FEDERAL RESERVE BANK OF RICHMOND

MONTHLY REVIEW

Government Employment In the United States: 1952-1970

Productivity, Labor Costs, and Prices

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GOVERNMENT EMPLOYMENT IN THE UNITED STATES: 1952 - 1970

Between 1952 and 1970,[1] total civilian employment in the United States increased by approximately 30.0%. A major contributing factor was the rise in the number of persons employed at the local, state, and federal civilian levels of government. With total public employment nearly doubling, the government sector consequently accounted for almost one-third of the increase in total employment over the 18-year period. By 1970, government employees constituted 16.6% of all employed persons, compared to 11.8% in 1952. In light of the Administration's recent proposal to trim the number of federal employees by 5.0% by July 1972, it is tempting to presume that the Federal Government has made the major impact on employment growth in the public sector. But this is not the case. The bulk of the increase in this period is accounted for by state and local governments. This article will investigate changes in the major sources of public employment between 1952 and 1970, with special emphasis on changes in State and local government employment in the Fifth Federal Reserve District.

Relative Public Employment Growth The total number of persons employed at all levels of government in the United States increased by almost 6.0 million between 1952 and 1970, an increase of 83.4%. At the same time, Federal Government employment rose by only 300,000 persons, accounting for just 5.0% of the increase in total public employment (Table I). Making up 28.6% of the total increase were State governments, where the number of persons employed rose by about 1.7 million. The major increase, however, came at the local level, where government employment rose by almost 4.0 million persons. Growth at the local level accounted for the major portion of the total growth in public employment. The major categories of government employment at the local, state, and federal levels for 1952 and 1970 are presented in Table II.

Federal Government The major source of public employment at the federal level is the area of national defense and international relations. A major portion of employment in this category, which does not include uniformed military personnel, consists of civilian workers involved in military related activities of the Defense Department. Since 1967, however, employment in national defense and international relations has declined by 150,000 persons, which helps to explain the relatively small gain in federal employment.

The major source of employment growth within the Federal Government was the postal service, where the number of employees rose by over 200,000 from 1952 to 1970. This large gain accounted for 69.1% of the total increment in federally employed personnel. Moderate gains also occurred in the areas of space, health and hospitals, and natural resources. Since highways, education, and police protection are principally in the domain of state and local governments, small federal employment gains were registered in these activities.

Table I

GOVERNMENT EMPLOYMENT IN THE UNITED STATES*

(Thousands)

	1952	1970	Change	% of Total Change
Local	3,461	7,392	3,931	66.4
State	1,060	2,755	1,695	28.6
Federal	2,583	2,881	298	5.0
Total	7,105	13,028	5,924	100.0

* Total Employment.

Source: U. S. Department of Commerce, Bureau of the Census.

[1] The year 1952 was the first for which government employment information was gathered in preparation for the quinquennial Census of Governments. The most recently available comparable data is for 1970. All of the data used in this article are published by the U. S. Department of Commerce, Bureau of the Census, Washington, D. C.

Employment data by Federal, State and local government for the United States in 1952 are obtained from the *Historical Statistics on Governmental Finance and Employment* (1969); 1952 data for the Fifth District are obtained from *State Distribution of Public Employment in 1952* (1953). All 1970 employment figures are from *Public Employment in 1970* (1971).

The 300,000 gain in the number of federal employees represented a relatively small percentage increase over the period. This slow growth helps to explain why the proportion of total public personnel employed by the federal government fell from 36.4% in 1952 to 22.1% in 1970. The change in the proportions of public employment accounted for by local, State, and Federal government is presented in Chart 1.

State Government Total employment by State governments in the United States rose by almost 1.7 million persons from 1952 to 1970, an increase of 159.9%. In education, which at the state level consists almost entirely of higher education, employment quadrupled. The 900,000 increase in educational personnel constituted over half of State government employment growth. Employment in the remaining categories approximately doubled. The largest identifiable noneducational employment gains occurred in the areas of health and hospitals, and highways, which together provided 400,000 new jobs. Employment in other areas of state government rose by almost 300,000 persons from 1952 to 1970. This "other" category includes personnel engaged in such activities as public welfare, corrections, state administration, and employment security. Overall, employment in state government increased at a slightly faster pace than total public employment and by 1970 represented over one-fifth of total public employment.

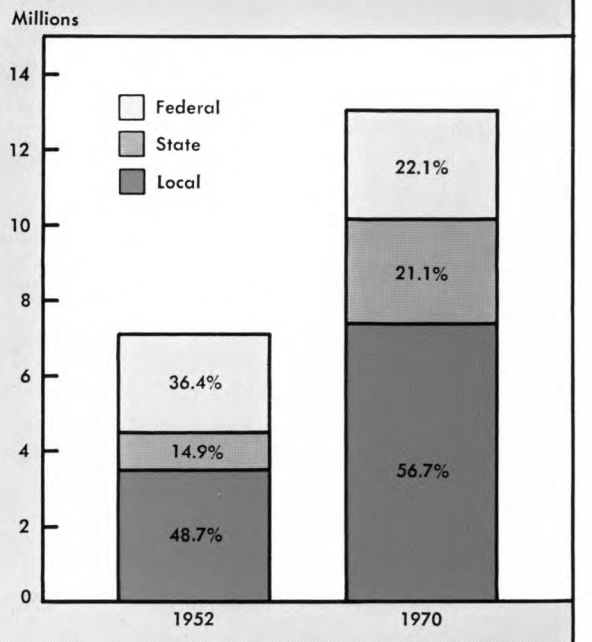
Local Government The greatest increase in government employment occurred at the local level. From 1952 to 1970, the number of local government personnel rose by almost 4.0 million. The major factor in this growth was the increase in the number of persons engaged in elementary and secondary education. This area, primarily in the domain of local government, experienced an employment increase of 2.5 million persons, which accounted for almost 65.0% of the total increase in local government personnel.

Major identifiable increases in local government also occurred in the areas of health and hospitals, with an increase of almost 290,000 persons, and in police protection, with an increase of over 200,000 persons. The number of persons engaged in "other" activities, such as fire protection, sanitation and sewage, utilities, local parks, etc., rose by almost 850,000. Because of this rapid overall rate of growth, local government personnel constituted 56.7% of all public employment in 1970.

Education and Public Employment The preceding discussion indicates the significant role that education plays in both public employment and total employment. Throughout the United States, the education function employs more persons than any other activity of State and local governments. Employment in education includes administrative, clerical, maintenance, and auxiliary personnel, in addition to teachers and professional personnel. Growth in the number of persons engaged in state and local education represented 57.8% of the increase in total public employment from 1952 to 1970 and 60.9% of the increase in total state and local government. Moreover, employment growth in education accounted for almost one-seventh of the total increase in U. S. employment from 1952 to 1970.

Chart 1

DISTRIBUTION OF TOTAL PUBLIC EMPLOYMENT IN U. S.



Source: U. S. Department of Commerce, Bureau of the Census

Public Employment in the Fifth District Available data for Fifth District states and the District of Columbia indicate that the Fifth District closely

Table II

GOVERNMENT EMPLOYMENT BY MAJOR CATEGORIES IN THE UNITED STATES*

(Thousands)

	FEDERAL			STATE		
	1952	1970	% Change	1952	1970	% Change
National Defense and International Affairs	1,342	1,200	−10.6			
Postal Service	525	731	39.2			
Space		30				
Education	11	19	72.7	293	1,182	303.4
Highways	4	5	25.0	187	302	61.5
Health and Hospitals	157	193	22.9	210	501	138.6
Police	16	30	87.5	21	57	171.4
Natural Resources	171	221	29.2	83	151	81.9
Other	358	454	26.8	267	562	110.5
Total	2,583	2,881	11.5	1,060	2,755	159.9

* Total Employment.

Source: U. S. Department of Commerce, Bureau of the Census.

mirrors the nation as a whole in public employment. Total employment by State and local governments in the Fifth District increased by over 400,000 persons, more than doubling between 1952 and 1970. This increase represents a rate of growth only slightly below that for all State and local governments in the United States. This slower growth rate can be traced in part to the state of West Virginia. State and local government employment in West Virginia rose by only 57.4%, while the rate of increase ranged from 99.6% to 170.1% in the rest of the Fifth District, as indicated in Table III. It is important to note, however, that West Virginia has experienced an actual decline in population over the past two decades. From 1950 to 1970, the West

Table III

STATE AND LOCAL GOVERNMENT EMPLOYMENT IN THE FIFTH DISTRICT*

	1952	1970	% Change
District of Columbia	20,451	48,677	138.0
Maryland	59,694	161,248	170.1
North Carolina	94,826	189,284	99.6
South Carolina	51,310	102,696	100.0
Virginia	79,773	184,093	130.8
West Virginia	45,659	71,856	57.4
Fifth District	351,713	757,854	115.5

* Full Time Equivalent Employment.

Source: U. S. Department of Commerce, Bureau of the Census.

Table IV

GOVERNMENT EMPLOYMENT IN THE FIFTH DISTRICT—MAJOR CATEGORIES*

	1952	1970	% Change	% of Total Change
Education	170,072	397,423	133.7	56.0
Highways	41,494	56,232	35.5	3.6
Health & Hospitals	29,030	82,589	184.5	13.2
Police	17,056	39,161	129.6	5.4
Natural Resources	11,864	13,384	12.8	0.4
Other:				
Fire Protection	8,655	14,077	62.6	1.3
Public Welfare	4,768	18,579	289.7	3.4
Water Supply	7,974	8,949	12.2	0.2
Other Utilities	3,460	5,210	50.6	0.4
Sanitation	9,983	13,948	39.7	1.0
All Other	47,357	108,302	128.7	15.0
Total Other	82,197	169,065	105.7	21.4
Total	351,713	757,854	115.5	100.0

* Full Time Equivalent Employment.

Source: U. S. Department of Commerce, Bureau of the Census.

LOCAL			TOTAL			STATE & LOCAL TOTAL		
1952	1970	% Change	1952	1970	% Change	1952	1970	% Change
			1,342	1,200	− 10.6			
			525	731	39.2			
				30				
1,580	4,115	160.4	1,884	5,316	182.2	1,873	5,297	182.8
269	305	13.4	460	612	33.0	456	607	33.1
222	508	128.8	589	1,202	104.1	432	1,009	133.6
217	451	107.8	254	538	111.8	238	508	113.4
37	33	− 10.8	292	404	38.4	121	183	51.2
1,135	1,980	74.4	1,959	2,995	52.9	1,402	2,543	81.4
3,461	7,392	135.8	7,105	13,028	83.4	4,522	10,147	124.4

Virginia population fell by about 14.0%, while Fifth District population rose by about 28.0%. On a per capita basis, the level of public employment in West Virginia did not differ appreciably from that for the Fifth District in 1970.

Education at the state and local level provided 56.0% of all new government jobs in the Fifth District from 1952 to 1970 (Table IV). This proportion is slightly lower than the 60.9% for all State and local public employment. Health and hospitals was the other area of government activity to display a substantial increase in public employment for the Fifth District. Employment in this field, which includes public health administration, hospital and clinic operations, and other health activities, rose by over 50,000 persons over the period. This increase accounted for 13.2% of the total increase in State and local government personnel, somewhat above the percentage for all State and local governments. The areas of highways, police protection, and public welfare provided over 50,000 new public jobs, or 12.4% of the total increase.

The data indicate that public employment growth in the Fifth District kept pace with that of the United States over the period 1952 to 1970. Only in West Virginia did public employment growth fail to reflect the national trend, and this divergence can be attributed to the state's population decline over the past two decades. In general, the percentage distribution by categories of the increase in State and local government personnel in the Fifth District closely reflected that for the United States as a whole.

Glenn Picou

PRODUCTIVITY, LABOR COSTS, AND PRICES

How successful will stabilization policy be in bringing inflation under control? Will the rate of inflation continue to subside in the months ahead? If so, how far and how fast will it subside? The answers to these questions will largely depend on the behavior of productivity, which, together with movements in hourly wage rates, is one of the key determinants of changes in the price level.

The Productivity-Wage-Price Nexus Productivity, or output per man hour, affects the price level via its influence on labor costs per unit of output. Unit labor costs are equal to average hourly compensation divided by productivity. Whether unit labor costs rise or fall depends upon which one—compensation or productivity—is rising faster. If hourly compensation rises faster than productivity, which has been the case in recent years, unit labor costs will rise. Since unit labor costs constitute the largest component of production costs per unit of output of most goods and services, a rise in unit labor costs is likely to result in upward pressure on prices.

The productivity-labor cost-price relationship is illustrated in Chart 1. As indicated in the third panel of the chart, the percentage change in unit labor costs is approximately equal to the difference between the percentage changes in hourly compensation and productivity. The size of the spread between percentage changes in compensation and productivity also influences the rate of inflation (shown in the bottom panel of the chart) via the unit labor cost link.

Recent Experience As shown in Chart 1, from the middle of 1968 to the second quarter of 1970, rapidly rising compensation per man-hour combined with virtually nonexistent productivity growth to produce high rates of increase in unit labor costs. Over the same period, the rate of inflation accelerated in all but two quarters.

Following a two-year period of stagnation, productivity growth revived sharply in the second and third quarters of 1970 before sustaining a temporary setback in the strike-distorted fourth quarter. In the first quarter of 1971 the productivity growth rate spurted to 6.6% as auto production resumed following the strike. Over the next two quarters, however, productivity registered only modest gains. Increases in hourly compensation persisted at high levels in 1970 and the first half of 1971 as workers sought, via large money wage gains, to restore real earnings eroded by past inflation and to protect future earnings from anticipated further inflation. The rate of increase in unit labor costs, however, was moderated by productivity growth, which partially neutralized the rapid rise in compensation.

Data for the fourth quarter of 1971 show productivity growing almost twice as fast as in the preceding two quarters. Moreover, the rate of increase of compensation per man-hour slowed, reflecting mainly the influence of the 90-day wage freeze. The combined influences of accelerating productivity growth and the constraints of Phases I and II produced a significant reduction in both the rate of increase of unit labor costs and the rate of inflation.

Current vs. Past Cyclical Recoveries Productivity typically rises faster than its long-term rate of growth during the later stages of recessions and initial stages of recoveries. These cyclical phases typified the 1970 economy and, accordingly, the rise in productivity that began in that year was not unexpected.

Chart 2 contrasts the behavior of productivity, hourly compensation, and unit labor costs during the 1969-70 recession and subsequent recovery with the average patterns established in the three previous cyclical swings in business. The chart indicates that productivity gains in the most recent recovery fell short of the average gain for previous recoveries. Productivity advanced 4.1% over the four quarters following the trough of the 1970 recession, whereas its average post-trough increase over comparable time spans in previous recoveries was 5.0%. Actually, the chart somewhat overstates the strength of productivity's recovery from the most recent recession be-

cause the post-trough gain is measured from the fourth quarter of 1970 when productivity was depressed below its level of the preceding quarter.

Except for its slightly weaker performance, relative to past revivals, the overall pattern of productivity growth in 1970-71 was roughly similar to that shown in earlier cycles. The same cannot be said for compensation per man-hour and unit labor costs, however. As shown in Chart 2, the 1970-71 recovery profile of these two series deviates markedly from the average pattern established in earlier postwar cycles. For example, increases in employee compensation over the past two years were substantially in excess of rises occurring in earlier recession and recovery periods. Hourly compensation rose 7.0% and 6.4%, respectively, over the four-quarter intervals preceding and following the most recent cyclical trough. The average increase for comparable periods in earlier cycles was only 2.7% and 4.5%, respectively.

Partly because of the below-average rebound in productivity growth, but chiefly because of the extraordinarily rapid rise in hourly compensation, recent movements in unit labor costs bear scant resemblance to those displayed in earlier cycles. In the past, unit labor costs typically exhibited relatively little growth over the four quarters preceding, and absolute declines over the four quarters following, a cyclical trough. In contrast, unit labor costs rose 5.3% and 2.3%, respectively, in the pre-trough and post-trough periods of the most recent recession. Were it not for the price-wage controls, moreover, the 1971 post-trough rise in unit labor costs likely would have been even higher.

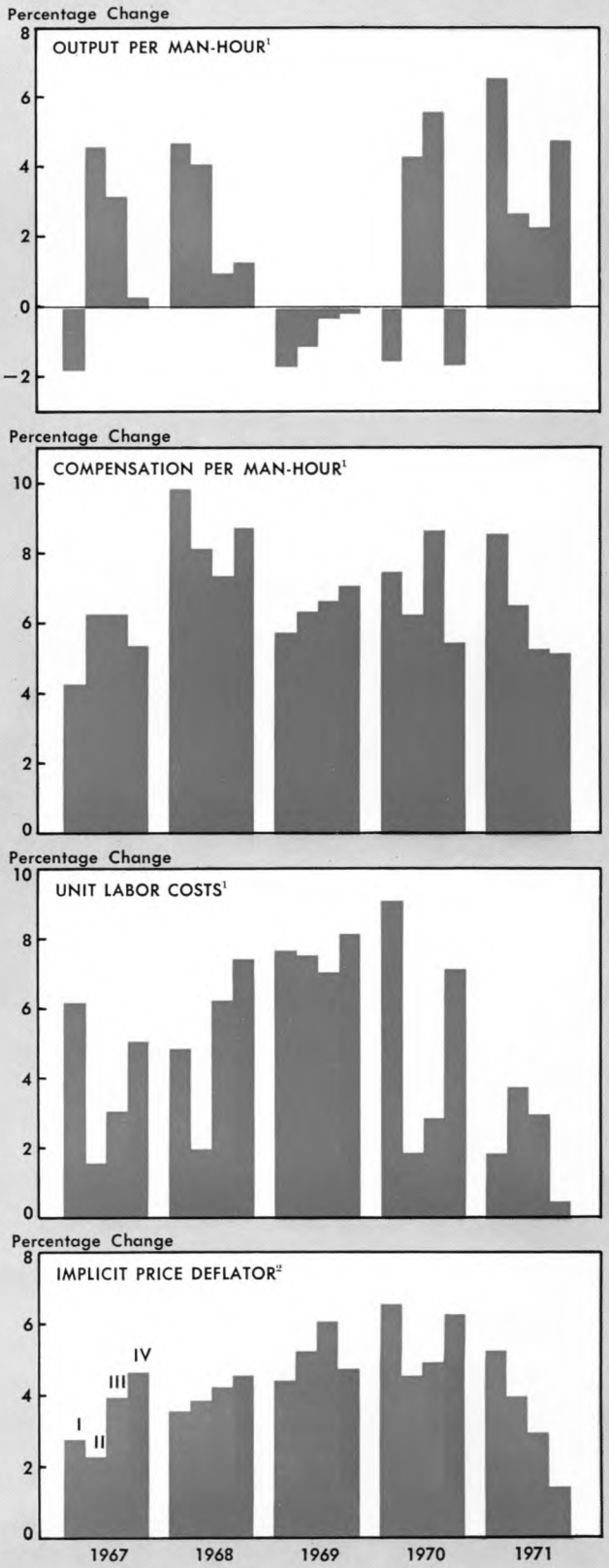
In summary, the 1970-71 performance of productivity roughly conformed to its typical behavior in past recoveries. This was not true for hourly compensation or unit labor costs, however.

Factors Influencing Productivity Besides being influenced by random events, such as the auto strike of late 1970, productivity is also affected by both cyclical and structural factors. Cyclical movements in productivity are related to variations in growth of total output and in rates of capacity utilization. They are also affected by employer policies with respect to labor hoarding. Noncyclical movements in productivity are related to such basic factors as technological change and changes in the average levels of education and experience of the labor force. Other structural factors affecting productivity are changes in the age-sex composition of employment and shifts away from industries with relatively large productivity gains (e. g., manufacturing) to in-

Chart 1

PRODUCTIVITY, COMPENSATION, UNIT LABOR COSTS, AND PRICES: 1967-1971

PERCENT CHANGE OVER PREVIOUS QUARTER AT ANNUAL RATE



[1]Private Nonfarm Economy
[2]Private Economy
Source: Bureau of Labor Statistics

dustries with relatively small productivity gains (e. g., services). That some of these cyclical and structural factors may have influenced the recent behavior of productivity is suggested by the data shown in Chart 3.

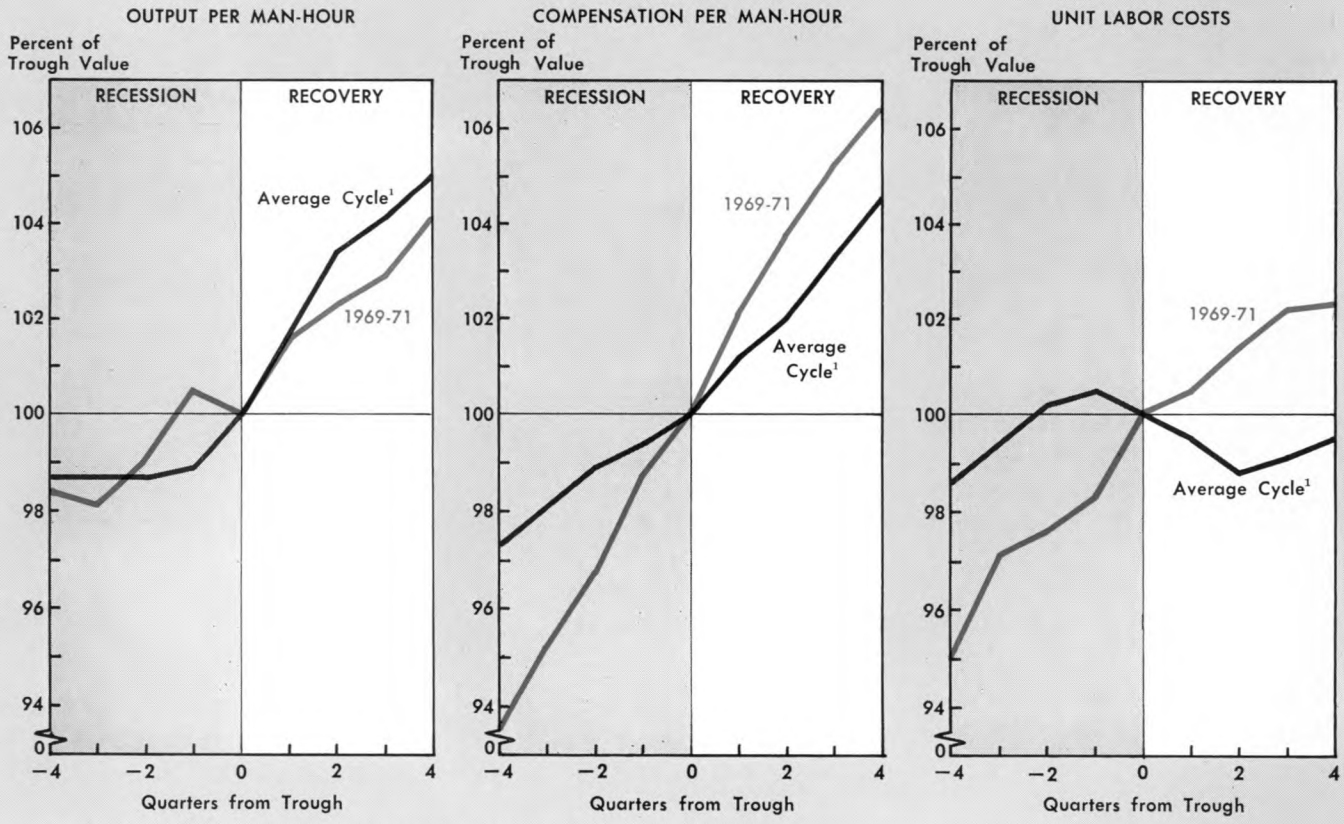
Cyclical Influences Slow growth of output combined with fast growth of employment is the wrong recipe for productivity advance. Yet this combination was characteristic of the economy's performance in the late 1960's. As indicated in the chart, in 1968 and 1969 growth of real product of the private nonfarm sector slowed markedly. While the rise in output was slackening, employers continued to expand their work rolls at a rapid pace. Even after output reached a peak and turned down in the third quarter of 1969, employment continued to rise until the second quarter of 1970.

The slowness of employers in adjusting payrolls to the reduced pace of output reflected in part a desire to hoard labor. This, in turn, was apparently related to anticipations of renewed expansion of aggregate demand and to difficulties experienced in replacing help in the tight labor markets of the middle and late 1960's. But labor hoarding in the face of stagnant output growth had an adverse effect on productivity. Not until employers finally began to pare their work forces in early 1970 did productivity growth revive. The strong advance of productivity in the third quarter of 1970 stemmed almost solely from the continued decline in employment. In the second and fourth quarters of 1971, however, *both* cutbacks in employment *and* spurts in total output contributed to the surge of productivity. The vigorous growth of output expected for 1972 should

Chart 2

PRODUCTIVITY, HOURLY COMPENSATION, AND UNIT LABOR COSTS IN RECENT RECESSION AND EARLY RECOVERY PERIODS

INDEXES: TROUGH QUARTER = 100



[1]Average of 1953-55, 1957-59, and 1960-62 recession and early recovery periods.

Notes: Data are for private nonfarm economy.
Trough quarters of most recent recession: 1970 IV. Trough quarters of three earlier recessions: 1954 III, 1958 II, 1961 I.

Source: Bureau of Labor Statistics

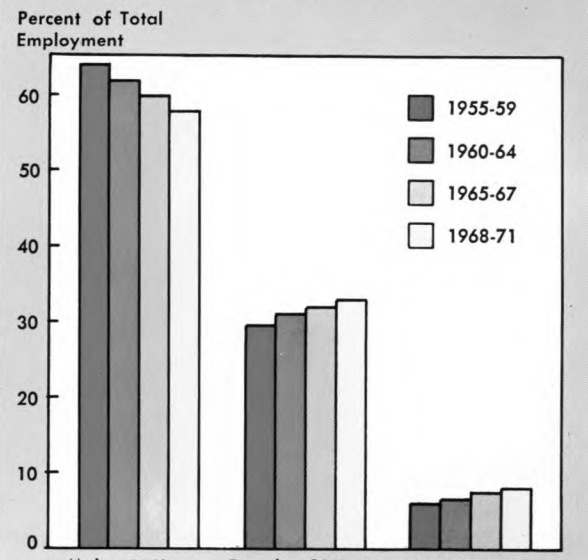
Chart 3a

OUTPUT, EMPLOYMENT, AND CAPACITY UTILIZATION: 1967-1971

Sources: Bureau of Labor Statistice; Federal Reserve Bulletin

Chart 3b

THE CHANGING AGE AND SEX COMPOSITION OF EMPLOYMENT: 1955-1971



Source: 1972 Economic Report of the President

help sustain the rate of advance registered by productivity in 1971.

Finally, the falling and low rates of capacity utilization that have prevailed since 1968 are probably associated with impaired productivity of *overhead labor,* i.e., the component of firms' work forces whose size is invariant to the level of production.[1] In 1972, however, as the economy picks up steam and firms operate at higher rates of capacity, overhead labor can be spread over a greater volume of output, thereby increasing its productivity.

Structural Influences Changes in the age-sex composition of employment also affected productivity. One economist, George Perry of the Brookings Institution, estimates that shifts in the employment mix accounted for fully one-fifth of the gap between the potential or long-term trend growth rate of productivity and the lower, actual growth rate registered over the span 1965-1970.[2] In the late 1960's employment of women and teenagers grew much faster than employment of prime-age males. But teenagers often lack the experience and training of older workers, and women are frequently relegated to inherently low-productivity jobs. Because of these factors, the average productivity of women and teenagers suffers in comparison with that of prime-age males. Since the former groups tend to have lower, and the latter group higher, than average productivity, the change in the employment-mix acted to retard the overall rate of productivity increase over the last five years.

Thomas M. Humphrey and Marjorie S. Hale

[1] Apparently, overhead labor is now a less inclusive category than it was in the past. Formerly, the term "overhead labor" referred to nonproduction workers (professional, administrative, clerical) as well as to production workers retained during economic slumps because of (1) their specialized skills, (2) the high costs of rehiring and retraining them, and (3) employer contractual commitments (e.g., a guaranteed annual wage). Contrary to earlier recessions, however, in 1970-71 nonproduction workers were among the hardest hit by layoffs as employers endeavored to cut costs by reducing the number of workers not essential to production. Evidently, employers have ceased to regard white-collar employees as overhead labor.

[2] George L. Perry, "Labor Force Structure, Potential Output, and Productivity," *Brookings Papers on Economic Activity* (3:1971), pp. 558-9.

Provisional Plan

REGIONAL CHECK PROCESSING CENTERS

Fifth Federal Reserve District

The Federal Reserve Bank of Richmond recently published and sent to Fifth District banks its Provisional Plan for the establishment of a regional check clearing system to serve the entire District. Since the proposed system will be of interest to the general public as well as to the banking industry, the Plan, with minor revisions, is reprinted below.

INTRODUCTION

In a policy statement issued in June 1971, the Board of Governors of the Federal Reserve System stated its intention to seek basic improvements in the nation's payments mechanism. The Board placed a high priority upon (1) the early extension of existing clearing arrangements in cities with Federal Reserve offices into larger immediate payment zones and (2) the establishment of other regional clearing facilities providing settlements in immediately available funds. Federal Reserve Banks throughout the nation are now developing regional clearing systems in order to implement this policy as rapidly as possible. As part of this national effort, the Federal Reserve Bank of Richmond has established a Regional Clearing Committee to design and propose an efficient system of regional clearing facilities within the Fifth Federal Reserve District. This Committee has developed a provisional plan designed to indicate the general delineation of clearing regions and possible locations of clearing facilities under the new system. This report describes the plan. It should be emphasized that the plan is quite preliminary. Details given in this report are therefore subject to change as planning proceeds.

AN OVERVIEW

The Fifth District regional clearing system will hopefully provide facilities permitting the overnight settlement of all cash items drawn on Fifth District banks that are entered for collection by Fifth District banks. The system will be implemented in two stages. During the first phase of the program, the District will be divided into four clearing regions, and overnight settlement will be provided *within* each region. The second phase of the program will extend overnight settlement, where possible, to the entire District through the introduction of a new transit network capable of transporting checks rapidly *between* clearing regions.

After the Fifth District system becomes operational, overnight settlement will be extended, where feasible, to clearing regions located in other Federal Reserve Districts. Such extensions will be planned and implemented jointly with other Federal Reserve Banks.

ADVANTAGES OF THE REGIONAL CLEARING SYSTEM

Both participating banks and the general public will benefit from the regional clearing system.

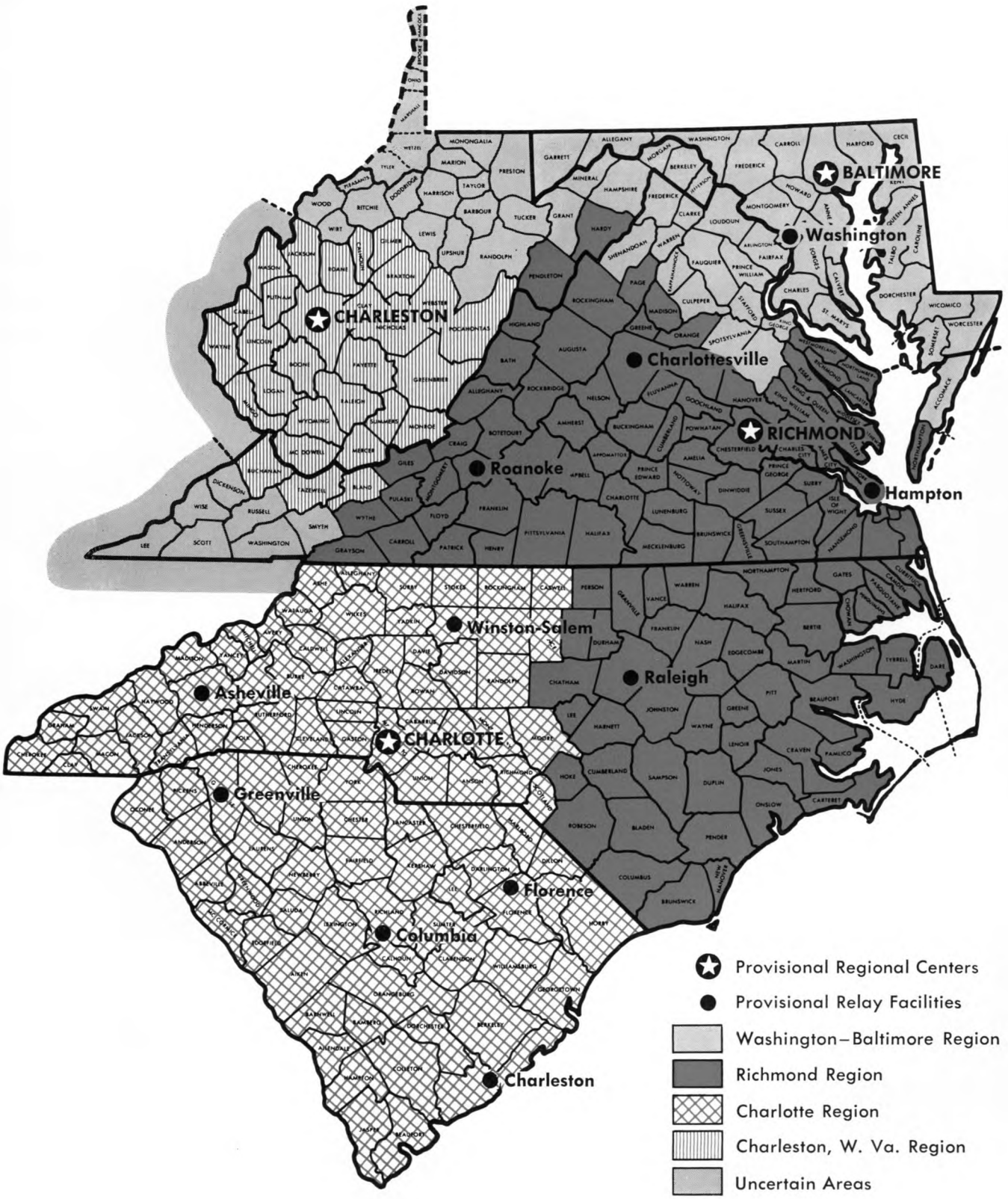
More Rapid Collection and Settlement In many cases, items sent for collection will be collected from one to three business days earlier than at present. For example, a check drawn on a Lynchburg, Virginia, bank which is deposited in a Columbia, South Carolina, bank on Monday would not be paid by the Lynchburg bank before Thursday under existing Federal Reserve arrangements. Under the regional clearing system, the check would be collected on Tuesday, and the Columbia bank would receive credit on the same day.

Other Advantages More rapid check collection and settlement will produce several beneficial by-products, including faster return of unpaid items and reductions in both commercial bank and Federal Reserve float. In addition, the opportunity for check kiting will be severely curtailed.

It is certain that check volume in the Fifth Dis-

PRELIMINARY GEOGRAPHIC DELINEATION OF CLEARING REGIONS

FIFTH FEDERAL RESERVE DISTRICT



trict will increase substantially during the next decade. Under these circumstances, the relative inefficiency of the present check collection process would be compounded, causing both public and private costs associated with the payments mechanism to rise at a rapid rate. The regional clearing system will reduce these costs by significantly increasing the efficiency with which checks are processed and transported. In addition, the system will provide an operational framework for the transition in the future to an electronic payments mechanism.

EFFECTS OF REGIONAL CLEARING ON THE BANKING INDUSTRY

The effects of regional clearing on the banking industry will vary from one bank to another and will reflect, in each case, such factors as bank size, location, and the payment-receipt pattern associated with the bank's depositors. It is nonetheless possible to predict some of the effects regional clearing will have on the banking industry as a whole.

Because regional clearing will accelerate collection and consequently reduce commercial bank float, the banking system will probably experience some reduction in total deposits. This decline, however, will be largely matched by corresponding reductions in uncollected items rather than in loans and investments.

Faster and more efficient collection will also lead to a reduction in Federal Reserve float. A decrease in Federal Reserve float is desirable, because this uncontrolled and highly volatile source of member bank reserves interferes with the conduct of monetary policy and can disrupt money and credit markets. Because the purpose of regional clearing is to improve the payments mechanism rather than to affect member bank reserves, it is reasonable to presume that any general reduction in reserves caused by declining float would be offset by Federal Reserve open market operations or other means.

GEOGRAPHIC CLEARING REGIONS AND CLEARING FACILITIES

The map attached to this report shows the provisional geographic delineation of clearing regions and probable locations of clearing facilities. This configuration was drawn on the basis of comprehensive regional economic studies conducted by the Office of Business Economics of the Department of Commerce and by the Rand-McNally Company. These studies have defined, as accurately as possible, geographic areas of substantial commercial and economic intercourse throughout the United States. In specifying the regional clearing boundaries shown on the attached map, information from these two sources has been supplemented with additional data from other sources.

Where check flow patterns warrant, it may be desirable to define clearing region boundaries that cross Fifth District boundaries. This Bank is currently coordinating with representatives of contiguous Federal Reserve Districts to determine where such boundary intersections should occur.

It should be emphasized that all regional boundaries drawn on the map are provisional. As additional information regarding check flows and check volume becomes available, particular counties in the vicinity of these boundaries may be transferred from one region to another and the boundaries redrawn.

Washington-Baltimore Region

The Washington-Baltimore region will include the area presently covered by the Washington-Baltimore Regional Clearing Center plus additional counties in western Maryland, northern Virginia, and on the Maryland Eastern Shore. The basic settlement facility will be located at the Baltimore Branch. No relay facilities other than the existing Washington station are presently envisioned for this region.

Richmond Region

The Richmond region will include (1) most of western, central, and eastern Virginia and (2) eastern North Carolina. The basic settlement facility will be in Richmond. The region will be divided into collection subregions, each of which will be served by a relay facility. Possible relay locations are Roanoke, Charlottesville, Hampton, and Raleigh.

Charlotte Region

The Charlotte region will include western North Carolina and all of South Carolina. The central clearing facility will be in Charlotte. Like the Richmond region, the Charlotte region will be divided into collection subregions. Possible relay facility locations are Asheville and Winston-Salem, North Carolina, and Charleston, Columbia, Florence, and Greenville, South Carolina.

Charleston, West Virginia Region

A provisional West Virginia region is shown on the map. Several possibilities for serving this region exist. Separate settlement facilities could be established in Charleston and operate directly by this Bank or indirectly through an agent. Alternatively, a relay station could be established in Charleston which would send items to an existing

Federal Reserve office. A final choice among these alternatives will be made after further study.

Uncertain Areas

There are three specific areas within the District or contiguous to it that require further study before they can be assigned to particular clearing regions. These areas are depicted in gray on the map.

Northern West Virginia Some Fifth District counties in northern West Virginia form part of the trade district dominated by Pittsburgh. It is possible that these counties could be most efficiently served by the regional clearing center to be established at the Pittsburgh Branch of the Federal Reserve Bank of Cleveland.

Southeastern Ohio and Eastern Kentucky Some Fourth District (Cleveland) counties in this area are located in the Charleston, West Virginia, trade district. It may be desirable to serve these counties through the facility to be established in Charleston.

Southwestern Virginia Some counties in this area are located in the trade district dominated by Bristol-Kingsport-Johnson City, Tennessee. The Tennessee portion of this trade district will be served by a regional clearing center to be established by the Nashville Branch of the Federal Reserve Bank of Atlanta. Consequently, this center may be able to serve the Virginia counties in the trade area most effectively.

Studies of each of these uncertain areas are currently in progress in order that each area will be included in the clearing region through which service can be most efficiently provided.

OPERATIONAL PLAN

The Regional Clearing Committee is currently preparing an operational plan that will include: (1) final clearing region boundaries, (2) the locations of individual clearing centers and relay stations, and (3) a detailed description of the transportation system and operating procedures. This plan will be based on a further analysis of trade area patterns, a detailed study of check volume in particular localities, an examination of transportation facilities, and the views of area bankers. Where feasible, analysis leading to the final operational plan will include simulation of check flows and volume within the Fifth District using the model developed for the Board of Governors by TRW Systems, Inc.

ADVISORY COMMITTEES

Prior to establishing the present Washington-Baltimore Regional Clearing Center, this Bank formed a six-member advisory committee consisting of representatives of participating banks. The advisory committee has assisted the Center in identifying and solving operational problems and has served as a highly useful communications channel between the Center and participating banks. On the basis of this experience, it is evident that similar advisory groups should be formed to assist in planning, implementing, and operating the regional clearing system described in this report. Present plans call for the establishment of an advisory committee for each clearing center.

IMPLEMENTATION SCHEDULE

The Regional Clearing Committee has established the following provisional schedule for the detailed implementation of the regional clearing program.

April-June

1. Completion of the operational plan.
2. Presentation of the operational plan to the Board of Governors for approval.
3. Presentation of the operational plan to area banks.

July-December

Begin implementation of the operational plan.

WHAT'S AHEAD FOR AGRICULTURE IN '72?

The agricultural outlook for 1972 was analyzed by top level economists of the U. S. Department of Agriculture at the National Agricultural Outlook Conference late in February. A brief digest of their forecasts follows.

The economic outlook for the nation's farmers in 1972 is dominated by good news. Farmers can expect materially better incomes than in 1971. Realized net income from farming is expected to rise substantially, and farmers' earnings from off-farm jobs also promise to increase. Farm production expenses will continue to go up but probably at a slower rate. More money will be available for farm lending and, by current prospects, at perhaps the lowest interest rates in two years. The outlook is clouded, however, by effects of the prolonged dock strikes and large world grain supplies.

Keys to the outlook are prospects that general economic activity will continue to gain momentum and that consumers' after-tax incomes will show a healthy increase.

Farm Income and Expenses Realized gross farm income of the nation's farmers may well chalk up a neat gain in 1972, rising some $3 billion to $3.5 billion over the record $58.6 billion realized in 1971. The anticipated increase in gross income will likely come from a combination of larger cash receipts from farm marketings and sharply higher Government payments to farmers. Most of the gain in cash receipts will center in the livestock sector and will stem chiefly from higher prices for livestock products.

Farm production expenses can be expected to rise further this year, but the increase may be less than in most recent years. Feed prices are lower, and Phase II restraints on wages and prices will hopefully moderate price increases on farm production items of nonfarm origin. Interest, taxes, and items of farm origin are not covered by the wage-price restraints, however. Overall, the increase in farmers' production expenses may run around 3.5% versus 4.9% in 1971. Dollarwise, this means that the advance in production costs could be about $0.5 billion less than a year ago, or roughly $1.5 billion.

Expectations that the gains in farmers' gross income will exceed the rise in production expenses point to a healthy boost in realized net farm income, ranging from $1.5 billion to $2 billion or in the neighborhood of 10% to 13% over 1971. With such an increase, realized net farm income would hit a new record level of from $17.2 billion to $17.7 billion, exceeding the previous high first established in 1947. Net income per farm is expected to rise even more, perhaps by from 11% to 14%.

Supply and Demand Conditions Food supplies are likely to be smaller than last year. Some winter fresh vegetables were in short supply, and supplies of livestock will be limited by cutbacks in pork and egg production. Cotton and soybean supplies are tight, while supplies of wheat and feed grains are heavy and well in excess of prospective demand. Tobacco supplies continue to be sizable.

Rising disposable personal incomes—bolstered by expanding social security and welfare payments, higher wage rates, and another increase in Federal income tax exemptions—are expected to provide a substantial boost to the domestic demand for farm products this year. Moreover, as economic growth accelerates and more job opportunities open up, the unemployment situation will ease, adding further to consumers' buying power.

Export market prospects for the nation's farm products are uncertain because of the dock strikes and the international monetary situation. There are indications that exports in the current fiscal year may fall short of last year's record. The short supplies and higher prices of United States cotton and soybeans and the large grain supplies in Western Europe are having a dampening effect on the volume of shipments and may well reduce overall exports.

Food Situation Retail food prices this year will likely rise at a faster pace than a year ago. Contributing most to the advance will be a strong con-

sumer demand combined with little change in the supplies of food. Prices of all foods may average as much as 4.5% above 1971, up from the 3% advance last year but less than the 5.5% boost in 1970. Grocery store food prices, which are more meaningful to the housewife, can be expected to rise about 4% in comparison with a 2.4% gain in 1971. Restaurant food prices rose better than 5% last year and are likely to advance at the same rate in 1972. Much of the increase in food prices this year will result from higher prices for meats, especially pork. But indications also point to higher prices for eggs, fish, and processed fruits and vegetables.

The American people spent $118.4 billion for food in 1971, up about 4% from a year earlier but the smallest increase in four years. The slower rise in total food spending last year was due primarily to the slowdown in retail food prices resulting from larger food supplies and the wage-price freeze. Disposable personal income last year rose twice as fast as food expenditures, so total food spending of the average breadwinner took only 16% of after-tax income, compared with 16.6% in 1970. Consumer outlays for food in 1972 may well be around 6% larger than in 1971, reflecting both higher food prices and stronger demand. Such an increase would still be far smaller than the anticipated 8% increase in disposable income. A further decline in the share of consumers' after-tax incomes spent for food thus appears likely.

Major Commodities The Department of Agriculture's analysis of the outlook for principal Fifth District commodities shapes up this way.

Tobacco: Highlighting the tobacco outlook for 1972 are prospects that cigarette consumption may edge upward from last year's record level. Tobacco export prospects are dampened, however, by the probable resurgence of Rhodesian tobacco in world trade, possible shipping strikes, and bigger competitive supplies in our foreign markets. Total tobacco use may well slip below last season's level but still exceed the reduced 1971 crop and result in a substantial reduction in carry-over.

Flue-cured tobacco marketing quotas are about the same as last year, but burley quotas are larger. New legislation, effective for the first time in 1972 and providing greater flexibility in the marketing quota programs, permits the lease, sale, and transfer of Virginia fire-cured and Virginia sun-cured tobacco farm acreage allotments across county lines within the state. Price supports for eligible 1972-crop tobaccos are 4.8% above 1971 levels.

Soybeans and Peanuts: The supply-demand situations for soybeans and peanuts remain a study in contrasts, as was the case last year—that is, too few soybeans but too many peanuts. Supplies of soybeans, down 6% from last year, are tight and are limiting soybean usage. But usage is exceeding production for the third consecutive year and is expected to reduce carry-over stocks next fall to minimum operating levels. Export demand remains strong, but exports may fall short of last year's record shipments. Soybean prices, which have averaged just under $3.00 per bushel so far this season, will likely remain strong.

Peanut supplies are at an all-time high and well above requirements for food and farm use. With output continuing to outstrip consumption, peanut prices this season have again averaged near the support level. And acreage allotments for 1972 have again been set at the minimum level permitted by law. Where growers plant peanuts in skip-row patterns in 1972, the acreage of the whole field will be counted as peanut acreage.

Cotton: Supplies of cotton are tight—the smallest since 1947, in fact—and prices are sharply higher. These factors highlight the cotton outlook and are combining with reduced export prospects to cut prospective disappearance about 6% below last year. Expected disappearance, however, will top 1971 production and reduce the August 1 carry-over to around 3½ million bales, smallest since 1952. Domestic mill use, due in part to a growing demand for denim and corduroy fabrics, may almost match last season's 8.1 million bales. Features of the 1972 cotton program are the same as in 1971.

Dairy Products: Milk production appears to be in for another slight increase in 1972. Although milk cow numbers will probably continue to decline at a slow rate, milk output per cow is likely to rise further. Farm prices for milk will run above 1971 levels at least until April and may average slightly higher for the year. The likelihood of larger marketings and a small price gain points to a modest increase in gross income from dairying. With lower feed costs and price restraints on many production inputs, dairymen could maintain net income at 1971 levels.

Poultry and Eggs: The outlook for poultry and egg producers is a little brighter. Feed costs are lower, and demand is strong. Moreover, small pork supplies and higher red meat prices will help to support poultry and egg prices throughout the year.

Output of both broilers and turkeys is expected to expand moderately, while egg production may dip slightly below last year's record output. Broiler and turkey prices may average a little higher than in 1971 despite larger production. Egg prices are expected to strengthen from their current low levels and should average well above a year earlier next summer and fall.

Meat Animals: Hog prices this year can be expected to average substantially higher than in 1971 because of sharply reduced supplies of slaughter hogs. With improved hog prices and lower corn prices, the hog-corn price ratio will likely remain favorable to the production of hogs at least through summer. This situation could encourage some farmers to begin rebuilding their breeding herds.

Cattle marketings probably will be moderately larger than in 1971. Cattle prices are likely to average higher, however, because strong consumer demand for beef and the sharply smaller pork supplies are expected to bolster the market for cattle.

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