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FEDERAL RESERVE BANK
OF KANSAS CITY

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Proposals for Broadening the INCOME TAX BASE

DURING THE PAST few years, considerable sentiment has developed for a major reworking of the Internal Revenue Code to allow a broader definition of individual income and a reduction of individual income tax rates. In view of the importance of the individual income tax, it seems appropriate to discuss the major proposals for revision and the issues involved in assessing these proposals.

Last month, a *Monthly Review* article discussed the structure and coverage of the Federal tax on individual incomes. It was pointed out that although the structure of tax rates applied to taxable incomes of individuals is quite severe, well over half of total personal income is not subject to tax. It is widely held that this situation creates serious inequities and causes unnecessary distortions of economic incentives. As a remedy, it has been proposed that the tax base be broadened to encompass a greater portion of personal income, and that tax rates be lowered.

This article outlines certain proposals to enlarge the tax base. The focus of the first portion is on elements of current personal income that go untaxed. Proposals for revision of the

taxation of capital gains (income from a rise in the value of capital assets) are taken up in a later section.¹ A third, and final, article will deal with arguments raised against some of the major proposals, and also will outline certain possible revisions in the code of a different nature from those set forth here.

SOURCES OF DIFFERENCE BETWEEN TOTAL PERSONAL INCOME AND TAXABLE INCOME

The chart on page 4 shows the sources of difference between total personal income as it is measured in the National Income Accounts and taxable income of individuals in 1959, the latest year for which detailed income tax data are available. Capital gains are not included in either measure. The differences fall into three major categories. Reading from the top of the chart, the first of these results from conceptual differences in the definitions of total personal income and adjusted gross income for tax purposes. This nontaxable personal income comprised 13 per cent of total personal income in 1959, or about \$50 billion. The second category consists of nonconceptual differences—income that is not conceptually excluded from taxation but does not show

¹ This article draws heavily on *Tax Revision Compendium*, Washington, D.C.: U. S. Government Printing Office, 1961, particularly Joseph Pechman's paper, "What Would a Comprehensive Individual Income Tax Yield?" (Volume 1, pp. 251-281). Pechman's study is valuable to anyone interested in a detailed discussion of possible revisions of the tax base. It is reprinted in *Essays in Federal Taxation*, New York: Committee for Economic Development, 1960, pp. 17-48.

up on returns for various reasons. Nonconceptual differences accounted for 8 per cent of total personal income, or over \$30 billion. The third and largest category consists of the exemptions and deductions which taxpayers are allowed to subtract from adjusted gross income in determining taxable income.

Conceptual Differences

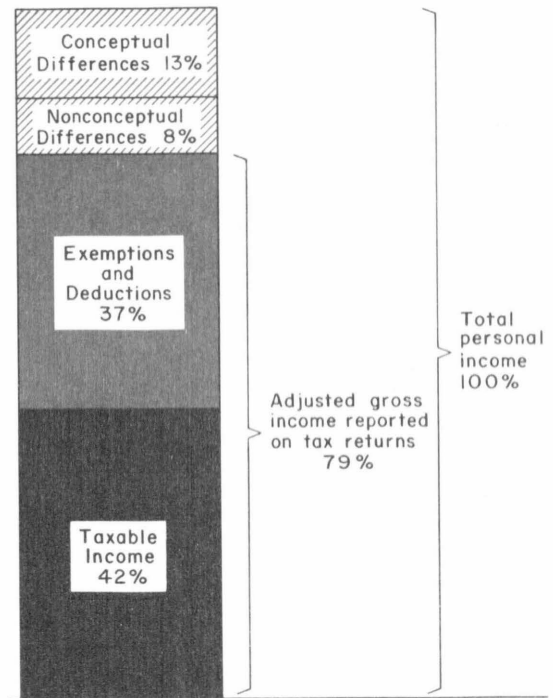
Among the portions of total personal income which taxpayers are not required to report as part of adjusted gross income on tax returns are large amounts of transfer payments made under the Nation's social insurance programs. These include old-age and survivors benefits under the Social Security System and railroad retirement system benefits and disability payments.² Other transfer payments, including unemployment and workmen's compensation and public assistance, together with certain kinds of military pay and allowances and veterans' benefits, also are excluded from adjusted gross income, although they are included in total personal income.

A second important element of the conceptual differences between total personal income and adjusted gross income is certain imputed income and income in kind. Such income does not involve money payments to the recipient. An important component of this total is the rental value of owner-occupied homes. Total personal income includes the imputed value of housing services enjoyed by a homeowner, a treatment that assures that the services of owner-occupied houses are included on a par with the services of rental units in the computation of national income. Taxpayers are not required to report imputed rent in adjusted gross income for tax purposes.

Another source of untaxed imputed income arises from the provision of "free" services to

² To some extent, the omission of these payments from adjusted gross income is offset by the inclusion of social security contributions in adjusted gross income for tax purposes, but not in total personal income figures.

SOURCES OF DIFFERENCE BETWEEN TOTAL PERSONAL INCOME AND TAXABLE INCOME, 1959*



*Total personal income as reported in *Survey of Current Business*, July 1961, less fiduciary income not distributed and income of pension funds and other tax-exempt organizations. Adjusted gross income and taxable income excluding net capital gains derived from *Statistics of Income (Preliminary), Individual Income Tax Returns for 1959*, U. S. Treasury Department.

customers of financial intermediaries. Banks, for example, provide checking account and other services that cost far more than the service charges paid by depositors. This practice is profitable for banks because it attracts deposits, thereby raising lending capacity. The services provided are largely a substitute for payment of interest on demand deposits, which is not allowed under the Nation's banking laws. Part of this "imputed interest" is allocated to personal income under national income accounting methods. Other financial institutions also provide such "free" services, part of which

are included in the imputed interest portion of total personal income.

Certain other kinds of nonmoney income not reportable as adjusted gross income for tax purposes are included in total personal income. These include food and clothing provided to members of the armed forces, and food and fuel produced and consumed on farms.

A third source of nontaxable personal income is interest earnings on state and local debts and on a very small proportion of the outstanding Federal debt. Tax exemption of interest payments on state and local debt traces historically to the belief that taxing the instruments of lower levels of government is unconstitutional, a view that is widely contested today. Although the amount of this interest received by individuals is small (less than \$700 million in 1959) its exemption from taxes has caused a great deal of controversy.

Nonconceptual Differences

After these conceptual differences have been accounted for, a difference of over \$30 billion remains between total personal income in 1959 and total adjusted gross income reported on tax returns. About \$3.5 billion of this is estimated to be income which is included in the adjusted gross income concept, but was received by persons who were not required to file returns in 1959 because their personal exemptions exceeded gross income. The remaining nonconceptual differences consist of underreporting by taxpayers and statistical discrepancies. Some unreported income will be taxed as returns are audited and deficiencies are uncovered.

Deductions and Exemptions

The differences reviewed above between total personal income and adjusted gross income shown on tax returns account for over \$80 billion of the \$220 billion difference between taxable income and total personal income in 1959. But the major portion of the \$220 billion difference traces to subtraction of allowable exemptions and deductions from

adjusted gross income. These totaled approximately 37 per cent of total personal income and 46 per cent of total adjusted gross income.

In computing his taxable income, a person is allowed to deduct some specified items of expenditure from adjusted gross income. Within certain limits, the law provides for deductions of contributions to charitable and educational institutions, interest payments on personal debts, state and local taxes paid, and extraordinary medical costs.³ Other deductions allowed include uninsured casualty losses, such as damage to a home or automobile, deductions for certain costs involved in earning income that are not accounted for in determining adjusted gross income, limited deductions for child care expenses of working mothers and widowers, and certain educational expenses.

The taxpayer is given an option of itemizing deductions on his tax return or taking a standard deduction equal to 10 per cent of adjusted gross income up to a maximum of \$1,000. A majority of taxpayers use the standard deduction.

In addition to personal deductions, exemptions of \$600 may be taken by every taxpayer for himself and each of his dependents. Persons 65 or over are allowed an additional exemption, as are the blind. Thus, the parents of five children who file a joint return are allowed seven personal exemptions, and subtract \$4,200 from adjusted gross income on that account. If the couple reported \$8,000 adjusted gross income, and took the standard deduction (\$800 in this case), its taxable income would be only \$3,000.

³The medical deduction is found by adding (a) spending for drugs and medicine in excess of 1 per cent of adjusted gross income to (b) other medical and dental bills, then subtracting from this total 3 per cent of adjusted gross income. For taxpayers 65 and over, the entire sum of (a) and (b) is deductible. These deductions are subject to ceilings depending on the marital status and number of exemptions of the taxpayer.

PROPOSALS FOR BROADENING THE TAX BASE

Many students of the individual income tax argue that the exclusion of large portions of personal income from taxation fosters inequities, distorts economic decisions, and necessitates the imposition of excessively high rates on taxable income if adequate revenue is to be raised. A tightening of the Internal Revenue Code to raise the amount of personal income subject to tax is proposed as a remedy for these ills.

Inequities arise when taxpayers who have equal taxpaying capacities do not pay equal taxes. Although there is no scientific test for measuring taxpaying capacities, the dominance of the individual income tax in this country's finances is due largely to the belief that income is the best and fairest measure of a person's capacity to pay taxes. Fairness clearly requires a definition of taxable income that measures taxpaying capacity with reasonable accuracy. But the complete exclusion of certain types of economic gain from adjusted gross income assures that inequities will arise. Two persons with equal net incomes in the ordinary economic sense pay different taxes if one of them earns his income solely from taxable wages and dividends while the other's earnings include elements of tax-exempt income such as nontaxable transfer payments and wage supplements, income in kind, and imputed income not included in adjusted gross income. For this reason, many analysts propose that the income concept used for taxation be broadened to include large amounts of personal income now excluded from the tax base.

Raising Adjusted Gross Income

In a detailed study, one analyst has estimated that a feasible program for broadening the definition of adjusted gross income could add well over half of the total personal income now excluded because of conceptual differences.

The tentative proposals would involve bringing large portions of tax-exempt transfer pay-

ments into the adjusted gross income base, including social security and railroad retirement benefits, public assistance, unemployment and workmen's compensation payments, and nontaxable payments to veterans and military personnel. In addition, the study outlines suggestions for taxing imputed rent of owner-occupied houses and interest earnings on life insurance savings which are not presently taxable, and for ending tax exemption of interest payments by state and local governments.

It has been estimated that about \$5.6 billion of interest and dividends was not accounted for on tax returns in 1959. Considerable support has developed recently for enacting a law that would require withholding of tax at the source of these payments, as is done with wage and salary income.

Personal Deductions Under Scrutiny

In addition, many proposals have been advanced for revising provisions for deductible expenditures. Most, but not all, of these call for a tightening of deductibility rules. Personal deductions are usually intended to allow for special circumstances that affect a person's taxpaying capacity, to provide a more accurate measure of net income, or to subsidize what are held to be socially desirable activities.

The deduction for charitable contributions was originally granted to assure that income taxation did not dry up the sources of charity, and continues to be justified as a subsidy to charitable, religious, and educational institutions.

Most other deductions are designed primarily to afford a more equitable measure of taxpaying capacity. The deduction for extraordinary medical expenses is intended to provide relief for taxpayers who have the ill fortune to encounter serious and expensive medical problems. Similarly, the deduction for state and local taxes paid is viewed as a means of allowing for differential tax burdens among taxpayers on the ground that payment of state

and local taxes reduces a person's ability to meet Federal tax obligations.

The casualty loss deduction refines the measurement of net income by recognizing that people who suffer these losses are made economically worse off by them. Similarly, deductions for expenses involved in earning an income are needed to offset certain inadequacies of the adjusted gross income concept as a measure of net income. The child care deduction is a special kind of allowance for the expenses involved in earning an income when both parents work.

The deduction for interest on personal debts is conceived by some as preventing a kind of double tax on what is essentially a transfer of income from debtor to creditor. Others view it as a subsidy to personal borrowing.

Criticisms of Deductions

All of the deductions listed above have been criticized. Some critics have contended that the tax system is more inequitable with the present provisions for deductions than it would be without them.

The standard deduction, whereby a taxpayer may deduct 10 per cent of his adjusted gross income up to a maximum \$1,000 deduction in lieu of itemizing, has been criticized severely. Since the purpose of allowing deductions is either to provide equitable adjustments for special circumstances or to encourage socially desirable spending, the use of a standard deduction not tied to specific expenditures is open to criticism. The justification for the standard deduction is that it greatly simplifies the problems of administering the tax—policing the millions of itemized deductions that would appear on small returns without the standard deduction seems impractical.

The effect of the standard deduction is to reduce taxable income by 10 per cent of adjusted gross income up to the \$1,000 maximum. Critics of the present arrangement suggest that it could be eliminated, and that taxpayers who itemize be allowed deductions only to the ex-

tent that their total expenditures falling into the deductible category exceed 10 per cent of adjusted gross income or \$1,000, whichever is lower.

It is often pointed out that deduction of state and local sales taxes rests on shaky ground because in many cases these taxes are regarded as payment for benefits received in the form of government services. On the other hand, deductibility of state income taxes is held to be a practical necessity because without it the combined state and Federal marginal rates might exceed 100 per cent for persons in the highest bracket.

The deduction for charitable contributions is sometimes criticized as a highly inefficient subsidy. According to this argument, the average taxpayer, facing a relatively low marginal rate, does not consider the tax advantages of gifts to eligible organizations and is therefore not led to give more. It is therefore proposed that the deduction be allowed only for very large gifts, or for that portion of charitable contributions in excess of some minimum portion such as 10 per cent of adjusted gross income.

The medical expense deduction is held by some to be unduly liberal, allowing taxpayers to deduct medical outlays only slightly higher than routine expenditures.

Perhaps most severely criticized are the deductions of interest payments on personal debts and state and local taxes on real estate. Most of the interest deductions in this category are for payments on mortgage debts. Similarly, most of the real property tax deductions shown on individual returns are for homes owned by the taxpayer. Coupled with the omission of imputed rent from adjusted gross income, these deductions give rise to serious discrimination in favor of homeowners. This can be seen in the following example:

Suppose two people each earn \$10,000 a year from wages and salaries and both have investments worth \$10,000. The first person owns corporate bonds on which interest income

is \$600 per year. He rents the house he lives in, valued at \$20,000, for \$2,400 per year.

The second taxpayer invests \$10,000 in an identical home, also worth \$20,000. On his \$10,000 mortgage loan, he pays \$600 annual interest, which is tax deductible. He pays property taxes of \$400, also deductible, and faces annual maintenance and depreciation costs of \$800. His costs of owning the home come to \$1,800 plus the \$600 interest income he foregoes by maintaining his \$10,000 equity, for a total of \$2,400—the rental value of the house.

In the relevant economic sense, the two individuals have equal net incomes of \$10,600 each. But the first taxpayer will be taxed more than the second, who is not required to report his \$600 net “rental” income from his home and can also deduct \$1,000 interest and taxes from his adjusted gross income in computing taxable income. The renter has a taxable income \$1,600 higher than the homeowner. At a 26 per cent marginal tax rate, he pays \$416 more in taxes. For taxpayers in higher brackets the advantages of homeownership are even more striking.

One way to remove the inequity would be to require homeowners to include rental values, net of maintenance and depreciation costs, in adjusted gross income. Thus the second taxpayer cited above would enter into his adjusted gross income \$2,400 implicit rental income less \$800 maintenance and depreciation charges, or \$1,600. He could then deduct his total \$1,000 interest payments and taxes. The net result would be to increase his taxable income by \$1,600, eliminating his advantage over the renting taxpayer.

This proposal has been seriously considered by many critics of the income tax who point out that similar plans are used in many other nations.

Another approach would not allow deductions of interest and tax payments for owner-occupied houses. The deductibility of these items usually is justified on the ground that

they are part of the cost of producing property income. But since the income (rental value) is not taxable, the cost of producing it ought not be deductible, it is argued.

Such a change would eliminate only a part of the discrimination in favor of the homeowner. Thus, the homeowner in the example would declare the same adjusted gross income as before, but would not be allowed to deduct the \$1,000 for interest and taxes. His net advantage over the first taxpayer would be reduced to \$600, the amount of net rental income deriving from his equity in the home.

TREATMENT OF LONG-TERM CAPITAL GAINS

A further suggestion for augmenting the tax base involves stiffer tax treatment of capital gains—income from the sale of assets at prices which exceed original cost. Presently, gains from the sale of capital assets held more than 6 months are classified as long-term capital gains and are, with minor exceptions, given preferential treatment over ordinary income. The excess of a taxpayer's net long-term capital gains over any net short-term capital losses (on capital assets held less than 6 months) is taxed at a rate equal to one half the marginal rate on ordinary income or 25 per cent, whichever is lower. Furthermore, unrealized capital gains on assets held at death are never subjected to income tax.

The preferential treatment of capital gains has been criticized severely on the grounds that it favors certain taxpayers, and that it distorts economic decisions by making it profitable to arrange for income to take the form of long-term gains. For example, it is alleged that corporations are artificially induced to retain their earnings for reinvestment in the business, rather than to distribute them as dividends. In this way, presumably, an investor's share of the net income of the corporation takes the form of rising values of common stock, a capital asset, rather than dividends, which are taxed as ordinary income.

The most drastic proposals for taxation of capital gains would involve treating long-term gains as ordinary income in the year of realization, and requiring unrealized capital gains to be recorded in the adjusted gross income of decedents in the year of death.

POTENTIAL TAX BASE GAINS FROM MAXIMUM TIGHTENING

If the most extreme proposals for tightening the definition of taxable income by broadening the adjusted gross income concept and limiting personal deductions were adopted, the tax base could probably be increased by more than 30 per cent. Using 1959 figures, for example, inclusion in adjusted gross income of large elements of exempt transfer payments, interest earnings on life insurance savings, interest payments on state and local debts, and imputed net rent of owner-occupied houses might well have added \$15 - \$20 billion to adjusted gross income shown on tax returns.

Furthermore, more severe limitations of deductions, together with outright removal of some deduction provisions, might have added another \$25-\$30 billion to the taxable income base. Taxation of all realized capital gains as ordinary income, and inclusion of unrealized gains in the income of decedents in the year of death, might add as much as \$10 billion to taxable income, although a precise figure is hard to estimate.

If all of the proposals outlined in this article were put together in one package, it would seem possible to raise total taxable income by an amount in the \$50-\$60 billion range, using 1959 figures. This would represent a 31-37 per cent increase in the tax base, and would make possible a commensurate reduction in marginal rates without loss of Federal revenue. Thus, it seems evident that the Nation could, if

it chose to, drastically alter the coverage of the income tax and thereby make possible a very substantial reduction of rates.

THE OTHER SIDE OF THE STORY

The appeal of such suggestions lies partly in their promise of greater fairness in the income tax and partly in their promise of making lower tax rates possible without a sacrifice of revenue. But there are also disadvantages involved in trying to broaden the tax base by these means.

Administrative problems raised by some of the changes would be great. Taxpayer resistance to some of the proposed changes might engender severe problems of taxpayer compliance, at least until the new system became established.

In addition, even more basic arguments can be raised against many of the proposed revisions. In some cases, it is argued that present favored tax status does indeed promote socially desirable goals—homeownership is a case in point. And in many cases, an objection can be found that points to inequities arising out of a sort of *ex post facto* changing of the rules. For example, it can be argued that any change in the tax treatment of owner-occupied houses that causes property values to fall inflicts an arbitrary loss on homeowners.

Such objections should be given careful consideration in any reformulation of the income tax. There are ways in which some of them might be at least partly overcome by careful planning of any changes in the tax laws. In other cases, the gains from a change need to be weighed judiciously against whatever disadvantages they might entail.

The final article in this series will deal with such problems and with certain more technical aspects of proposed tax reform.

FREE RESERVES AND

BANK RESERVE MANAGEMENT

A CENTRAL component of any analysis of the money and capital markets is an appraisal of current and prospective changes in central bank policy. While a broad range of indicators may be used in such studies, the results frequently are summarized, or thought to be confirmed, by changes in the volume of free or net borrowed reserves of Federal Reserve member banks — excess reserves less borrowings from Reserve banks.

The broad developments which are thought to be expressed by these terms may be described as follows. If member bank borrowings from Reserve banks are at low levels, the provision of additional reserves by the central bank induces banks to expand their loans and investments and their deposit liabilities. Expansion of deposits raises required reserves and reduces excess reserves. Maintenance of a relatively high level of excess reserves therefore means that the central bank is continually restoring these reserves as expansion of bank liabilities reduces them. The high rate of expansion of bank assets reduces interest rates and broadens the availability of credit. Failure of the central bank to replenish excess reserves fully would be interpreted as a change of monetary policy in the direction of less ease. Since a rise in the volume of borrowing usually accompanies a decline of excess reserves, the change in free reserves may be even sharper.

A relatively large volume of net borrowed reserves is thought to imply that a restrictive credit policy exists because banks are more re-

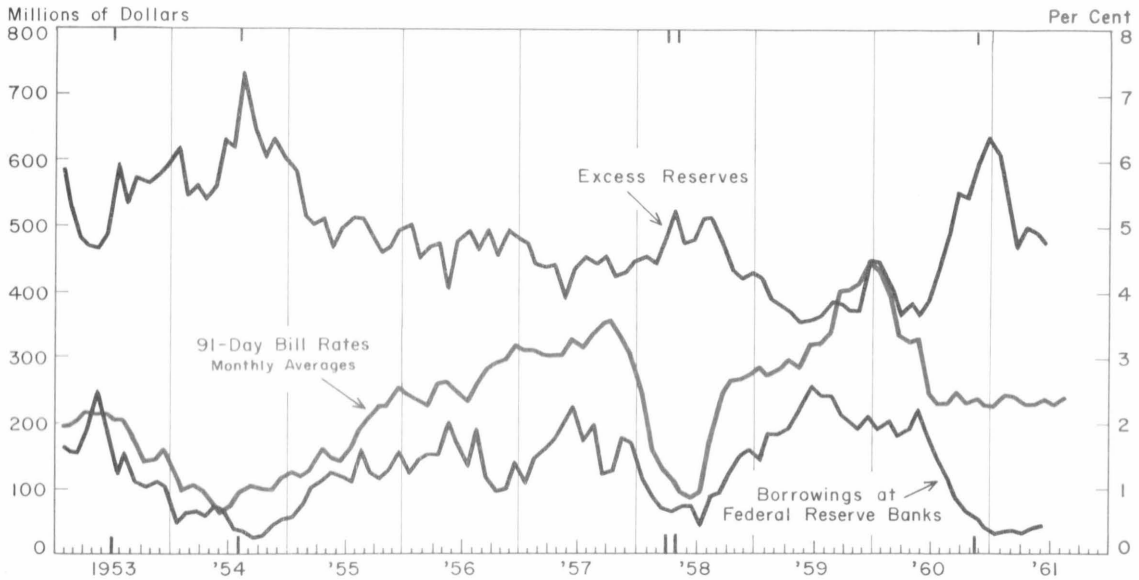
luctant to expand their assets when reserves must be borrowed. Reserves obtained in this way are temporary and are useful only in deferring a more basic adjustment of assets or in bridging a short-run reserve deficiency. The expense of borrowing also causes banks to be more selective in granting loans or to sell securities, possibly at prices below book value.

However, a relatively large and stable volume of net borrowed reserves is consistent with either the expansion or contraction of commercial bank credit. If the central bank supplied reserves to the banks when borrowed reserves were large and banks chose to increase assets rather than to reduce indebtedness, expansion would occur. But if banks found continued indebtedness undesirable and sought to reduce their debts by selling securities and curtailing loans, and if the central bank were selling securities, the maintenance of a given level of net borrowed reserves would mean that excess reserves produced by the contraction of deposits and required reserves were being absorbed by the central bank.

Changes in reserve requirements over the past 2 years have heightened interest in the implications of bank reserve positions. According to one analyst, these changes have increased the volume of excess reserves banks desire to hold. If that were the case, then any given level of excess or free reserves would be less expansive than before and any given level of net borrowed reserves would be more restrictive. Moreover, the characteristics of free and excess

EXCESS RESERVES AND BORROWINGS FROM RESERVE BANKS OF COUNTRY MEMBER BANKS, AND TREASURY BILL RATES

Daily Averages of Reserves and Borrowings, by Months



reserves should be reviewed periodically since their movements at times may have meaning entirely different from the one usually ascribed to them.

The accompanying chart shows the changes in country member bank excess reserves and borrowings from Reserve banks, and the rate on 91-day Treasury bills since 1952. Major changes in reserve requirements are shown by the heavy vertical lines on the horizontal axis. Country bank data are used because these banks held most of the excess reserves of the banking system.

The statistical case for believing that a change in bank reserve management has occurred rests mainly on the behavior of banks over the past year. Excess reserves seem to have been somewhat high when account is taken of the relatively favorable level of market interest rates and the interval since the last change of reserve requirements in which banks could have readjusted their reserve positions.

IMPLICATIONS OF CHANGES IN RESERVE REQUIREMENTS

Three basic changes have been made in the reserve requirements of country member banks since late in 1959. In a series of actions between December 1959 and December 1960, banks were allowed to include vault cash in meeting legal reserve requirements. In November 1960, reserve requirements were increased from 11 per cent to 12 per cent of net demand deposits, partly offsetting the gain from vault cash. Beginning in January 1960, the computation period for averaging deposits and reserves in meeting requirements was changed from a semimonthly to a biweekly basis.

One line of analysis that has been applied to the reduction of legal requirements distinguishes between the total cash reserves banks hold and required reserves. When a reduction in legal requirements is made, it is thought that total reserves would fall by less than the full amount of the reduction in required reserves.

This is because required reserves partly fulfill a bank's need for cash reserves at the same time that they meet the legal requirement.

An illustration may help to clarify this analysis. Suppose a bank having \$100,000 of deposits, and required reserves of 20 per cent, estimates that the largest deposit drain it should prepare to meet out of cash resources is \$10,000. The bank knows that a deposit loss of \$10,000 would reduce required reserves by \$2,000 and therefore it would have to hold \$8,000 to meet the remainder of the drain. Its total cash resources would be \$20,000 plus \$8,000, or \$28,000. If reserve requirements had been 10 per cent, then the deposit loss would release \$1,000 of required reserves, other cash resources would have to be \$9,000, and total cash reserves would equal \$19,000. Thus, a reduction of reserve requirements from 20 per cent to 10 per cent enables the bank to reduce total reserves from \$28,000 to \$19,000, or by less than the reduction of required reserves, since it increases its excess reserves from \$8,000 to \$9,000.

This line of reasoning also states that the inclusion of vault cash as a part of legal reserves has complicated bank reserve management by making it more difficult to estimate reserve positions, tending to increase excess reserves. Under prior arrangements, excess reserves included only balances at Reserve banks that exceeded the legal requirement. Vault cash was held to the minimum needed to meet inflows and outflows of currency and was related to the speed with which a bank could obtain additional supplies. The conditions which caused fluctuations in vault cash were not reflected in the changes of banks' excess reserves until cash was included as a part of reserves that fulfilled the legal reserve requirement. After the change, banks were able to make reductions in the total of their reserve balances plus vault cash. However, the fluctuations of the two are partly independent, and since unusual drains of vault cash and reserve balances

may occur simultaneously, banks are led to hold larger excess reserves than before.

A third change in reserve requirements that may have increased the problems of reserve adjustments for country member banks was the change in the reserve computation period from a semimonthly to a biweekly basis. Although this change may have lessened adjustment problems related to systematic intraweek flows of payments, it increased the difficulty of adjusting to shifts of reserves produced by intramonth forces such as the cycle of billings and payments by business firms. Under the new arrangements, the peak in these flows moves from one reserve period to another and from early to late in the same reserve period.

AN ALTERNATIVE INTERPRETATION

While the foregoing analysis is logically correct for the factors considered, a question remains as to whether it includes all of the changes which might have increased or decreased the desired volume of excess reserves of banks. For example, over the past 4 years the percentage of total net demand deposits held by country banks has increased. Since these banks consistently hold substantially greater excess reserves than city banks, this shift of deposits tended to increase total excess reserves. On the other hand, the general increase in interest rates in recent years might have induced banks to give greater attention to efficient management of reserve balances.

The Significance of Excess Reserves

Aside from these and similar developments that may change the volume of excess reserves held by banks over longer periods, there is the further question of what interpretive value is provided by changes in volume of excess reserves, even in the short run. Banks generally follow one of two practices in managing their reserves. One of these is typified by the larger banks whose positions are adjusted daily through short-term money markets by purchases or sales of Federal funds and short-term

Treasury securities. Deficiencies of reserve positions not exceeding 2 per cent can, without penalties, be offset by larger balances in the succeeding reserve period—a privilege which enables professional managers of reserve positions to attain an average balance of close to zero in their excess reserves. If, over a period of several weeks, banks should find that they are generally buying or selling funds, they may then make more basic adjustments in their asset position.

The smaller banks whose excess reserves may be large in relation to their size but small in absolute amounts may either allow excess reserves to accumulate until the permanence of their holding them can be ascertained, or they may transfer the excesses to city correspondents. To the extent that they follow the latter practice, the balances become a part of the funds administered by the larger banks, and credit expansion based on them is almost instantaneous. Thus, the excess reserves that appear in the balances of most country member banks at the Reserve banks represent only a small part of the total cash resources held to meet drains on reserve balances or vault cash. Since transfers between correspondent balances and accounts at Federal Reserve banks can be made quickly and easily, it is doubtful that recent changes of reserve requirements had any significant effect upon the size of excess reserves at Reserve banks.

The relative importance of excess reserves and balances with banks as working reserves can be observed by inspection of the data for country member banks in the Kansas City and Dallas Districts. These banks were chosen because city correspondents play a major role in the collection of their checks and in the adjustment of their balances at the Federal Reserve banks. The country banks of these two Districts also are of interest because they usually hold about 19 to 20 per cent of the excess reserves of all country member banks, and in August 1961, they held 23 per cent.

The accompanying table shows gross demand deposits, balances with banks, and excess reserves of country member banks for the two Districts as daily averages for the first 6 months of the past 4 years. The volume of balances with banks is overstated since most of the smaller banks do not segregate items in process of collection from those balances. On the basis of rough estimates, the amount of such items does not constitute more than about 15-20 per cent of the totals shown.

In absolute terms, it is evident that both groups of banks made the major adjustments in their cash positions through their balances with banks. Between the 6-month periods of 1958 and 1960, Kansas City country banks reduced their excess reserves by \$10 million and their balances with banks by \$25 million. Under the expansive monetary policy of the past year, excess reserves expanded by \$15 million while balances with banks rose by \$73 million. The adjustments in balances with banks were even more striking in the Dallas District during the 1958-60 period. Under restrictive conditions, excess reserves declined by \$9 million and balances with banks by \$76 million. Between

BALANCES WITH BANKS, EXCESS RESERVES, AND GROSS DEMAND DEPOSITS

Country Member Banks
Tenth and Eleventh Federal Reserve Districts
Daily Averages, January-June of Each Year

In millions
KANSAS CITY

Average of First 6 Mos.:	Gross Demand Deposits	Balances With Banks	Excess Reserves
1958	\$2,821	\$405	\$42
1959	3,067	392	36
1960	3,008	380	32
1961	3,164	453	47

DALLAS

Average of First 6 Mos.:	Gross Demand Deposits	Balances With Banks	Excess Reserves
1958	\$3,809	\$651	\$54
1959	4,011	626	46
1960	3,898	575	45
1961	3,986	716	73

1960 and 1961, excess reserves increased \$28 million and balances grew by \$141 million.

It is evident from these data that country banks have considerable latitude to change their holdings of excess reserves at Reserve banks. But since a bank may gain goodwill by holding more than the minimum balances with its city correspondent banks, but will receive no reward for holding excess reserves at Reserve banks, unusual increases in working balances might be expected to be transferred to correspondents.

The conclusion which emerges from this examination of the practices of banks in managing their reserves is that changes in excess reserves represent too small a part of the total reserves supplied by the central bank to convey an accurate impression of the degree of ease or restrictiveness intended. The larger banks quickly expand their earning assets on any new reserves they receive, whether obtained by transfers from smaller banks or by the growth of other deposit accounts. Since most new reserves support credit expansion, the rate of growth of bank earning assets would seem to provide a more meaningful gauge of central bank policy than the residual reserves which take the form of additions to excess reserves, principally of country banks.

Borrowing From Reserve Banks

Free or net borrowed reserves represent the difference between excess reserves and borrowing from Reserve banks. If this measure is to serve as an effective guide in the interpretation of central bank policy, declines in the volume of free reserves or increases in net borrowed reserves must signify an increasingly restrictive policy, and opposite changes must denote a policy moving in a contrary direction. For this measure to provide a useful indication of central bank policy with regard to expansion of bank assets and deposits, the volume of borrowing must be reliably linked to the willingness of banks to buy or sell earning assets.

Three general groups of banks can be dis-

tinguished on the basis of their use of Federal Reserve discount facilities and the attitudes which they reflect. One group, as a matter of policy, rarely or never uses discounting. Instead, these banks provide themselves with ample amounts of liquid assets and if these are depleted by exceptionally heavy drains, the banks liquidate intermediate-term assets or curtail lending, or both. Larger banks in this group sell excess reserves in the Federal funds market or purchase short-term securities, depending upon comparative rates of return. A second group consists of more frequent borrowers who reserve the privilege for occasions such as unusual seasonal drains, or the deferment of a basic adjustment in assets. These banks hold smaller relative amounts of liquid assets than the first group and may be either buyers or sellers of Federal funds at any given time. The third group includes banks which use the discount window still more frequently, have a high tolerance for debt, and delay adjustment of their basic asset positions as long as possible. Federal Reserve regulation of borrowing, however, sets a limit on even the most aggressive banks.

The above classification suggests that the growth or contraction of bank earning assets which accompanies a given level of net borrowed reserves depends upon, among other things, the distribution of reserve pressures in the banking system. For example, if deposits in the banking system were to shift in such a way that banks with a high tolerance for debt gained reserves while those which rarely or never borrow lost reserves, the volume of member bank borrowings likely would decline. Yet, in all probability, the reduction in net borrowed reserves would be accompanied by a contraction of bank earning assets, since the heightened reserve pressures on the group of non-borrowing banks would lead them to liquidate short-term securities.

The time dimensions of bank reserve and asset adjustments are of particular importance

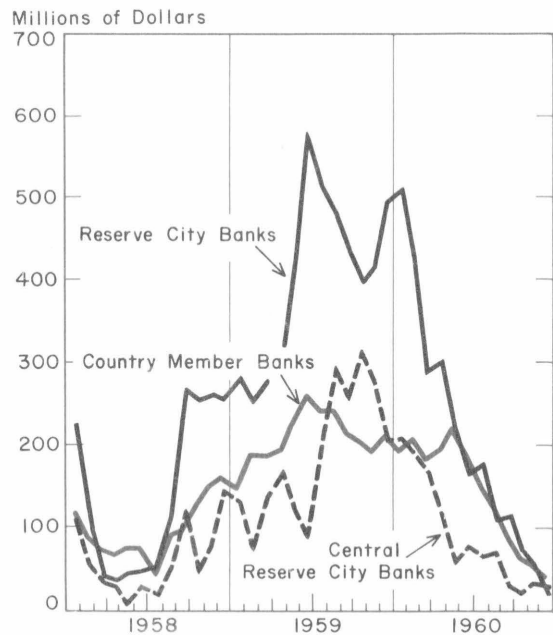
in the interpretation of member bank borrowing. The longer a bank maintains its position by borrowing, whether from the market or a Reserve bank, the more certain it can be that its policies are not in accord with its available resources. Borrowed funds are being used to fill loan demands or to meet drains of deposits while the liquidation of investments is being delayed. The relative advantages of a quick adjustment—or deferment in the hope that conditions will change—may depend upon how the bank views prospective demand for credit and the trend of security prices. The progressive asset adjustments of nonborrowing banks and those which react quickly depress the prices of securities and make the adjustment of assets increasingly disadvantageous. But the combination of unrelieved reserve pressures and unfavorable trends of security prices may induce even the more aggressive borrowing banks to liquidate investments and paydown debts in a period of restrictive credit policy before basic economic conditions have brought a relaxation of policy. That is, banks with a high tolerance for debt early in the stages of a tight money policy may change their attitudes as reserve pressures continue beyond some point.

A recent episode which appears to have exhibited the results of such reactions occurred in the last 6 months of 1959 and early 1960. The beginning of a shift of policy is usually dated from about March 1960, but by that time a significant curtailment of debt had occurred. Net borrowed reserves reached a peak in July 1959 at \$557 million, on a daily average basis, and then declined to \$361 million by February. Average daily borrowing from Reserve banks topped at \$1,007 million in August and then contracted to \$816 million in February 1960. Borrowing by reserve city and country banks began to contract after June 1959. The reserves thus withdrawn from the banking system apparently increased reserve pressures on central reserve city banks, for their borrowing rose in the summer and early autumn.

Some of the events preceding June 1959 are helpful in evaluating the changes in borrowing which occurred that summer. The accompanying chart indicates the way in which reserve city and country member bank borrowing increased after mid-1958, as well as the lag in borrowing by central reserve city banks until after June 1959. This latter group of banks had adjusted over the preceding year to a loss of deposits, resulting mainly from a reduction of Treasury deposits, and total loans and investments had declined by \$2,000 million.

On the other hand, both reserve city and country members had experienced strong demands for credit. The first group had increased loans by \$3,765 million and liquidated \$2,400 million of investments. Growth of total deposits had been retarded by contraction of Treasury balances, and borrowings from Reserve banks had risen by about \$500 million. Country member banks gained substantial vol-

BORROWING FROM RESERVE BANKS
Central Reserve and Reserve Cities, and Country
Member Banks



Free Reserves and Bank Reserve Management

umes of deposits over the year and were able to add \$800 million to their investments in spite of an increase of \$3,400 million in their loans. Market yields on Treasury bills increased from an average of 0.83 per cent in June 1958 to 3.21 per cent in June 1959; in the same span, yields on 3- to 5-year Treasury issues rose from 2.25 per cent to 4.33 per cent and the yields on long-term governments increased from 3.19 per cent to 4.09 per cent.

Credit demands did not moderate after June, despite the start of a prolonged strike in the steel industry, and demands were expected to intensify after the work stoppage was halted. A large Federal deficit was expected to increase the supply of securities in the last half of the year. These prospects, together with the high level of borrowing and the reduced prices of securities, could have given the borrowing banks adequate reasons to reconsider their policies.

In contrast to the impression of easing reserve pressures conveyed by the movement of

net borrowed reserves from June 1959 through March 1960, total loans and investments of all commercial banks gave a decidedly different signal. During the 9-month period, the earning assets of commercial banks contracted \$1.3 billion, after correction for reclassifications. In the period of credit restrictiveness in 1956-57, an increase of \$2.1 billion occurred in the same 9 months. Over the year ending with March 1960, growth of bank credit was \$1.8 billion—the smallest amount of any year in the 1950's.

These observations seem to confirm the earlier analysis that the volume of free or net borrowed reserves of member banks does not give entirely dependable evidence of the restrictiveness or ease of credit conditions. A minimum requirement for using such measures, particularly when more than a few months' history is being examined, is to give attention also to the rate of change of bank credit in relation to the stage of the business cycle.

BANKING IN THE TENTH DISTRICT

District and States	Loans				Deposits			
	Reserve City Member Banks		Country Member Banks		Reserve City Member Banks		Country Member Banks	
	Aug. 1961	Sept. 1960	Aug. 1961	Sept. 1960	Aug. 1961	Sept. 1960	Aug. 1961	Sept. 1960
	September 1961 Percentage Change From							
Tenth F.R. Dist.	+4	+8	+1	+7	+4	+8	+1	+9
Colorado	+5	+9	+1	+6	+5	+13	+2	+6
Kansas	+8	+10	†	+5	+1	+4	†	+9
Missouri*	+2	+9	+1	+4	+4	+5	+1	+7
Nebraska	+4	+7	+3	+6	+2	+8	+2	+9
New Mexico*	**	**	+1	+9	**	**	+1	+7
Oklahoma*	+1	+8	+2	+10	+5	+8	+2	+11
Wyoming	**	**	+1	+8	**	**	+3	+8

* Tenth District portion only.
† Less than 0.5 per cent.

** No reserve cities in this state.

PRICE INDEXES, UNITED STATES

Index	Sept. 1961	Aug. 1961	Sept. 1960
Consumer Price Index (1947-49=100)	128.3	128.0	126.8
Wholesale Price Index (1947-49=100)	118.8	118.9	119.2
Prices Rec'd by Farmers (1910-14=100)	242	241	238 r
Prices Paid by Farmers (1910-14=100)	301	301	298

r Revised.

TENTH DISTRICT BUSINESS INDICATORS

District and Principal Metropolitan Areas	Value of Check Payments		Value of Department Store Sales	
	Percentage change—1961 from 1960			
	Sept.	Year to date	Sept.	Year to date
Tenth F. R. District	+3	+6	+6	+4
Denver	+10	+13	+11	+7
Wichita	+4	+4	+6	-1
Kansas City	-2	+4	+2	+1
Omaha	-1	+3	+2	+18
Oklahoma City	+6	+9	-7	-9
Tulsa	+5	+3	+7	-2