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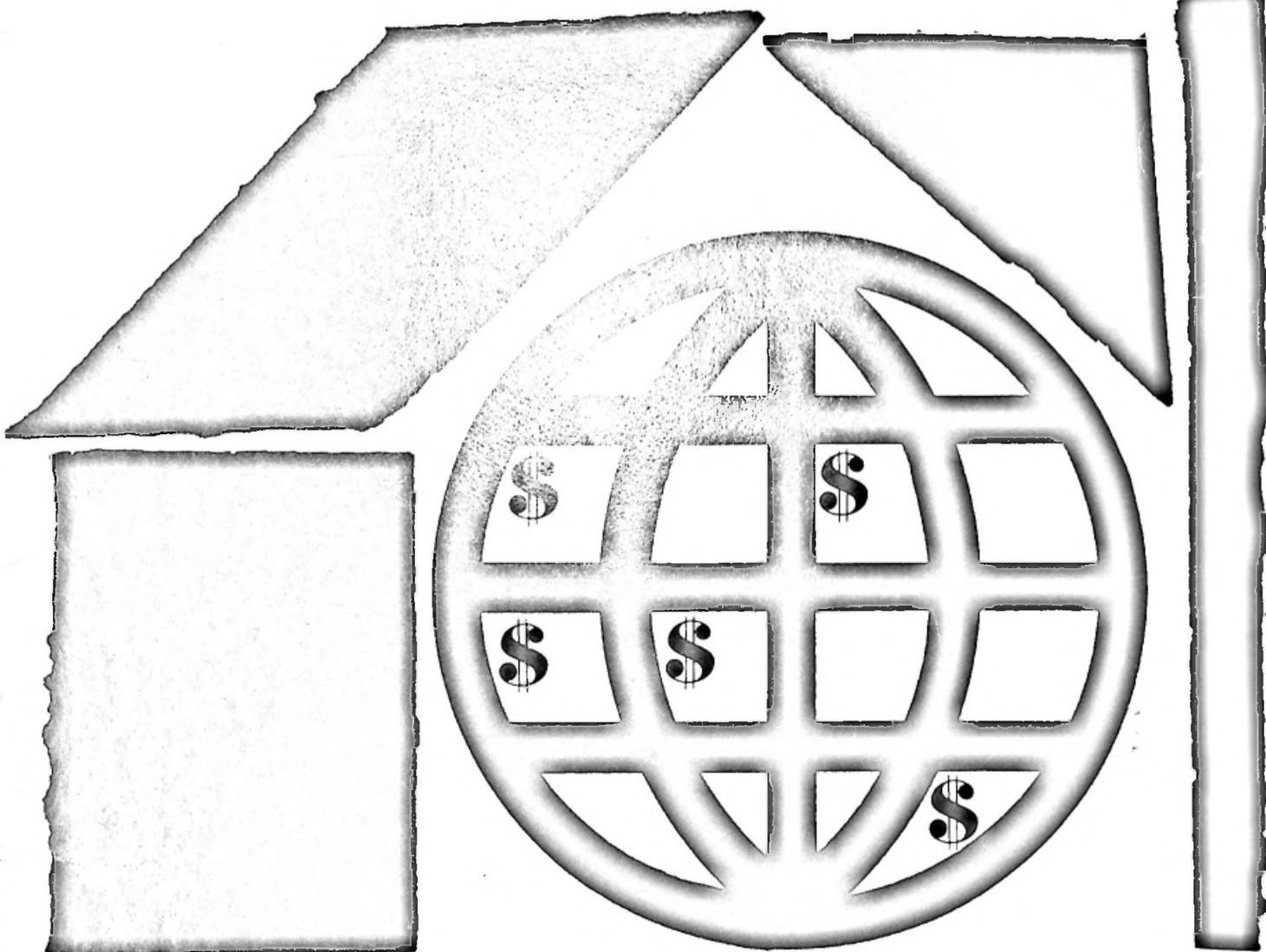


Housing Costs in the United States and Other Industrialized Countries, 1970-1977

DEPARTMENT OF HOUSING
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HOUSING COSTS IN THE UNITED STATES AND
OTHER INDUSTRIALIZED COUNTRIES, 1970-1977

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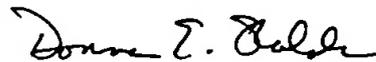
FOREWORD

The cost of housing is one of the priority research areas of HUD's Office of Policy Development and Research. In a number of studies, we are examining the effects on housing costs of such things as regulatory processes, settlement costs, and large-scale land acquisition.

One of the questions that often emerges in our discussions of high housing costs is: Do foreign governments have a similar problem, and if so, what strategies have they developed for dealing with it?

In this essay, E. Jay Howenstine, our International Research Coordinator, examines foreign experience during the period 1970-1977 and finds that all industrialized countries have been confronted with high and rising housing costs. It is significant that the United States comes out with a relatively good performance in cost behavior when compared to the other countries. In a companion essay, Mr. Howenstine will analyze the policies through which foreign governments are trying to cope with the high cost of housing. A close look at foreign experience has helped to provide better insight in solving some of our domestic problems.

The following people provided helpful advice and comments during the course of the study: Katharine C. Lyall, Earl L. Flanagan, John A. Maxim, Jr., Duane T. McGough, Kevin E. Villani, and Stevenson Weitz of the Department of Housing and Urban Development; Robert Moore Fisher of the Federal Reserve Board; and Patricia Capdeville of the Bureau of Labor Statistics.



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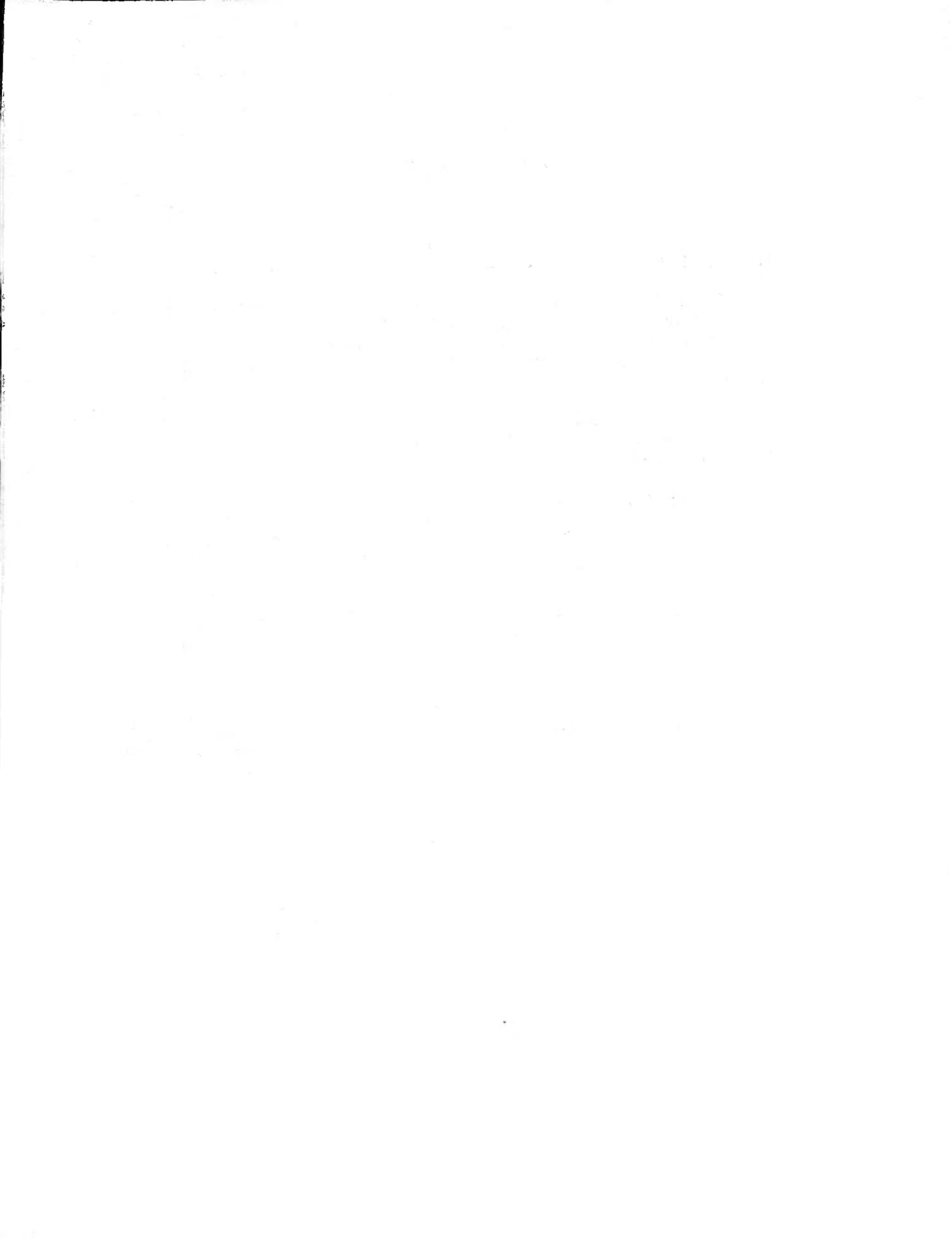
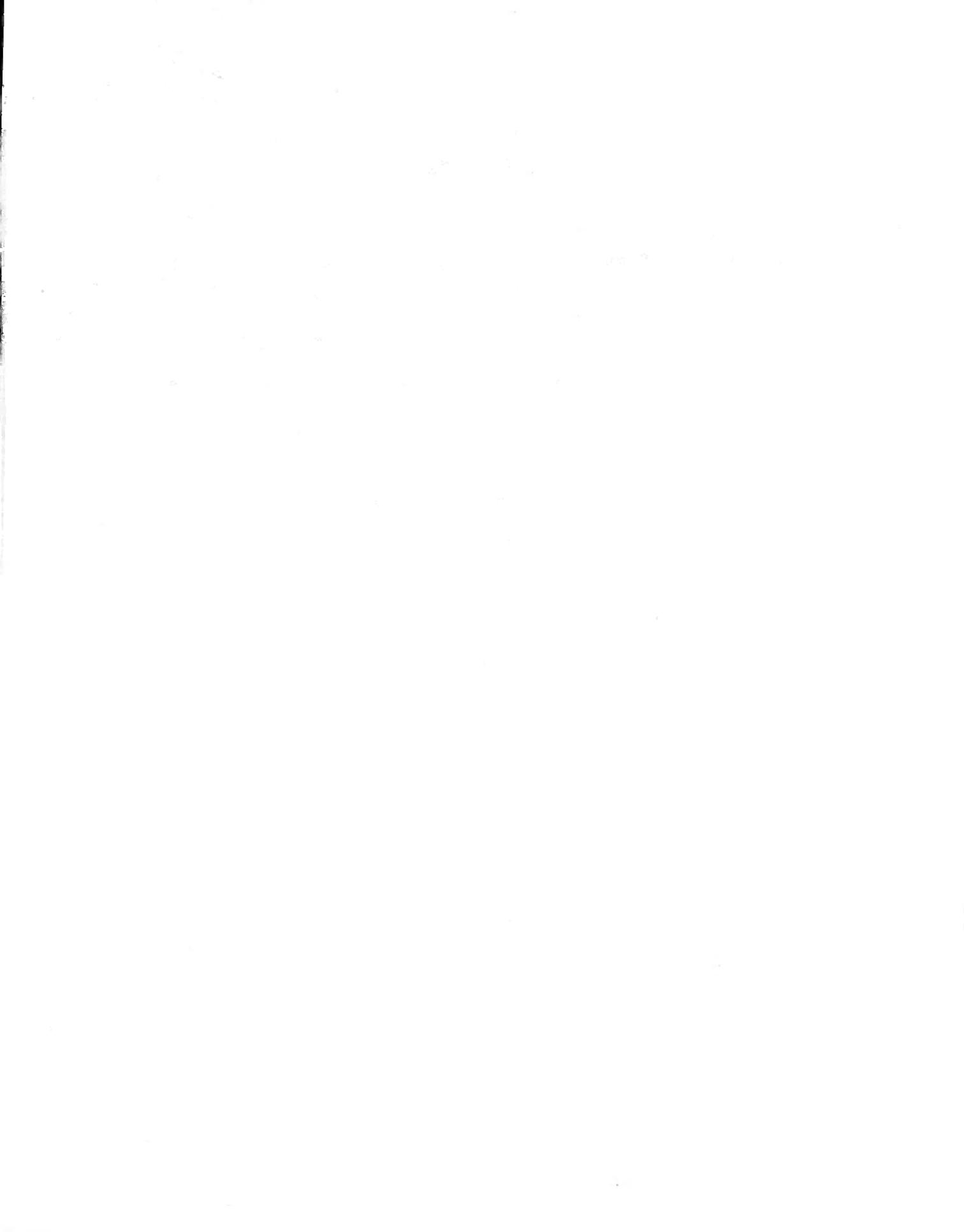


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I. Executive Summary

- The U.S. is not alone in facing a critical problem of high and rising housing costs. All industrialized countries have been similarly confronted. However, all cross-national comparisons are necessarily general and tentative because of deficiencies in the available data.
- Average annual rates of increase in costs of new housing for the period, 1970 - 1977, ranged from a low of 4.8% in Switzerland to a high of 17.3% in New Zealand (Table 1). The U.S. barely fell into the lower range of countries at 8.5%. The average annual rate of increase in rents ranged from a low of 4.9% in the U.S. to a high of 15.7% in Portugal (Table 1).
- In all but two countries -- Japan and Switzerland -- rates of increase in the costs of new housing were higher than rates of increase in the Consumer Price Index (CPI). The U.S. fell midway in the array of countries, with the annual average rate of increase in costs of new housing exceeding increases in the CPI by a margin of 1.9%.
- As a whole, there appears to have been some slight improvement in the accessibility of households to housing accommodation during the period. In all countries except Austria, per capita income rose at a more rapid rate than increases in rents, and in roughly two-thirds of the countries it rose at a more rapid rate than costs of new housing. The U.S. rate of increase in per capita income exceeded increases in the cost of new housing by a bare 0.3% and increases in rent by 3.0%. But when the U.S. comparison is made with the more appropriate indicator of median family income, the rate of increase in costs of new housing exceeded the rate of increase in incomes by a margin of 1.4%.
- Comparisons between rises in the cost of new housing and rises in its major components -- labor costs and material costs -- showed no single dominant pattern. Countries were divided in their comparative rates of increase. In the U.S., the rate of increase in costs of new housing was greater than the rate of increase in building labor costs by an amount of 2.5%, but by a margin of 0.5% less than the increase in building material costs. It is worth noting that, with growing industrialization of the building process, onsite labor costs are increasingly disappearing into higher material costs.

Table 1

Average Annual Rates of Increase in Cost of New Housing
and in Rents in Selected Countries, 1970 - 1977, in
Current Money Units

(In percentages)

<u>Country</u>	<u>Rate of Increase in Costs of New Housing¹</u>	<u>Rate of Increase² in Rents²</u>
Austria	14.1	11.9
Belgium	10.7	--
Canada	9.9	7.8
Denmark	10.7	9.7
Finland	12.7	11.0
France	10.3	8.3
Federal Republic of Germany	6.1	5.5
Greece	--	9.9
Ireland	14.5	10.3
Italy	--	9.6
Japan	10.2	--
Netherlands	10.4	9.0
New Zealand	17.3	--
Norway	10.6	7.4
Portugal	13.2	15.7
Spain	--	10.3
Sweden	10.6	7.4
Switzerland	4.8	6.6
United Kingdom	17.1	12.6
United States	8.5	4.9

¹CF. Table 2.

²CF. Table 3.

Overall during the period, 1970 - 1977, the U.S. comes out with a relatively good performance when compared to other industrialized countries. Not only was the U.S. among the group of countries having comparatively low rates of increase in housing costs, but in certain respects -- i.e., the average annual rate of increase in building labor costs, and the average annual rate of increase in rents -- the U.S. was the lowest of all countries. The importance of the low labor cost factor may, however, be somewhat diminished by the increasing disappearance of onsite labor costs into higher material costs.

II. Introduction

After studying the behavior of housing costs in the United States, the Task Force on Housing Costs of the Department of Housing and Urban Development concluded:

"The high cost of housing is now a major problem of millions of American families. Costs of acquiring or occupying decent housing have increased dramatically in recent years... the high cost of shelter is not merely serious, it is too often an insurmountable crisis."³

Is the U.S. alone in confronting a critical housing cost situation? Or is U.S. experience merely symptomatic of trends throughout the highly industrialized world?

To make fully valid comparisons among countries, it would be necessary to have national data for rents, the price of new housing and the price of old housing for a constant quality house in constant dollars employing uniform statistical definitions, as well as equivalent national data for such variables as level of income, consumer prices, building labor costs and building material costs. Unfortunately, available data leave much to be desired.

As the footnotes to Table 2 indicate, the definitions and coverage of data on new housing costs differ widely among countries. Price data on new housing seldom include land costs and finance costs. This exclusion seriously qualifies the generality of conclusions, since these costs seem to be the fastest growing components in total housing costs in most countries.

Moreover, few countries collect data on the construction cost of a new unit of housing space, e.g., a cubic meter (m³), in a constant quality house, and there are no comparable data on the prices of existing houses. However, there are fairly good rent data as a consequence of government rent controls in most countries for many decades. Types, size, longevity and equipment of housing differ widely. Masonry is the traditional housing type in most European countries as compared to the traditional wood house in the U.S.; multifamily apartment housing is much more prevalent in Europe than in the U.S.; plumbing, heating and kitchen facilities -- as well as size of dwelling units -- tend to be more generous in the U.S. than in other industrialized countries; in some countries no housing cost data that distinguish single from multifamily units are available on a national basis, and in some cases data are not available for the entire period, 1970 - 1977. There are no

³Task Force on Housing Costs, Final Report of the Task Force on Housing Costs (Washington, D. C., Department of Housing and Urban Development, 1978), p. 1.

internationally comparable data on housing operating costs. Comparability is limited, too, on account of differences in the methods of collecting data.

A certain portion of households are in large measure protected in the short- and medium-term against changes in housing costs, either as a result of fixed mortgage agreements in the case of home ownership, or of government rent controls in the case of renters. Clearly, the impact of changes in housing costs is felt most directly and fully by households which change their accommodations, but all households tend to be affected at least indirectly in the long-term. In many cases, considerable capital gains accrue to home owners, but the gains may not be realized unless owners change accommodations. No data are available for an examination of this issue.

The short period chosen for this analysis -- the 1970s, during which the rate of increase in costs has become critical on the U.S. scene -- also injects limitations into the reliability of the findings. The impact of central factors in long-term changes, e.g., rent decontrol, may not be fully expressed during the period under review. For some purposes, an analysis of the entire post-World War II period would be preferable, if adequate data were available.

Since there is no immediate way of overcoming the many data problems in this field, this study will adopt a pragmatic approach and use the best information available, that is, data mainly from the United Nations and the Organisation for Economic Cooperation and Development. The simplest and most meaningful comparison among nations -- and the one selected for this analysis -- is to look at average annual rates of change primarily in construction costs and to compare them with changes in other significant variables computed at compound rates. To obtain an approximate indication of whether people were more or less able to afford housing over the period, 1970 - 1977, changes in housing costs are compared to changes in income and consumer prices.

The most appropriate general measure of the capacity of families to afford or obtain housing is median family income, as adopted by the HUD Task Force; but such information does not exist on an international scale. The present comparisons, therefore, use per capita income data, even though this measure seems to result (for the U.S. at least) in a small upward bias in rates of income growth (Cf. Table 6). During the period, 1970 - 1977, U.S. median family income increased 7.1% as compared to an increase of 8.8% in per capita income.⁴

⁴Bureau of Census, Consumer Income: Money Income in 1977 of Families and Persons in the United States (Washington, D. C., Department of Commerce, 1979), Series P-60, No. 118, pp. 2, 32.

A comparison between rates of increase in housing costs and the Consumer Price Index (CPI) is another indicator of the consumer's fortunes regarding satisfaction of his shelter needs. If housing costs are rising faster than the CPI, housing is becoming less accessible relative to other purchases of an average consumer. But there again the value of the housing cost-CPI ratio as a criterion of affordability is limited by the fact that the way in which housing costs enter into the calculation of the CPI varies widely among governments, and this, in turn, affects the reliability of this ratio as a measure of affordability.

Recognizing all the above qualifications of the comparability of the available data, this review may, nevertheless, be useful in pointing up some general tendencies about housing costs and human welfare among the highly industrialized countries and in indicating the relative international position of the U.S. A companion paper will be issued in the near future, examining the strategies and policies which foreign governments have adopted to cope with high housing costs.

III. Costs of New Housing and Rents

In the U.S., approximately two-thirds of the dwelling units are owner-occupied, and one-third are rented. The striking fact about new housing costs in the 1970s is that all industrialized countries faced high rates of increase, ranging from 4.8% in Switzerland to 17.3% in New Zealand (Table 2). Among 19 countries, at an annual rate of increase of 8.5% the U.S. had the third lowest rate of increase, and a rate that was less than one-third of those countries with the highest rates, i.e., the United Kingdom and New Zealand.

To a very considerable measure, the degree of inflation in housing costs reflects the general inflationary trend of the economy. It is not surprising, therefore, that the Federal Republic of Germany and Switzerland, with the lowest annual rates of increase in the Consumer Price Index of 5.7% (Table 8) should also have the lowest rates of increase in housing costs.

A second significant comparative fact is that -- for countries for which data are available -- the average rate of increase in building labor costs was lowest in the U.S., at 6% (Table 3). This appears to be at variance with the popular notion in some quarters that U.S. housing costs are high because of labor union policies. As regards increases in the cost of building materials, the U.S. was among the group of countries with low rates of increase (Table 4).

When we turn to changes in rent levels, the U.S. position was also relatively good. In fact, the U.S. had the lowest rate of increase of all industrialized countries, i.e., 4.9% (Table 5). When it is considered that government rent controls have been much more widespread in Europe than in the U.S., and are a long-standing character,⁵ the low rate of increase comes as a surprise. The comparatively high rate of increase in European rent levels may not, however, be a true reflection of long-term trends, since the increases in the 1970s may, in part, represent delayed upward adjustments in rent levels that had been relatively frozen during the first two postwar decades.

The conclusion emerges, therefore, that as regards costs of new housing and rents during the 1970s, the U.S. had a relatively good performance.

⁵For an analysis of European rent controls, see E. Jay Howenstine, "European Experience with Rent Controls," Monthly Labor Review, June 1977, pp. 21-28.

Table 2

Average Annual Rates of Increase in Costs of New Housing
in Selected Countries, 1970 - 1977, in Current Money Units¹
(In percentages)

<u>Country</u>	<u>Average Annual Rate of Increase</u>
<u>A. Low Rates of Increase</u>	
Switzerland (Zurich) ²	4.8
Federal Republic of Germany ³	6.1
United States ⁴	8.5
United States ⁵	8.7
<u>B. Medium Rates of Increase</u>	
Canada ⁶	9.9 ⁷
Japan ⁸	10.2 ⁹
France ¹⁰	10.3
Netherlands ¹⁰	10.4
Norway ⁶	10.6
Sweden ⁶	10.6
Belgium ¹⁰	10.7
Denmark ³	10.7
Finland ⁶	12.7
Portugal ⁶	13.2
<u>C. High Rates of Increase</u>	
Austria ⁶	14.1
Ireland ³	14.5
United Kingdom ¹¹	17.1
New Zealand ¹²	17.3

¹United Nations Economic Commission for Europe, Annual Bulletin of Housing and Building Statistics for Europe (New York, 1978), Table 9, pp. 54-55.

²Based on prices for different work categories, e.g., as cubic meters of masonry work, weighted on basis of standard house.

³Index of building costs for single family house.

- ⁴Composite construction cost index of all construction works.
- ⁵Price index, new one family houses, Bureau of Census, Price Index of New One Family Houses Sold (Washington, D. C., Department of Commerce, 1978), p. 3.
- ⁶Index of housing construction costs.
- ⁷For period, 1971 - 1977.
- ⁸Deflator for cost of residential building construction, prepared by Survey and Statistics Division, Ministry of Construction, in Bureau of Statistics, Office of Prime Minister, Japan Statistical Yearbook, 1978 (Tokyo, 1978), p. 218.
- ⁹For period, 1970 - 1976.
- ¹⁰Price per cubic meter of more or less constant quality house.
- ¹¹Index covering materials, labor, overhead, profits and output per man for all new building and civil engineering.
- ¹²Index of Urban Housing Property Prices (minus land costs) of housing units built in 17 urban centers financed by National Housing Corporation, Department of Statistics, New Zealand Official Yearbook, 1978 (Wellington, 1978), p. 476.

Table 3

Average Annual Rates of Increase in Building Labor Costs
in Selected Countries, 1970 - 1977, in Current Money Units¹

(In percentages)

<u>Country</u>	<u>Average Annual Rate of Increase</u>
<u>A. Low Rate of Increase</u>	
United States	6.0
<u>B. Medium Rates of Increase</u>	
Sweden	9.7
Switzerland (Zurich)	9.9
Finland	11.3
Denmark	11.4 ²
Canada	11.7 ²
<u>C. High Rates of Increase</u>	
Portugal	14.5
United Kingdom	15.0 ³
Ireland	16.3 ³
Austria	17.1

¹United Nations Economic Commission for Europe, Annual Bulletin of Housing and Building Statistics for Europe (New York, 1978), Table 9, pp. 54-55.

²For period, 1971 - 1977.

³For period, 1970 - 1976.

Table 4

Average Annual Rates of Increase in Building Material Costs
in Selected Countries, 1970 - 1977, in Current Money Units¹

(In percentages)

<u>Country</u>	<u>Average Annual Rate of Increase</u>
<u>A. Low Rates of Increase</u>	
Federal Republic of Germany ²	4.6
Austria	7.5
Japan ³	8.2 ⁴
United States	9.0
France ⁵	9.0
Canada	9.4 ⁶
<u>B. Medium Rates of Increase</u>	
Denmark	10.4
Norway ⁷	10.5
Sweden	11.0
Australia ⁸	11.7
Portugal	12.2 ⁴
<u>C. High Rates of Increase</u>	
New Zealand ⁹	13.2 ⁴
Finland	13.9
United Kingdom	17.1
Belgium	15.6 ⁴
Ireland	17.8 ⁴

¹United Nations Economic Commission for Europe, Annual Bulletin of Housing and Building Statistics for Europe (New York, 1978), Table 9, pp. 54-55.

²United Nations, Monthly Bulletin of Statistics, January 1979, p. 152.

³Ibid., p. 154.

⁴for period, 1970 - 1976.

⁵United Nations, Monthly Bulletin of Statistics, op. cit., p. 150.

⁶For period, 1971 - 1977.

⁷United Nations, Monthly Bulletin of Statistics, op. cit., p. 154.

⁸Ibid., p. 148.

⁹Ibid., p. 154.

Table 5

Average Annual Rates of Increase in Rents in Selected
Countries, 1970 - 1977, in Current Money Units¹

(In percentages)

<u>Country</u>	<u>Average Annual Rate of Increase</u>
<u>A. Low Rates of Increase</u>	
United States	4.9
Federal Republic of Germany	5.5
Switzerland	6.6
<u>B. Medium Rates of Increase</u>	
Sweden	7.4
Norway	7.4
Canada	7.8
France	8.3
Netherlands	9.0
Italy	9.6
Denmark	9.7
Greece	9.9
<u>C. High Rates of Increase</u>	
Spain	10.3
Ireland	10.3
Finland	11.0
Austria	11.9
United Kingdom	12.6
Portugal	15.7

¹United Nations Economic Commission for Europe, Annual Bulletin of Housing and Building Statistics for Europe (New York, 1978), Table 10, pp. 56-57.

IV. Performance in Housing Costs Compared to Other Indicators

From the standpoint of national social and economic policy perhaps the most crucial issue concerns the accessibility of people to housing accommodation. Has the rise in average per capita disposable income kept pace with or exceeded the rise in costs of new housing and rents?

Table 6 indicates that in about one-third of the countries the rate of increase in the costs of new housing exceeded the rate of increase in per capita income, while it was less in two-thirds. The U.S. was among the majority; its rate of increase in income was a bare 0.3% above the annual average rate of increase in the costs of new housing. However, when compared to the more appropriate measure, median family income, the U.S. situation is altered. The rate of increase in new housing costs exceeded the rate of increase in income by a margin of 1.4%.

International experience with rents during the 1970 - 1977 period was more favorable to households. There was only one country, i.e., Austria, in which the rate of increase in income did not exceed the rate of increase in rents (Table 7). This finding confirms the well-known tendency for increases in rents to lag behind inflationary increases in most other parts of the economy.

Unfortunately, there are no comparable international data with regard to prices of existing housing.

In the light of the above evidence, one may reach a qualified conclusion that during the 1970s, relatively speaking, in most countries housing accommodation has been slightly more accessible to the average family.

A closely related measure of the impact of changing housing costs on relative standards of living of the worker is a comparison of the rate of increase in housing costs and rents with the rate of increase in the Consumer Price Index.

This comparison is less favorable than the income comparison. Only two countries -- Japan and Switzerland -- enjoyed rates of increase in housing costs less than the increase in the CPI (Table 8). In the bulk of the countries, the rates of increase in the cost of new housing exceed the increase in the CPI, with the highest being differences of 6 and 7.5%, respectively, in New Zealand and Austria. With a difference of 1.9%, the U.S. falls midway in the array of countries in which the rate of increase in housing costs exceeded the CPI. Table 8 tends to confirm the hypothesis that for basically structural reasons the building industry exhibits a relatively low rate of increase in productivity compared to other major economic sectors.⁶

Table 6

Differences between Average Annual Rates of Increase in Costs of New Housing and Average Annual Rates of Increase in Per Capita Disposable Income in Selected Countries, 1970 - 1977, in Current Money Units

(In percentages)

A. Countries in which Rates of Increase in Housing Costs Exceed Rates of Increase in Per Capita Disposable Income

<u>Country</u>	<u>Rates of Increase in Housing Costs¹</u>	<u>Rates of Increase in Disposable Income²</u>	<u>Differences in Rates of Increase</u>
Belgium	10.7	10.7	0.0
Austria	14.1	13.5	0.6
Sweden	10.6	9.7	0.9
United Kingdom	17.1	14.7	2.4
Ireland	17.1 ³	11.6	5.5
New Zealand	17.3 ³	11.4	5.9

B. Countries in which Rates of Increase in Housing Costs are Less than Rates of Increase in Per Capita Disposable Income

<u>Country</u>	<u>Rates of Increase in Housing Costs¹</u>	<u>Rates of Increase in Disposable Income²</u>	<u>Differences in Rates of Increase</u>
United States	8.5	8.8	0.3
Japan	10.2 ³	11.0	0.8
Netherlands	10.4	11.2	0.8
Norway	10.6	11.7	1.1
Denmark	10.7	12.0	1.3
Federal Republic of Germany	6.1	8.1	2.0
Finland	12.7	15.4	2.7
Switzerland	4.8	7.5	2.7
Canada	9.9 ⁴	12.8	2.9
France	10.3	13.3	3.0

¹CF. Table 2, supra.

²Organisation for Economic Cooperation and Development, National Accounts of OECD Countries, 1952 - 1977 (Paris, 1979), Vol. 1, country tables.

³For period, 1970 - 1976.

⁴For period, 1971 - 1977.

Table 7

Differences between Average Annual Rates of Increase in Rent and Average Annual Rates of Increase in Per Capita Disposable Income in Selected Countries, 1970 - 1977, in Current Money Units

(In percentages)

A. Countries in which Rates of Increase in Income Exceed Rates of Increase in Rents

<u>Country</u>	<u>Rates of Increase in Disposable Income¹</u>	<u>Rates of Increase in Rents²</u>	<u>Differences in Rates of Increase</u>
Switzerland	7.5	6.6	0.9
Ireland	11.6	10.3	1.3
United Kingdom	14.7	12.6	2.1
Netherlands	11.2	9.0	2.2
Denmark	12.0	9.7	2.7
Sweden	9.7	7.4	2.3
Federal Republic of Germany	8.1	5.5	2.6
United States	8.8	4.9	3.9
Norway	11.7	7.4	4.3
Finland	15.4	11.0	4.4
Canada	12.8	7.8	5.0
France	13.3	8.3	5.0

B. Countries in which Rates of Increase in Income are Less than Rates of Increase in Rents

<u>Country</u>	<u>Rates of Increase in Disposable Income</u>	<u>Rates of Increase in Rents</u>	<u>Differences in Rates of Increase</u>
Austria	10.9	11.9	1.0

¹Organisation for Economic Cooperation and Development, National Accounts of OECD Countries, 1952 - 1977 (Paris, 1979), Vol. 1, country tables.

²CF. Table 5, supra.

Table 8

Differences between Average Annual Rates of Increase in Costs of New Housing and Average Annual Rates of Increase in the Consumer Price Index in Selected Countries, 1970-1977, in Current Money Units

(In percentages)

A. Countries in which Rates of Increase in Housing Costs Exceed Rates of Increase in the Consumer Price Index

<u>Country</u>	<u>Rates of Increase in Housing Costs¹</u>	<u>Rates of Increase in Consumer Price Index²</u>	<u>Differences in Rates of Increase</u>
Finland	12.7	12.4	0.3
Federal Republic of Germany	6.1	5.7	0.4
Denmark	10.7	9.5	1.2
France	10.3	9.0	1.3
Sweden	10.6	9.1	1.5
United States	8.5	6.6	1.9
Norway	10.6	8.7	1.9
Netherlands	10.4	8.3	2.1
Belgium	10.7	8.3 ³	2.4
Canada	9.9 ⁴	7.4	2.5
Ireland	17.1 ⁵	14.2	2.9
United Kingdom	17.1	14.1	3.0
New Zealand	17.3 ⁵	11.3 ³	6.0
Austria	14.1	6.6	7.5

B. Countries in which Rates of Increase in Housing Costs are Less than Rates of Increase in the Consumer Price Index

<u>Country</u>	<u>Rates of Increase in Housing Costs¹</u>	<u>Rates of Increase in Consumer Price Index²</u>	<u>Differences in Rates of Increase</u>
Japan	10.2 ⁵	11.1 ³	0.9
Switzerland	4.8	5.7	0.9

¹CF. Table 2, supra.

²United Nations Economic Commission for Europe, Annual Bulletin of Housing and Building Statistics for Europe (New York, 1978), Table 10, pp. 56-57.

³United Nations, Monthly Bulletin of Statistics, January, 1979, Table 61, pp. 178-184.

⁴For period, 1971 - 1977.

⁵For period, 1970 - 1976.

On the other hand, for the rental sector of housing the main trend was for renters to prosper relative to other economic sectors. In over two-thirds of the countries rents rose less rapidly than the CPI, reflecting again the well known tendency for rents to lag in periods of price change. The U.S. was in the majority group, with its rate of increase in the CPI exceeding rents by an amount of 1.7% (Table 9).

Another series of comparisons relates to changes in different components within the housing sector. The general tendency for rents in the existing housing stock to lag behind rises in the cost of new housing is well known. Table 10 shows that countries overwhelmingly experienced more rapid rates of increase in housing costs than in rates of increase in rents. A number of them were above a 3% differential, including the U.S. at 3.6%. Only in Switzerland did housing costs rise at a lower rate than rents during the period, 1970 - 1977.

There are much less pronounced tendencies concerning the relative importance of labor costs and material costs in explaining increases in total housing costs. In regard to building labor costs, the rate of increase was less than the rate of increase in total housing costs in five countries, but exceeded the rate of increase in housing costs in four countries (Table 11). It is noteworthy that the U.S. was the country in which the rate of increase in labor costs was lowest relative to increases in total housing costs.

In the case of building material costs, again there was diversity in pattern. The rates of increase in material costs exceeded rates of increase in total housing costs in five countries, but were less than housing costs in ten countries (Table 12). The U.S. fell roughly in the middle.

⁶For a review of productivity performance, Cf. E. Jay Howenstine, "Productivity Trends in the Construction Industry: A Comparative International Review," appendix in National Commission on Productivity, Measuring Productivity in the Construction Industry (Washington, D. C., 1973).

Table 9

Differences between Average Annual Rates of Increase in Rents and Average Annual Rates of Increase in the Consumer Price Index in Selected Countries 1970 - 1977, in Current Money Units

(In percentages)

A. Countries in which Rates of Increase in Rents Exceed Rates of Increase in the Consumer Price Index

<u>Country</u>	<u>Rates of Increase in Rents¹</u>	<u>Rates of Increase in Consumer Price Index²</u>	<u>Differences in Rates of Increase</u>
Denmark	9.7	9.5	0.2
Canada	7.8	7.4	0.4
Netherlands	9.0	8.3	0.7
Switzerland	6.6	5.7	0.9
Austria	11.9	6.6	5.3

B. Countries in which Rates of Increase in Rents are Less than Rates of Increase in the Consumer Price Index

<u>Country</u>	<u>Rates of Increase in Rents¹</u>	<u>Rates of Increase in Consumer Price Index²</u>	<u>Differences in Rates of Increase</u>
Federal Republic of Germany	5.5	5.7	0.2
France	8.3	9.0	0.7
Norway	7.4	8.7	1.3
Finland	11.0	12.4	1.4
United Kingdom	12.6	14.1	1.5
Sweden	7.4	9.1	1.7
Portugal	15.7	17.4	1.7
United States	4.9	6.6	1.7
Italy	9.6	13.4	3.8
Ireland	10.3	14.2	3.9
Greece	9.9	13.9	4.0
Spain	10.3	14.9	4.6

¹CF. Table 5, supra.

²United Nations Economic Commission for Europe, Annual Bulletin of Housing and Building Statistics for Europe (New York, 1978), Table 10, pp. 56-57.

Table 10

Differences between Average Annual Rates of Increase in Total Costs of New Housing and Average Annual Rates of Increase in Rents in Selected Countries, 1970 - 1977, in Current Money Units

(In percentages)

A. Countries in which Rates of Increase in Housing Costs Exceed Rates of Increase in Rents

<u>Country</u>	<u>Rates of Increase in Housing Costs¹</u>	<u>Rates of Increase in Rents²</u>	<u>Differences in Rates of Increase</u>
Federal Republic of Germany	6.1	5.5	0.6
Denmark	10.7	9.7	1.0
Netherlands	10.4	9.0	1.4
Finland	12.7	11.0	1.7
France	10.3	8.3	2.0
Canada	9.9 ³	7.8	2.1
Austria	14.1	11.9	2.2
Norway	10.6	7.4	3.2
Sweden	10.6	7.4	3.2
United States	8.5	4.9	3.6
United Kingdom	17.1	12.6	4.5
Ireland	17.1 ⁴	10.3	6.8

B. Countries in which Rates of Increase in Housing Costs are Less than Rates of Increase in Rents

<u>Country</u>	<u>Rates of Increase in Housing Costs¹</u>	<u>Rates of Increase in Rents²</u>	<u>Differences in Rates of Increase</u>
Switzerland	4.8 ⁵	6.6	1.8

¹CF. Table 2, supra.

²CF. Table 3, supra.

³For period, 1971 - 1977.

⁴For period, 1970 - 1976.

⁵Zurich

Table 11

Differences between Average Annual Rates of Increase in Building Labor Costs and Average Annual Rates of Increase in Total Costs of New Housing in Selected Countries, 1970 - 1977, in Current Money Units

(In percentages)

A. Countries in which Rates of Increase in Building Labor Costs Exceed Rates of Increase in Housing Costs

<u>Country</u>	<u>Rates of Increase in Labor Costs¹</u>	<u>Rates of Increase in Housing Costs²</u>	<u>Differences in Rates of Increase</u>
Denmark	11.4	10.7	1.3
Canada	11.7	9.9 ³	1.8
Austria	17.1	14.1	3.0
Switzerland (Zurich)	9.9	4.8	5.1

B. Countries in which Rates of Increase in Building Labor Costs are Less than Rates of Increase in Housing Costs

<u>Country</u>	<u>Rates of Increase in Labor Costs¹</u>	<u>Rates of Increase in Housing Costs²</u>	<u>Differences in Rates of Increase</u>
Ireland	17.1 ⁴	16.3 ⁴	0.8
Sweden	9.7	10.6	0.9
Finland	11.3	12.7	1.4
United Kingdom	15.0	17.1	2.1
United States	6.0	8.5	2.5

¹Table 3, supra.

²Table 2, supra.

³For period, 1971 - 1977.

⁴For period, 1970 - 1976.

Table 12

Differences between Average Annual Rates of Increase in Building Materials Costs and Average Annual Rates of Increase in Costs of New Housing in Selected Countries, 1970 - 1977, in Current Money Units

(In percentages)

A. Countries in which Rates of Increase in Building Materials Costs Exceed Rates of Increase in Housing Costs

<u>Country</u>	<u>Rates of Increase in Materials Costs¹</u>	<u>Rates of Increase in Housing Costs²</u>	<u>Differences in Rates of Increase</u>
United Kingdom	17.1	17.1	0.0
Sweden	11.0	10.6	0.4
United States	9.0	8.5	0.5
Ireland	17.8	17.1 ³	0.7
Finland	13.9	12.7	1.2
Belgium	15.6	10.7 ³	4.9

B. Countries in which Rates of Increase in Building Materials Costs are Less than Rates of Increase in Housing Costs

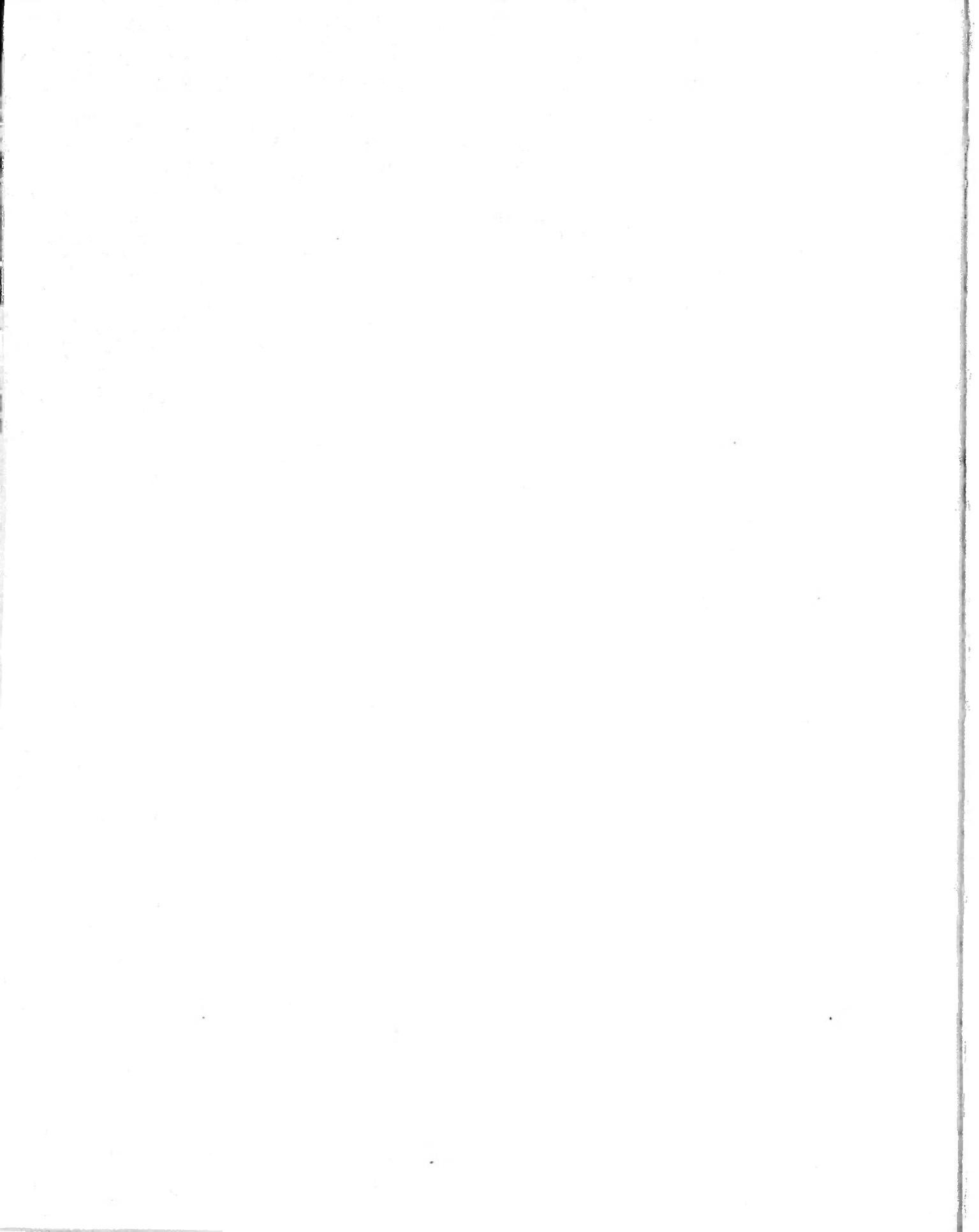
<u>Country</u>	<u>Rates of Increase in Materials Costs¹</u>	<u>Rates of Increase in Housing Costs²</u>	<u>Differences in Rate of Increase</u>
Norway	10.5	10.6	0.1
Denmark	10.4	10.7	0.3
Canada	9.4 ⁴	9.9 ⁴	0.5
Portugal	12.2	13.2	1.0
France	9.0	10.3	1.3
Federal Republic of Germany	4.6	6.1	1.5
Japan	8.2	10.2 ³	2.0
New Zealand	13.2	17.3 ³	4.1
Austria	7.5	14.1	6.6

¹CF. Table 4, supra.

²CF. Table 2, supra.

³For period, 1970 - 1976.

⁴For period, 1971 - 1977.



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