FEDERAL RESERVE BANK OF RICHMOND

MONTHLY REVIEW

1968 Balance Of Payments In Perspective Residential Mortgage Market Research In A Triangle: Part I The Fifth District





1968 Balance Of Payments In Perspective

The United States recorded a small surplus in its balance of payments in 1968, the first surplus on a liquidity basis since 1957 and only the second since 1949. But perhaps more important than the overall surplus was the dramatic shift in the payments pattern of recent years. The traditionally strong trade surplus virtually disappeared while private capital flows, usually a large debit item, turned sharply inward. This article attempts to put these recent developments into historical perspective.

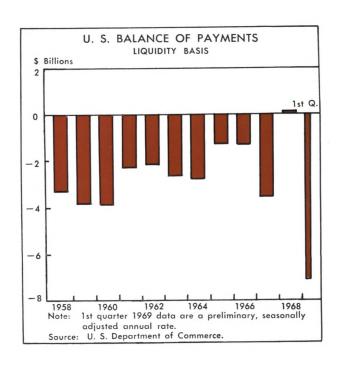
The Postwar Pattern The United States emerged from World War II in a strong competitive position in world markets. Its productive capacity had expanded greatly during the war while much of that of the other industrial nations had been destroyed. The demand of foreign countries for imports, both for reconstruction purposes and for current consumption, greatly exceeded their ability to pay with exports. Consequently, the United States ran huge surpluses in its international trade in the early postwar years. In the 1946-49 period U. S. exports of goods and services exceeded imports by \$8 billion per year, about \$7 billion of which represented the trade surplus.

Only about a sixth of the surplus on goods and services was financed by private U. S. capital outflows and gifts. Most of the remainder was made possible by U. S. Government loans and grants, including Marshall Plan aid. Roughly half of the surplus was financed by Government grants and private gifts and thus did not increase U. S. claims on future foreign output or saddle other nations with the burden of foreign debt repayment. The export surplus was, in the main, the real counterpart of massive U. S. assistance with postwar reconstruction, primarily in Western Europe.

Despite the vast capital outflows associated with U. S. aid, the total U. S. payments position remained in surplus over this period, and the U. S. Treasury acquired substantial amounts of gold from abroad. By the end of 1949 official U. S. gold holdings stood at \$24.56 billion, approximately 70% of the gold reserves of the non-Communist world.

Our huge export surplus was reduced after 1949. European recovery was well on its way by then, and U. S. economic aid was cut back sharply. Moreover, a series of currency devaluations in September 1949, touched off by the British devaluation of the pound, cut further into the U. S. competitive advantage. The surplus on goods and services fell from an average \$8.2 billion in the 1946-49 period to \$4.7 billion in the period 1950-56. But in contrast to the earlier period, the private and Government outflow of capital and gifts exceeded the export surplus, leaving a small deficit in the balance of payments. The deficit averaged \$1.5 billion from 1950 through 1956, but rather than being considered a problem, it was welcomed on the grounds that the world was suffering from a chronic dollar shortage that could only be met through U. S. deficits.

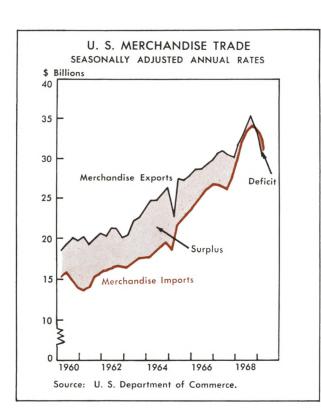
From Dollar Shortage to Dollar Glut The U. S. recorded a small overall surplus in 1957, largely due to the disruption of world trade patterns associated with the Suez crisis. But in 1958 the deficit reappeared, and the dollar shortage turned into a dollar glut. From the narrow standpoint of our balance of payments, the rebuilding of economies of the world's trading nations had worked only too well. In contrast to the small "planned" deficits of the early 1950's, the deficits since 1958 (chart 1)



have been much larger and quickly became a major concern of economic policy.

The deficit since 1958 has changed in composition as well as magnitude. The deficit on the liquidity basis is measured by the decline in gold and other reserve assets and the increase in liquid liabilities to foreigners. Before 1958 foreign countries added most of the excess dollars supplied by our deficits to their official reserves and purchased only small amounts of gold. But as the deficits grew larger and the foreign demand for dollar balances was satisfied, foreign monetary authorities increasingly exercised their right to convert dollars into gold. Official gold sales reduced the gold stock from \$22.86 billion at the end of 1957 to \$10.89 billion by the end of 1968. Net gold sales in 1968, however, were concentrated in the first quarter and ended with the establishment of the two-tier gold market in March.

While the overall deficit has been large since 1958, our trade accounts, until recently, remained in substantial surplus. The trade surplus (chart 2) averaged \$4.2 billion during the 1958-67 decade while the surplus on goods and services combined (chart 3) averaged \$6.3 billion. But the export surplus was more than offset by deficits in private and Government capital accounts and unilateral transfers, leaving an average liquidity deficit of \$2.7 billion that was financed through sales of reserve



assets (\$1 billion) and increases in liquid liabilities to foreigners (\$1.7 billion).

Policies and Programs The traditional prescription for a deficit under fixed exchange rates is the application of deflationary monetary-fiscal policies. But until mid-1965 such policies were in conflict with efforts to achieve full employment of domestic resources. "Operation twist" in the early 1960's represented a limited attempt to reconcile these conflicting objectives by supporting short-term interest rates for balance of payments purposes while depressing long-term rates to promote domestic investment.

With conflicting objectives precluding a broad monetary-fiscal attack on the deficit, most of the effort has been aimed at particular segments of the balance of payments. For example, in the early 1960's the Government attempted in several ways to reduce the net impact of its transactions on the deficit. It tried to persuade countries in which U. S. troops are stationed to offset part of the foreign exchange costs through purchases of U. S. military equipment and long-term securities. It also sought to tie foreign economic aid to the purchase of U. S. goods to neutralize its impact on the deficit, while at the same time the Department of Defense undertook a sharp curtailment of its offshore procurement program.

Since 1961, however, most of the programs to deal with the deficit have aimed at restricting the outflow of private capital. The first such measure was the interest equalization tax (IET) on foreign issued securities which became effective July 19, 1963. The tax amounted to 15% of the purchase price of stocks and up to 15% of the price of debt instruments with maturities over three years. It raised the effective interest rate to foreigners borrowing in the U. S. capital market by about 1% per annum. Securities of underdeveloped countries and new issues of Canadian securities were exempted.

The IET sharply reduced the sale of securities to which it applied, but heavy outflows of private capital for direct investment continued. Moreover, a rapid rise in bank loans to foreigners suggested that bank credit was being substituted for securities covered by the IET. Accordingly, in February 1965, the President extended the tax to term bank loans and broadened its coverage on securities to include those with maturities over one year. He also instituted a program of voluntary restraint on credit to foreigners by U. S. banks and nonbank financial institutions, to be administered by the Federal Reserve System, and a program of voluntary limitation

of foreign direct investment by U. S. businesses, administered by the Department of Commerce.

Whereas the IET was essentially a tariff on imported securities, and thus operated as a market device, the credit restraint program placed direct quotas on private capital outflows. The Federal Reserve requested banks to limit their foreign credits in 1965 to 105% of the amount outstanding at the end of 1964. The guidelines for nonbank financial institutions were comparable to those for banks. Priority was given to export loans and credits to less developed countries. The companion Commerce program aimed at reducing the net capital outflow arising from direct foreign investment activities of U. S. firms. Due largely to a sharp reduction in foreign claims reported by U. S. banks, the net outflow of private capital declined substantially in 1965 and 1966 as did the overall deficit in the balance of payments. The sharp deterioration in the payments position in 1967 led the President on January 1, 1968 to propose more restrictive measures. Commerce program was tightened and made mandatory, while guideline ceilings under the Federal Reserve program were lowered. Both programs, however, have been liberalized somewhat this year.

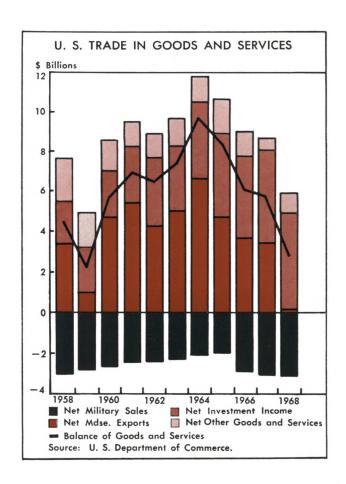
Recent Changes in the Postwar Pattern The sharp drop in the export surplus and the reversal of private capital flows last year represented an acceleration of a trend that began in 1965. The trade surplus fell from \$6.6 billion in 1964 to \$3.5 billion in 1967 to only \$0.1 billion in 1968. The surplus on goods and services dropped from \$9.7 billion in 1964 to \$2.8 billion last year. Preliminary estimates show a further decline so far in 1969, although a major dock strike early in the year may be largely responsible for this decline.

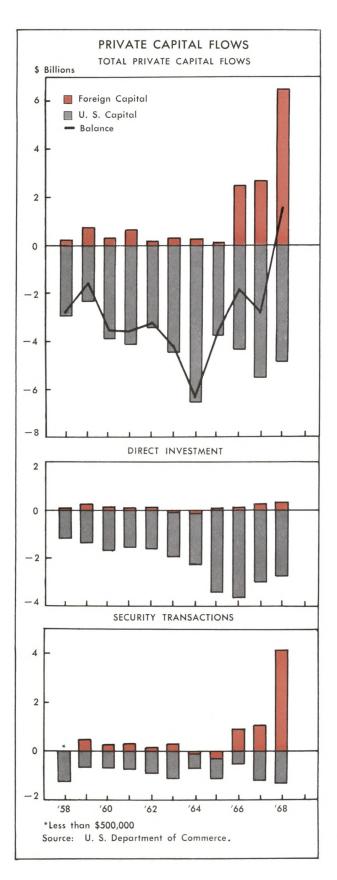
The deterioration in the U. S. export surplus coincides with the current inflation that began with the Vietnam buildup in 1965. From 1960 to 1964, a period of exceptional price stability and less than full employment, merchandise exports grew at a 9.2% compounded annual rate while imports expanded at a 4.0% rate. Exports continued to grow at a substantial 7.2% rate in the 1965-68 period, but imports, under the influence of domestic inflation, increased twice as fast, at 15.7%. The large export growth of 9.5% in 1968 was overwhelmed by a fantastic 23.3% rise in imports.

An inflationary boom reduces the trade balance in two ways. As incomes rise people spend more, and part of the additional spending is for foreign goods. In addition to the income effect on imports, there is a related substitution effect as high and rising domestic prices lead to a substitution of foreign for domestic goods. At the same time, export products become less competitive.

Improvement in other accounts more than offset the reduction in the export surplus in 1968, yielding a slight surplus of \$0.2 billion in the balance of payments. Most of the improvement was in the private capital account, which swung from a net outflow of \$2.8 billion in 1967 to a net inflow of \$1.6 billion in 1968. This improvement resulted primarily from a \$3.7 billion increase in the inflow of foreign capital, mainly in the form of foreign purchases of U. S. securities.

Some of the improvement in the capital accounts can probably be attributed to the various capital control programs described earlier. Banks, for example, reduced their foreign claims substantially in 1968. Direct investment abroad declined only moderately, but a much larger portion was financed abroad and thus did not add to the net outflow of U. S. funds. The unexpected overall surplus would not have occurred without a huge year-end repatriation of corporate funds from foreign affiliates to meet the in-





vestment quotas set by the Commerce program.

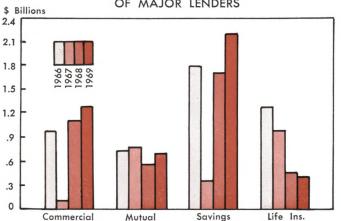
Special programs, however, have a way of working better if they are reinforced by underlying market forces. Most of the credit for the improved capital account probably should go to rising interest rates relative to foreign interest rates. Relatively high U. S. interest rates tend to attract foreign capital and keep U. S. capital at home. They encourage U. S. corporations to finance their foreign operations abroad. Tight domestic credit conditions help U.S. banks and other financial institutions to reconcile the foreign credit restraint program with their profit objectives. Certainly the fact that banks consistently have maintained their foreign credits well below the guideline ceilings suggests that the program is not their only constraint, nor even the main constraint, on foreign lending.

It is ironic that the high interest rates which helped the capital account in 1968 were partly the result of domestic inflation which contributed to the worsening of the trade balance. In other words, inflation had an offsetting influence on the trade and capital accounts. Unfortunately, its harmful effect on the trade balance is likely to be more permanent and more difficult to reverse than its beneficial effect on the capital account. The ability of high interest rates to attract capital during a period of inflation is found to be transitory, as the higher money return is offset by a lower value of the monetary unit. Fundamental improvement in our balance of payments must await the elimination of inflation. But if the end of inflation brings lower interest rates, a capital outflow could precede any substantial improvement in the balance of goods and services, worsening the overall balance in the meantime.

Another factor that will affect the published deficit in 1969 will be the use made of "special transactions" by the Government. Special financial transactions reduce the published liquidity deficit by shifting foreign dollar claims into nonliquid or near liquid forms, e.g., time deposits with 366 days or more maturity and certain nonmarketable, mediumterm U. S. Government securities. Such transactions, which involve little fundamental improvement, reduced the published deficit by \$2.3 billion last year, as compared to \$1 billion in 1967. If less reliance is placed on such transactions in the future, an increased liquidity deficit could mask a more fundamental improvement in the balance of payments.

Robert D. McTeer, Jr.

FIRST QUARTER NET CHANGE IN MORTGAGE HOLDINGS OF MAJOR LENDERS



and Loans

Companies

RESIDENTIAL M

While a degree of tightening has occurred in the residential mortgage market in recent months, funds have not become as scarce as during the 1966 period of credit stringency.

Virtually all principal mortgage lenders made sizable first quarter additions to their mortgage holdings.

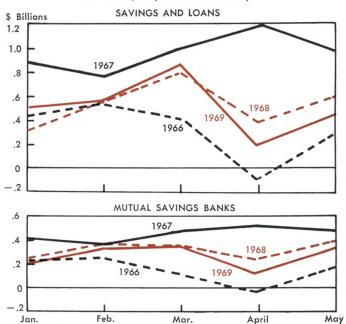
NET FLOW OF FUNDS INTO SAVINGS INSTITUTIONS

(Seasonally Adjusted Annual Rates)

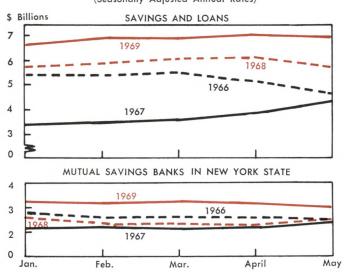
Compared with the same period in other recent years, net inflows of funds at savings institutions, the dominant suppliers of home mortgage funds, have held up fairly well so far this year. Some weakening in these inflows, however, is suggested in the latest data.

Savings Banks

Banks



MORTGAGE COMMITMENTS OUTSTANDING (Seasonally Adjusted Annual Rates)

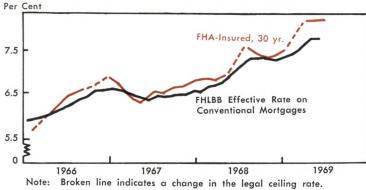


Mortgage commitments at savings institutions have remained at relatively high levels, reflecting the industry's cautiously optimistic view concerning near-term capital availability.

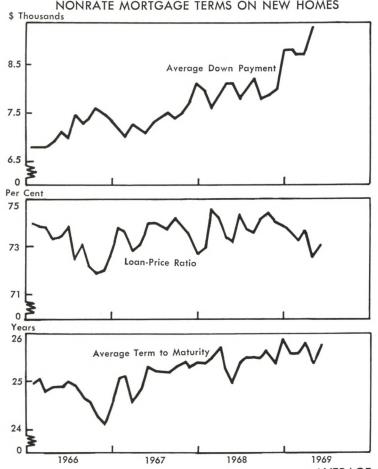
RTGAGE MARKET

INTEREST RATES ON HOME MORTGAGES

While mortgage funds for singlefamily homes have been available, their cost has been rising steadily,



NONRATE MORTGAGE TERMS ON NEW HOMES

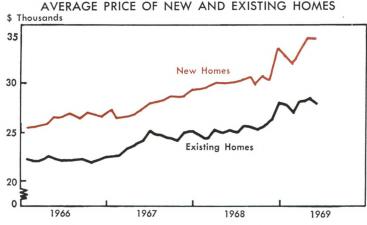


. . . and several nonrate terms have become more restrictive. Average down payments have risen sharply and loanprice ratios have been declining, on balance. On the brighter side, average terms to maturity have been relatively stable.

Home buyers have been contending with soaring housing prices, reflecting in part the trend toward construction of larger and more luxurious homes.

Jane F. Nelson

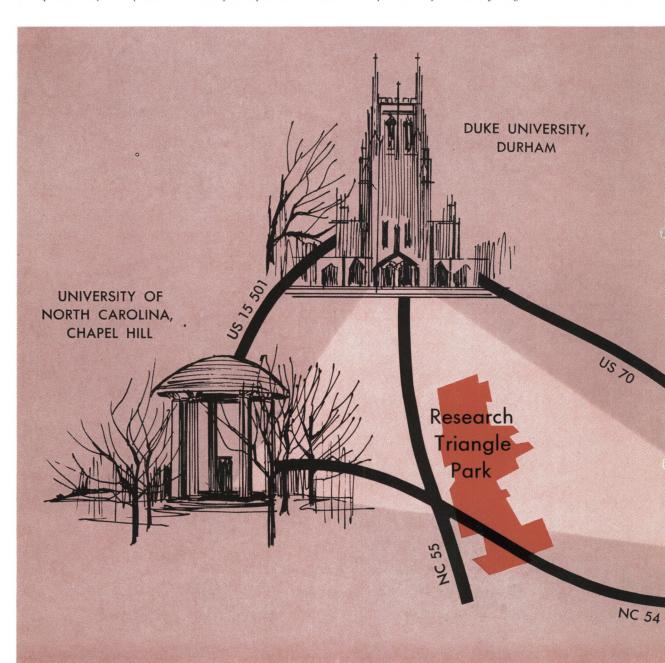
Sources: Board of Governors of the Federal Reserve System and the Federal Home Loan



RESEARCH IN A TRIANGLE: PART I

Nestled in the flat land of the Piedmont section of North Carolina is one of the most successful research centers in the country today. The Research Triangle, bounded by Raleigh, Durham, and Chapel Hill—once only a dream—is now a thriving research conglomerate. Eighteen research organizations, whose research activities are as diverse as textile chemistry, environmental health problems, and computer components, form the hub of the Research Triangle complex.

The specific activities of these organizations will be discussed in Part II of this series. How the Research Triangle began, what it has become, and why it has succeeded when many similar attempts have failed provide the subject of this article. This portion of the story begins in the mid-1950's.



History A research center for North Carolina was envisioned as early as 1955. The original stimulus for the idea was an economic one. Realizing the need to diversify an economy which for decades had been dependent on tobacco, textiles, and furniture, leaders of both government and industry were willing to consider and experiment with any idea that might lure industry to their state. A center devoted to scientific, technological, and industrial research, they concluded, would not only be a big business in its own right, but would also attract major industries which thus far had bypassed the Tar Heel State. The original planners were extremely fortunate in



having a nearly perfect site for their proposed research center. Three universities, located in the north-central portion of the state within close proximity to one another, conveniently provided the academic resources vital to the research-development objective. The University of North Carolina at Chapel Hill, Duke University in Durham, and North Carolina State University in Raleigh formed a scalene triangle—too obvious to ignore in naming the project. The Research Triangle offered the ideal environment for almost any type of study. Furthermore, the cultural advantages associated with university life were an enticement to the necessary human element; concerts, art exhibits, little theaters, and the possibility of continuing education combined with living in a relaxed country atmosphere made a tempting combination.

Preparations for the new research complex were begun, and by mid-1958 a name and site had been chosen. The Research Triangle Park, the land provided for the prospective industrial and governmental research organizations, was located at the base of the Triangle, within easy reach of all three universities and purposely near the Raleigh-Durham Airport. Restrictions were established to insure both the purpose and appearance of the Park. Occupants were to be organizations devoted solely to research and research-oriented manufacturing and, in order to maintain a park-like, campus atmosphere, were allowed to cover no more than 15% of their allotted acreage with buildings.

When the location of the Park had been selected, the problems associated with developing a research complex became manifest. Land had to be acquired, money had to be collected, promotion work had to be started, and most important of all, clients had to be found. It was a slow, disorganized period for the Park—and the most complicated part of its history. The complexity was increased by the unique combination of business, government, and academic interests in the project. The difficulties were slowly and carefully overcome, however, until the present organization and structure were attained.

The underlying cause for the success of the whole research project seems to have been the ability of dissimilar interests to work for one common goal which would ultimately benefit all. There were, of course, additional factors which contributed to the success; the close alliance with the universities, careful and detailed planning—not only of the Park itself, but of the residential areas surrounding it—the generosity of contributors, and the cooperation and enthusiasm of then Governor Luther H. Hodges all played an invaluable role in the success story.

Structure Today the "Research Triangle" commonly refers to the three universities and the 18 institutions in the Park. There are three distinct corporate organizations which act as the basic governing bodies of the research complex. Membership of the Boards of Directors of the three groups reflects the influential role of the universities and the collaboration of state, business, and academic interests. The Research Triangle Foundation, the mother organization, the Research Triangle Park, and the Research Triangle Institute comprise the tripod structure. Each has its own function; each fulfills a vital need.

The Research Triangle Foundation's primary purpose is to promote the entire resources of the Triangle, and thereby recruit new research organizations to the area and the state. It is in essence a trusteeship and was originally financed through contributions from corporations and individual citizens in North Carolina. Profits from both the Institute and the Park are turned over to the Foundation. These surpluses are used as grants to support scientific research at North Carolina universities and colleges and at the Institute. The Chairman of the Board of Directors of the Foundation is the former Governor and former U. S. Secretary of Commerce Luther Hodges. As a respected citizen of North Carolina with great administrative ability, he seems ideally suited to the job. The "Governor" receives one dollar a year for his services—50 cents at each semi-annual Board meeting.

The Research Triangle Park is a wholly owned subsidiary of the Foundation and has its own Board of Directors. Its original purpose was to secure land for the research center. Today its primary function is the sale of that land. The Research Triangle Park refers not only to the corporation, but also to the land itself.

The Park, which is the geographical hub of research activity within the Triangle, is a huge 5,000 acre tract of land six miles long and two miles wide. It is the Park which offers the physical evidence of a "dream come true." The total value of the investment today is about \$50 million. An additional \$105 million for buildings which will be completed in the next few years will raise the total to approximately \$155 million. Visitors to the Park are initially impressed with its sprawling size, and secondly with its modernity. It is rather paradoxical to find million-dollar buildings which manage to capture all the strength and simplicity of modern design in the middle of a forest of scrub pine. Amazing also is the mere ten years required for the Park to reach its present state of development.

The Research Triangle Institute, commonly referred to as "RTI," provides contract research services to Federal, state, and local government agencies, foundations, and industrial clients ranging from local companies to national corporations. Over the past ten years, RTI's cumulative contract billings to its clients have exceeded \$26.5 million—another example of the success of the research endeavor. Earnings are reinvested in program development, staff growth, and expansion of facilities. RTI was created as the focal point of the Triangle and was established as an independent corporate entity by the three universities. As a wholly owned affiliate of the three schools, it operates under a separate Board of Governors with its own full-time staff.

Separated from this three-pronged structure is the Research Triangle Regional Planning Commission, which has proved invaluable to the overall development of the research area. Established in 1959 by the North Carolina General Assembly, its chief responsibility is to provide long-range, area-wide planning for the development of the Park and the surrounding counties of Wake, Durham, and Orange.

The Measure of Success In little over a decade the Research Triangle has become one of the most successful research complexes in the nation, and thereby one of North Carolina's most valuable assets. The very size and operation of the Park -18 "tenants" on 5,000 acres doing research in numerous disciplines—are indicators of the success of the research center. A wide variety of research services are made available through the Triangle to the state's educational, governmental, agricultural, and business communities. Perhaps the success of the Research Triangle is best measured by how well it has fulfilled the purpose for which it was originally intended: the economic improvement of North Carolina. The amount of revenue the state gains from the Park is one very evident example. Last year the annual payroll for the approximately 5,000 Park employees totaled \$50 million. Also of great economic value are the human resources brought to North Carolina by the Triangle facilities: not only professional scientists and engineers, but also supporting personnel such as highly skilled technicians. The Triangle also allows the state to retain its own talent and brainpower by supplying positions for graduates of the three universities and the 57 other North Carolina colleges. By pouring both capital and manpower into the economic stream, the Research Triangle has taken a giant step toward accomplishing its primary purpose.

Carla R. Gregory

The Fifth District



CROP PROSPECTS FOR 1969

Fifth District crop prospects on July 1 were generally good to excellent, according to estimates of the U. S. Department of Agriculture. The only exceptions were in West Virginia's Eastern Panhandle and the adjoining portions of Virginia and Maryland and in South Carolina's central Coastal Plain. Final crop outturn will, of course, be determined in large measure by weather conditions during the remainder of the growing and harvesting seasons.

Total acreage of the principal crops for harvest, including planted acreages of cotton and peanuts, is expected to be 2% smaller than in 1968. The only significant shifts in acreage from last year are indicated for tobacco, sweet potatoes, and wheat. Gains over last year in yields per acre are anticipated for all crops for which data are available except hay, Irish potatoes, and Maryland tobacco.

More Tobacco Combined output of all types of District tobaccos will be 14% larger than in 1968 if July 1 indications materialize. Except for a 3% decrease in Southern Maryland leaf, production of all types will be up. The smaller Maryland crop will result entirely from a cut in acreage.

The District's flue-cured crop, its chief money crop and largest farm income producer, is expected to total 990 million pounds. If realized, 1969 output will be 16% above that a year ago. The increase is expected because of an anticipated gain in yield per acre as well as a 9% larger acreage. A good portion of the increase in this year's acreage reflects adjustments resulting from net undermarketings of 1968 poundage quotas under the acreage-poundage program. (Under this program, if a grower markets less than his poundage quota in any year, the undermarketings are added to the farm's quota the following year. Similarly, if a grower markets more than his poundage quota in any year, the overmarketings are deducted from the farm's quota the following year.) Harvest of this year's bright leaf crop was well under way by mid-July and marketing began on the South Carolina markets July 23-eight days ahead of last year. It is reportedly the kind of crop which should be in good demand.

Soybean, Cotton, and Peanut Acreages First estimates of this year's production of soybeans, cotton, and peanuts will not be made until August 1. The planted acreages of these crops provide good clues to 1969 prospects, however. The acreage of soybeans planted alone for all purposes is 6% below a year ago. Producers, however, expect to harvest only 2% fewer acres for beans than in 1968. Stands are said to be generally good. Supplies of moisture are reported to be reasonably good, although they vary widely. Should yields per acre average more nearly normal than last year's drought-reduced yields, production could be up considerably.

Though provisions of the cotton program were changed to encourage an increase in 1969 production, it appears that many Fifth District farmers did not take advantage of these changes. As a result, planted acreage is 3% smaller than in 1968. Stands are reported to be better in North Carolina than in South Carolina, and soil moisture is said to be adequate in most areas. Insects have not become a major problem as yet.

Peanut acreage allotments are unchanged from last year, and District farmers planted roughly the same acreage as they did in 1968. Reports indicate that stands are excellent and that the crop is making good progress.

Fruit Crops Winter and spring weather generally favored the District's apple and peach crops, and trees in most areas set good crops of fruit. The commercial apple crop is expected to be 13% larger than last year's excellent production. Expectations vary considerably by states, however, with anticipated changes from a year ago ranging from a sharp 47% increase in North Carolina to a decline of 14% in West Virginia, where dry weather has slowed development of the crop.

The prospective peach harvest in the District as a whole is 4% smaller than last year's large crop. All of the anticipated decline is in the Carolinas and is due largely to a reduction in bearing trees. Although larger peach crops are expected in Virginia, West Virginia, and Maryland, moisture shortages

were developing in their important producing areas by July 1 at a time when moisture is critically needed for proper sizing of the fruit.

The grape crop, produced only in the Carolinas, is expected to be about 2% larger than in 1968. All of the prospective increase is in North Carolina.

Hay and Feed Grains Hay production prospects are 8% below a year ago, with declines anticipated in all District states except South Carolina. The reduction is expected because of a 2% cut in acreage and an anticipated 6% decline in yield per acre.

Total feed grain production now shaping up gives promise of being around one-tenth larger than last year, despite farmers' heavier participation in the feed grain program and the resulting reductions in acreage from year-ago levels. The indicated increase is due to expected large gains in yields per acre. Should anticipated output materialize, the corn crop, estimated at 183 million bushels, will be 12% above 1968 and second only to the record 1967 crop. Prospects also call for an oat crop 5% larger

than last year and the largest barley crop on record, 4% above 1968's output.

Food Grains and Potatoes Wheat allotments for 1969 were cut 13% below a year ago, and District farmers reduced acreages accordingly. Sharply higher yields per acre are in prospect, however, and crop estimates indicate an output 3% above a year earlier. A 6% larger crop of rye, due entirely to increased yields per acre, is also anticipated.

Farmers are expected to harvest a 12% larger sweet potato crop than last year. Acreage for harvest is up in all states and for the District as a whole averages 8% above the 1968 acreage. Prospective per-acre yields are also larger in the Carolinas.

By comparison, indications point to a 4% reduction from last year in the District's Irish potato crop. Smaller production is indicated for all three seasonal groups—the late spring potatoes and both the early summer and late summer crops. Lower average yields per acre account for most of the decline.

Sada L. Clarke