Business Conditions

July 1971

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Colleges and jobs

As the 1970-71 academic year came to a close, frequent news stories described the scarcity of permanent jobs for new graduates, and of summer jobs for those planning to return to school in the fall.

During the 1960s, starting salaries offered to those receiving bachelor's, master's, and doctorate degrees increased substantially almost every year. Moreover, qualified graduates typically could choose between a number of attractive offers from prospective employers. In 1971, however, starting salaries were about the same as a year earlier, and many graduates with good records had no firm offers at the end of the school year. Some were forced to take production or service jobs unrelated to their training. Similarly, according to reports of placement offices, summer jobs for students were harder to obtain than at any time since Pearl Harbor.

In large part, the current problems of college-trained job seekers reflect a slack demand for workers in most labor markets. Unemployment was estimated at about 6 percent of the nation's labor force in the second quarter—up from 5 percent a year earlier, and 4 percent in the comparable period of 1969. But this was not the whole story. The number of college students and the size of graduating classes have been increasing sharply ever since the end of World War II, much more rapidly than either the nation’s population or its labor force. Gains have accelerated, moreover, since the mid-1960s, when young people born in the early postwar years began to leave high school. In addition, the proportion of young people in the relevant age range attending college has continued to climb.

Enrollment soars

In September 1970, enrollment at colleges and other institutions of higher learning (defined as schools providing post-high school degree-credit education) was 7.6 million, more than double the 3.6 million enrolled in 1960. In the same interval, 1960-70, total civilian employment rose from 65.8 million to 78.6 million, an increase of 20 percent. In the decade of the 1960s, employment rose more than population (up 14 percent) but less than one-fifth as much as college enrollment. Of course, many students work at least part of the year and are counted in average employment. In the 1950s, college enrollment increased 56 percent. In that decade, employment rose 12 percent, and population rose 19 percent.

In the 1960s, the number of people aged 18-24 jumped 52 percent to 24.5 million. The doubling of college enrollment in the past decade was the result of both the rise in the number of persons of college age, and the rise in the proportion of these people seeking college degrees. In the 1950-60 period, on the other hand, the rise in college enrollment was entirely the result of an increase in the proportion of people of college age (taken as 18 through 24 years) attending school. The number of people in this bracket was 16 million in 1960, no higher than in 1950.

Why go to college?

The desire for a college education, for rich and poor alike, has been part of the American dream for more than a century. A much larger proportion of the adult population has attended college in the United States than in other nations.
Until the mid-19th century, almost all of the colleges were private institutions, often affiliated with organized religion. (Some of the famous eastern schools predate the Revolutionary War.) They were mainly small schools, usually devoted to providing a liberal arts background for young men headed for the ministry, teaching, and the law. Midwestern states took the lead in establishing public institutions of higher learning. Growth of such schools was encouraged by the Morrill Act (1862), which provided land grants to state colleges offering courses in the agricultural and mechanical arts. As late as 1871, however, college enrollment was only about 20 thousand, almost all men.

In the late 19th and early 20th centuries, many public and private colleges expanded their programs to provide professional and post-graduate training in a variety of fields of study and thus became “universities.”

Growth in college enrollment has been almost continuous throughout the nation’s history, interrupted only briefly by wars or severe depressions. As late as 1926, however, less than one million degree-credit students were enrolled. Education in the larger universities typically was restricted to the sons and daughters of well-to-do families; to holders of a relatively small number of scholarships; and to dedicated individuals who “worked their way through” under conditions of relative hardship.

College enrollment increased by 37 percent in the Depression decade of the 1930s. This development was the result in part of special federal programs aiding both schools and students, but it also probably reflected the scarcity of jobs for young people. Owing to widespread unemployment and lower income at the time, those going on to college were often motivated to attend tax-supported institutions, where costs were lower than at private schools. Thus, during the 1930s enrollment at publicly-financed institutions rose 50 percent, while private college enrollment rose only 23 percent. After World War II, college attendance was swollen by hundreds of thousands of veterans benefited by the GI Bill of Rights. Since the late 1940s, other factors have encouraged the growth of college enrollment.

First, the relatively steady advance in the general economy since World War II has increased the ability of families to finance, or help finance, the college educations of one or more offspring. Second, parents with college degrees—a rising proportion of the total—typically expect their example to be followed. Third, it is widely accepted that those who possess college degrees almost automatically are assured of substantially higher incomes than those without such attainment. Fourth, the young men enrolled in universities—both in graduate and undergraduate programs—were, until recently, exempt from the military draft. Fifth, the rapid growth of two-year community colleges has reduced the cost of college attendance for many young people. Sixth, scholarships and government financial aids (including insured loans and deferred tuition) for college students are much more common now than a decade or two ago.

Another factor has been the cultural change that emphasized the value of college education for women as well as men. From the late-1940s to the mid-1960s, total college enrollment was boosted by the larger proportion of women students. Since 1964, however, the ratio of male to female students has been about 60-40. Interestingly, a similar ratio prevailed in the 1930s, prior to U. S. involvement in World War II. During the war, women on campus outnumbered men. In the late-1940s, the proportion of men students rose briefly to about 75 percent. In
the past several years, a number of colleges, long-established as all male or all female institutions, have begun to admit students of both sexes.

**The growing proportion**

In 1950, with the post-World War II bulge of veterans largely dissipated, college enrollment equaled 14 percent of the population aged 18-24 inclusive. After dipping slightly in 1951, this proportion rose each year until 1970, when it exceeded 31 percent. It had been 22 percent in 1960.

A more striking way to measure the rise in college enrollment is to compare first-time enrollment to the number of people reaching 18—the typical age for matriculation. In 1950, new enrollments, at 510 thousand equaled 21 percent of the number of people reaching 18. Except for 1951 and 1964, this proportion rose each year, reaching 46 percent in 1970, when new enrollments numbered 1.8 million. Apparently, almost 50 percent of all 18 year-olds now go to college.

About 80 percent of young people now graduate from high school.

Births averaged less than 2.5 million annually in the 1930s, but rose to the three million level in World War II. Births reached 3.4 million in 1946, four million in 1953, and peaked at more than 4.3 million in 1957. The birth rate relative to total population declined after 1957, but the growing number of families kept the number of births at about 4.3 million for five successive years, from 1957 through 1961. In the following years, the number of births declined gradually to 3.5 million in 1968 before turning up again.

Children born in 1957 will not reach 18 until 1975. Assuming stability in the ratio of college enrollments to the number of people reaching 18, college enrollments can be expected to rise in each of the next five academic years. The increase from 1970 to 1975, however, would be only 10 percent. If the proportion of young people attending college continues to rise, the increase in enrollments would be greater, but probably still far short of the rate of increase of the 1960s.

**Public versus private**

As recently as 1950, enrollments in private colleges and public colleges were about equal. In the 1950s, however, enrollment in public institutions increased three times as fast as enrollment in private schools. In the 1960s, public enrollment increased almost five times as fast. Moreover, most of the increase in private college enrollment in the 1960s occurred in the early years of the decade. In 1970, private college enrollment, at two million, was only slightly higher than in 1965 and appeared to be declining slightly. Public enrollment in 1970 was 5.6 million, up from 5.6 million, up from 3.6 million in 1965.

The relative rise in public higher education largely reflects the increased availability
of funds from federal, state, and local governments. Private schools typically charge much higher tuition than public schools, about double on the average, and the gap has widened. Even in private schools, however, tuition charges fall far short of total requirements for funds. Many of these institutions receive some public support, but most are heavily dependent on earnings from endowments and current gifts of alumni and other philanthropists. Funds obtained from private gifts have tended to lag in recent years.

Many public universities have grown at extremely rapid rates in the past ten to 15 years, much faster than total enrollment. Some “teachers’ colleges” that had one or two thousand students now are universities with enrollments of ten thousand or more. The growth of these schools has resulted in strong competition for qualified faculty, administrative, and maintenance personnel.

Among the most striking developments of the past two decades has been the proliferation of junior colleges, usually public institutions, offering two-year programs. The number of junior colleges has doubled since 1960, while enrollment has more than tripled. Enrollment in these schools was more than 1.4 million in 1970, compared to 450 thousand in 1960 and only 200 thousand in 1950.

Because of low tuition, liberal admission requirements, and ready accessibility, junior colleges offer opportunities for post-high school education to people who would not have been able to attend college in the past. Junior college students typically live within commuting distance of school and can avoid the extra living expenses traditionally associated with college attendance.

Courses and degrees

In the past 15 years, about 10 to 12 percent of college enrollment has consisted of students with bachelor’s degrees seeking advanced degrees—usually master’s or doctorate degrees. This proportion has risen only slightly since the mid-1950s, after rising sharply in earlier decades. Fall enrollment for 1969 included about 900 thousand graduate students and 6.4 million undergraduate students. In 1957, there were 300 thousand graduate students and 2.8 million undergraduates.

The proportion of graduate students may have declined in the 1970-71 academic year, and it may decline again this fall. Reduction in the volume of public funds supporting these programs, reduced availability of jobs, and the withdrawal of draft exemption for students have been mainly responsible for the change. Private universities have been particularly hard hit. Another factor affecting graduate school enrollment in the past two years has been sharply-reduced needs for university faculty members and for research scientists. Large net reductions of staff in the
aerospace industries have replaced extensive hirings in earlier years.

The increase in the number of people with advanced degrees relative to those with bachelor’s degrees is implied by a comparison of the number of degrees conferred at the two levels. While the enrollment of students seeking advanced degrees has been fairly stable relative to those enrolled as undergraduates since the mid-1950s, the number of graduate degrees conferred has continued to rise relative to the number of bachelor’s degrees conferred. Apparently, there are fewer dropouts among graduate students than among undergraduates. The attrition rate for freshmen is 40 percent or more in some colleges.

In 1970, graduate degrees accounted for 26 percent of all university degrees conferred. This ratio was 18 percent in 1960.

In 1970, 815 thousand students received bachelor’s degrees, 244 thousand master’s degrees, and 31 thousand PhDs. The number of bachelor’s degrees doubled from 1960 to 1970, while the number of master’s degrees and PhDs both more than tripled. Before World War II, people with advanced degrees were relatively rare. Many elementary and high schools (as well as business firms) that boast of the number of “doctors” on their staffs today may have had none at all 20 years ago.

Since the mid-1950s, the U.S. Office of Education has compiled detailed information on degrees conferred by colleges and universities. About one-fourth of all degrees, bachelor’s and advanced, are awarded in education, about the same as 15 years ago. The rise in the number of trained teachers, combined with slower growth in secondary and elementary enrollment, has brought a dramatic change in the job market for teachers in recent years. Surpluses have replaced shortages in a relatively brief period.

Second to education in popularity are the social sciences—mainly history, political science, economics, and sociology—with about 17 percent of all degrees. Degrees conferred in the social sciences have increased sharply relative to degrees in the physical sciences.

Among the specific fields of study, degrees in mathematics have shown the largest increase—up six times from the mid-1950s to the late-1960s. This increase was spurred by realignments of curricula that followed the Soviet “Sputnik” satellite in 1957. In the past 15 years, the smallest increases in degrees conferred were in health and medicine and in engineering.

A big business

Total enrollment in higher education, including non-degree-credit students, currently exceeds eight million. Professional staffs of colleges and universities, mainly professors and instructors, exceed 900 thousand. Experts foresee an expansion of 40 percent in
these numbers by 1980—a much less rapid growth than in the past decade, but still much faster than the prospective rise in either population or employment.

Expenditures by colleges for all purposes totaled $22.7 billion in 1970, more than triple the amount ten years earlier. These outlays are expected to double in the 1970s.

On average, Americans 25 years and older now have completed 12.2 years of school. In 1960, the average was 10.6 years; in 1950, 9.3 years. The figures doubtlessly will continue to rise.

To any high school graduate, the decision of whether to go to college or to enter the labor force rests upon an evaluation of the costs and benefits that the two options appear to offer. But the choice made may reflect the preferential terms upon which college is offered because of the subsidy inherent in the generous tax support provided to higher education. Perhaps an awareness that college training has been to some extent overstressed accounts for the emergence in recent years of expanded public support for post-high school vocational training. Much of this training is being provided by junior colleges or community colleges. These institutions typically offer a wide array of one- and two-year terminal programs that are directly job-oriented, alongside two-year curricula for young persons going on to senior colleges.

**Time deposit growth—back on track?**

Growth in commercial bank time deposits slowed in the second quarter of 1971, after increasing at a spectacular pace during the previous nine months. Preliminary June figures show gains over March at an annual rate of 12 percent, compared with a 29 percent rate of increase from mid-1970 through the first quarter of 1971. To a large extent, the strong inflows represented the return to the banks of household and business funds that had been diverted to direct investments in higher-yielding market instruments during 1969 and early 1970—the so-called “disintermediation” phenomenon. Judging from the experience of large, weekly reporting banks in major cities, time deposits of individuals, partnerships, and corporations (IPC) have surpassed the pre-1969 level and have nearly caught up to the 1961-68 deposit-growth trend line. (See chart)

Some slowing in the growth rate was to be expected as time deposits at commercial banks approached their long-term trend line, and the second-quarter experience has already borne this out. As the chart shows, growth in the 1961-68 period approximated a straight line. A return to this track by the end of 1971 would imply a second-half increase of about $6 billion, or an 11 percent annual rate.

The wide deviations from the growth trend in the past two years demonstrate, however, that an extrapolation of past trends is not always a reliable indicator of future events. The growth pattern from now on will depend on the same basic factors that consistently
Deposits at U. S. weekly reporting banks nearly regained their long-term growth path

The major swings in time deposits during recent years are attributable to changes in large negotiable certificates of deposit (CDs). First introduced in February 1961, the CD instrument accounted for 21 percent of total time deposits outstanding at U. S. weekly reporting banks at the end of 1968. Businesses held $15.1 billion, or 64 percent, of these instruments, while others (mostly foreign official institutions and state and local governments) held the remaining $8.4 billion. In addition to making up almost two-thirds of total CDs outstanding, CDs held by business firms have accounted for most of the short-run changes in such deposits.

The negotiable CD is one of a number of sources used by large commercial banks to generate loanable funds when growth of demand deposits and consumer-type savings accounts do not provide adequate inflows of such funds. When the need for funds is expected to persist, the issuance of new CDs—which have a minimum maturity of 30 days—is generally preferred to overnight purchase of federal funds or increases in other nondeposit liabilities. By raising its offering rate on new CDs, the individual bank can induce investors to sell other financial instruments (or refrain from purchasing other financial instruments out of current income) and to purchase the quantity of new CDs the bank desires to sell. This was one of the principal means by which the large banks financed their steady credit expansion through most of the Sixties.

The flexibility provided to bank management by the negotiable CD is subject to a major constraint, however. The maximum interest rates that banks are permitted to offer on new CDs, as well as other time deposits (with the exception of those due to foreign official institutions and since June 1970, 30-89 day maturity), are subject to regulatory ceilings. Three times in the last five years ceiling rates have prevented banks from raising funds by issuing CDs. Throughout 1969, while yields on other financial instruments were rising sharply, the Federal Reserve Board—as part of its program to restrain credit growth—maintained time deposit rate ceilings at the levels established in April.
1968. As other market rates rose above the regulatory ceilings, the ability of banks to compete for new funds was seriously impaired. Moreover, as outstanding CDs matured, investors were unwilling to renew them because higher rates were being paid on other financial instruments. The result was a $10 billion decline in business CDs during 1969.

In January 1970, in an effort "... to set the stage for a renewed expansion of bank credit," the Federal Reserve Board raised rate ceilings on large CDs by ¾ to 1 ¼ percentage points, depending on maturity. This was not enough to change the banks' competitive position materially, and business CDs increased by only about $700 million during the first half of 1970.

The ability to attract CD money was restored in June 1970, when ceilings on CDs with original maturities of 30-89 days were suspended indefinitely. The bankruptcy of the Penn Central Railroad (a large volume borrower in the commercial paper market) shook investor confidence in the quality of commercial paper issued by many major corporations. Along with assurances of access to the discount window for banks confronted with unusual business loan demands, the suspension of rate ceilings by the Federal Reserve Board represented an effort to permit banks to obtain funds to finance short-term loans to businesses that were temporarily unable to refinance maturing commercial paper.

Banks immediately raised their offering rates on short-term CDs, and corporate holdings of such deposits increased at a rapid pace. Reinforced by the subsequent decline in market interest rates—which made bank offering rates on longer-term CDs competitive with market instruments—corporate CDs outstanding at U. S. weekly reporting banks increased by more than $10 billion during the second half of 1970, reaching a new peak.

The uncertainty in the commercial paper market proved to be short-lived, partly because of the Board's action in providing an immediate alternative source of short-term credit. As a result, banks used much of the $10 billion increase in funds raised through issuance of corporate CDs to repay funds previously raised through other channels—primarily borrowings in the Eurodollar market. Thus, the rapid growth of corporate CDs was not accompanied by a correspondingly rapid growth in total credit outstanding at large banks.

The rate of increase in corporate CDs moderated in the first half of 1971. A combination of weak demand for bank loans and massive deposit inflows from the household sector reduced bank needs for CD funds. Offering rates on CDs were reduced but were maintained at high enough levels to prevent runoffs of maturing CDs.

With outstandings now totaling more than $17 billion, business CDs represent funds equal to about 7 percent of the loans and investments of U. S. banks in the over-$100 million deposit-size class. When those held by others are included, CDs represent more than 10 percent of credit sources and considerably more than this at some of the very large banks. The volatility of such deposits has been amply illustrated during the past two years, and any projection of future growth must take account of the factors likely to affect changes in CDs.

The household sector

One of the principal reasons for the slower rate of increase in large CDs this year has been the flood of money into consumer-type time and savings accounts at commercial banks. Acceleration in these inflows began
late in 1970 and continued into the first half of 1971.

At the end of 1968, consumer-type deposits amounted to $79.2 billion, about 85 percent of total IPC time deposits at large U.S. banks. By the end of 1969, such deposits had fallen to $77.6 billion, a decline of 4.5 percent. Consumer deposits showed little change over the first half of 1970, then began to rise sharply, increasing by $5.4 billion during the last half of 1970 and by an additional $9.1 billion during the first half of 1971. The 12-month increase amounted to $14.5 billion, significantly more than the net increase in corporate CDs during the same time period.

Inflows into consumer deposits come from two principal sources: saving out of current income and the proceeds from sales or retirements of other financial assets. In 1970 and early 1971, current saving was sharply higher than in 1969. The major impetus to time deposit growth, however, came from a shift of investor allocation of funds from market instruments to deposits at savings institutions, including commercial banks.

**Saving out of current income**

Consumer saving amounted to 7.3 percent of current disposable income in 1970, compared to 6 percent in 1969. A number of factors appear to have given rise to this increase in the saving rate, which remained at an unusually high level into the spring of 1971. The sharpest increase in saving occurred in the second quarter of 1970 and was associated with an unusually large increase in disposable income due to retroactive social security and federal pay increases. Most of this sharp, transitory increase in income was saved rather than spent immediately. Another unusual factor that temporarily contributed to sustaining the high rate of saving was the

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*Preliminary data.*
fourth-quarter 1970 GM strike. The strike reduced output of new cars with the result that consumer spending and instalment borrowing for new autos were lower, and saving higher than usual.

Widespread uncertainty over the future course of the economy probably contributed to the persistently high saving rate, also. Unemployment began to rise sharply after mid-1969, and, reinforcing the uncertainty generated by rising unemployment, a sharp decline in stock market prices occurred during 1969 and early 1970.

Whatever the reasons, there was a substantial change in consumer attitudes with respect to the allocation of income between spending and saving. The higher level of saving was reflected in increased acquisitions of financial assets—partly in the form of time and savings accounts at commercial banks and other savings institutions. More important than the increased acquisition of total financial assets, however, was the shift in consumer preferences away from market instruments and toward savings accounts.

**Competition for household savings**

Though to a lesser degree than corporations, consumers also are influenced by relative interest rates in allocating their funds among alternative forms of saving. During all of 1969 and the first quarter of 1970, commercial banks were at a decided disadvantage in competing for new savings of the household sector because Regulation Q ceilings held bank interest rates below yields on market instruments. Consequently, an unusually large proportion of the household sector’s savings was channeled into market instruments—particularly U. S. Government securities, for a time available at rates as high as 8 percent.

During 1968, increases in time and savings deposits at all commercial banks in the nation accounted for 24 percent of the net increase in financial assets of the household sector, and similar deposits at other savings institutions accounted for an additional 20 percent. In the second half of 1969 and the first quarter of 1970, however, increases in time and savings deposits at banks accounted for only about 2 percent of the household sector’s net acquisitions of financial assets, and such deposits at other savings institutions accounted for about 8 percent. Other savings institutions—savings and loan associations, mutual savings banks, and credit unions—sustained their deposit inflows better than commercial banks, perhaps because most of these institutions offered slightly higher deposit interest rates than commercial banks. Nevertheless, all types of savings institutions lost substantial amounts of potential deposits to the open market during 1969 and early 1970. The Federal Reserve Board had raised the structure of ceiling rates on small denomination consumer-type time and savings deposits in January 1970, and as market rates began to fall below these higher deposit rate ceilings in late 1970, banks were again in a position to compete for consumer savings. Another factor which probably improved the competitive position of banks and other savings institutions was that the U. S. Treasury ceased issuing bills in denominations below $10 thousand after March 1970.

Not only were banks and other savings institutions able to attract most of the household sector’s new savings out of current income, they also received a large share of the funds raised through net sales and redemptions of credit market instruments. During the first quarter of 1971, increases in time and savings deposits at banks and other savings intermediaries were greater than the increase in total financial assets of the house-
hold sector. Preliminary flow of funds data indicate that roughly 70 percent of this deposit inflow resulted from a shift out of U. S. Government securities.

An unusual feature of the sharp increase in consumer-type deposits in 1970-71 was that, contrary to experience since 1965, regular passbook savings accounted for much of the gain. Since large commercial banks began to compete actively for small denomination deposits by issuing higher-yielding (minimum maturity) time deposits, passbook savings balances have declined or shown only small year-to-year increases. This trend was reversed in the 1970-71 period, partly because of individuals' desires for readily accessible funds and partly because rates paid on passbook accounts grew increasingly attractive relative to yields on other types of deposits and market instruments. Rates on passbook savings were generally maintained at early-1970 levels, despite sharp declines in short-term market rates and fairly widespread reductions of bank rates on minimum-maturity time deposits.

**Will the track bend?**

Time deposits have traced an almost continuous upward path over the past ten years except at times when interest rate ceilings got in the way. The major deviation from this path was in 1969-70. Relatively minor deviations occurred in late 1966 and again in the spring of 1968. But, in each case, the shortfalls from trend were quickly made up as soon as rate maneuverability was regained.

It seems clear that the principal means of growth for commercial banks is via the time deposit route. This is virtually the only way available to smaller institutions. In times of stress, large banks have resorted to nondeposit liabilities, such as Eurodollars and commercial paper issued by affiliates, to offset their inability to compete for time deposits. When the constraint imposed by Regulation Q ceilings ceased to be binding, however, the large banks reduced their nondeposit liabilities and resumed growth along the time deposit track.

Assuming that banks will continue to rely on time deposits as a major source of loanable funds and also that the banking system will continue to be a major source of credit for the economy, there is little reason to expect the growth trend to slacken in the near future. Inflows of consumer savings will continue as a strong base for this growth, with short-run variations in both net savings inflows and the strength of credit demands accommodated mainly by the aggressiveness with which banks bid for corporate deposits.

If there is one conclusion that stands out from this review, it is that relative interest rates were the most important factor determining short-run changes in deposits during 1969-71. The consumer sector's savings are interest-sensitive, as are corporate short-term funds. If permitted to compete at market rates, banks are likely to attract a respectable portion of these funds.