prevail interest-rate and payment adjustment caps were 2 percent and 7 percent, respectively. Seventy-one percent of all programs conformed to either FHLMC or FNMA guidelines. Interest-rate or payment caps were available in 64 programs, and 55 programs had a life-of-loan maximum on the mortgage rate (see table 1). Rates on uncapped and capped ARM programs differed only slightly, without one being consistently higher than the other when analyzed by index type. Of 18 programs that had neither interest-rate nor payment adjustment caps, only one had a life-of-loan rate maximum. Thus, in these 17 uncapped programs, borrowers would, in effect, bear 100 percent of the interest-rate risk.

In general, prices and terms of ARMS in the surveyed areas were similar. Row by row, interest-rate and ARM programs—which those without interest-rate and payment adjustment caps and life-of-loan rate maximums—were concentrated in Cleveland and Columbus. In Cincinnati, institutions that offered payment adjustment caps seemed to prefer loan extensions to negative amortization caps. In contrast, institutions in Columbus and Cleveland chose negative amortization caps. Institutions in Cleveland and Columbus also tended more than those in the Cincinnati ARM assumptions.

A statistical comparison of loan features by institution type (see table 2) suggests S&Ls offered ARMS with lower initial rates, lower down payments, less frequent interest-rate and payment adjustments, and lower interest-rate adjustment caps than did commercial banks. However, at

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The variety of mortgage loan programs currently available to home buyers has made choosing a mortgage loan as difficult as choosing a house. One of these mortgage loan options, the adjustable rate mortgage, became more popular in 1985–86 as home mortgage rates deteriorated substantially during the 1981–82 recession because loans based on their short-term liabilities eclipsed the low, less responsive return on their long-term, fixed-rate assets. In 1982, Congress enacted the Garn-St. Germain Act, which allowed S&Ls to originate various non-mortgage products, including consumer loans and, to some extent, commercial loans. With their liabilities sensitive to market interest rates, S&Ls had two options for shortening the maturity structure of their asset portfolios: embark on new business activities or extend mortgage loans more sensitive to market rates, such as ARMS. Since S&Ls have a comparative advantage in the mortgage lending business, most of them have chosen to originate ARMS. In late 1983, many lenders began to offer discounted introductory rate ARMS, less than the projected $1.3 trillion of outstanding one- to four-family mortgages by year-end 1984.

ARMs’ Features

Under the ARM regulations of the FHLMC and the OCC, a mortgage lender has wide discretion to set the price and terms of an ARM. A lender cannot choose the index to which the ARM rate adjusts and may set the interest-adjustment and payment-adjustment caps, including the frequency and amount of adjustment. A lender may also include a cap of whether the loan’s term can be extended, or whether it can be converted to a fixed-rate mortgage by the borrower or assumed by another purchaser.

In principle, ARMs offer advantages to both lenders and borrowers, particularly in today’s deregulated financial environment. To lenders, ARMS represent a method by which asset portfolios can be restructured, allowing lenders to match interest-rate-sensitivity assets with interest-rate-sensitive liabilities. For borrowers, ARMS brighten the prospects of owning a house by improving housing affordability, which deteriorated substantially because of inflationary price increases in the 1970s and high, real interest rates in the 1980s. ARMs seem particularly suited to people who expect to sell their house in a few years and to young, first-time home buyers who choose to index the mortgage to a low, low initial mortgage rate and, possibly, a lower total loan cost. By allowing borrowers to choose greater risk, lenders benefit because the rate sensitivities of assets and liabilities can

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be aligned, even if a lender’s liabili-
ties are particularly rate-sensitive.

The rationale for the mortgage, an ARM allows the inter-
est rate to vary according to an index (see chart 1). Mortgage lenders usu-
ally index the ARM rate to rates on Treasury securities, the FHLLB average mon-
itor contract rate, or the cost of funds to S&Ls. To cal-
culate the interest rate paid by the bor-
rower, a lender adds a margin that, at
a minimum, reflects lending ex-
penes and profit. Generally, deter-

Chart 1 Index Rates for Adjustable Rate Mortgages

<table>
<thead>
<tr>
<th>Percent</th>
<th>6-month Treasury</th>
<th>3-year Treasury</th>
<th>Contract rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.00</td>
<td>6.50</td>
<td>7.00</td>
<td></td>
</tr>
<tr>
<td>6.50</td>
<td>7.00</td>
<td>7.50</td>
<td></td>
</tr>
<tr>
<td>7.00</td>
<td>7.50</td>
<td>8.00</td>
<td></td>
</tr>
</tbody>
</table>

Even if borrowers choose more volatile, short-run indexed ARMs, they can partially stabilize monthly payments if the lender limits, or caps, the interest-rate or payment adjust-

ment. An interest-rate cap, which limits the percentage change in the interest-rate, may apply both to peri-
odic adjustments and over the life of the loan. A payment cap sets a limit on the percentage change in the pay-
mortgage during the term of the mortgage. When this

<table>
<thead>
<tr>
<th>Rate (mean)</th>
<th>1-year Treasury</th>
<th>3-year Treasury</th>
<th>5-year Treasury</th>
<th>7-year Treasury</th>
<th>10-year Treasury</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.35%</td>
<td>12.75%</td>
<td>13.15%</td>
<td>13.5%</td>
<td>13.75%</td>
<td></td>
</tr>
<tr>
<td>11.88%</td>
<td>13.25%</td>
<td>13.63%</td>
<td>13.91%</td>
<td>14.18%</td>
<td></td>
</tr>
<tr>
<td>12.41%</td>
<td>13.75%</td>
<td>14.13%</td>
<td>14.41%</td>
<td>14.68%</td>
<td></td>
</tr>
<tr>
<td>12.94%</td>
<td>14.25%</td>
<td>14.63%</td>
<td>14.91%</td>
<td>15.18%</td>
<td></td>
</tr>
<tr>
<td>13.47%</td>
<td>14.75%</td>
<td>15.13%</td>
<td>15.41%</td>
<td>15.68%</td>
<td></td>
</tr>
</tbody>
</table>

Some lenders relaxed their mortgage underwriting requirements and qualified borrowers for ARMs. As a result, borrowers who otherwise might have been too risky were able to obtain mortgages.

Not all borrowers were negatively affected by rising rates. In some markets, aggres-
sive ARM marketing led to improp-

<table>
<thead>
<tr>
<th>ARM Programs and Rate Selected of Tiers</th>
<th>Type</th>
<th>Number</th>
<th>Rate (mean)</th>
<th>Range of Rates</th>
<th>Payment Cap</th>
<th>Negative Rate Cap</th>
<th>Life-of-Maximum Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-year Treasury</td>
<td>Capped</td>
<td>22</td>
<td>11.75%</td>
<td>11.15% - 12.35%</td>
<td>22</td>
<td>0</td>
<td>15.00%</td>
</tr>
<tr>
<td>3-year Treasury</td>
<td>Uncapped</td>
<td>22</td>
<td>13.15%</td>
<td>12.5% - 13.75%</td>
<td>23</td>
<td>0</td>
<td>15.00%</td>
</tr>
<tr>
<td>5-year Treasury</td>
<td>Capped</td>
<td>14</td>
<td>13.75%</td>
<td>13.15% - 14.15%</td>
<td>14</td>
<td>0</td>
<td>15.00%</td>
</tr>
<tr>
<td>7-year Treasury</td>
<td>Uncapped</td>
<td>14</td>
<td>14.25%</td>
<td>13.6% - 15.25%</td>
<td>14</td>
<td>0</td>
<td>15.00%</td>
</tr>
<tr>
<td>10-year Treasury</td>
<td>Uncapped</td>
<td>14</td>
<td>15.00%</td>
<td>14.4% - 16.00%</td>
<td>14</td>
<td>0</td>
<td>15.00%</td>
</tr>
</tbody>
</table>

ARMs Respond to Market Pressures

There have been strong pressures from mortgage insurers, secondary market institutions, trade groups, and regulatory agencies to correct some of the problems with ARMs.

As ARM abuses have come to the attention of the public, the mortgage industry recognized that this new kind of loan should be more strongly regulated. ARM lenders then de-

veloped standard ARM underwriting guidelines for lenders who sell these loans in secondary mar-

kets. These guidelines would prevent lenders from assuming excessive credit risk, yet give them freedom to react to local market demand and to design ARM programs that fit a variety of portfolio management strategies. To illustrate: Freddie Mac re-
has developed guidelines for lenders that set maximums on periodic interest-rate and month-

ly payment adjustments and that specify a ceiling on negative amortization. Under these guidelines, if the ARM

loan allows negative amortization, then a mortgage’s loan-to-value ratio cannot exceed 80 percent. Also, bor-

rowers must be qualified on the non-
discounted value of the property. One-

other action was the development of dis-
closure guidelines on ARMs that ex-

plained the ARM loan and gave advice about ARM options.

4. For two excellent guides, see "What You
Should Know About ARMs: A Consumer Guide to Adjustable Rate Mortgages," AARP and a
Merchants Bank, Finance, and Urban Affairs, 1984; and "AARP Handbook on Adjustable Rate
Mortgages," Federal Reserve Board and Federal Home Loan Bank Board.

Ohio Survey

A telephone survey of ARM loan pro-
grams offered by banks and S&Ls

in Ohio, we found that mortgage

lenders are designing ARM loans to

install payment shock. The sample

included 50 depository institutions

who deposits range from under $10

million to over $50 million. There

were 82 ARM programs offered by those institutions whose deposits.

In average, institutions whose de-

posit size ranged from $100 million to

$500 million offered ARM programs.

Of seven ARM programs at five institutions that had a six-month discounted rates, only six ARM pro-

grams (at three institutions) quali-

fied borrowers at the discount.

The most common ARM indices were

rates on Treasury securities, par-

ticularly one- and three-year rates. As
defered, one- and three-year inter-

est-rate payments are adjusted to represent approximately three

fourths of all programs. Only three programs had semi-annual or monthly interest-rate adjustments. The mos

2. See "ARMS: A Study of Adjustable Rate Mort-


3. See "Adjustable Rate Mortgages (ARM)," Hear-

ings before the Subcommittee on Housing and Community Development of the Committee on Banking, Finance, and Urban Affairs, 98 Cong.


5. According to a number of surveys, lenders are indeed constructively rede-

signing ARM programs. In August 1983, Freddie Mac surveyed 750 mort-

gage lenders nationwide and found that 82 percent of them offered ARM

products. A wide range of initial rates, ARM terms, and prepayment pen-
alties were noted. Ninety-seven percent of ARM pro-

grams had either annual interest rate or annual payment caps, and more than 80 percent of ARMs had a life-
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