

*A review by the* **Federal Reserve Bank of Chicago**

# Business Conditions

**1970 August**



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# Consumption trails rising incomes

After-tax incomes of consumers rose at an annual rate of more than 10 percent from the fourth quarter of 1969 to the second quarter of 1970. This was a near-record pace, almost double the rate of increase in the same period of the previous year. Consumer spending also rose in the first half of 1970, but not so fast as income.

Rising spendable income was boosted by large increases in wage rates and salaries, higher social security payments, and income tax reductions. These factors offset a moderate decline in total employment and lower income for some workers because of shorter workweeks, reduced commissions and bonuses, and lower entrepreneurial profits.

Because some of the recent developments helping to increase income—such as higher

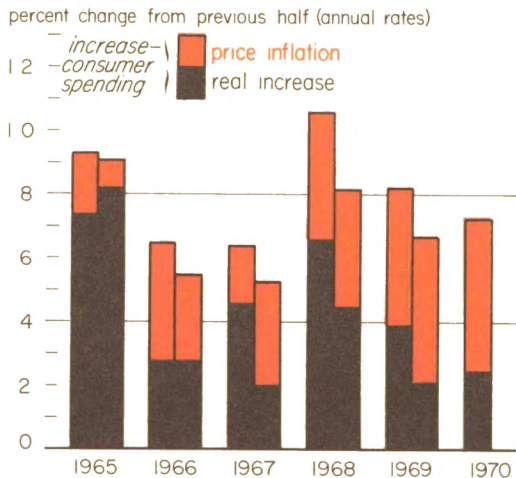
salaries for civilian and military federal personnel and higher social security payments retroactive to the first of the year—will not be repeated in the second half of 1970, income is likely to rise at a slower pace. Even so, recent high rates of personal saving, which partly reflect slower growth in debt, show that the pace of consumer purchases could accelerate. An important key to the future is the state of consumer confidence or “psychology,” which has been somewhat depressed since mid-1969. Improvement in consumer attitudes is closely related to renewed strength in the general economy. Similarly, general economic expansion depends heavily on consumers’ willingness to spend. The cause and effect relationship works both ways.

## The sluggish giant

Consumer expenditures account for about 63 percent of the nation’s total output of goods and services (the gross national product). In addition, a large share of business investments in inventories and plant and equipment reflect, more or less directly, trends in consumer purchases. Clearly, the great bulk of economic activity is oriented toward consumers and depends on their ability and willingness to spend.

Since 1946, the transition year after World War II, outlays on consumption have varied between 93 and 95 percent of current “disposable income,” i.e., income after payment of taxes on income, personal property, and inheritance. Small changes in the ratio can be highly significant. With disposable income currently nearing an annual rate of \$700 billion, a 1 percent change in the proportion of income saved (not spent) would equal

## Most of the recent rise in consumer spending has reflected higher prices

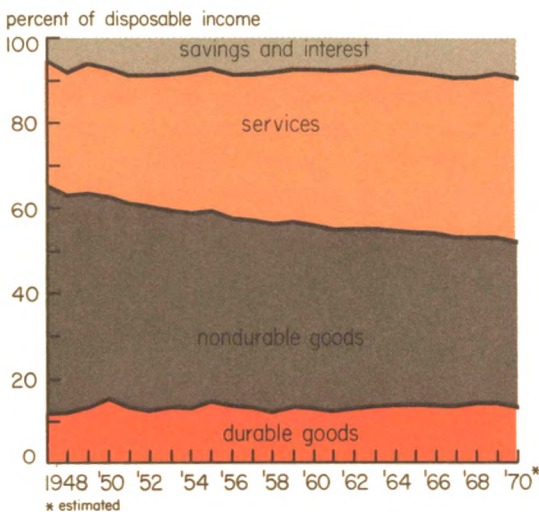


almost \$7 billion of expenditures.

In the second quarter of 1970, the rate of consumer savings is estimated to have been 7.6 percent of disposable income. This compares with an average of 6 percent in the years 1960-69. If consumer spending had been at the "normal" relationship of income in the second quarter, outlays would have been about \$11 billion larger, and the rise in consumer spending in the second quarter would have been double the actual increase. The rise in the savings rate in the second quarter reflects the fact that part of the rise in income consisted of lump-sum payments that typically are not spent as rapidly as regular current income.

The relationship of saving and income in the first half of 1970 contrasts sharply with the situation a year earlier when the proportion of income spent was somewhat larger than the long-term average. The rise in the

### Services have accounted for a growing share of consumer spending



savings rate in the second half of 1969 and in the first half of 1970 was associated with a leveling of the general economy and an easing of job markets resulting from fiscal and monetary restraint.

Incomes of some families declined in the past year. Other families, unaffected directly by the economic adjustment, held back on new purchases, especially "big ticket" items such as autos and color TV sets. Inventories of some consumer goods became burdensome as sales failed to match retailers' expectations. Business purchases of some types of plant and equipment appeared less pressing and were deferred. These developments played a major role in the general economic slowdown of 1969-70.

### The pattern of outlays

Personal consumption expenditures are divided into three major groups:

**Durable or "hard" goods**—autos, appliances, TV sets, and other long-lasting products made principally of metal.

**Nondurable or "soft" goods**—food, apparel, fuel, and other commodities of relatively short life.

**Services**—a heterogeneous category that includes outlays on rent, utility bills, public transportation, medical care, financial services, and recreation.

Of total personal consumption expenditures at an annual rate of \$614 billion in the second quarter, about 43 percent were for nondurable goods, 42 percent for services, with less than 15 percent for durables—the smallest, but most volatile group. These proportions have remained fairly stable since World War II, although there has been a gradual rise in the proportion of income spent on services accompanied by a gradual decline in the proportion spent for nondurable goods.

Each of the major categories of consump-

tion expenditures contains items that can be readily reduced or postponed. When consumers are in a mood to restrict expenditures, outlays for such nonessentials as vacation trips and restaurant meals may be eliminated. Last year's clothing may not be replaced. Acquisition of furniture and new cars may be deferred. Less expensive goods and services in all classes may be substituted.

All of the methods of holding down consumer expenditures are resorted to by some families in any business adjustment, but the category most clearly affected is durable goods. Sales and output of virtually all durable goods are highly vulnerable in periods of recession or slower economic growth. This is because of relatively high unit prices, the possibility of postponing replacements, and the use of credit in many purchases. Uncertainty as to income prospects, of course, reduces the ability and willingness of consumers

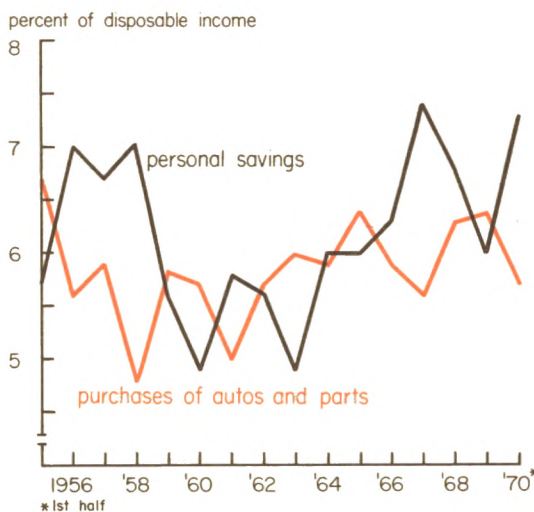
to incur additional debts.

The dollar value of purchases of durable goods declined in the recession years 1954, 1958, and 1961. This total also declined in 1956 when sales of autos (which account for about 45 percent of all durables) decreased sharply while the economy as a whole continued to expand.

Purchases of both nondurable goods and services have shown a strong long-term up-trend even in business recessions. Many of these items, such as basic foods and needed clothing, are not readily postponable. Payments for some services, such as rent and insurance, are often on a contractual basis.

Total purchases of nondurable goods have increased each year since 1949, although in a number of years the increase was very small. Total service expenditures have increased substantially each year since World War II. One of the most rapidly growing categories of services is medical care, because of both expanding volume and sharply rising prices for these services.

### The proportion of income saved usually moves inversely with spending on autos



### Effect of the slowdown

Total consumption expenditures have continued to rise quarter-to-quarter throughout the economic adjustment that became clearly evident about a year ago. Outlays rose each quarter even after allowance for price increases. It is the slower pace of the increase, especially in comparison with income gains, that marks the end of the 1967-69 boom in consumer expenditures.

With disposable income up 10 percent from a year earlier in the second quarter, personal consumption expenditures were up 7 percent. Outlays on services were 9 percent higher, a surprisingly strong showing in view of the temporary factors boosting disposable income. Outlays on food, the largest single category of expenditures on goods, rose a

vigorous 8 percent. Apparel purchases were only 4 percent higher, however, and outlays on autos and parts rose less than 1 percent. Purchases of durables other than autos were about 2 percent higher. These data are estimates for the entire nation. Consumer purchases in depressed areas hit by cutbacks in production of military or civilian goods have not performed as well.

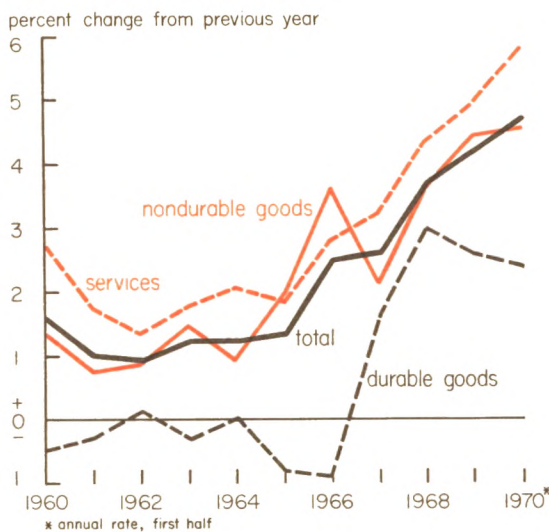
The trend of consumption expenditures has followed the pattern of past slowdowns. Expenditures on food and services have remained strong. Apparel has been affected significantly, but the big ticket items have borne the major impact of consumer restraint.

One of the most striking aspects of the pattern of consumer spending during the prosperous Sixties was “upgrading”—the trend to larger, more fully-equipped, and more expensive dwellings, autos, and appliances. A similar tendency was noted for non-

urable goods and services. In the past year, the trend toward buying the top of the line has been reversed with consumers adjusting purchases to more limited budgets or less sanguine income prospects. Aside from actual or feared losses of income, many families have had to provide for sharp increases in property taxes and higher costs of education—especially post-high school education.

Trading down has been especially apparent in the case of autos. In 1969, deliveries of foreign cars (mainly small, sub-compacts) exceeded 1 million units for the first time and accounted for a record 11 percent of all new car purchases. In the first half of 1970, this proportion reached almost 14 percent and it moved even higher in July. Meanwhile, U. S. auto manufacturers found demand strongest for their smaller, more economical models. Several times during the model year production schedules were adjusted to meet this change in customer tastes.

### Prices of services have led the advance of all consumer prices



### The impact of inflation

Average prices paid by consumers rose about 1 percent annually in the first half of the Sixties. In 1966, however—the first full year of direct U. S. participation in the Vietnam war—these prices rose 2.5 percent. Price inflation accelerated in subsequent years and exceeded 4 percent in 1969. In the second quarter of 1970, consumer prices were almost 5 percent above a year earlier. In recent months, the uptrend in prices of some consumer goods, mainly food and apparel, was less rapid.

Throughout the postwar period, the rise in consumer prices has been led by the service category, especially services that involve a high labor input. Average prices of services rose about twice as fast as the average of all prices paid by consumers in the first half of the Sixties. Since then, prices of services have

continued to rise faster than prices of goods, but the differential has been smaller.

In most years of the past decade, the rise in prices of nondurable goods closely approximated the rise for all consumer goods and services. Durable goods prices, on the other hand, declined slightly from 1959 through 1966. Prices of durables joined the general uptrend in the late Sixties, however. In both 1968 and 1969, prices of durables increased about 3 percent. This rate of increase has not gathered speed for durable goods as a group. But auto producers announced in August a tentative 5 percent increase in prices of 1971 model cars. Earlier in the year, major producers of tires raised prices by this amount.

Price indexes may be used to measure the purchasing power, or "real" worth, of consumer dollars. From 1965 through 1969, two-fifths of the increase in personal consumption expenditures reflected higher prices. In the second quarter of 1970, two-thirds of the 7 percent rise in consumption expenditures from the previous year represented higher prices.

### **Savings and debt**

In national income accounting, savings by consumers is obtained as a residual by subtracting estimated expenditures from estimated current after-tax income. An increase in savings may show up either as a faster increase in assets, or as a reduction, or slower growth, in outstanding debt.

A decline, or slower growth, in consumer purchases of durable goods is almost always accompanied by a decline in the amount of instalment credit extended and a decline, or slower growth, in outstanding debt. When outstanding instalment credit increases, consumer spending power rises by a similar amount.

6 At midyear, outstanding consumer instal-

ment credit reached a record \$99 billion—up \$5.6 billion from a year earlier. This was the smallest rise in a similar comparison since 1967. Auto credit outstanding was \$37 billion at midyear, up only \$1 billion from a year before.

Examining the data from another perspective, the net rise in outstanding instalment credit added about \$10 billion to consumer spending in the year ending in mid-1969. In the second half of 1969, this rate was down to \$7 billion, and in the first half of 1970, it declined further to about \$4 billion.

Credit use increased slightly in recent months as sales of autos and some appliances improved. Some lenders have restricted consumer credit availability, but the bulk of the decline in credit use appears to have resulted from a reluctance to incur additional debts. Therefore, the trend could easily be reversed.

### **Spending may accelerate**

Consumer spending continued to rise in the past year, although the rate of increase was less than the rise in consumer after-tax income. Nevertheless, consumers provided the major support for general economic activity, accounting for a growing share of total spending as important government programs and some business investments were curtailed.

Historical relationships suggest a faster pace of consumer purchases in the second half of 1970, barring further deterioration in the general economy. The postwar years have seen a series of periods of hesitancy in consumer spending followed by renewed strength when confidence was restored. Family formations are increasing, and a backlog of wants is building again. Consumers typically spend \$94 of every \$100 available from current income. Periods of higher rates of saving, as in the past year, have proved to be of limited duration. Consumer needs, or desires, remain

“insatiable” in the phrase of the economic textbooks. A higher rate of spending would soon be accompanied by a revival of related business investments.

Preliminary data for July indicate that retail sales moved to a new high, but durable goods continued to lag behind the trend for nondurables. The business slowdown of the

past year has now gone well beyond the 1966-67 “mini-recession” in duration and magnitude. More families have been affected adversely and consumer caution has replaced the ebullience evident prior to the peak of the recent boom. The tendency of consumers to weigh alternative purchases more carefully, therefore, is likely to persist.

## Retail sales and consumer spending

The Department of Commerce publishes weekly and monthly estimates of retail store sales. Retail sales do not include many services, which account for more than two-thirds of consumer spending. On the other hand, not all retail sales are to consumers. The difference is most significant in the case of sales of durable goods.

Stores in the automotive group sell cars and trucks to business and government as well as to consumers. Also, their sales include the full sale price of used cars. To avoid double counting, only dealers' profits are included in consumer expenditures.

Retail sales also include farm machinery and building materials, which are sold to businesses.

The trend of retail sales sometimes diverges significantly from the trend of consumer spending on goods. Retail sales in the first half of 1970, for example, were 3 percent higher than a year earlier. Consumer expenditures on goods, however, are estimated to have increased 6 percent in this comparison. The difference reflects depressed sales of auto, farm equipment, and building materials stores, which account for a larger share of retail sales than of consumer expenditures on goods.

## More working wives, fewer children

Population experts in the United States were unprepared for the magnitude of the increase in births following World War II. They were also unprepared for the duration of this post-war “baby boom.” As a result, projections of population growth in the Fifties and Sixties were underestimated. The U. S. Bureau of Census in 1947 estimated that it would be unlikely for population to reach 177 million by 1970. When the 1970 census is completely

tabulated later this year, the actual figure will be close to 205 million.

Just as the Bureau's 1947 projections erred on the low side, another set of projections prepared by the Bureau 20 years later now appears to be overstated. In 1967, the Bureau prepared four alternative population projections for the year 2000, based on different assumptions about birth and death rates. So far, the projection showing the slowest growth

has been the most accurate. Acknowledging this development, the Bureau in 1970 revised its 1967 projections to include assumptions leading to another, still lower growth rate.

Unanticipated declines in birth rates during the Sixties appear responsible for the generally high 1967 Bureau projections. These declines were probably associated with the rapid increase in the rate at which young married women entered the labor force, particularly since the mid-Sixties. An expanding economy throughout the Sixties, coupled with tight labor markets in the latter half of the decade, encouraged many more young women to work in their early married years. At the same time, women began to delay child-bearing and perhaps to plan smaller families. Thus, even though many of the girls born in the first postwar years were reaching marriageable age and marriage rates rose, birth rates declined.

### Long-term birth rates down

There was an almost continuous decline in U. S. birth rates from 1800 to the 1930s. In 1933, the U. S. birth rate reached a till-then historic low of 18.4 per 1000 population.<sup>1</sup> This low point does not appear to be related solely to the Depression. A decline in births sharper than any previous decline began in 1924, and continued at a near-constant rate until 1933.

In the mid-Thirties, the birth rate began to climb, slowly at first, but more rapidly after 1940. During the war years, the rising trend was interrupted.

<sup>1</sup>All birth rates before and including 1959 are adjusted for underregistration in births.

## Census Bureau projections for the year 2000

Birth rate assumptions	1967 projections		1970 projections	
	Population (millions)	Growth rate <sup>1</sup> (percent)	Population (millions)	Growth rate <sup>1</sup> (percent)
High	361	1.9	321	1.5
Medium-high	336	1.7	301	1.3
Medium-low	308	1.3	281	1.0
Low	283	1.1	266	0.9

<sup>1</sup>The growth rate is the annual compound rate of growth, where growth is the excess of births over deaths plus net immigration and the rate is inferred using 1969 as the base year.

In 1946, the birth rate zoomed and, in 1947, reached a peak level of 26.5 per 1000 population. Between 1947 and 1959, it varied between 24.5 and 25.1. This elevated plateau appears to be the longest period of stable U. S. birth rates since 1860.

From the plateau in 1958-59 the birth rate began to decline, until in 1967, 1968, and 1969, it was below the previous record low set in 1933. A mild upturn in births occurred in 1969.

In 1967, the year birth rates first dipped below Depression-levels, the Bureau of the Census published the population projections for the year 2000 that now seem on the high side. To make these projections, the Bureau adopted four different sets of assumptions. One set assumed that in the future women would bear children at rates about equal to rates of the mid-Fifties (Series A). The other, presumably extreme possibility, was that women would bear children at rates about equal to the Depression, avoiding, however, the lowest rates near 1933 (Series D). Two intermediate sets of assumptions were developed based upon a survey of couples' expected family size (Series B and C).

Actual birth rates in the years 1967-69 have caused population growth to fall below



all but the lowest of the Bureau's four projections. Recognizing this, the Bureau in 1970 dropped the highest 1967 projection and added another (Series E) based upon the assumption that future generations will exactly replace themselves.

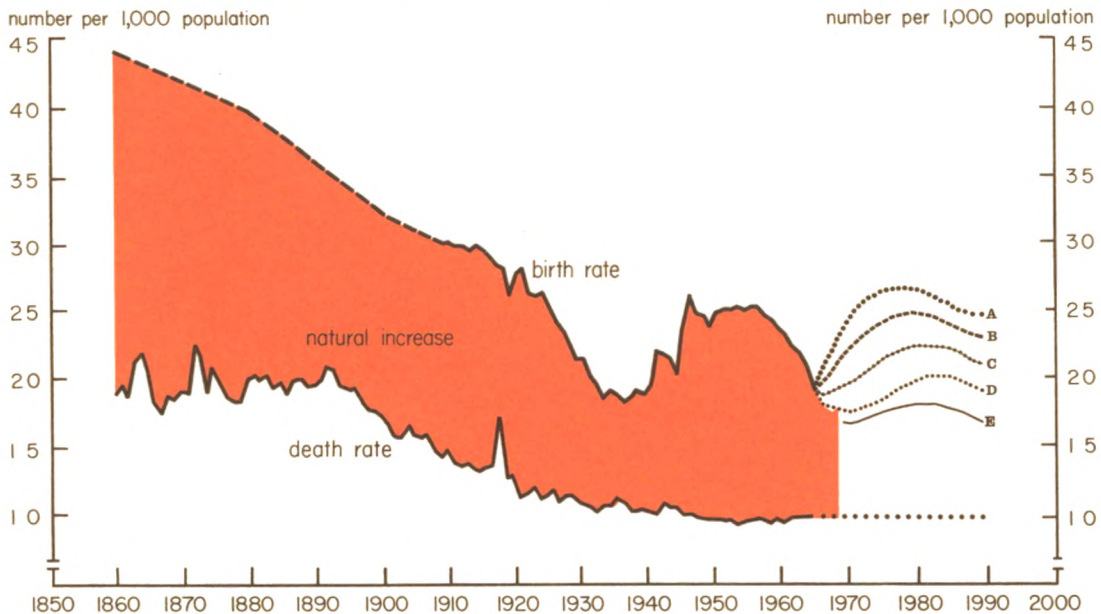
**Short-term birth rates up**

The postwar babies are now in their early childbearing years. The birth rate will probably rise in the short run because of the large

number of young adults, and because child-bearing is concentrated in a woman's early adult years. Over the next decade or so, we can expect the birth rate to rise, but delays in first births and smaller family sizes will have a dampening effect and the birth rate may well remain below Depression levels.

The surge in births in 1946-47 was dramatic, an increase of nearly 33 percent over 1945 levels. Those born in 1946-47 are now young adults, old enough (23-24) to have

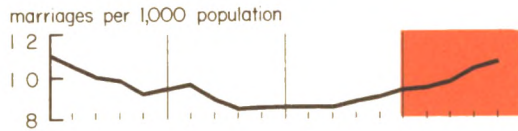
**United States has a history of declining birth rates**



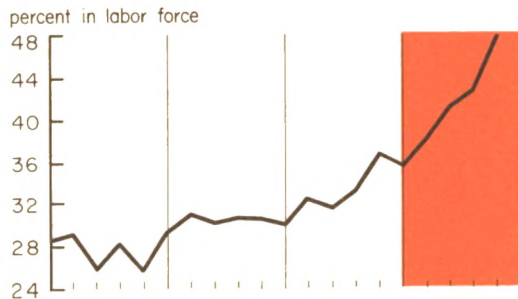
NOTE: Projections A, B, C, and D, prepared by the Bureau of the Census in 1967, are based upon alternative assumptions regarding birth rates; the highest approximates the rates of the mid-Fifties and the lowest approximates the Depression era. Projection E was added in 1970 and is based upon the assumption that future generations exactly replace themselves. Birth rates for 1860, 1880, and 1900 are estimated based upon decennial census information; before 1959 data are adjusted for underregistration in births. Natural increase plus net immigration (not shown) equals total population growth.

SOURCE: U. S. Bureau of the Census and the National Center for Health Statistics.

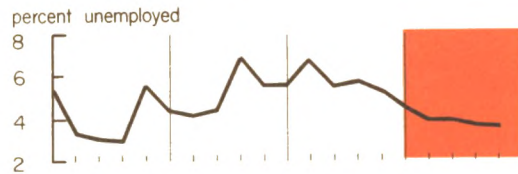
**With marriage rate increasing**



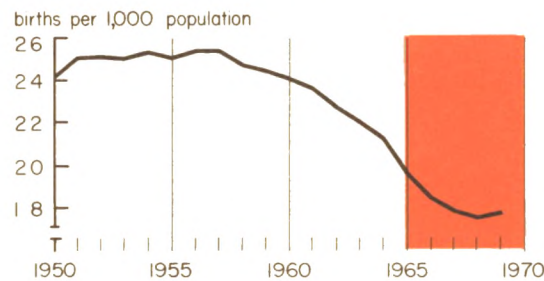
**married women (20-24) become more active in the labor force**



**attracted by a strong demand for labor**



**and the birth rate continues to decline until 1969**



married and produced children of their own.

This increase in young adults is indeed reflected in the marriage rate, which began to rise after 1962 following five years of stability—increasing from 8.8 per 1000 population to 10.6 by 1969. By 1966, over one-quarter of all women born in 1946-47 had married; by 1970, over three-quarters had married. Yet, the birth rate declined until 1969.

The upturn in births in 1969 was slight and may have been caused, in part, by the military buildup in Vietnam. Draft quotas increased abruptly in 1966, taking many young men into the armed forces before they married. Two years later, in 1968, when these young men returned home, the marriage rate increased appreciably more than the average change since 1964.

While the marriage rate was increasing and the proportion of women of childbearing age was growing in the late Sixties, a growing proportion of women began delaying child-rearing and perhaps planning smaller families, too.

Between 1930 and 1962, the average number of children borne by women by the time they had reached age 23 increased steadily while the median age of women at first marriage edged lower. Between 1962 and 1967, however, the average number of births declined 8 percent for white women and 12 percent for nonwhite women who had reached age 23. Contributing to this development was an increase in the proportion of women in the total population who were unmarried.

Even with adjustments for the rising proportion of unmarried women, a trend toward delaying births still is apparent. The rate of childbirth among married women aged 15-19 declined between 1960 and 1969. Between 1964 and 1969, the rate of childbirth declined for married women under 30.

### More working wives

Changes in childbearing among women under 30 have coincided with a substantial influx of younger women into the labor force. Between the end of World War II and 1965, the proportion of women 16-35 in the labor force grew very slowly. Since 1965, however, the proportion of these women in the labor force increased 14 percent.

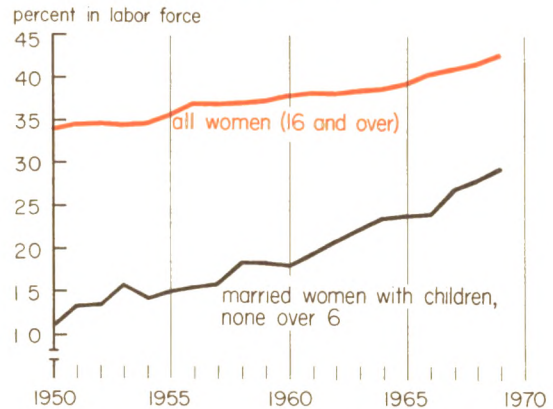
In the most recent **Manpower Report of the President**,<sup>2</sup> two factors are noted as contributing to the shift towards greater labor force participation by young women. One is the rising proportion of unmarried women in the total population. The other is the introduction of popular, more effective, birth control techniques, such as "the pill."

Although the proportion of single women aged 20-24 has risen since 1965, their proportion in the labor force has declined slightly. The proportion of married women aged 20-24 in the labor force, however, has jumped from 37 percent to 48 percent, or nearly one-third. This increase was far greater than the increase in total female labor force participation, married or unmarried, and greater than the increase for single (never married, widowed, or divorced) women of the same age.

The likelihood of a woman working before her family is raised is continuing to increase. Between 1950 and 1969, the proportion of married women in the labor force with husbands present and children only under 6 increased from 11 to 29 percent. During the same period, the proportion of all women in the labor force grew from 34 to 43 percent.

The effect of the new birth control techniques on female labor participation is diffi-

### Mothers of young children enter the labor force at unprecedented rates



SOURCE: **Manpower Report of the President**, 1970.

cult to assess. But birth control techniques used primarily as a means of controlling childspacing are likely to have a short-term effect only.

### Demand for female labor growing

The influx of young women into the labor force was encouraged by an increase in the demand for white-collar workers and a declining unemployment rate in the latter Sixties.

Even before those born in the postwar era were old enough to augment the labor force (at the age of 16), an increase in the relative demand for white-collar labor was evident. Between 1958 and 1962, the proportion of workers employed in white-collar occupations increased from 42.6 to 44.4 percent. The increase in the proportion of service workers was less than half this amount, and blue-collar and agricultural occupations declined in relative importance.

Although less than 40 percent of all working men were employed in white-collar oc-

<sup>2</sup>U. S., Department of Labor, **Manpower Report of the President** (Washington: U. S. Government Printing Office, 1970).

cupations in 1962, over half of all working women were so employed, most in clerical, teaching, or nursing jobs. The demand for white-collar labor continued to be keen after 1962, and by far the most rapidly expanding segments of the white-collar market in the latter Sixties were the clerical and professional categories.

The rapid expansion in female labor force participation, particularly by younger married women beginning in 1965, coincided with a strengthening demand for labor. In 1965, joblessness was at an eight-year low, and it continued to decline in each succeeding year until, in 1969, it reached levels not experienced since the Korean War. However, women did not make significant inroads into traditionally male occupations during this tight labor market period. The main impact of the tight labor market was to increase the demand for traditional kinds of white-collar labor at a more rapid rate.

Over the last few months, the unemployment rate has climbed to the highest levels since the mid-Sixties. If the unemployment rate were to remain at these new higher levels, the female participation rate could fail to advance as rapidly as it has in the recent past.

But female labor force participation has shown surprising strength this year. In spite of a one-third increase in unemployment rates

between May 1969 and May 1970, female participation in the labor force increased at a rate nearly as large as increases of recent years.

### Conclusions

Since 1947, female participation in the labor force has increased by nearly one-third and probably will continue to increase in the decades ahead. It is also likely that women will account for a larger proportion of employment in traditionally male occupations requiring long-term career commitment with the probable result of still smaller family sizes.

The United States has a relatively high birth rate among advanced industrial nations. Western European countries, for example, typically have had lower birth rates than the United States. A long-run birth rate for the United States much lower than the present is possible.

Any attempt to predict population levels as far into the future as the year 2000 is risky because errors in birth rate projections accumulate over time. Although the long-term projection for the birth rate is downward, considerable variation can occur from year to year. Still, the down trend in the rate is sufficient to justify recent revisions in the Census Bureau's projections for the year 2000.

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