

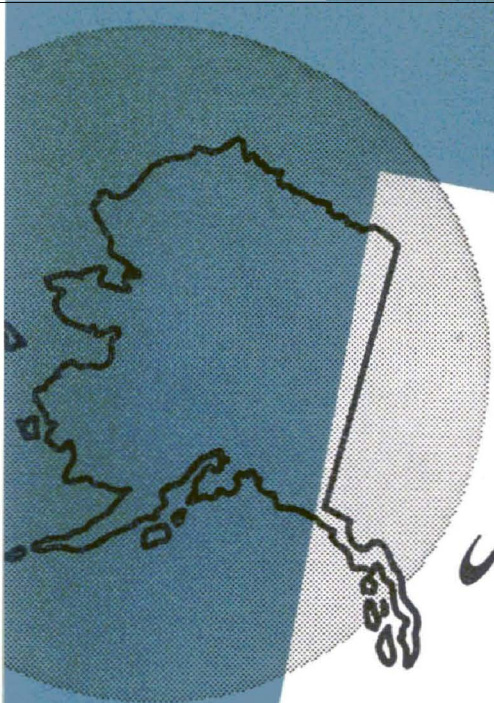
Monthly Review

FEDERAL RESERVE BANK OF SAN FRANCISCO
TWELFTH FEDERAL RESERVE DISTRICT

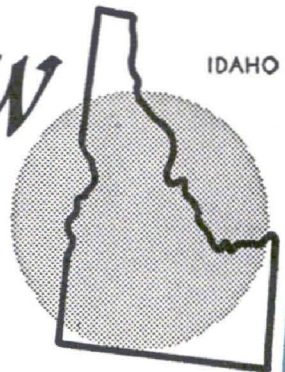
April 1960

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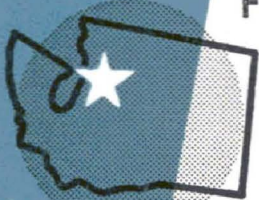
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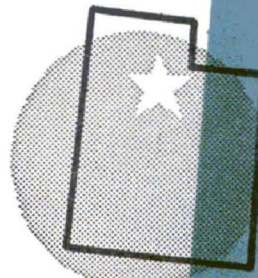
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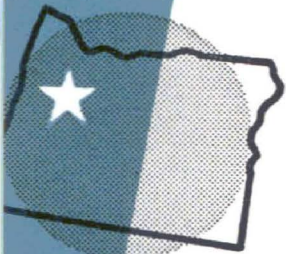
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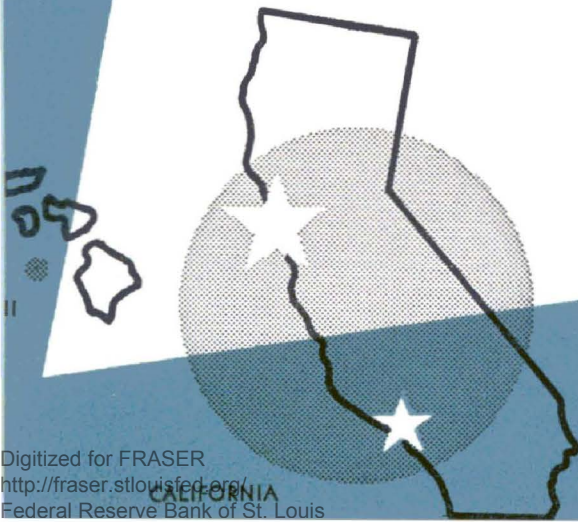
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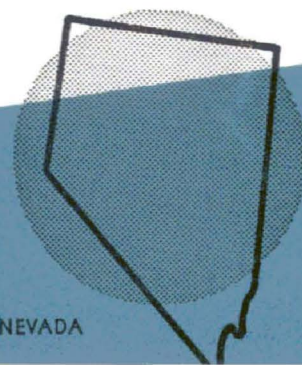
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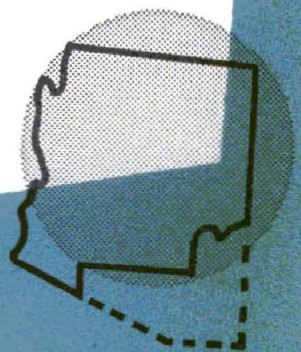
OREGON



CALIFORNIA



NEVADA



ARIZONA

The Race Against the Flood of Checks

IN December 1959, the Federal Reserve Bank of New York, on behalf of the 12 Federal Reserve Banks, announced that 5 of the 36 Federal Reserve Bank offices would soon install electronic equipment to process checks. These pilot installations are part of a 6-year period of preparation in the race against the ever-growing flood of checks. Located at the head offices of the Federal Reserve Banks in Boston, New York, Philadelphia, Chicago, and San Francisco, the five installations will permit the testing of equipment supplied by several manufacturers beginning in the summer of 1960. Several of the remaining Federal Reserve Bank offices will receive pre-printing and encoding equipment at a later date to help support the test operations. A substantial number of commercial banks will either have electronic check processing equipment in operation, in process of installation, or on order for delivery within the next 12-18 months.

Banks have been faced for some years with a rapidly growing volume of checks. The number of checks written, based on the most frequently quoted figures, has increased from about 3.5 billion in 1939 to about 8 billion in 1952, and to roughly 12 billion in 1959. As far as anyone can tell, the volume of checks written each year may well continue to grow at the 1952-59 pace. The average check, from the time it is written until it comes back to the person who wrote it, passes through two to three banks. Some checks, of course, are deposited directly in the bank on which they are drawn, but some items pass through as many as five banks before reaching the office where the writer of the check has his account.

Checks received at a bank for collection are sorted and then sent on to a Reserve Bank, another bank, or the drawee bank for collection, and eventually the individual item must be posted to the proper account. Since considerable handling and paper work is neces-

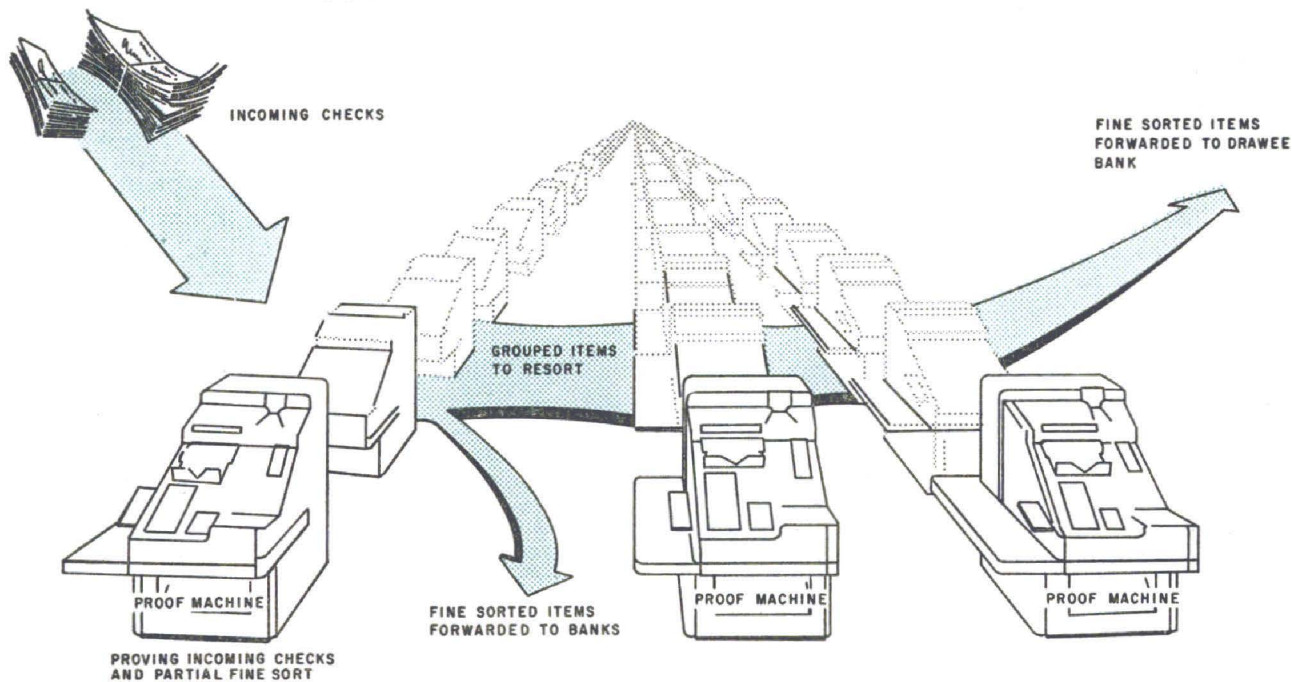
sary even in those cases where the check is deposited directly in the bank on which it is drawn, and more than two banks usually handle an item, a large volume of paper handling and recording results from the billions of checks written.

The ever-growing volume of checks has created severe space, personnel, equipment, and management problems for banks. To indicate the magnitude of the problem, in 1959 the 36 Federal Reserve offices as a group handled over 3 billion checks, or about one-fourth of the estimated total volume written on the nation's 22,000 commercial bank offices. The flow of checks through Federal Reserve offices has been increasing at a rate of about 6 percent a year during the 1950's, with a number of offices showing annual rates of increase of more than 10 percent.

In the past 20 years many mechanical and semi-automatic devices have been developed which have speeded the operation and taken some of the drudgery out of check processing. However, the limitations of present equipment and procedures have made it increasingly difficult for banks to handle the flood of checks.

Automation, in the form of electronic check-handling equipment, affords a number of advantages over present techniques. Even though the staff may be just as large when the new equipment has taken over because of continued growth in the volume of checks, the nature of the jobs will change. The average individual's contribution may involve more judgment and fewer repetitive, mechanical tasks than at present. The overall effect of these changes should be more attractive jobs with higher salaries and reduced turnover. The controls contemplated in the new equipment may also ease some of the supervisory and expediting problems. A very important consideration, too, is the probability that two to four times the present volume could be handled in the existing floor space. Finally,

PRESENT PROCESSING PROCEDURE



there is a reasonable prospect that operating costs per item, exclusive of floor space and personnel management expenses, will be lower with the new equipment than if the present equipment were to continue in use.

The search for a vehicle

Check processing has long been a favored study topic in banks. Just when the thought of electronic equipment first received serious consideration cannot be stated with certainty, but early 1954 can be regarded as the beginning of a well organized campaign to develop techniques which would permit the closest approach to full mechanization of check processing. At that time the Bank Management Commission of the American Bankers Association created a technical committee for intensive study of the check mechanization problem. The most pressing problem was finding a way for electronic equipment to read a check so that it could be sorted, tabulated, and posted to the individual deposit account.

After considering a variety of proposed alternatives, it was decided to adopt a common machine language for checks. Briefly, the

common machine language concept meant that each check would have inscribed on it a set of symbols which would permit electronic equipment to identify the bank on which the check was drawn, the account number of the depositor who had issued the check, and the amount of the check. A number of factors had to be considered in adopting a common language. Among them were: accuracy with which the information could be read by humans as well as machines; the degree of precision required in placing the information on the checks; the feasibility and cost of printing; present check practices of bank customers; and durability of the encoded information.

After discussing the problem with printers and manufacturers of equipment and consulting with Federal Reserve Banks, the technical committee decided on magnetic ink character printing as the vehicle to carry the common machine language needed. Magnetic ink contains iron-oxide. When it passes through electronic equipment, an electronic charge is passed over the ink, making it possible for the equipment to read the characters. The

FEDERAL RESERVE BANK OF SAN FRANCISCO

decision to adopt magnetic ink characters, reached in mid-1956, marked the beginning of an accelerated program for equipment design. The technical committee then developed the specifications for placing the language and the precise format of the symbols. A special type font, E-13-B, was adopted in 1958. The characteristics of a fully imprinted and encoded check are shown in the accompanying specimen.*

Underlying the successful use of the common language for checks are several important assumptions. The plan looks forward to each bank preprinting its checks with the bank's A.B.A. number and routing symbol in magnetic ink. In addition, it is anticipated that ultimately most banks will have an attachment on their tellers' or bookkeepers' adding machines which will encode the amount of the check in the appropriate place. This information permits the electronic devices to sort and tabulate the items by bank as part of the clearing process. The first time a check is processed under these assumptions will be

*The exact details required for imprinting checks may be found in *The Common Machine Language for Mechanized Check Handling*, American Bankers Association, 12 East 36 Street, New York 16, N. Y.

the only time any purely manual operation is necessary. Electronic equipment will then carry on the process until the check is received by the drawee bank. The program also contemplates the imprinting of magnetic ink account numbers by banks on their checks so as to facilitate internal bank bookkeeping.

Electronic high-speed equipment and check processing

Electronic check processing has a number of features that alter the framework of operations from the primarily manual procedures in use now. Electronic equipment can read a check much more rapidly than the human eye: a rate of 20 checks per second is considered attainable. Electronic controls plus high-speed sorting equipment can provide much more rapid sorting than the human eye plus a purely mechanical aid. Sorting rates of 36,000 checks an hour or 10 per second have been specified for some equipment. Computers can add more rapidly than the new equipment can sort, and listing devices can keep pace with the sorters.

At this bank, the pilot system supplied by the National Data Processing Corporation

JOHN H. DEPOSITOR ADDRESS CITY, STATE		No. <u>1001</u>
		<u>56-7890</u> <u>1234</u>
		<u>March 1, 1960</u>
PAY TO THE ORDER OF	<u>J. R. Smith Co</u>	\$ <u>1959 ^{xx}/₁₀₀</u>
<u>Nineteen Hundred fifty nine and ^{xx}/₁₀₀</u>		DOLLARS
NAME OF YOUR BANK CITY, STATE		<u>John H. Depositor</u>
⑆ 1 2 3 4 ⑆ 7 8 9 0 ⑆	⑆ 2 3 8 ⑆ 4 6 5 7 ⑆	3 4 6
		⑆ 0 0 0 0 ⑆ 1 9 5 9 0 0 ⑆

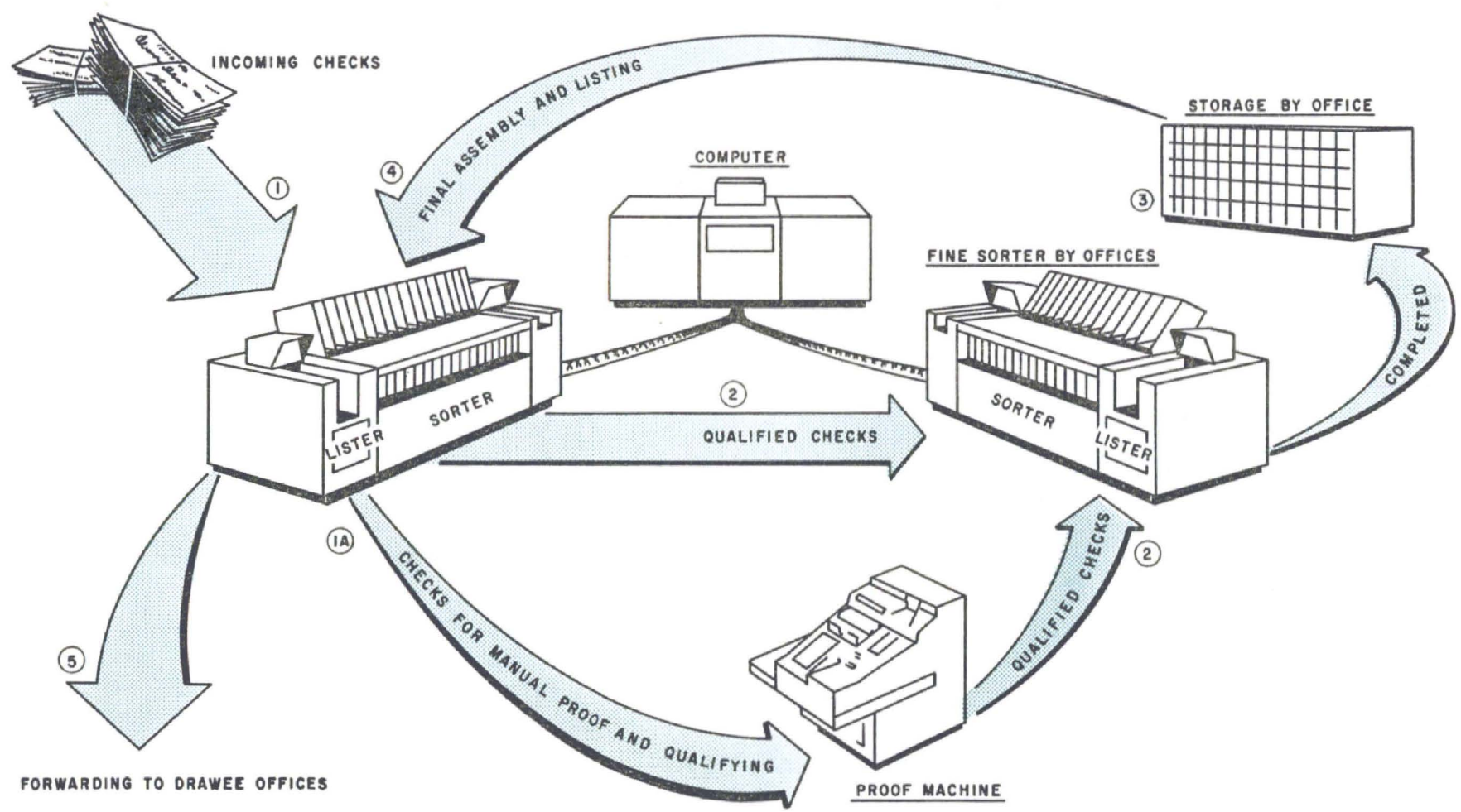
Routing Symbol

Bank Transit Number

Codes for Internal Bookkeeping

Amount Coding

NEW PROCESSING PROCEDURE



will include three primary units—a dictionary look-up computer and two sorters. The computer, in addition to performing calculations, can control three sorters, each performing different operations simultaneously, as well as the associated listing equipment. The computer is the main difference between present techniques and the new procedures. The computer will control the sorters and listers and perform the necessary calculations. It has a memory unit for storing information needed for the control operation as well as the calculations. Auxiliary devices include bank code and routing symbol preprinting equipment, amount encoders, and several amount encoding proof machines. These accessory devices are needed now, and probably will continue in use at a gradually declining rate, because many checks will not be preprinted or encoded in the early stages of the operation. When this equipment is fully tested and operating with a high proportion (75 percent or more) of fully imprinted, encoded checks, it will replace about 35 proof machines, the type of equipment currently in use.

Some remaining problems

The program outlined so far may sound as if all problems have been solved, but like all new procedures of this complexity a host of problems remains. Since checks are involved, the Federal Reserve Banks have found it necessary to require higher performance and reliability characteristics in the sorting equipment than is customarily needed in some other types of document processing. Consequently, each of the five systems being tested by the Federal Reserve Banks involves almost completely new "hardware." A test period will determine the suitability and economic feasibility of each of the designs. If past experience with new computer and document processing systems is any criterion, some changes in design or construction may be needed.

At least as important as the equipment is the degree to which checks are preprinted with routing information and encoded with amounts. The American Bankers Association has pursued preprinting of checks with considerable vigor. Bank response has been very good, but not all elements of the problem are completely under their control. Redesign and printing of new stocks of checks issued by banks will take considerable time. Furthermore, bank customers in some important cases supply their own checks. Some of these organizations may have large stocks of checks, and it may be some time before they print a new stock. Until the various issuers and users of checks have preprinted a high proportion of the items and a significant percentage of banks use amount encoding equipment in the first handling of items, the flow of fully qualified documents will be too small for efficient utilization of the equipment.

In December 1959, 13 percent of checks received at the head office of this bank were preprinted with routing information in magnetic ink. By the end of 1960, 25 percent may be preprinted, and it is expected that by mid-1961 about 50 percent will be preprinted. The rapid rise anticipated in preprinting of checks reflects the fact that the program must be started well in advance of the installation of electronic processing equipment at commercial banks. Since almost all major banks in the Twelfth District have ordered or installed electronic processing equipment, the drive for preprinting is vigorous. Amount encoding, however, will come more slowly.

While the outlines of a desirable solution to the check problem are at hand, the race is only about to begin. The long-run outlook is favorable since many banks, particularly those handling a large proportion of the checks written, are moving rapidly toward electronic processing. For the near future, however, success will depend in part on how rapidly banks which are not automating immediately

add the necessary preprinted information to their checks and encode the dollar amount on items passing through their hands.

Even banks which are not automating will find it to their advantage to have their checks preprinted and amount encoded. Checks which are ready for electronic processing will be handled with greater speed than at present. The sooner a bank receives checks drawn on it, the less difficulty it may have with overdrawn accounts and other customer errors.

As the use of magnetic imprinting proceeds and higher percentages of fully qualified checks flow through the banking system, there

may be special recognition of the lower cost and lesser difficulty of handling fully qualified checks in the form of lower charges to banks for handling these items or more prompt credit provided the depositing bank. The general public should receive better service as checks become an increasingly good substitute for currency, a matter always of concern to the central bank. The success of the contemplated arrangements, therefore, may provide benefits shared by everyone who uses banking services as well as reduce the check handling problem which has been growing steadily more burdensome.

Review of Business Conditions

EARLY estimates indicate that the national economy turned out goods and services at a rate of \$498 billion in the first quarter of 1960. The half trillion dollar economy, which used to be accorded the same degree of awe as the 4-minute mile and the speed of sound, is now a benchmark rather than a dim and distant goal. Steel production, which was pressing the physical limits of capacity in January and February, has apparently overtaken the demand for steel inventories, and production fell to 92 percent of capacity in March and was scheduled for 80 percent in mid-April. Automobile assemblies in March were up from February but 15 percent below the January high, and auto inventories rose to over 1 million units. The net effect on overall industrial production was a decline of 1 percent from February and of 2 percent from the January record.

The weather seems to have been a major factor in the national economic picture, as severe storms and floods in the midwest and eastern sections of the country gave rise to

dislocation in a number of industries and markets. The weather was bad through March 15, when the employment statistics were gathered, and was an influence particularly in construction and trade. On a seasonally adjusted basis, overall employment declined while unemployment rose substantially to 5.4 percent of the labor force in March against 4.8 percent in February. Department store and auto sales improved after mid-month so that overall retail sales in March were at about the level of the prior 2 months. Early April trade indications are even more encouraging. Housing starts were unchanged in March, although the value of new construction put in place declined.

The stability in some factors previously declining, and signs of others beginning to increase, are some causes for cheer in the business outlook. The survey of consumer attitudes in January indicated that they were optimistic, and the level of expected business spending for plant and equipment is reported as very high. The prudent forecaster survey-

ing the business scene, then, might describe it as "fair, but slightly cloudy."

Unemployment rate up in nation; cutbacks seen in District payrolls

The gains in employment that were registered in February over January were washed out in the March statistics. Total unemployment rose by 400,000, after seasonal adjustment. This represents the largest February to March increase since the end of World War II. Here again the weather played hob with statistics, for the March survey upon which this information is based was taken in the week of March 7-12, when storms gripped much of the industrial eastern portion of the nation and held down outdoor employment activities. Total civilian employment dropped by 735,000 in the month on a seasonally adjusted basis, with the decline divided almost equally between agricultural and nonagricultural employment. A large part of the increase in unemployment was due to reduced production in the automobile industry, as dealers' inventories rose sharply.

Although estimates of District employment during March are not yet available, claims for unemployment insurance indicate that aircraft firms continued to reduce their payrolls. Recently announced changes in the Bomarc program will result in the release of perhaps 3,000 production workers. However, funds released from Bomarc allocations are largely being shifted to the Atlas and Minuteman projects and to the purchase of transport planes, reducing the net effect in the District of this shift in defense spending. The construction of four Bomarc bases originally scheduled to be built on the Pacific Coast will also be cancelled.

District demand for metals eases

The weekly operating rates of western steel producers averaged about 80 percent of capacity in March, down 10 percent from the February level of operations. The stimulus to

production provided by inventory accumulation has dwindled sharply in recent weeks, but there is nothing to suggest that final consumption may be faltering.

Demand for brass mills' products remained slow as March ended, with both the United States customs smelters' and mine producers' copper quotations holding firm at 33 cents a pound. European demand contributed to the stability of the copper price as there was a "good" rate of consumption abroad and concern that political unrest in South Africa might spread to Northern Rhodesia and the Belgian Congo, both major European copper sources. The expected spring upturn has yet failed to materialize, with producers blaming the weather's adverse effect on the automobile and housing industries, two major consumers of copper products.

Prices for both lead and zinc were unchanged at the end of March. Demand for lead was quiet at 12 cents a pound, New York. Steel mills were fairly active buyers of western prime grades of zinc at 13 cents a pound, East St. Louis, for their galvanizing operations. Lead and zinc interest centered on the Tariff Commission's report to Congress on aiding domestic mine production, which revealed a split decision. The two-member minority (four members felt the Commission was not authorized to make the decision) urged removal of import quotas and more effective import duties.

Lumber and plywood markets still dormant

Demand for western lumber and plywood continued at wintertime levels in recent weeks, especially in midwestern markets which were further disrupted by storms and floods. Prices remained steady, however, as mills expected orders to be swelled by the usual springtime upturn in construction. Orders came in slowly through the end of March and lumber production was increased less than seasonally during the month. Sawmills have been revising their

sales estimates downward, apparently, and are becoming more cautious about augmenting their already high levels of inventories.

Total construction contracts rise during February

The value of construction contracts in the District rose, as it normally does, during the month of February. Of greater import, however, is the fact that this total was up 8 percent from the same month of 1959 and that this increase is reflected in all 3 of the major categories of construction. The largest gain was in the area of public works and utilities, where contracts climbed 20 percent above the year-ago total. Most of this increase reflected larger contracts for construction by utilities, as those for street and highway construction continued to decline. Contracts for nonresidential construction rose by 11 percent, reflecting increases in the area of commercial and manufacturing buildings. Gains extended even to residential construction, which moved up 2 percent during February. This was chiefly the result of increased contracts for larger residential units, along with transient quarters, e.g., motels, hotels, etc., as contracts for one- and two-family homes continued to decline.

The price of FHA-insured mortgages rose to \$96.50 per \$100 in March, suggesting that conditions in the mortgage market have eased somewhat, presumably due to the fact that demands for funds from other sectors of the economy have not been as great as anticipated earlier. This "ease" has not been reflected as yet in FHA applications, however. Twelfth District applications for new housing rose slightly during February, as they normally do, but were still 31 percent below the corresponding month of last year.

Farm prices continue to strengthen in March, but—

For the third consecutive month, farm prices firmed in March as severe weather over much

of the country reduced marketings. Since the first of the year, prices received by farmers have risen considerably more than the prices they pay, turning the terms of trade in the farmers' favor, though less so than in March 1959. Despite recent improvement, farm prices are lower than a year ago, and this is reflected in smaller receipts that farmers received from marketings during January and February of 1960. Prices received by farmers for important farm commodities in the District strengthened during March but were generally below year-ago levels, except for fresh vegetables, navel oranges, and lambs. Up sharply during March were prices received for winter potatoes and navel oranges, both of which rose by 32 percent. Contrary to the farm income situation nationally, cash receipts of District farmers for the first 2 months of 1960 were higher than a year earlier. All District states except Washington and Oregon showed increases, but the bulk of the rise occurred in California and Arizona, where heavy marketings of beef cattle from feedlots was an important factor contributing to the increased cash receipts in these states.

Field crop acreage planted in the District will total 21.3 million acres, according to farmers' production plans, with the largest increases in acreage expected for grain sorghums, hay, and cotton. In this District, cotton farmers usually plant nearly all of the acreage they are allotted, with underplanting amounting to only about 1 percent. Choice of Plan B under the cotton price support program (40 percent increase in acreage above basic allotments in exchange for a lower level of support) was common among District cotton producers. The District is allocated about 6 percent of the nation's basic cotton acreage but accounted for 26 percent of the increase in acreage available for planting because of the election of Plan B. District plantings will probably be about 30 percent greater than basic acreage allotments and about 6 percent larger than in 1959.

The heavy participation of District cotton growers in Plan B will have implications for commercial banking facilities in the District if the market price remains above the minimum level of support, as it did in 1959. This would mean that cotton would move through commercial channels rather than into government hands and that the financing of the marketing of District cotton would rely heavily on the resources of commercial banks. The value of the District cotton crop exceeds \$400 million.

Retail sales increase in the District

Sales of retail stores¹ in the District in February were 8 percent above the same month in 1959. The better showing was accounted for almost entirely by automobile and automotive accessories sales, which were above those of last year. Sales of automobiles, lumber, building materials, and hardware were up in February over January 1960, but sales of furniture and appliances dropped. As is normal in February, sales of soft goods dropped below the January level. The decline was approximately the same as last year. District department stores, however, showed an increase of 7 percent over February 1959 and sales of apparel stores were up 6 percent. In March, department store sales showed a 1 percent decline from the comparable period last year. If allowance were made for the fact that Easter falls 3 weeks later this year, sales in March would show an improvement over last year. Department store sales the first week of April were up over last year even after adjustment for Easter.

New car registrations in California averaged 2,370 per business day for the first 21 days of March. This represents an increase of 12 percent over average daily registrations in March 1959 and a gain of the same proportion over average registrations in February of this year.

Tax borrowings boost business loans in March

In March, total loans of Twelfth District reporting member banks rose by \$117 million, only about one-third of the increase in March 1959. This reflects, in part, the fact that business firms borrowed less to meet quarterly tax payments due in March than they did last year. Even so, commercial and industrial loans accounted for \$86 million of the March loan increase. Metal manufacturers were heavy borrowers during the month, as were the other mining and manufacturing groups. Public utilities, transportation companies, and the "all other types of business" classification also increased their bank borrowings. Food processors and commodity dealers continued to liquidate their bank debt during the month as they have each month this year. As automobile sales picked up in March, reporting bank loans to consumers rose, reflected in the increase of \$25 million in the "other loan" category, which is composed primarily of consumer loans. Contrary to the usual seasonal pattern, real estate loans declined \$12 million during March—the only loan category to show a drop. In the first week of April, total loans continued to rise and loans outstanding were \$49 million above the year-end, completely offsetting the loan decline which occurred in January.

Demand deposits adjusted increased by \$73 million in March, the first monthly increase registered in 1960. The ratio of bank debits to demand deposits was up 6 percent over March 1959, indicating a more intensive use of funds. Total time deposits in March dropped slightly below the February level, although for the first time this year banks had an increase, \$9 million, in savings deposits. This improvement in attracting savings appears to have been short-lived, for in the first week of April savings deposits held by District reporting banks dropped \$6 million.

¹District retail firms operating 1-10 stores.

In March, District reporting banks' holdings of United States Government securities declined for the third consecutive month. The \$237 million reduction, however, was less than in the preceding 2 months. Reductions occurred in all maturities—short-, intermediate-, and long-term. In the first 2 weeks of April there was a turn-about in bank holdings of Governments, the first weekly increases in 1960.

Interest rates on business loans hold steady

In spite of the general decline in short-term interest rates during the first quarter of 1960, a sampling of rates charged by District banks on short-term loans made during the first 15 days of March 1960 showed an average rate of 5.72 percent, about the average rate on loans made the first half of December 1959. For the nation as a whole, there was a very small decline. In the District the only rate decline by size category was on loans of \$100,000-\$200,000. The small average rate change from the last quarter of 1959 conceals shifts in the distribution of loans made at each rate of interest. In March, only 1.2 percent of all loans carried rates under 5 percent compared with 2.5 percent of all loans in December. There was a small increase in loans made at rates of 5 percent but less than 6 percent. A small gain in the proportion of loans made at rates over 6 percent was accounted for mainly by an increase in the number of loans under \$10,000 which bore this higher interest charge.

Lull in municipals market nears end

The municipal bond market was characterized by a light supply of new issues during

February and March. This has permitted some slight price rises and clearing up of old inventories. Developments in the latter part of March indicate that this quiet period is coming to a close, with several important issues scheduled for the near future.

Only two issues of any size were floated in the District in March, both by units which make frequent trips to the money market. The Los Angeles County Flood Control District sold \$10 million of general obligation bonds at a net interest cost of 3.626 percent, slightly lower than the rate paid on an issue of \$21 million last October. The other issue was a flotation of \$100 million of construction and veterans bonds by the State of California. Because of the lightness of the March calendar, these bonds sold quickly at a net cost of 3.949 percent as opposed to the 4.02 percent rate paid by the State for funds in January. These two issues alone accounted for more than a quarter of all municipal issues in the nation in March. A significant development in the municipal market was the announcement by the State of California of its intention to alter its marketing policy in an attempt to secure more favorable rates on smaller issues to be offered at times determined by the market, rather than the present more or less quarterly blocks of \$50-100 million.

The April calendar for the District includes \$52 million of school district and publicly owned utility district issues. A special bond issue for \$62 million is being readied for April or May offering by the Oroville-Wyandotte Irrigation District in California. The bonds will finance a water and power project with a private utility contracting to take the electric power generated by the installation.

FEDERAL RESERVE BANK OF SAN FRANCISCO

BANKING AND CREDIT STATISTICS AND BUSINESS INDEXES—TWELFTH DISTRICT¹

(Indexes: 1947-1949 = 100. Dollar amounts in millions of dollars)

Year and Month	Condition items of all member banks ²				Bank debits index 31 cities ^{4, 5}	Bank rates on short-term business loans ⁶	Total nonagricultural employment	Total mfg employment	Car-loadings (number) ⁸	Dep't store sales (value) ⁹	Retail food prices ^{7, 8}
	Loans and discounts	U.S. Gov't securities	Demand deposits adjusted ²	Total time deposits							
1929	2,239	495	1,234	1,790	42	....	...	...	102	30	64
1933	1,486	720	951	1,609	18	....	...	...	52	18	42
1939	1,967	1,450	1,983	2,267	30	....	60	57	77	31	47
1950	.....	.....	.....	.....	...	....	103	105	98	107	100
1951	7,866	6,463	9,937	6,777	132	3.66	112	121	100	112	113
1952	8,839	6,619	10,520	7,502	140	3.95	118	130	100	120	115
1953	9,220	6,639	10,515	7,997	150	4.14	121	137	100	122	113
1954	9,418	7,942	11,196	8,699	154	4.09	120	134	96	122	113
1955	11,124	7,239	11,864	9,120	172	4.10	127	143	104	132	112
1956	12,613	6,452	12,169	9,424	189	4.50	134	152	104	141	114
1957	13,178	6,619	11,870	10,679	203	4.97	138	156	96	140	118
1958	13,812	8,003	12,729	12,077	209	4.88	138	154	89	143	123
1959	16,537	6,673	13,375	12,452	237	5.36	143	163	93	156	123
1959											
March	14,176	7,436	12,228	12,003	244	4.97	142	164	97	156r	123
April	14,768	7,739	12,874	12,301	241	....	143	164	94	153	123
May	15,000	7,511	12,520	12,399	231	....	143	163	101	154	123
June	15,328	7,329	12,589	12,517	235	5.21	143	164	95	161	123
July	15,617	7,096	12,945	12,390	242	....	144	166	88	161	123
August	15,924	6,932	12,797	12,378	241	....	144	164	105	162	123
September	15,978	6,717	12,850	12,365	238	5.54	144	163	87	154	123
October	16,010	6,702	12,963	12,316	232	....	144	161	71	153	123
November	16,252	6,651	13,133	12,138	251	....	145	164	91	156	123
December	16,537	6,673	13,375	12,452	236	5.71	145	165	98	158	123
1960											
January	16,354	6,304	12,971	12,111	239	....	146	167	92r	153	124
February	16,388	5,976	12,493	12,017	244	....	147	167	91	158	123
March	16,660	5,707	12,553	11,986	249	5.72	...	...	..	161	...

Year and month	Industrial production (physical volume) ⁵							Waterborne Foreign Trade Index ¹⁰					
	Lumber	Petroleum ⁷		Cement	Steel ⁷	Copper ⁷	Electric power	Exports			Imports		
		Crude	Refined					Total	Dry Cargo	Tanker	Total	Dry Cargo	Tanker
1929	95	87	78	55	...	103	29	190	150	247	124	128	7
1933	40	52	50	27	...	17	26	110	...	...	72	...	...
1939	71	67	63	56	24	80	40	163	107	243	95	97	57
1950	114	98	103	112	125	115	120	91	80	108	142	145	103
1951	113	106	112	128	146	116	136	186	194	175	163	140	733
1952	115	107	116	124	139	115	145	172	200	129	206	142	1,836
1953	116	109	122	131	158	113	162	141	138	146	314	163	4,239
1954	115	106	119	133	128	103	172	133	141	123	268	166	2,912
1955	122	106	124	145	154	120	192	165	178	149	313	187	3,614
1956	120	105	129	156	163	131	209	201	261	117	459	219	7,180
1957	106	101	132	149	172	130	224	231	308	123	582	216	10,109
1958	107	94	124	158	142	116	229	176	212	123	552	218	9,096
1959	116	92	130	174	138	100	...	186	221	135	682	283	11,083
1959													
February	117	92	126	142	187	138	242	156	183	118	701	215	13,375
March	114	92	128	171	192	140	250	212	210	217	657	383	7,810
April	114	92	130	178	213	144	250	170	191	139	605	279	9,101
May	118	92	128	188	216	148	254	161	181	133	587	283	8,516
June	111	93	128	186	205	138	269	170	192	139	813	307	13,990
July	118	92	136	192	79	118	267	166	215	96	612	284	9,168
August	111	92	136	191	11	76	256	196	265	97	654	254	11,074
September	113	92	132	176	13	36	248	171	217	107	678	269	11,344
October	115	91	132	186	15	40	249	231	289	150	702	261	12,206
November	117	91	133	154	148r	43	257	148	202	71	807	290	14,284
December	129	91	131	152	212r	40	...	209	266	128	858	302	15,333
1960													
January	126	90	130	141	200p	69	...	...	...	...	...	...	...
February	126	90	127	140	209p	..	...	...	...	...	...	...	...

¹ Adjusted for seasonal variation, except where indicated. Except for department store statistics, all indexes are based upon data from outside sources, as follows: lumber, California Redwood Association and U.S. Bureau of the Census; petroleum, cement, and copper, U.S. Bureau of Mines; steel, U.S. Department of Commerce and American Iron and Steel Institute; electric power, Federal Power Commission; nonagricultural and manufacturing employment, U.S. Bureau of Labor Statistics and cooperating state agencies; retail food prices, U.S. Bureau of Labor Statistics; carloadings, various railroads and railroad associations; and foreign trade, U.S. Bureau of the Census. ² Annual figures are as of end of year, monthly figures as of last Wednesday in month. ³ Demand deposits, excluding interbank and U.S. Government deposits, less cash items in process of collection. Monthly data partly estimated. ⁴ Debits to total deposits except interbank prior to 1942. Debits to demand deposits except U.S. Government and interbank deposits from 1942. ⁵ Daily average. ⁶ Average rates on loans made in five major cities, weighted by loan size category. ⁷ Not adjusted for seasonal variation. ⁸ Los Angeles, San Francisco, and Seattle indexes combined. ⁹ Commercial cargo only, in physical volume, for the Pacific Coast customs districts plus Alaska and Hawaii; starting with July 1950, "special category" exports are excluded because of security reasons. ¹⁰ Alaska and Hawaii are included in indexes beginning in 1950. p—Preliminary. r—Revised.