the form of owner-occupied housing, 11 percent in the form of durables, 16 percent in currency and bank accounts, 21 percent in corporate stock, and 18 percent in business equity. Tangible assets amounted to 38 percent of the total and financial assets to 62 percent. The average debt to asset ratio was 15 percent. Panel A shows the composition of wealth by income (actually, adjusted gross income) class. The proportion of assets held in the form of housing increased with income and then declined, while the proportion held in consumer durables fell almost continuously with income. The share of stocks and business equity in total assets, on the other hand, generally rose with income. The ratio of debt to wealth was highly negatively correlated with income.

The proportion of wealth held in housing increased with the age of the head of household until about 45 and then declined, while that held in durables fell continuously with age. The share of corporate stock and business equity in total assets increased with age. The debt-equity ratio increased during the "homebuying" years, fell off during the "amortization" years and then increased during old age.

Whites had a much higher percentage of their wealth in the form of houses and, as a result, a slightly higher debt to asset ratio. Home and durable goods ownership were positively related to the educational level of the household head, while stock ownership was negatively related. Portfolio composition varied very little by region of the country. Married couples with children had a much higher percentage of their assets in housing and durables than singles and married couples without children and a much smaller percentage in currency, deposits, stocks, bonds, and other financial securities. The former also had a higher debt to asset ratio.

⁵Imputations for these five assets were not done, because the necessary data were not available. Moreover, in the case of trust and pension funds, certain sticky conceptual issues would have to be resolved before allocation is possible.

		Other Real	Durchler	Currency and	Bonds,	Stoolyn	Business	Daht
	%	estate %	%	%	840 Etc.	%	Equity %	%
A. Adjusted Gross Income								
1. Negative	7.3	12.3	3.4	12.5	4.2	18.5	41.9	27.6
2. 0\$4,999	23.2	7.9	12.6	24.6	7.6	12.0	12.3	16.7
3. 5.000-9.999	26.0	5.4	17.2	18.1	6.3	10.3	16.9	21.4
4. 10,000-14,999	35.4	4.5	17.3	15.2	5.4	10.5	11.7	20.0
5. 15,000-19,999	31.8	4.5	13.8	16.6	6.5	12.7	14.2	17.8
6. 20,000-24,999	26.3	5.7	10.6	17.9	6.9	16.6	16.0	13.6
7. 25,000-29,999	21.6	4.4	8.3	16.4	6.6	19.9	22.7	11.1
8. 30,000-39,999	19.3	5.5	7.3	16.8	7.4	20.2	23.7	10.6
9. 40,000-49,999	17.3	5.5	5.4	14.7	5.3	23.8	27.9	9.0
10. 50,000-59,999	16.2	7.1	4.5	11.4	4.7	32.7	23.5	8.2
11. 60,000-69,999	10.4	6.4	2.8	11.7	3.6	24.4	40.8	5.7
12. 70,000-79,999	3.6	2.0	1.0	19.6	4.8	28.3	40.8	2.3
13. 80,000-89,999	6.0	2.6	1.9	12.8	6.9	38.9	31.1	4.1
14. 90,000-99,999	6.8	13.6	2.1	20.1	14.4	13.6	29.5	4.6
15. 100,000 or more	11.3	5.0	0.4	9.3	6.6	63.7	13.9	1.2
B. Age of Household Head								
1. 24 years or less	11.5	7.3	24.5	22.3	7.7	11.5	15.2	9.2
2. 25-34	28.5	5.6	18.1	17.5	5.2	11.3	13.8	20.5
3. 35-44	34.3	4.3	14.6	14.0	4.5	12.1	16.3	20.9
4. 45-54	25.6	5.2	11.3	16.0	5.8	20.3	16.1	13.3
5. 55-64	17.0	7.0	7.9	14.5	7.2	28.4	18.1	8.9
6. 65 or more	12.3	6.5	5.7	18.7	7.4	27.3	22.3	17.0
C. Race								
1. White	22.4	5.9	10.8	16.2	6.4	20.3	18.1	15.4
2. Non-white	12.0	6.3	9.8	17.2	5.5	32.4	16.7	12.4

 TABLE 2

 The Composition of Wealth by Demographic Group in 1969

		Other Real		Currency and	Bonds,		Business	
	Home %	Estate %	Durables	Deposits %	Etc.	Stocks	Equity	Debt
w								/0
D. Schooling of Household H	Iead							
1. 0-8 years	12.4	6.6	7.9	17.6	6.5	26.2	22.9	14.8
2. 9–11	18.3	6.0	10.7	17.2	6.6	22.2	19.1	12.4
3. 12	24.5	5.9	12.6	16.9	6.5	19.3	14.6	14.8
4. 13-15	28.5	5.0	12.8	15.8	6.1	18.0	14.8	16.4
5. 16 or more	29.5	5.5	10.8	13.6	5.5	19.2	15.9	18.0
E. Region								
1. Northeast	23.1	4.6	10.9	16.0	5.9	21.8	17.8	16.0
2. North-central	19.4	6.0	10.5	16.4	6.7	23.2	17.8	13.3
3. South	20.3	6.2	10.5	16.3	6.4	22.7	17.8	15.0
4. West	22.9	6.4	10.9	16.8	6.3	18.6	18.2	15.9
F. Household Composition								
1. Single, no children	11.0	5.8	7.6	22.2	8.5	29.9	15.1	5.5
2. Single, with children	11.9	4.3	7.2	26.3	10.6	22.3	17.5	7.2
3. Married, no children	18.5	6.8	9.5	14.7	6.4	24.0	20.2	17.6
4. Married, 1 child	28.9	7.0	15.0	13.6	4.5	15.7	15.3	16.7
5. Married, 2 children	35.0	4.8	14.9	13.0	4.1	11.2	17.1	22.1
6. Married, 3 or more children	34.6	4.4	13.8	11.6	3.5	12.8	19.4	21.5

TABLE 2-(continued)

200

G. Net Worth								
1. Less than \$5,000	10.6	0.8	62.8	13.9	2.0	3.6	6.3	73.6
2. 5,000-9,999	31.4	0.6	53.1	11.0	1.6	1.3	1.1	22.6
3. 10,000-14,999	56.7	1.4	26.8	9.0	2.3	1.6	2.2	34.3
4. 15,000-19,999	57.8	1.9	22.4	9.0	3.3	2.2	3.5	31.3
5. 20,000-24,999	55.5	2.5	19.7	10.2	4.8	2.9	4.4	27.1
6. 25,000-29,999	48.1	3.8	17.1	12.9	7.5	4.8	5.8	21.4
7. 30,00039,999	41.1	5.8	13.7	15.3	8.8	6.4	8.9	18.6
8. 40,000-49,999	31.3	7.1	10.9	23.8	5.9	7.3	13.6	14.8
9. 50,000-59,999	23.9	7.3	8.9	29.2	4.6	9.3	16.8	11.4
10. 60,00069,999	20.7	6.2	7.5	30.7	5.3	12.1	17.6	9.6
11. 70,000–79,999	19.8	6.3	6.6	29.6	6.6	13.6	17.5	8.7
12. 80,00089,999	19.6	7.6	6.2	25.8	6.3	12.6	21.9	8.3
13. 90,000–99,999	14.4	6.8	5.4	25.2	8.3	13.7	26.2	7.7
14. 100,000-199,999	11.0	7.0	4.2	21.2	9.2	20.7	26.7	5.2
15. 200,000 or more	2.8	7.7	1.0	12.5	6.8	43.3	25.8	1.4
H. Overall	21.4	5.9	10.7	16.3	6.3	21.4	17.9	15.1

Note: Each entry shows the percentage of the asset or debt relative to total assets.

The most systematic relation of portfolio composition was to wealth class. The share of wealth in homes increased with wealth until a net worth of \$20,000 and then declined continuously with wealth. The proportion held in investment real estate was highly positively correlated with wealth while that held in durables highly negatively correlated. The share in corporate stock and business equity increased almost continuously with wealth, while the proportion of debt in net worth declined almost continuously with net worth.

B. 1969–75 Asset Price Changes

Table 3 shows the ratio of the 1975 price to the 1969 price of each asset included in the sample. In the case of owner-occupied housing, other real estate, farms, and consumer durables, we used the price index for the purchase price of new structures and goods. We thus implicitly assumed that the price of old structures and used goods inflate at the same rate as new items. Since we had no corresponding series for the price of old items, this seemed like the most reasonable assumption to make.

For home value we used the National Income and Product Accounts (NIPA) implicit price deflator for private residential structures. The NIPA implicit price

	Inflation
Asset	Rate
1. Owner-occupied Housing ^a	1.53
2. Other Real Estate ^b	1.60
3. Automobiles ^c	1.30
4. Other Consumer Durables ^d	1.22
5. Currency, Demand Deposits and Time Deposits	1.00
6. Bonds, Commercial Paper, Mortgages, Notes,	
and Other Securities ^e	0.82
7. Corporate Stock ^f	0.87
8. Unincorporated Farms ⁸	1.74
9. Other Unincorporated Businesses ^h	1.44
10. Debt	1.00
The Consumer Price Index (CPI) ⁱ	1.47

TABLE 31969–75 Inflation Rates by Asset Type

Sources:

^aSurvey of Current Business (July 1976), National Income and Product Accounts (NIPA), Table 7.13, "Implicit Price Deflators for Purchases of Structures by Type."

^bIbid., Table 7.13.

^cIbid., Table 7.12, "Implicit Price Deflators for Personal Consumption Expenditures by Type of Product."

^aIbid., Table 7.12.

^eFederal Reserve Bulletin (January 1976), Table A29, "Security Prices."

^tIbid., Table A29.

⁸NIPA, op. cit., Table 7.13.

^h*Ibid.*, Table 7.8, "Current Dollar Cost and Profit per Unit of Constant Dollar Gross Domestic Product of Non-Financial Corporate Businesses."

ⁱEconomic Report of the President, 1976, Table B-42, "Consumer Price Indexes by Expenditure Classes, 1929–75." deflator for farm structures was used for farm value, and a weighted average of NIPA implicit price deflators for non-farm, non-residential structures and residential non-farm structures was used for other real estate. For other consumer durables we used a weighted average of NIPA price deflators for durable goods. Bond prices for corporate AAA securities was used for bonds and other financial securities, and Standard and Poor's Composite Index for 500 stocks was used for the corporate stock price index. Profit per unit of output in constant dollars for non-financial corporate businesses was used as the price index for non-farm unincorporated businesses. Currency, bank deposits, and debt are fixed in nominal amounts and were therefore assigned an index of 1.0.

Owner-occupied housing, other real estate, and farms registered the largest gains in prices over the period. All three groups of assets inflated faster than the consumer price index (CPI), which increased 47 percent over the six years. Unincorporated businesses also had a sizeable price increase over the period. The price increase for consumer durables was substantially less than the CPI. The average price of bonds and other securities actually dropped by 18 percent over the period, while that of corporate stock dropped by 13 percent. Real estate thus made the largest gains over the period, while financial securities and stocks fell in value.

C. Mean Wealth by Demographic Group in 1969 and 1975

Table 4 shows which groups were relative and absolute gainers and which losers from the 1969–75 inflation. Because of the importance of home ownership, the sample is divided into home-owners and renters. The first three columns of Table 4 show the mean net worth of each group in 1969. The last three columns show the ratio of net worth in 1975 to net worth in 1969 divided by the CPI. A ratio above 1.0 thus indicates that a group gained in real terms and a ratio less than 1.0 the converse.

Mean net worth in 1969 for the full population was \$39,700, for homeowners higher at \$45,500 and for renters lower at \$33,800 (row H). The corresponding figures for 1975 in 1975 dollars were \$50,800, \$62,500 and \$39,000. In nominal terms, homeowners gained by 38 percent, renters by 16 percent and the two groups together by 28 percent. In real terms all three groups lost, with renters declining substantially more than home-owners.

In Panel A the three groups are disaggregated by 1969 income class. Except for the negative income class, home-owners at every income level fared better than renters. But for both home-owners and renters low and middle income families lost relatively less than upper middle and high income families. In real terms all groups lost, except for home-owners with negative income and those in the \$5,000-\$15,000 range. In fact, renters with over \$100,000 of income lost not only in real terms but in nominal terms as well.

Younger households fared better than older ones. Home-owners under 45 gained in real terms and renters under 45 gained relatively to renters 45 or over. Both whites and non-whites lost in real terms on average from the inflation, but white home-owners and renters gained relatively to their non-white counterparts. Inflationary effects showed little variation by schooling level or by region of the

	1969	Net Worth (\$1,000)			969–1975 Change	
-	Home-owners \$	Renters \$	Both \$	Home-owners	Renters	Both
A. Adjusted Gross Income						
1. Negative	67.3	83.2	76.4	1.00	1.00	1.00
2. 0-\$4,999	28.7	15.9	20.8	0.97	0.80	0.89
3. 5,000-9,999	26.2	15.7	20.1	1.02	0.82	0.93
4. 10.000-14.999	30.6	22.5	27.3	1.00	0.80	0.91
5. 15.000-19.999	45.8	38.5	43.4	0.96	0.80	0.88
6. 20,000-24,999	68.2	63.2	66.7	0.91	0.78	0.87
7. 25.000-29.999	91.0	102.1	94.0	0.89	0.84	0.85
8. 30,000-39,999	115.2	121.9	117.3	0.88	0.80	0.85
9. 40.000-49.999	173.7	161.8	171.3	0.86	0.83	0.85
10. 50.000-59.999	215.1	236.4	219.9	0.88	0.70	0.83
11. 60.000-69.999	298.5	520.7	360.6	0.89	0.90	0.89
12. 70.000-79.999	450.6	1,055.4	692.5	0.93	0.76	0.83
13. 80.000-89.999	352.7	672.0	476.9	0.80	0.77	0.78
14, 90,000-99,999	444.6	224.3	375.1	0.85	0.77	0.83
15. 100,000 or more	1,203.3	2,084.4	1,641.1	0.72	0.66	0.69
B. Age of Household Head						
1. 24 years or less	25.8	13.8	15.4	1.05	0.80	0.85
2. 25-34	25.7	21.3	23.1	1.08	0.79	0.92
3. 35-44	35.6	24.7	31.1	1.01	0.83	0.95
4. 45-54	50.2	38.5	45.5	0.92	0.78	0.78
5. 55-64	56.4	57.5	56.8	0.90	0.75	0.83
6. 65 or more	58.3	46.1	52.1	0.88	0.80	0.84
C. Race						
1. White	45.3	34.8	40.3	0.94	0.79	0.88
2. Non-white	48.1	28.1	35.0	0.87	0.76	0.81

 TABLE 4

 Mean Net Worth by Demographic Group in 1969 and the Change in Net Worth Relative to the Consumer Price Index from 1969 to 1975

	D. Schooling of Household Head						
	1. 0-8 years	42.1	40.2	41.0	0.91	0.80	0.85
	2, 9–11	42.7	33.6	37.9	0.91	0.80	0.86
	3. 12	40.3	30.4	35.4	0.95	0.76	0.87
	4. 13–15	42.8	31.2	37.3	0.97	0.78	0.94
	5. 16 or more	67.8	29.9	50.8	0.94	0.79	0.90
	E. Region						
	1. Northeast	44.6	32.9	39.2	0.94	0.77	0.87
	2. North-central	44.7	34.6	39.7	0.91	0.79	0.86
	3. South	46.7	33.6	39.7	0.93	0.78	0.86
	4. West	45.7	34.4	40.1	0.95	0.80	0.89
	F. Household Composition						
	1. Single, no children	55.5	35.4	42.0	0.84	0.74	0.78
	2. Single, with children	64.7	34.5	45.2	0.85	0.74	0.80
	3. Married, no children	51.4	42.6	47.3	0.92	0.81	0.88
	4. Married, one child	44.1	19.8	32.9	0.95	0.82	0.92
2	5. Married, 2 children	33.5	28.3	31.5	1.04	0.81	0.96
S	6. Married, 3 or more children	34.4	27.7	31.9	1.03	0.84	0.96
	G. Net Worth						
	1. Less than \$5,000	2.3	2.0	2.0	1.22	0.84	0.86
	2. 5,000-9,999	7.9	6.9	7.2	1.20	0.82	0.94
	3. 10,000-14,999	12.5	12.3	12.5	1.19	0.79	1.07
	4. 15,000-19,999	17.3	17.3	17.3	1.14	0.79	1.06
	5. 20,000-24,999	22.3	22.5	22.3	1.10	0.77	1.02
	6. 25,000-29,999	27.3	27.5	27.4	1.05	0.76	0.97
	7. 30,000-39,999	34.5	34.9	34.6	1.01	0.79	0.94
	8. 40,000-49,999	44.7	44.7	44.7	0.98	0.81	0.91
	9. 50,000-59,999	54.8	54.7	54.8	0.94	0.81	0.89
	10. 60,000-69,999	64.8	64.7	64.8	0.91	0.78	0.86
	11. 70,000-79,999	74.8	75.3	75.0	0.90	0.77	0.85
	12. 80,000-89,999	84.7	84.5	84.6	0.90	0.83	0.87
	13. 90,000-99,999	94.6	94.7	94.6	0.89	0.81	0.86
	14. 100,000-199,999	137.6	135.8	136.9	0.87	0.80	0.84
	15. 200,000 or more	543.6	935.2	693.4	0.80	0.76	0.78
	H. Overall	45.5	33.8	39.7	0.94	0.79	0.87

country. Married home-owners and renters gained relatively to their single counter-parts.

The most systematic pattern was with respect to 1969 wealth class. Among home-owners, the less wealthy gained relative to the more wealthy. In fact, the relative gain from inflation declined continuously with wealth class among homeowners. Moreover, those households with less than \$40,000 in net worth gained in real terms from inflation, while those above \$40,000 lost in real terms. Among renters, the relative gain was practically uncorrelated with wealth class. When home-owners and renters are combined into one group, the results show that the relative gain from inflation increased with wealth up to \$15,000 in net worth and then declined almost continuously with wealth.

A comparison of Table 2 and Table 4 reveals the reasons for the differential gains from inflation. The poor and middle-class gained relatively to the rich because of the larger share of their wealth in the form of housing, their smaller share in financial securities and stocks, and their considerably larger debt-equity ratio. Young home-owners gained relatively to older ones because of their larger debt. Non-whites lost relatively to whites because of the larger proportion of their wealth in the form of stocks. Married couples gained in relation to singles because of their larger debt to equity ratio.

D. The Overall Distributional Effects of the 1969–1975 Inflation

Since the poor and middle class gained relatively to the rich from this inflation, we would expect a less concentrated distribution of wealth in 1975 than in 1969. This is confirmed in Table 5, where the Gini coefficient is used to measure

	HE INEQUALITY	OF WEALTH IN 190	59 AND 1975
		1969	1975
A .	Net Worth	- <u></u>	
1.	Home-owners	0.67	0.59
2.	Renters	0.88	0.86
3.	Both	0.78	0.73
В.	Assets		
1.	Home-owners	0.54	0.51
2.	Renters	0.78	0.78
3.	Both	0.67	0.66

TABLE 5 INFOLIALITY OF WEALTH IN 1969 AND 1975

Note: The Gini coefficient is used to measure the inequality of wealth.

the inequality of wealth.⁶ The overall inequality in wealth (net worth) fell from 0.78 to 0.73, a rather substantial fall for so short a period. Moreover, among home-owners the decline was substantially greater than among renters. The overall decline in the inequality of wealth was thus primarily due to the greater equality of wealth among home-owners. For comparison reasons, Gini

⁶The Gini coefficient is defined as twice the area between the Lorenz curve and the 45 degree line of perfect equality.

coefficients were also computed for total assets (net worth plus debt). Despite the depreciation in stock values and the relatively large appreciation in house value, inequality in the ownership of assets remained virtually unchanged during this period. Thus, the major cause of the decline in the inequality of wealth over this period was the negative correlation of wealth and the debt-wealth[®] ratio.

IV. CONCLUDING REMARKS

During this simulated 1969–75 period, the wealth holdings of most households declined relative to the general increase in the price level, with the average portfolio losing 13 percent relative to the CPI. Home-owners fared considerably better than renters, losing only 6 percent in the value of their portfolio compared to 21 percent for renters. By both income and wealth level, the poor and the rich lost relative to the middle class, though among home owners the poor were the biggest gainers. Middle-aged households gained relatively to younger and older ones, though among home-owners younger households gained relatively to older ones. White home-owners and renters gained relatively to their non-white counterparts, while married home-owners and renters gained relative to their unmarried counterparts. The biggest gainers were home-owners with large mortgages and the biggest losers the large stock holders.

The overall distributional effect of this particular inflationary period was to induce a fairly substantial drop in the level of wealth inequality. The primary reason for this seems characteristic of most periods, namely the strong negative correlation between the ratio of debt to assets and wealth level. The secondary reason for this effect seems peculiar to this particular period, namely the large increase in house values relative to stock prices. During the 1969–75 period, then, inflation acted like a progressive tax, leading to greater equality in the distribution of wealth.

REFERENCES

- Bach, G. L. and Albert Ando, "The Redistributional Effects of Inflation," The Review of Economics and Statistics, Vol. 39, No. 1 (February 1957), 1-13.
- ----- and James B. Stephenson, "Inflation and the Redistribution of Wealth," The Review of Economics and Statistics, Vol. 56, No. 1 (February 1974), 1-13.
- Budd, Edward C. and David F. Seiders, "The Impact of Inflation on the Distribution of Income and Wealth," American Economic Review Papers and Proceedings, Vol. 61, No. 2 (May 1971), 128-38.
- Ruggles, Richard, "Statement for the Task Force on Distributive Impacts of Budget and Economic Policies of the House Committee on the Budget," Mimeo (September 1977).
- —— and Nancy Ruggles, "A Strategy for Matching and Merging Microdatasets," Annals of Economic and Social Measurement, Vol. 3, No. 2 (April 1974), 353-71.
- ——, Nancy Ruggles, and Edward Wolff, "Merging Microdata: Rationale, Practice and Testing," Annals of Economic and Social Measurement, Vol. 6, No. 4 (Fall 1977), 407–28.
- Wolff, Edward, "Estimates of the 1969 Size Distribution of Household Wealth in the U.S. From a Synthetic Database," Mimeo (December 1977).
 - -----, "The Effect of Alternative Imputation Techniques on Estimates of Household Wealth in the U.S. in 1969," Mimeo (July 1978).