THE TAXATION OF INCOME FLOWING THROUGH FINANCIAL INSTITUTIONS: GENERAL FRAMEWORK AND SUMMARY OF TAX ISSUES

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OTA Paper 52 September 1983

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Washington, D.C. 20220
Issued: September 1983

analyzed. This framework will allow many problems and anomalies to be traced to the same roots. While we will not deal with every aspect of the tax laws affecting such institutions, we will set forth general rules with regard to income flows from such transactions--rules which can be applied to all categories of financial institutions.

A word of caution. Substantial changes in the tax treatment of financial institutions can involve large, perhaps undesired, changes in relative tax burdens across taxpayers. Moreover, it is difficult to provide for changes in the tax treatment of one type of institution without simultaneously altering the tax treatment of other institutions. It may be both inequitable and inefficient, for instance, to eliminate a special tax preference or tax penalty levied against one type of institution if similar provisions are not eliminated for other competing institutions. The very complexity of the laws, however, makes it difficult to understand, much less adopt, anything but piecemeal changes. While this study provides a general framework or model against which the tax laws and proposed changes in those laws can be measured, it does not suggest any easy means of attaining greater uniformity in the tax treatment of financial institutions.

THE TAXATION OF INCOME FLOWING THROUGH FINANCIAL INSTITUTIONS: GENERAL FRAMEWORK AND SUMMARY OF TAX ISSUES*

Part 1

A GENERAL FRAMEWORK OF ANALYSIS

To analyze income as it flows through financial institutions, we will use a general framework which identifies four broad classes of issues: the measurement of total economic income, the allocation of income among recipients, the attribution of income by type of activity, and the timing of income receipt. Section I presents an overview of the economic functions and attributes of financial institutions. Readers who are familiar with this material may choose to proceed directly to the presentation of the general framework in section II.

I. OVERVIEW OF FINANCIAL INSTITUTIONS AND THEIR SERVICES

A. Economic Functions and Types of Financial Institutions

Financial institutions play an extremely important role in the modern economy by performing four general economic functions. First, they borrow and lend funds, thus creating a secondary market between savers and investors. Second, they perform brokerage services by facilitating financial transactions directly between savers and investors. Third, financial institutions offer insurance and related services, such as pension management. Finally, financial institutions offer direct services, such as financial consulting, record- and safe-keeping, and check clearing. A single financial institution may perform any number of these functions.

* We are indebted to Ralph Bristol, Larry Dildine, Seymour Fiekowsky, Harry Grubert, Hudson Milner, Andrew Pike, Ted Sims, and Eric Toder for helpful comments and to Eunice Taylor for her assistance in the preparation of the manuscript.

Intermediation Services

It is in the first economic function of borrowing and lending that financial institutions can best be described as intermediaries. In one sense, of course, all financial instruments possess an "intermediation effect." "Through the intermediation of financial instruments the current surpluses of some spending units are made available to finance the deficits of other spending units." 1/ In the more narrow sense used here, however, financial intermediation involves an exchange between lenders and borrowers, or savers and investors, which is facilitated through the creation of new assets and liabilities by the financial institution itself. Typically, the financial intermediary arranges the exchange of assets and liabilities between lenders and borrowers without requiring the liabilities of borrowers to be purchased directly by lenders. Each lender acquires an asset of the financial institution, while each borrower incurs a liability to that institution. The institution in turn holds both an asset (the debt of the borrower) and a liability (the asset of the lender). The financial institution generally covers some or all of its costs, as well as earns a profit, through arbitrage between the rates of return paid to lenders and the rates of payment made by borrowers.

Few financial transactions are conducted solely between an individual lender and borrower. 2/ Typically, borrowers are unable to find an individual lender who would propose terms of a contract that are better than those offered by a financial institution. A financial institution in its role as an intermediary can create new securities or obligations with different characteristics, such as size of the loan or deposit, maturity, repayment schedule, or riskiness. In this way, financial institutions increase the opportunity set available to both

1/ Basil J. Moore, An Introduction to the Theory of Finance (New York: The Free Press, 1968), p. 17.

2/ Paul F. Smith, Economics of Financial Institutions and Markets (Homewood, Illinois: Richard D. Irwin, Inc., 1971), p. 64.

lenders and borrowers. The economic function of intermediation has been described as "a transformation process within the financial markets between the asset and liability sides of the public's balance sheet." 3/

Brokerage Services

As a broker or dealer, a financial institution performs a function somewhat similar to that of an intermediary. 4/ In both cases, it arranges an exchange of assets and liabilities among economic actors. A broker or dealer, however, may not participate directly in the financial transaction, but simply bring together savers and investors (or lenders and borrowers) for a fee or commission. To facilitate the process, the dealer may actually purchase a security or liability (or, more likely, a block of securities or liabilities) from one party and then resell that same security in the market for a price slightly higher than that at which it was purchased.

In one type of transaction it is especially difficult to distinguish between the role of financial broker and that of financial intermediary. The security or obligation issued by a financial institution may be matched against or tied to a given set of equity or debt obligations which have been purchased by or made available to the institution. Mutual funds, for instance, ascribe to each shareholder a partial ownership of the pool of financial assets that it holds. The institution's role is closer to that of a conduit or broker than that of an arbitrager or intermediary. Nonetheless, it issues a security or obligation of its own and does not simply transfer the assets purchased directly to the lenders or savers.

3/ Board of Governors of the Federal Reserve System, Introduction to Flow of Funds, June 1980, p. 6.

4/ Smith, Economics of Financial Institutions and Markets, p. 64.

Insurance Services

The third function performed by many financial institutions is that of insurance. An insurer accepts conditional liabilities and incurs liabilities when certain specified conditions are met. It is the probabilistic nature of these conditions that causes the obligation to be labeled insurance. Strictly speaking, the insurance function can be one purely of service, not intermediation. Indeed, if the conditional liabilities are paid contemporaneously with the receipt of premiums, and if the total payout relative to premiums is established with certainty, the insurer may be viewed merely as the paid dealer of a card game. Each participant in that game has an *ex ante* expected return equal to his contribution to the pot, less the dealer's percentage. *Ex post*, each participant receives a greater or lesser share (often zero). It is likely, however, that the total payout relative to premiums will not have a certain value. In that case, it would be more correct to view the insurer as the house in a roulette wheel game rather than as a non-playing dealer in a card game. Such conditional liabilities make it prudent for insurers to maintain reserves in order to pay claims under almost all circumstances or contingencies.

Note that the insurer does not necessarily play the role of intermediary between savers and investors. 5/ If term insurance were available for one day at a time, for instance, the insurer could technically transfer total premiums less fees to "winners" without separately depositing those premiums into income-bearing accounts. This example is so extreme, however, that it becomes obvious why insurers typically also serve as financial intermediaries. Even for term insurance, there is a lapse of time between when premiums are paid and when insurance amounts are returned.

5/ Ibid, p. 90.

During this lapse of time, premium payments of individuals are converted into income-bearing financial assets which in turn are used to meet future contingent liabilities of the insurer. The return to the policyholder of the income on those assets may take the form of a lower price paid for the insurance. In the case of pensions especially, premiums are held for long periods of time to cover contingent liabilities far in the future. It is often quite difficult to separate funds devoted to this insurance function from those devoted to the strict intermediation function. It is equally difficult to apportion ownership of reserves, and income returns from those reserves, between the insurer and those insured.

Other Financial Services

Finally, a financial institution may offer a variety of direct financial services such as consulting, record- and safe-keeping, check clearing, credit card services, etc. Although these services may theoretically be separated from other functions such as intermediation, in practice the functions are almost always tied together. Many financial institutions do not charge separately for the time of their staff or the amount of operation costs incurred for each customer transaction. Instead those costs are often paid by the customer when he accepts a rate of return lower than he might receive on depositing his savings elsewhere. Even in dealings with brokers, charges are seldom based on the actual costs or actual time spent by the broker, but are subsumed into a fee which is related to the size or amount of the actual transaction. Certainly the failure to establish more elaborate cost functions and mechanisms for charging customers can be viewed as a realistic means of economizing on administrative costs. Separate itemization of each transaction cost could become enormously expensive because it would entail substantial efforts to measure, record, and store many items of information. The tax system also encourages the vertical

integration of financial services because of the particular way in which income net of transactions costs and certain service costs are reported to the customer.

Types of Financial Institutions

Financial institutions are typically defined by the economic function which they emphasize. In the past, government laws and regulations have accentuated differences among institutions by limiting certain overlaps of functions. The Glass-Steagall Banking Act of 1933, for instance, denies commercial banks the opportunity to offer investment banking as a service. The tax laws may also place special penalties on institutions which diversify. As an example, savings and loan associations may lose the advantage of special loss deductions when they reduce the percentage of their assets held in residential mortgages.

Recent trends toward expansion and diversification of services have narrowed substantially the differences among types of financial institutions. Deregulation has further accelerated these trends. Today a brokerage house may offer not only brokerage services, but checking accounts, credit cards, insurance and pension services as well. Investment annuities and variable life insurance are packaged by a variety of sellers and are often sold more as investment vehicles than as life insurance or pension guarantees. A typical means of accomplishing diversification is to subcontract out those particular transactions that are disallowed to the financial institution per se. In some cases, it is possible to create a "subcontractor" which is simply another financial institution within the same group or holding company of institutions.

The main financial institutions considered in this study, separated according to traditional definitions, 6/ include:

Insurance Institutions
- Legal reserve life insurance companies
- Property and liability insurance companies

Deposit Institutions
- Commercial banks
- Thrift institutions
  - Mutual savings banks
  - Savings and loan associations
  - Credit unions

Investment Institutions
- Investment companies, mutual funds and real estate investment trusts

B. Special Attributes or Characteristics of Financial Institutions

Financial institutions exist because they perform certain economic functions that other enterprises or individuals could not do as well. Specialization has resulted in the acquisition by financial institutions of various attributes or characteristics that allow them to perform their functions efficiently. These attributes include diversification of their asset portfolios, pooling of conditional liabilities, economies of scale, and financial expertise. Although these attributes are not unique to financial institutions, the combination of attributes enables these institutions to be especially adept at performing their economic functions.

6/ Herbert E. Dougall and Jack E. Goumnitz, Capital Markets and Institutions, 3rd edition (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1975), p. 13.

Diversification of Asset Portfolios

Perhaps the most common characteristic of financial institutions is the diversification of assets. 7/ Through diversification, institutions can offer savers a higher rate of return for a given level of risk. Risk reduction is possible whenever the returns on two or more assets are uncorrelated or correlated less than 100 percent. Then the overall risk of a portfolio containing two or more assets is less than the risk associated with each of the assets by itself. 8/

Financial institutions are able to offer services, such as lending and insurance, that would be severely limited if individuals tried to finance investments or insure against risks themselves or directly with other individuals. For instance, pooling investments through deposits or shares in financial institutions enables savers to invest in securities with large face amounts (and higher yields) than they otherwise could obtain. Similarly, pooling investments increases the liquidity for a single saver even when the institution is holding primarily long-term assets. 9/ As long as the institution can expect inflows of funds to match outflows, it can borrow short term, while lending long term. Of course, the advantages of using financial institutions lie not just with the savers. By pooling investments, financial intermediaries reduce the risk premium they charge for lending funds as well.

7/ E. J. Kane and S. J. Buser, "Portfolio Diversification of Commercial Banks," Journal of Finance, 34 (March 1979), pp. 19-34.

8/ H. M. Markowitz, "Portfolio Selection," Journal of Finance, 7 (March 1952), pp. 77-91 and W. F. Sharpe, Portfolio Theory and Capital Markets (New York: McGraw-Hill, 1970).

9/ Smith, op. cit., p. 65.

The advantages to savers and borrowers works through to the economy as a whole. The presence of financial institutions broadens the forms of financial investment and credit, and should result in higher levels of output, savings, investment and consumption in the economy. 10/ At any given expected rate of return, risk to the saver is reduced. At any given level of risk, therefore, institutions can offer savers a higher rate of return and borrowers a lower rate of payment than would be required if the assets and liabilities were not pooled. The higher rate of return offered to savers for a given level of risk in turn may increase the amount of savings in the economy. At the same time, increased efficiency in capital markets due to financial intermediation, as well as any additional savings generated, reduces the cost of financing physical investment.

Pooling of Conditional Liabilities

Similar to diversification of investments, the pooling of conditional liabilities can reduce the cost of providing insurance or pensions. The law of large numbers insures that a conditional event will occur with more predictability--that is, with less deviation around the percentage of times it is expected to occur--the greater the number of policyholders insured against similar, but independent, 11/ conditional events. Thus, insurance companies generally can reduce the risk associated with any single insurance policy simply by offering insurance to a larger number of policyholders. By increasing the number of conditional liabilities, a financial institution can more accurately predict the amount of liabilities that it will pay relative to premiums it will receive. A financial institution

10/ Federal Reserve Board, Introduction to Flow of Funds, p.7.

11/ Independence of events is crucial. Many insurance companies, for instance, will not insure against death caused by war since the deaths of many policyholders would then be dependent upon the same event.

requires fewer liquid reserves to meet conditional liabilities when expected outflows can be predicted with greater certainty. Each insurer can then invest in higher-yielding (more risky) assets, which in turn makes it possible to reduce the cost of providing insurance or to increase the return on the savings component of insurance policies.

Economies of Scale

Due to economies of scale, financial intermediaries have lower search and information costs than do individuals and most non-financial institutions. 12/ Such economies increase the net interest rate that can be offered to savers and lower the net interest rate that can be charged to borrowers. Check clearing, investment analysis, and portfolio trading are activities which financial intermediaries generally perform at significantly lower costs than individual investors. Economies of scale are of course not unique to financial institutions. Just as other businesses achieve scale economies in providing goods and services, financial institutions survive in a competitive economy by providing financial services at the lowest available cost. Note, however, that costs are typically not minimized at infinite or monopoly size; diseconomies of scale may set in when a firm becomes too large.

Financial Expertise

Individuals working for financial institutions develop financial expertise through the transactions they handle each day. Expertise acquired in handling one type of financial transaction may easily be transferred to other types of financial arrangements. While for some institutions the selling of its expertise may be the primary financial service that it performs, for others this expertise is applied to a variety of functions.

12/ G. J. Benston, "Economies of Scale in Financial Institutions," Journal of Money, Credit and Banking, 4 (May 1982).

Financial expertise also complements each of the other characteristics or attributes associated with financial institutions. For instance, optimal diversification, pooling and scale economies are reached through expert understanding of financial markets.

II. LAYING THE FRAMEWORK

In many ways, the general economic functions of different financial institutions, as well as their attributes, are quite similar. We now develop a general framework with which to analyze how these economic functions relate to (1) the calculation of total economic income associated with transactions involving financial institutions; (2) the allocation of income among recipients; (3) the attribution of income by type of activity; and (4) the timing of receipt of income. This framework is extremely important to the analysis of taxation of financial institutions because practically all problems of taxation can be related to the accounting or attribution of income according to these four categories.

The columns of Table 1.1 present a simplified breakdown of the return to each economic actor for most types of transactions taking place through financial institutions. Although a wide variety of economic actors are involved in transactions with financial institutions, the various income recipients can typically be categorized into one of four groups. Depositors, pensioners, and policyholders who provide funds through a contractual obligation are called <u>creditors</u> (savers/lenders). Others who provide funds with a claim to the residual income of the enterprise are called <u>stockholders</u> (equity owners). The economic functions performed by financial institutions also require payments to <u>other factors of production</u>, such as to labor and rentors or lessors of physical capital. Finally, the <u>ultimate users of capital or services</u> provided by financial

Table 1.1

Expected Return to Recipients by Type of Activity for Income Flowing Through Financial Institutions

Type of Activity	Total Income to Economic Actors: Suppliers of Factors Employed by Financial Institutions: Creditors	Equity Owners	Other Factor Owners	Ultimate Users or Investors	Total Return or Value of Product
Intermediation (Investment)	i_1	$i'-i_1-c_1$	c_1	$r-i'$	r
Other Non-Intermediation Services	i_2	$p-i_2-c_2$	c_2	0	p
Combination of Intermediation and Other Services	i_3	$i'-i_3+p-c_3$	c_3	$r-i'$	$r+p$

r is the expected return from the investment or implicit return from consumption financed with loans;
i' is the market interest charged to borrowers by the financial institutions;
i_1 is the interest paid at the market rate to creditors (lenders) by the financial institutions for the production of income from intermediation;
i_2 is the interest paid at the market rate to creditors by the financial institution for the production of income from other non-intermediation services;
i_3 is the total interest paid to creditors in the provision of both investment and other services;
p is the market price of providing the services of the financial institution to the customer;
c_1 is the cost paid (wages, rent) to other factors in the production of intermediation services by the financial institution;
c_2 is the cost paid to other factors in the production of other service income by the financial institution;
c_3 is the total cost paid to other factors in the provision of intermediation and other services.

institutions are investors (businesses) who use the loans to purchase physical assets or other securities, and individuals who borrow for consumption or to finance purchases of durable goods and housing.

For purposes of our framework, the main types of activities performed by financial institutions can be classified generally as financial intermediation or investment services, and non-intermediation services. If the non-intermediation service provides direct benefits to consumers, then it adds to total final value of goods and services or income in the economy. If the service is purchased by a business, then it is more likely to be an intermediate product and not add to income directly. 13/ Non-intermediation services in the second row of Table 1.1 are assumed to be of the former type.

Pure intermediation in this simplified model involves only monetary transactions in which the institution facilitates the exchange of funds while earning an arbitrage profit for performing one or more of the forms of intermediation. The arbitrage profit may be due to its own stock of physical capital such as buildings or human capital such as expertise. As shown in the first row of Table 1.1, the financial intermediary borrows funds from creditors at an interest rate, i_1, and lends the funds at a higher interest rate, i'. Creditors earn a rate of return per dollar, i_1; the equity owners earn a return, $i'-i_1-c_1$; other factors employed by the financial institution to perform intermediation earn a return, c_1; and the ultimate user (the business) expects to earn a return of $r-i'$, where r is the

13/ In national income accounting, the distinction between final and intermediate financial services is not always easy to make.

return, explicit or implicit, from the physical investment or other use financed with the loan. Note that the total return in the economy equals r and is irrespective of its division between the various income recipients. Indeed, in national income accounting, the total return to capital is equal to the net payment (net of depreciation of capital) made to all capital owners--regardless of the breakdown by type of recipient, e.g. creditors such as depositors in financial intermediaries vs. equity owners.

Non-intermediation services involve the production of particular "commodities" such as term insurance or check cashing. In the second row of the above diagram, a consumer purchases a service from a financial institution at the market price, p. Other factors employed by the financial institution in rendering the service earn a return, c_2; the equity owners earn a return, $p-c_2$; and the ultimate user (the consumer) earns no income (or return) from the product, but does receive the product valued at the market price, p. Note that the total return in the economy is equal to the value of the product when the service is considered to be final rather than intermediate.

A. Measurement of Total Economic Income

As income flows through financial institutions, a first set of accounting problems arise simply in accounting for all income. For our purposes it will be useful to divide these measurement problems into five categories. First, in the case of intermediation, much income flows outside of the institution to creditors and others. Total income flowing through or out of the financial institution should be allocated in one way or another to all employed factors. If the equity owners of the institution deduct i_1 plus c_1 as payments to other factor owners, then it would be inconsistent for these other factor owners to count any

more or less than i_1 plus c_1 as their actual income. There are few problems with measuring c_1 since it is comprised principally of wage payments. It is in the simple recognition of i_1, especially when payments are made only indirectly to creditors, that many difficulties appear.

Our next two categories of problems arise in separating the income flows to individual owners of capital from other payments passing out of the financial institutions. Cash payments may differ from income if some payments represent returns of capital or other forms of rebate which are unrelated to the actual income earned on the capital. Because of the inherent complexity of two related isssues--measuring investment income net of services and separating income from returns of capital--they are discussed further below.

The last two categories involve measurement of income at the level of the institution. If the company does not recognize receipts as they flow in, then total income will be mismeasured no matter how it is later allocated. Similarly, if the company takes deductions which are unrelated to actual expenses or otherwise subtracts dollar amounts which are not paid out to creditors or other factors, then its income will be understated.

Investment Income Net of Service Costs

To account for income properly, the cost of earning investment income should be deducted at both the individual and company level. The net return, not the gross return, to investment is what is to be measured. If a financial institution provides a joint product of investment and non-intermediation services, on the other hand, economic income may be mismeasured if the cost of those services are also deducted from the investment income of the individual.

When any type of service is performed by a financial institution handling investment, then the cost of that service is typically excluded from the measure of investment income itself, which is reported on a net basis. If the services are performed separately from the investment, however, then the investment income is reported on a gross basis and the cost of the services may or may not be separately deductible. If financial services do not represent a cost of making investments or doing business, but rather provide a value to the individual independent of the investment income, then investment income will be understated when the value of the services are deducted.

Two examples may clarify this situation. First, if a financial institution provides personal insurance in lieu of payments of interest on deposits yet the cost of those insurance services is not added to net investment income, then total income of the depositors will be measured incorrectly.

Second, commercial banks often offer "free" checking accounts to some depositors even though they may charge a fee to less regular depositors for the same service. Depositors implicitly receive the market interest income, i_2, on their deposits, while banks implicitly collect a fee, p, for providing the service by paying interest rates on checking deposits lower than rates on other savings deposits. In such cases of combined investment and services (see the third row of Table 1.1), separating the income from investment from the value of services may be difficult if the price, p, is never explicitly stated. Similarly, attempts to distinguish between investment income and the value of the final services rendered to the depositor or policyholder may require an implicit or explicit attribution of total expenses, c_3, between the two activities.

Separation of Income from Returns of Capital

At the individual level, it should be clear that total income does not include all payments received. In our roulette wheel analogy of insurance, the premium payments (or bets) are made out of income already counted. The returns on those bets do not add to income, but rather represent a redistribution of income. After accounting for this redistributional effect, the additional net income simply equals the return to the house for operating the roulette wheel. Similarly, income generated in the provision of pure insurance equals the cost of paying factors for that service. Policyholders as a group are willing to receive total insurance payments less than total premiums paid because the difference represents the value of service received. If the house (or insurance company) adds an investment policy which allows prepayment of future insurance costs, then the investment return on those savings also represent an addition to economic income.

In addition to redistribution, the measurement of total income is complicated by payments to income recipients which include other returns of capital or price rebates. In the case of depository institutions, distributions to the depositor can include both a return of capital (the initial deposit) and the investment income earned on the deposit. Return of capital can also include a price rebate on a service. Some insurance companies, for instance, charge annual premiums in excess of expected liabilities with the prospect of giving the policyholders a "dividend" at the end of the year. The company invests the excess funds during the year and earns a return on the investments. The "dividends" paid to policyholders can therefore represent payments of investment income, price rebates on services rendered, and returns of excess premiums from prior years.

Accurate measurement of these various types of income requires differentiation between investment income and return of capital. Such distinctions, while difficult to make, nonetheless are necessary for the correct measurement of income.

B. Allocation of Income Among Recipients

Even when accounting for total income is accurate, problems may arise in allocating that income among various recipients. We have separated these recipients into the following groups: creditors (depositors, policyholders), stockholders (equity owners), owners of other factors of production (labor, physical capital) and ultimate users of capital or services (investors and final consumers of services).

Allocation problems are most acute when individuals perform several of these roles together. Some financial institutions are formed as "mutual institutions" in which no equity owners exist apart from the depositors or policyholders of the institution. In terms of Table 1.1, investment income to a mutual depositor would include the income of the creditor and the equity owner ($i'-c_1$). A mutual insurance policyholder could receive income as creditor (i_2) and as "equity" owner ($p-i_2-c_2$), as well as receive and pay for the service rendered to the ultimate user. Another example is provided by the equity investor in a business who provides the savings for a particular investment directly without intermediation. In terms of Table 1.1, the self-financed investor plays the roles of creditor, equity owner, financial intermediary and investor together and earns the total return, r.

Distinctions by type of income recipient may be difficult to make. Attribution of income between creditors and equity owners in many instances involve arbitrary division of a single

individual's income. Because the tax system differentiates between types of income recipients, such distinctions are important to the allocation of resources in the economy and the distribution of tax burdens.

Finally, even if allocation between groups can be made correctly, it is still difficult to attribute income accurately within groups, especially when individuals pool funds and maintain uncertain shares of returns from the pool. In the case of insurance, allocation among policyholders could involve distribution of costs, estimates of individual insurance rights and similar calculations.

C. Attribution of Income by Type of Activity

When income has to be allocated by type of activity, a third set of accounting problems may arise. In the first two rows of Table 1.1 it is assumed that intermediation services can be separated easily from other services performed by the same financial institution. While in theory the two functions can be separated; in practice, intermediation always involves some level of other service and vice-versa. The third row of Table 1.1 assumes that both intermediation services and final services are provided by the financial institution, and that the total return to the former equals r, and to the latter, p.

At the company level, there are two types of attribution problems. Payments by creditors, policyholders and other contributors of receipts may not be separated neatly into piles designating what portion is to be applied to what activity. For equity owners total income equals $i'-i_3+p-c_3$. Payments by depositors or policyholders, however, may not be separated into i' and p. By the same token, many of the costs of running the institution, such as building maintenance, managers' salaries, and equipment purchases are paid out (as c_3) without necessarily being allocated among the various types of activities.

The second type of attribution problem is less obvious from the table. Sometimes accounting rules will be made to differ across institutions according to their dominant activities. Insurance companies, for instance, may account for certain costs or loading expenses (the c_2 component of c_3) in one way, while that accounting procedure is denied to a depository institution for the insurance that it sells. If the accounting for income varies not just by activity, but by the dominant activity of the institution as well, then the total division of economic income will vary in strange ways often unrelated to the marginal activity of the firm.

D. Timing of Income Receipt

In many cases, future events will affect the amount of income a firm or individual will eventually receive from current activity. For a firm in existence more than one year, the number of such future contingencies is almost infinite. A firm may expect future increases in income from current activity if that activity creates goodwill, educates consumers, or involves research and development. Similarly, a firm may expect losses or future costs if some of its customers fail to pay debts, the product of the firm has some probability of failure (and there is a cost associated with such failure), or the firm promises to make payments in the case of other contingencies. Bad debt losses, warranty costs, and payment of insurance proceeds are examples of each of these types of costs.

In accounting for the effect of future events on income, three rules generally, but not always, apply. First, future events are not allowed to offset current income unless they are due to current or past activities. Current income is not meant to reflect the income from future operations (although on occasion it may involve a catch-up or a re-accounting of past income). As an example, in accounting for today's income,

current wages are deducted, but wages that will be paid to produce tomorrow's product, even if they are guaranteed, are not deductible until they are paid.

Second, while expected losses or future liabilities are sometimes allowed to offset current income, expected future gains are almost never added to current income. This practice results from a long-standing tendency toward conservative financial accounting, although this bias is certainly reinforced by tax incentives to recognize losses as soon as possible, while deferring gains into the future. 14/

Third, if future losses or liabilities are allowed to offset current income, proper income measurement requires that only the present value of the expected losses can be deducted. When losses are variable, prudent management may require the maintenance of reserves in excess of expected needs, but the income will clearly be mismeasured if the amount of income deductions exceeds the present value of the expected loss or liability.

Methods of Accounting for Future Liabilities

Future liabilities are properly accounted for by one of three methods: the cash method of self-insurance, the cooperative insurance method, and the qualified reserve method. With self-insurance under the cash method, a business recognizes future liabilities when they occur. This approach has the advantage of accurately accounting for all receipts and payments without imputing amounts that are difficult to calculate and verify. Moreover, it is consistent with the treatment of receipts since future expected receipts (e.g. from advertising or goodwill) are almost never

14/ This practice is not confined to present value accounting of future events. In accounting for gains and losses on assets, estimates of unrealized capital losses are allowed for depreciable assets, but estimates of unrealized capital gains are almost never added to income. See Eugene Steuerle, "Adjusting Depreciations for Price Changes," Office of Tax Analysis Paper No. 37, Department of the Treasury, March, 1979.

counted in income currently, even if due to current activity. The cash method may actually involve setting aside specific assets in reserve to meet future contingencies, although the total assets of the firm may suffice as such reserves. However, no deduction is taken against current income for the maintenance of reserve assets. For our purposes, any such reserves will be referred to as nonqualified reserves.

The most direct method of accounting currently for future liabilities or losses is for the firm to purchase insurance. Businesses and individuals thereby contribute to a common pool of funds for future losses. Under the cooperative insurance method, the insurance costs are deducted currently; moreover, these deductions measure accurately the cost to the firm of covering insured liabilities or losses resulting from current operations. Typically, when the future losses occur, the deduction for losses will be offset by the receipt of the insurance proceeds, with no net change in income in the year of the loss. Self-insurance against moderate losses, of course, may be more economical than cooperative insurance if the firm could earn a higher return on its own assets held in reserve or avoid administrative costs associated with cooperative insurance. 15/

Alternatively, a firm is sometimes allowed to recognize annually future liabilities resulting from current activities under the qualified reserve method. If a firm self-insures, yet accounts for future liabilities currently rather than using the cash method, it would treat additions to a qualified reserve account as a current expense. Future liabilities or losses are covered by withdrawals from the reserve assets. The drawdown of qualified reserves creates an offsetting income item to the expense charged for the year, except to the extent that loss payments exceed total reserves. 16/

15/ Seymour Fiekowsky, "Self-Insurance: Economics and Tax Treatment," mimeo, March, 1978, p. 6.

16/ In practice, reserve funds are often treated only as an accounting construct, and the reserves are commingled with the enterprise's other assets. A prudently managed firm, however, will at least regard reserves as a severable part of its assets.

This approach has the advantage of averaging several years' fluctuations in contingent liabilities incurred. In some cases, current recognition may provide a more accurate picture of the long-run position of the firm and of its expected net income from current operations.

Reserve funds are not unique to financial institutions, but are used by many businesses to meet contingent liabilities such as product claims, bad debt losses, and other expected or unexpected losses. While reserve funds are often used to handle future liabilities, there is no necessary relationship between additions to reserves and deductions from current income. Nonqualified reserve funds or liquid assets are often maintained by firms to take care of expected future liabilities and losses even when there is not a current deduction for increases in those reserves or assets. Moreover, most firms will maintain reserves or liquid assets as a means of providing insurance against unexpected, as well as expected, losses or liabilities.

If the amount of future liability or loss is known with certainty, the amount of reserve necessary to cover those liabilities can also be established with certainty if the business is willing to buy assets with rates of return that are certain to the date at which the liability must be paid. If the amount of liability is not known with certainty--the usual case in which insurance is offered--then the amount of reserve necessary to cover the liability will depend upon the expected value of the future liability. Similarly, if the rate of return on reserve assets is variable, then the amount of reserves will also depend upon the expected return on the assets.

Equivalence of Qualified Reserve Method with Other Methods of Accounting for Future Liabilities or Losses

In present value terms and in the absence of an income tax, the qualified reserve method can be equivalent to the other methods of accounting for future contingencies if two accounting

rules are followed. First, all income on assets held in qualified reserves must be counted as income when earned. Second, all withdrawals from qualified reserves must be counted in income. Excess (or shortfalls in) qualified reserves must be eventually withdrawn and counted in income (or as deductions). Inclusions of the withdrawal may be wholly or partially offset by a deduction for the payment of liabilities or losses incurred. If withdrawals are not used for those contingencies for which the fund was established, however, there may be no offset.

Even if these strict accounting rules for reserves are followed, the annual accounting may still be inaccurate unless a third rule is applied: additions to qualified reserves are calculated on the basis of reasonable expectations of the future contingencies. 17/ For instance, if the reserve account is funded based on a conservative assumption regarding the interest rate or the extent of the expected liabilities, then annual income will be underestimated when the reserve fund is being built up and overestimated when the reserve fund is depleted. At a minimum, qualified reserve funds should be accounted for separately from the self-insurers' other assets.

Table 1.2 illustrates differences in reserve accounting according to whether future liabilities or losses and the return on reserves are estimated correctly. In example 1, reliable estimates are made. The firm expects to have future liabilities of $50 in the second and fourth years and to earn a 10 percent return on its assets. Additions to reserves are set equal to the present value of expected future liabilities, which is $75.47. 18/ The reserves are depleted when no further liabili-

17/ No limit, however, is required for the amount of assets set aside in non-qualified reserves to meet self-imposed or government-imposed requirements.

18/ Additions to reserves are assumed to be made at the beginning of the year and claims are paid at the end of the year.

Table 1.2

Reserve Accounting for Expected Future Liabilities with Reliable and Incorrect Estimates

Example 1

Year	Additions to Reserves	Income Estimate (i=10.0%)	Income Actual (i=10.0%)	Losses Estimated	Losses Actual	Reserve Balance Estimated	Reserve Balance Actual
		Reliable Estimates					
1	$75.47	$7.55	$7.55	$ 0	$ 0	$83.02	$83.02
2	0	8.30	8.30	50.00	50.00	41.32	41.32
3	0	4.13	4.13	0	0	45.45	45.45
4	0	4.55	4.55	50.00	50.00	0	0
Total Present Value	$75.47	--	--	$75.47	$75.47	$ 0	$ 0

Example 2

Year	Additions to Reserves	Income Estimate (i=10.0%)	Income Actual (i=10.0%)	Losses Estimated	Losses Actual	Reserve Balance Estimated	Reserve Balance Actual
		Excess Reserves Due to Overestimate of Future Losses					
1	$90.57	$9.06	$9.06	$ 0	$ 0	$99.63	$99.63
2	0	9.96	9.96	60.00	50.00	49.59	59.59
3	0	4.96	5.96	0	0	54.55	65.55
4	0	5.45	6.56	60.00	50.00	0	22.11
Total Present Value	$90.57	--	--	$90.57	$75.47	$ 0	$15.10

Example 3

Year	Additions to Reserves	Income Estimate (i=5.0%)	Income Actual (i=10.0%)	Losses Estimated	Losses Actual	Reserve Balance Estimated	Reserve Balance Actual
		Excess Reserves Due to Underestimate of Return on Reserves					
1	$86.49	$4.32	$8.65	$ 0	$ 0	$90.81	$95.14
2	0	4.55	9.51	50.00	50.00	45.36	54.65
3	0	2.26	5.47	0	0	47.62	60.12
4	0	2.38	6.01	50.00	50.00	0	16.13
Total Present Value	$86.49	--	--	$75.47	$75.47	$ 0	$11.02

* Additions to reserves are assumed to be made at the beginning of the year while claims are paid at the end of the year.

ties are expected. The value of correctly estimated additions to reserves is equivalent in present value terms to the cost of the self-insuring firm using the cash method, where $50 is paid out directly in the second and fourth years to cover the actual losses. Additions to reserves are also equivalent to the cost of cooperative insurance if the insurer charges $75.47 in premiums and invests in assets earning the same rate of return.

Mismeasurement of annual income can result if the magnitude of loss, probability of occurrence, or the return on reserve investments is not accurately predicted. In example 2, future losses are overestimated. The firm expects the present value of future liabilities to be $90.57, but the present value of those losses is only $75.47. At the end of the fourth year, the firm has $22.11 remaining in its reserve with no additional expected liabilities. It should be noted that the difference between the present values of expected and actual losses ($90.57 - $75.47) equals the present value of the reserve balance, or $15.10. Thus, depletion of the excess reserves and its inclusion in income at the end of the fourth year (the second rule) would exactly compensate in present value terms for the prior excess deduction and resulting underestimate of income.

Example 3 illustrates the annual mismeasurement of income when the return on reserve assets underestimated. The firm adds $86.49 to reserves, operating under the assumption that the rate of return on the reserve assets will be 5 percent. If the actual return is 10 percent, the firm will have a reserve balance of $16.13 at the end of the fourth year with no future liabilities. Again, the present value of the excess reserves equals the present value of the excess deductions.

The problem of accounting for future liabilities sometimes interacts with the two other major classes of accounting problems of allocation among income recipients and by type of activity.

For instance, when reserves of a financial institution are held for long periods of time, and additions to reserves have been found to be in excess of the amounts necessary to cover actual losses, the excess income (reserve balance) may technically need to be allocated back to prior income recipients, including individuals no longer engaged in transactions with the institution. Such attribution of income among numerous current and past income recipients, of course, would be quite difficult.

In summary, in present value terms, the measurement of income involving expected future liabilities or losses can be accomplished by three equivalent methods--the cash method, the cooperative insurance method, or the qualified reserve method. Accurate qualified reserve accounting requires three additional specific accounting rules since it is based upon imputations or estimates of costs, not actual costs. First, income earned on reserve assets must be included in income in the current year. Second, all withdrawals of qualified reserves, including periodic withdrawals of excess reserve, must also be included in income. Finally, annual income will be mismeasured unless calculation of additions to qualified reserves are based on reasonable expectations of the future contingencies for the particular assets or liabilities of the individual financial institution. If any of these rules is not followed, income from transactions involving future expected liabilities or losses is likely to be mismeasured with the qualified reserve method.

Part 2

SUMMARY OF THE TAX ISSUES

Having developed a general framework with which to measure and attribute economic income resulting from transactions involving financial institutions, we can turn to the issue of taxation. The method of measurement or attribution of income now becomes more than simply an academic question; the amount of taxes paid will be directly related to the measure of reported taxable income. Measurement of income subject to tax affects the allocation of the economy's resources, the distribution of tax burdens, and the efficiency, if not the level, of savings and investment. Incorrect measurement or attribution can result in differential rates of effective taxation across activities of equal merit, thereby creating a number of distortions in the way our economy operates.

The number of specific tax issues which arise because of the provisions of the Tax Code are almost innumerable. To gain a general understanding of these issues and why they arise, we must first integrate taxation into our general framework. Many issues or problems of particular financial institutions can then be explained by simple reference back to this integrated framework. The paper concludes with a summary of general rules for the tax treatment of income flowing through financial institutions.

I. ISSUES RELATED TO THE MEASUREMENT OF TOTAL TAXABLE INCOME

In Table 1.1 we showed how total economic income flowed through financial institutions in a world without taxes. Total income did not depend on how the income was divided among the various economic actors involved or across the two general types of activities.

The introduction of income taxation does not change this result. Table 2.1 modifies Table 1.1 and shows the after-tax return to each type of income recipient involved in the two general types of transactions with financial institutions. The total return in the economy must now cover all tax payments as well as the rewards to the suppliers of labor and capital services. Yet the total return to investment still sums to r and the value of other non-intermediation services still equals p.

As the recipient of income tax payments, the government becomes an additional economic actor intimately involved in the transactions. Taxation may affect the efficiency of the transactions, their volume and even their after-tax values to individuals. While economic income may still add up to the same total, each recipients' share, including the government's, depends greatly upon how total income is allocated and taxed.

An income tax ideally would include as taxable income the net economic income of each actor involved in transactions with financial institutions. Tax rules in some cases define taxable income differently from total economic income because of problems in measuring or defining net income and because of certain policy goals which allow the exclusion, deduction or deferral of income. We have divided these issues into five categories: 1) tax-preferred products offered to individuals by financial institutions, 2) the measurement of income net of the cost of services, 3) the separation of returns of income from returns of capital, 4) tax-preferred assets held by financial institutions, and 5) other special tax preferences of financial institutions. Accurate measurement of total income also requires accounting for the timing of income receipt, but this topic is reserved for separate discussion in section IV.

Table 2.1

Expected After-Tax Return to Income Recipients by Type of Activity for Income Flowing Through Financial Institutions

Type of Activity	Total Income to Economic Actors: Suppliers of Factors Employed by Financial Institutions: Creditors	Equity Owners	Other Factor Owners	Ultimate Users or Investors	Government	Total Return or Value of Product
Intermediation (Investment)	$i_1(1-t_s)$	$(i'-i_1-c_1)(1-t_c)(1-t_e)$	$c_1(1-t_w)$	$(r-i')(1-t_i)$	$i_1t_s + (i'-i_1-c_1)t_c + (i'-i_1-c_1)(1-t_c)t_e + c_1t_w + (r-i')t_i$	r
Other Non-Intermediation Services	$i_2(1-t_s)$	$(p-i_2-c_2)(1-t_c)(1-t_e)$	$c_2(1-t_w)$	0	$i_2t_s + (p-i_2-c_2)t_c + (p-i_2-c_2)(1-t_c)t_e + c_2t_w$	p
Combination of Intermediation and Services	$i_3(1-t_s)$	$(i'-i_3 + p-c_3)(1-t_c)(1-t_e)$	$c_3(1-t_w)$	$(r-i')(1-t_i)$	$i_3t_s+(i'-i_3 + p-c_3)t_c + (i'-i_3 + p-c_3)(1-t_c)t_e + c_3t_w + (r-i')t_i$	$r + p$

r is the expected return from the investment or implicit return from consumption financed with loans;
i' is the market interest rate charged to borrowers by the financial institution;
i_1 is the interest paid at the market rate to creditors (lenders) by the financial institution in the production of income from intermediation;
i_2 is the interest paid at the market rate to creditors by the financial institution in the production of service income;
i_3 is the total interest paid to creditors, $i_1 + i_2$;
p is the market price of providing the services by the financial institution to the customer;
c_1 is the cost paid to other factors (labor, rent) in the production of intermediation services by the financial institution;
c_2 is the cost paid to other factors in the production of other service income by the financial institution;
c_3 is the total cost paid to other factors, $c_1 + c_2$;
t_s is the average individual marginal income tax rate of creditors;
t_w is the average individual marginal income tax rate of other factors;
t_e is the average individual marginal income tax rate of equity owners;
t_i is the average individual marginal income tax rate of ultimate users or investors; and
t_c is the effective income tax rate at the business level.

A. Tax-Preferred Products Offered to Individuals by Financial Institutions

Current tax laws allow certain financial institutions to offer products that carry with them substantial tax savings for the purchasers. In many cases, these tax preferences are not allowed for purchases of similar types of products from other financial institutions or businesses. The tax preferences generally fall into three catagories: the exclusion of investment income from taxation; the deferral of investment income from taxation; and the deduction or exclusion from income of the value of purchases of certain types of products.

Income Exclusion

A tax-exempt bond is one example of an asset yielding investment income excluded from taxable income. Individuals can purchase tax-exempt bonds directly or through certain financial institutions. Regulated investment companies or mutual funds can pass through the tax-exempt status of the interest earnings to their creditors or shareholders. Individuals may choose to invest in tax-exempt bonds through mutual funds in order to benefit from the several features of financial institutions described in Part 1, such as a diversified portfolio and financial expertise.

Other exemptions of income from tax are specific to products offered by certain financial institutions. For instance, in 1981, Congress exempted interest income on certain savings deposits labeled "All Savers Certificates." These certificates could only be offered by thrift institutions and commercial banks.

Another exemption of income specific to one type of financial institution is the deathtime exclusion of cumulated investment income included in life insurance proceeds. Insurance proceeds

include both a "pure insurance" component or a redistribution among policyholders, and an investment income component. The exclusion of the investment income for life insurance policy held until death makes savings for bequests through life insurance companies especially attractive.

Deferral of Income from Taxation

Deferral of income from taxation can also offer substantial tax savings. As a simple example, suppose a taxpayer in the 25 percent tax bracket invests $1000 at an annual pre-tax return of 10 percent. Since the value of the investment would equal $10,835 after 25 years, the taxpayer's wealth after-tax would be $8,376, yielding an effective annual after-tax return of 8.87 percent with deferral. This compares with after-tax wealth of $6,098, or an effective 7.5 percent annual return, if the investment income had been subject to tax when earned. The effective after-tax return approaches 10 percent, equivalent to outright exclusion, if the period of deferral becomes very long. The advantage of tax deferral is often greater than shown in this type of example because a taxpayer will elect to realize the taxable income when he is subject to a lower marginal tax rate.

Because the present tax system generally taxes income upon realization rather than accrual, it provides numerous opportunities for tax deferral of investment income. Many assets benefit from tax deferral only if held in certain forms. Income earned on savings, for instance, is allowed tax-deferred status if those savings form part of a life insurance product. The investment income earned, or the "inside interest buildup," on permanent life insurance policies is not subject to tax until the policy is cancelled or surrendered. Thus, the tax treatment of investment income earned through life insurance companies differs from the tax treatment of interest paid by depository institutions. Investment income earned on deposits held with banks and thrift institutions, on the other hand, is subject to tax when earned.

Deductions or Exclusion from Income for Purchases or Deposits

The Tax Code allows deductions or exclusions for the cost of purchasing certain products and services. Many fringe benefits are excluded from the taxable compensation of employees. The exclusion of fringe benefits reduces the after-tax cost of purchasing those products. For instance, there are statutory exclusions for employer provided health insurance and a limited amount of employer-paid group term life insurance. These deductions or exclusions are product specific, and are often sold only through certain financial institutions because of regulatory and tax policies which encourage separation of financial functions.

Deposits in pension funds and individual retirement accounts (IRA's) are also allowed to be excluded from income of employees. These special types of savings incentives at the same time provide for the deferral of investment income and the taxation of all withdrawals. When a taxpayer is in the same tax bracket at time of withdrawal as time of deposit, the tax savings are equivalent to nontaxation of the investment income. Pensions and IRA's are generally available through all financial institutions.

Economic Implications of Individual Tax Preferences

Although there are many important economic issues related to tax-preferred products offered to individuals, our concern will be mainly with those which are product specific and can be offered only by certain financial institutions. Even if there are problems of equity and efficiency because of current pension rules, for instance, they will not be of concern here if they arise outside the context of the taxation of financial institutions. The tax benefits of pension savings, as well as many other individual preferences, apply primarily at the

individual level and do not generally favor one type of financial institution over another. We are more concerned with tax provisions that may exempt income on one type of product offered by one type of financial institution when a similar exemption is not offered to other individuals who earn such income through other institutions.

One result of individual exclusions, deductions and deferrals is that taxpayers will purchase more of the preferred products or invest their savings more in assets offering special tax savings on the investment income. There are two further implications at the level of the financial institution. First, individual tax preferences increase the size of the institutions allowed to sell the preferred products. The increased after-tax rate of return or reduced price of services will increase the demand for the favored assets or products. Economic theory holds that the benefits of tax preference may be shared between demanders and suppliers, and that financial institutions which supply the products may indirectly gain some of the benefit essentially aimed at individuals. In the short run, this benefit may be a higher level of profitability or returns to other factors; in the long run, it will more likely take the form of an increase in the size of the financial sector offering the favored products.

Second, some taxes paid to government by certain financial institutions may not represent taxes on the "equity" owners of those institutions. A portion of the taxes levied at the company level may be aimed instead at creditors or customers as a partial offset for the tax exclusions, deferrals or deductions granted at the individual level. Thus, what might nominally be measured as corporate tax liability may actually represent tax collected at the company level on the individual beneficiaries of tax preferences.

B. Investment Income Net of the Cost of Services at the Individual Level

As we have noted before, investments flowing through financial institutions often involve some level of service regardless of the structure of the tax system. These financial services may not represent a cost of making investments or doing business, but may provide a value to the taxpayer which is independent of the investment income. In the case of joint products involving personal consumption services and investment income, the investment income is often reported net of the cost of the personal services.

An income tax measures investment income as the net return on assets and allows an exclusion or deduction for the transaction costs and other costs of investment or intermediation services. The costs of personal consumption services, on the other hand, are generally not deductible and must be paid out of after-tax income. If the investment income is reported net of the cost of personal services, then taxable income will understate the total economic income by the value of the personal services.

As a result of this netting process, taxpayers are encouraged to acquire services from institutions handling their investments rather than receive higher investment income and pay for such services separately. Even when the services are solely investment-related, and the costs clearly deductible, taxpayers who are non-itemizers will still have an incentive to avoid paying separately for the services.

The favorable tax treatment of joint investment and service transactions can be seen in the case of checking accounts. Most individuals have the option of (1) investing their funds in the highest yielding assets and purchasing checking account services out of after-tax income or (2) depositing their funds in a lower

yielding security in combination with "free" or reduced price checking services. In the first case, a saver would earn the highest market investment income, i_1, and purchase checking services for the market price, p, out of after-tax income, $i_1(1-t)$, where t is the individual's marginal tax rate. It is more likely, however, that the individual could earn a higher after-tax rate of return from a financial institution offering a lower interest rate in combination with a reduced price on checking services. This individual would maximize his after-tax rate of return by investing directly in assets yielding the market interest rate only if $i_1(1-t)$ were equal to or greater than the total after-tax return from the checking account without service charges, $i_2(1-t) + p$, where i_2 is the stated yield on the account.

The tax treatment of financial income net of transactions and service costs permits individuals to purchase checking services with pre-tax income. The cost of checking services becomes an excludable expense of the consumer regardless of whether those expenses are otherwise deductible. Inefficiency results because individuals are encouraged to choose "free" checking services even when the foregone interest income, (i_1-i_2), exceeds their direct price, p. 19/

A similar mismeasurement of taxable investment income occurs with other joint products offered by financial institutions. For instance, total premiums paid are treated as the cost basis for investment returns from a life insurance policy, even though part of the premiums are for the cost of personal insurance services.

19/ Checking accounts without service charges are demanded if $i_2(1-t) + p > i_1(1-t)$ or $(i_1-i_2) < p/(1-t)$. Thus, (i_1-i_2) can be greater than p as long as $t > 0$.

Economic Implications of Measuring Taxable Investment Income Net of Service Costs

The favorable tax treatment of joint service and investment income encourages the combination of economic functions and changes the allocation of capital resources between different financial institutions. The mismeasurement of investment income by the amount of personal services purchased is equivalent to allowing a deduction of the cost of those services. The effective price of the personal services is reduced and more are consumed. As long as only certain institutions are allowed to offer such joint products, moreover, the exclusion of their cost from the measurement of taxable income will increase the flow of capital to those institutions relative to other financial institutions.

C. Separation of Income from Return of Capital

The measurement of total income is complicated by payments to income recipients which include both income and return of capital or price rebate. An income tax must distinguish between returns to capital (income) and returns of capital. At the company level, any portion of the payment that represents investment income to creditors would be deductible as an interest expense. Similarly, a true price rebate would be deductible at the company level in order to properly measure net receipts. At the individual level, payments received would be nontaxable only when they can be reasonably identified as price rebates or return of capital contributed out of after-tax income. Any investment or service income would be included in taxable income at the individual level.

While these general rule may appear easy to understand, the difficulty of their application can best be understood through some examples.

Deposits

An individual's deposit (investment) in a financial institution represents an increase in the institution's liabilities, not its gross income. Thus, a deposit is normally not included in the institution's taxable income when received nor deducted when paid out. The income earned on the associated assets of the institution is offset by the deduction of interest paid on the deposit. The interest received by the individual depositor is generally taxable even though the income may be retained in the institution and not distributed.

In the case of deposits made with banks and thrift institutions, the application of these rules is fairly clear. In the case of insurance companies, where premiums cover both the cost of insurance services and the equivalent of a deposit in a savings account, the separation of the deposit from the price of the insurance service is often less explicit. The amount of the deposit portion is a liability of the insurance company which it must return to the policyholder at a later date and thus should not be included in taxable income of the company. The price of the insurance services, on the other hand, would be included in the company's taxable income, but would be largely offset by payment of insurance claims and expenses.

Corporate Dividends

Payments to shareholders may represent dividends paid out of income or returns of the initial investment. The Tax Code defines a dividend as a distribution received by a shareholder paid out of "earnings and profits" of the corporation. All payments normally are assumed to first come out of "earnings and profits" and, thus, are not deductible at the company level and are included in taxable income at the individual level.

Distributions in excess of accumulated earnings and profits are treated as return of capital and are not subject to tax. Any return of capital reduces the shareholders' basis in the investment.

"Price Rebates"

"Policyholder or patronage dividends" to mutual shareholders or cooperative members consist of both return of capital (excess charges for the product in the current or prior years) and return to capital (income earned on investments or through the provision of services). There is often no simple procedure for determining the income portion of these dividends when the customer is also an equity owner or creditor with the company.

Redistributions

Part of the payments from insurance proceeds represents a redistribution of income among policyholders, rather than an addition to net economic income. If the redistributive element of insurance proceeds has already been included in taxable income (assuming the cost of the insurance is not excluded from the policyholders' taxable income), then it would be taxed twice if it were added to taxable income again upon distribution. If the insurance contract, on the other hand, includes an investment component, then the investment return represents an addition to economic income. Moreover, if the premiums are paid out of before-tax income, as in the case of employer-paid fringe benefits, then the entire insurance proceeds may be subject to tax not as redistributions, but as return of previously untaxed income.

Borrowing and Other Partial Withdrawals

If income has been allowed to accumulate without taxation, then partial withdrawals of funds, including loans against the funds, must be accounted as coming from capital or income. An

ordering rule which assumes that any withdrawals are first made out of capital, rather than income, would allow the income to continue to receive tax-deferred status even when the initial savings contribution has been removed. Alternatively, the ordering rule could require the withdrawal to be made first from income. The latter rule is currently applied to partial withdrawals and loans from annuities and certain loans from qualified pension plans, while partial withdrawals and loans from life insurance policies currently fall under the former rule.

Economic Implications of Correct Separation of Income from Returns of Capital

Incorrect attribution of payments as return of capital rather than income would significantly lower the effective rate of tax on investments. Similarly, attributing payments as "price rebates" when some portion represents income would significantly lower the effective rate of tax on the incorrectly attributed service income. There would be too much investment in the favored assets and too little in the disfavored ones.

D. Tax-Preferred Assets Held by Financial Institutions

Financial institutions also hold tax-preferred assets in their own accounts. Sometimes the benefits of these tax preferences can be passed through to the individual level. Mutual funds and real estate investment trusts (REITs), for instance, receive integrated tax treatment under certain conditions, and hold tax-exempt bonds and real estate property for their owners. Other tax-preferred assets, however, are held by financial institutions mainly to increase the company's own after-tax income.

Because most capital is contributed by creditors, depositors, and policyholders rather than equity owners, the financial institution's own income typically is a relatively small proportion (5-10 percent) of gross income from financial assets. In most cases, the company will hold most assets in taxable form to generate the highest market yield for their depositors. Tax-exempt and tax-preferred income, on the other hand, can represent a large fraction of the net (otherwise taxable) income of the company. Although tax-preferred assets are not uniquely held by financial institutions, their high debt-equity ratio distinguishes them from most other holders of these assets.

Tax-exempt Bonds

Tax-exempt bonds are an example of tax-preferred assets held by many financial institutions. Some companies--in particular, commercial banks and property and casualty insurers--can effectively segregate "company" investment income from deductible investment income paid to creditors. These companies often find that tax-exempt bonds yield the highest after-tax return to the company. Typically, these companies will hold taxable securities up to the point that the taxable income receipts are offset by allowable deductions for costs and payments to depositors. Excess income that would otherwise be subject to the maximum corporate tax rate can then be earned from tax-exempt bonds.

Because of their tax-preferred status, such assets have yields below the market return on fully taxable securities with comparable terms. In the case of tax-exempt bonds, short-term obligations historically have yielded between 50-60 percent of the comparable taxable yield, while long-term obligations have yielded between 65-75 percent of the comparable taxable yield. Thus, financial institutions that hold tax-exempt bonds accept a

lower pre-tax rate of return and accept an implicit tax rate of between 25-50 percent. Investors usually will hold tax-exempt bonds only if the "implicit tax rate" paid in the form of the reduced pre-tax yield is less than their actual marginal tax rate.

Financial institutions that find tax-exempt bonds advantageous often pay only small amounts of Federal tax liability. They do, however, pay the implicit tax, although at a rate below the statutory corporate rate, to State and local governments in the form of lower interest receipts on the tax-exempt debt obligations. 20/ Many financial institutions participate in leasing of depreciable equipment and structures which also reduces their Federal tax payments. Lessors will pay a similar "implicit tax rate" by passing the benefit on to lessees in the form of lower rental charges.

Intercorporate Dividend Deductions

Corporations can generally claim a deduction for 85 percent of dividends received from holding shares of other corporations. The principal justification for a deduction for intercorporate dividends received is to reduce the possibility of triple taxation of dividend income. Income paid out as dividends otherwise could possibly be taxed to the originating corporation, the corporation holding the equity, and the receiving company's shareholders. Dividends would already be subject to double taxation if not flowed through other corporations.

One difficulty with the triple taxation argument is that it depends heavily on what the receiving corporation does with the dividends of the paying corporation. If the dividends are not

20/ Section 103 excludes from tax interest income on State and local government obligations, including certain industrial development bonds used for private business and other private activity bonds.

One difficulty with the triple taxation argument is that it depends heavily on what the receiving corporation does with the dividends of the paying corporation. If the dividends are not passed on to the receiving corporation's shareholders, then only a double tax is involved, and the receiving corporation, even without a dividend-received deduction, may be no worse off than other dividend recipients. Similarly, if the dividend can be passed on in a nontaxable form or to nontaxable recipients, then one level of tax is avoided even without the dividend-received deduction. With the dividend-received deduction and no taxable income at the individual level, the income would be subject to tax at only the originating corporation.

The receiving corporation may also borrow the money necessary to purchase the stock of the paying corporation. Interest payments on those borrowings are deductible. By using the dividends of the paying corporation to pay interest, and making use of the deduction for dividends received, the receiving corporation will reduce net corporate taxes paid by the two companies to almost zero.

If the receiving corporation combines methods--deducting interest payments made with dividends of another corporation, taking a dividend-received deduction, and making the interest payments in a nontaxable form--then total taxes paid by all corporations and individuals on the related capital income will be almost zero. The deduction for dividends received will allow the positive tax of the paying corporation to be offset by a negative tax of the receiving corporation (on interest payments), while zero taxes may be collected on interest and dividend recipients (if nontaxable). Thus, the so-called triple tax may end up to be no tax at all.

The dividend-received deduction therefore creates problems whenever the receiving corporation has debt or can make payments in nontaxable form. All financial intermediaries fall into the first category, and many fall into the second. A large portion

of their net investment income is earned through arbitrage of the rate paid on liabilities (e.g. to depositors and policyholders) and the rate received on assets. Because of a higher debt-equity ratio, most income received is offset by interest paid or similar deductions.

Income paid in intercorporate dividends to financial institutions generally would be taxed at two levels --the originating corporation and the depositors and shareholders of the financial institution--even without the 85 percent dividend deduction. In many cases, therefore, the intercorporate dividend-received deduction makes corporate equity preferable to other sources of income because it can be used to shelter other income of the financial institution from tax. In some cases such as life insurance companies, the ability to pay out income in tax- preferred form (e.g., life insurance benefits excluded from taxation) means that almost no tax at all is paid on the income of the originating corporation.

Capital Gains

Gains and losses from the sale or exchange of capital assets are eligible for special treatment at the corporate level. 21/ Net long-term capital gains can be taxed at an alternative rate of 28 percent. Capital losses are allowed only against capital gains, but any excess losses may be carried back three years or forward five years. The special tax rate is available only for capital assets that are held generally for investment. Gains and losses from property held for sale to customers, such as inventory, receivables and depreciable or real property used in a trade or business, are taxed as ordinary income. If income can be generated as capital gain rather than ordinary income, then a lower tax rate will apply.

21/ Capital gains and losses also receive special treatment at the individual level, but this special treatment is generally not peculiar to transactions with financial institutions.

Tax Arbitrage Issues

Investors generally are denied interest deductions for borrowing to hold or carry tax-exempt bonds. While this rule is hard to apply in practice, the intent is to prevent investors from generating tax reductions while undertaking no savings whatsoever. With tax arbitrage, an investor can borrow $100, deposit that $100 in a tax-preferred asset (not just tax-exempt bonds) and generate positive after-tax income mainly through the tax reduction. Yet no net saving will have occurred, and before-tax income may be negative.

Alternative rules for limiting arbitrage include disallowing a portion of interest deductions attributable to carrying or purchasing tax-preferred assets and allocating part of the tax-exempt income to creditors. The former approach is applied in the case of banks. Fifteen percent of the interest deduction attributable to tax-exempt bonds is disallowed. The latter approach applies to life insurance companies which must prorate tax-exempt income between the company and policyholders in the same proportion as total investment income is allocated. Because income from life insurance products is not taxed currently to policyholders, there is little reason for life insurance companies to hold tax-exempt securities as part of policyholders' "savings accounts."

Economic Implications of Tax-Preferred Assets at the Company Level

Lack of uniformity in the taxation of income from capital drives up the demand for preferred assets and leads to a misallocation of savings and resources in society. In the case of financial institutions, there is a special problem with tax arbitrage because deductions for interest and other payments are allowed at the same time that receipts are not counted in income.

While economic actors at all levels engage in tax arbitrage, financial institutions present a special case because of their high debt-to-equity or liability-to-asset ratio.

E. Other Special Preferences of Financial Institutions

Financial institutions may also receive special tax treatment of various receipts or costs. These special preferences generally can be classified into three types: exemption of income from company level tax; deferral of income from taxation; and additional deductions or exclusions unrelated to the cost of earning income.

As an example of the first type of preference, the Tax Code exempts from company level taxation income received by groups organized for mutual benefit purposes. Exemptions are granted to credit unions, voluntary employees' beneficiary associations which provide for the payment of life, sickness, accident or other benefits to members of their dependents, and certain "small" mutual insurance companies. The favored organizations pay no taxes and therefore can offer financial services at lower cost than taxable businesses. Because of their size, mutual savings and loan associations and most mutual insurance companies are subject to corporate tax.

Second, companies can often defer income from taxation through special accounting techniques. In addition to excess deductions for additions to reserves (see section VI) certain financial institutions are allowed to place income into special accounts and defer tax on that income. Mutual property and casualty insurance companies, for instance, can defer at least one-quarter of their underwriting income for up to five years and, under certain conditions, a portion can be deferred

indefinitely. Life insurance companies can defer one-half of their underwriting income until such funds are distributed to shareholders, a process which effectively permits indefinite deferral.

Finally, there are a whole series of deductions or exclusions which are unrelated to the cost of earning income. While the costs of earning income are generally deductible at the company level, these special deductions appear designed simply to reduce companies' tax liabilities without regard to the measurement of economic income. Often these special deductions are limited to one type of financial institution. Unlike other mortgage lenders, thrift institutions are allowed a special bad debt deduction if they hold a certain percentage of their assets in "qualified real property loans." The special deduction is unrelated to the amount of their bad debts. Similarly, life insurance companies are allowed a special deduction for a percentage of premiums paid on group term and health and accident policies. The deduction has little or no relationship to the proper measure of total economic income and is not available to other companies writing similar insurance contracts.

Economic Implications of Special Company Tax Preferences

The benefits of special company tax preferences will accrue partially to the customers, employees, creditors, and owners of the favored institutions. The favored companies will be able to offer lower prices, higher wages or interest rates, and higher profits as a result of the tax preferences. The amount of investments and services provided by favored institutions will most likely increase, while there will be less goods and services offered by other sectors of the economy.

Tax preferences that are specific to a particular type of financial institution will more likely accrue to the owners in the short run or if entry to the favored sector is restricted.

Over the long term, those financial institutions that have special tax breaks will expand their size, entry into the market will diffuse the benefits, and there will be additional activity or production in the preferred sectors.

II. ISSUES RELATED TO THE ATTRIBUTION OF TAXABLE INCOME AMONG RECIPIENTS

As was shown in Table 2.1, the introduction of income taxation does not affect the measurement of total income. If total income is measured the same way, why do distinctions among types of income recipients become so important for tax purposes? To the extent that one recipient's measure of income was too low, another's would often be too high by the same amount. The total amount of income subject to tax in many cases would be the same.

Distinctions are required under the current income tax system primarily because the same tax rate does not apply to all taxpayers. Creditors (savers/lenders), equity owners, incorporated financial institutions and consumers are each differentiated by the Internal Revenue Code and charged different tax rates or allowed different deductions according to the group within which they fall. Different tax rates may also apply to individual taxpayers within each group. Both the individual income tax and, to some extent, the corporate income tax contain progressive rate schedules. Moreover, all tax systems distinguish between taxpayers with a zero tax rate (usually because of low or negative taxable income) and those with a positive rate. Attribution of income to a profitable corporation, for instance, would bring about a different tax result than attribution to a non-profitable one even if the corporate tax were a "flat-rate" tax. Although the distinctions among income recipients may at times appear to be arbritrary, such as separating the income of

a creditor from that of an owner of the financial institution when they are one and the same person, such distinctions are important as long as different tax rates apply in the two cases.

Although the terms listed in Table 2.1 have become more lengthy than in Table 1.1, the essential differences in tax rates among economic actors are due either to variations in individual marginal tax rates or to the difference between the corporate tax rate and whatever individual rate might apply. 22/ In Table 2.1, the after-tax investment income of corporate equity owners is equal to $(i'-i_1-c_1)(1-t_c)(1-t_e)$, where a tax rate, t_c, is levied on the income earned at the level of the corporation while a tax rate, t_e, is paid on income distributed to individual equity owners. Current law attributes corporate income to the corporation, not its owner; that is, the tax system is unintegrated. Corporations can deduct interest payments to creditors but cannot deduct dividend payments and similar distributions to equity owners.

If the financial institution is not corporate, or the income is deemed to flow through directly to individuals, then all income (not just dividends) is attributed to the owners of the institution at the individual level only ($t_c=0$). A further simplification of Table 2.1 is possible if those owners are in turn the creditors or lenders. Then the tax rate applying to the investment income of the noncorporate financial institution is the same as the tax rate applying to the income attributed to the creditors; their total income equals $i_1(1-t_s) + (i'-i_1-c_1)(1-t_s)$, or simply $(i'-c_1)(1-t_s)$.

22/ Whatever tax rate applies, the final incidence of a tax does not necessarily rest with the taxpayer who actually pays the tax. In the case of financial institutions subject to corporate tax, for instance, factor prices such as interest paid to lenders, i_3, or wages paid to workers, c_3, may decrease, and product prices, p, or interest charged to borrowers, i', may increase. Thus, part of the burden of a tax on the income of a financial institution may be shifted to savers, wage earners, consumers or other capital owners.

Differential rates of taxation, regardless of whether they apply at the individual or corporate level, may have effects at both levels. For instance, the tax exemption of interest earned on All-Savers Certificates, available through commercial banks and thrift institutions, increased the flow of funds to those institutions. The tax exemption of interest income on these certificates induced many investors to purchase these tax-exempt assets even though the statutory tax-exempt interest rate was lower than market yields on other investments. Favored financial institutions were able to attract funds at lower interest rates than on other liabilities. The reduced cost of funds could be used to increase the number of loans made by reducing the interest charge on borrowed funds (i') thereby increasing demand for loans as well, or increasing the income of the institutions' equity owners ($i'-i_1-c_1$). Similarly, a reduction in the effective rate of tax paid at the corporate level by a particular type of financial institution could be used to increase its share of the financial market if it offered higher yields to lenders and lower interest rates to borrowers. Thus, tax rates at both the individual and corporate level can affect the share of the market held by each financial institution and the division of the total return between the various income recipients.

A. Allocation of Income Between Companies and Depositors or Policyholders

Some argue that under an ideal tax system, one would attribute no income to financial institutions qua institutions, but rather attribute all income directly to individuals, whether owners, creditors, depositors or policyholders. 23/ Individuals are the ultimate recipients of income and bear the burden of

23/ U.S. Department of the Treasury, Blueprints for Basic Tax Reform, Washington, D.C., 1977.

taxes, whether levied statutorily on an ad hominium (persons) or on an ad rem (thing or entity) basis. Since some financial institutions are corporate, while others are not, the tax rates faced by their owners are different under an unintegrated tax system. If the corporate tax rate, plus the effective rate resulting from taxation of dividends and capital gains, is higher than the individual tax rate on current equity income, then the business organized in corporate form is disadvantaged relative to the noncorporate business. Like many other tax wedges, this rate differential can result in misallocation of the economy's capital resources, affecting not only the amount of financial intermediation offered in the corporate sector, but the total amount of financial services in the economy as well. 24/

Under current tax law, most income earned by financial institutions is passed through to individuals and is not taxed at the corporate level. Problems arise in the allocation of income between those depositors or policyholders for whom integration is effectively provided and those equity owners from whom corporate tax is collected. As long as a corporate tax applies to capital income of other corporations, there is no good reason to favor income generated from activity within financial institutions over income generated within other corporations. Such favoritism would create its own form of inequity as well as to encourage relatively too much investment in activities related to financial intermediation and services.

B. Allocation of Income to Specific Individuals

Integration would solve one allocation problem, but it would leave many others. As long as tax rates (or rules for calculating income) differ among individual taxpayers, accurate

24/ For a summary of the recent literature on the capital allocation effects of the unintegrated corporate tax and its interaction with corporate financial behavior, see J. Cordes and S. Sheffrin, "Taxation and the Sectoral Allocation of Capital in the U.S.", Office of Tax Analysis Paper No 49, June 1981.

allocation of income between income recipients will still be important. In the absence of precise allocation rules, income would always tend to be allocated to the taxpayer with the lowest rate of tax. The tax savings would then be divided among participants through various compensating mechanisms, such as price changes.

In cases where attribution of income to specific individuals is difficult, a "substitute tax" may be used to prevent exemption of that income from taxation. Such a tax levied at the business level would be a substitute for, rather than an addition to, taxation at the individual level. When total taxes paid over to the government by a business represent both a proxy tax on individuals and a business tax on owners, it is inappropriate to measure the effective business tax rate by dividing total taxes paid by business income.

In practice, a substitute tax rate would normally be assessed either at a business tax rate or some flat rate which approximates the average marginal rates of actual income recipients. This type of flat rate, however, can create problems of its own. Potential investors with rates higher than the substitute rate would be encouraged to flow income through the financial institution. As this shifting takes place, the substitute tax rate can become too low when the average marginal tax rate of income recipients rises above the substitute tax rate. If this were to happen, the relevant financial instrument could become converted from its original purpose into a tax shelter. Substitute tax rates, therefore, should never be used when income can be attributed without undue complexity to the actual recipients. A limit should also be placed on the extent to which income flowing through a financial institution can be sheltered through means of a substitute tax rate below the highest individual tax rate; for instance, special rules might apply to large marginal investments of any one individual.

C. Mutual vs. Stock Ownership

Certain "mutual institutions," even though organized in corporate form, are treated like partnerships in which current income is attributable and taxable to individual owners. These qualifying corporations--primarily mutual funds and certain cooperative ventures--can deduct dividend distributions if they distribute a large percentage (e.g., 90 percent in the case of regulated investment companies and 95 percent in the case of real estate investment trusts) of current income to their "shareholders." In these instances, the income of the corporation is distributed to creditors and policyholders and is taxed only at the individual level. 25/ The requirement that a large percentage of corporate income be distributed currently limits the corporation from accumulating large amounts of retained earnings within the firm, and practically eliminates the normal corporate advantages of tax deferral and conversion of ordinary income into capital gains.

There is a continual policy debate over the extent to which other mutual owners should be treated like unincorporated partners or as corporate owners of their companies. This question is somewhat related to whether payments of income generated at the corporate level should be treated as payments of debt deductible at the corporate level or as nondeductible dividend payments to owners of the corporation.

The optimal taxation of mutual owners is an issue of both equity and efficiency. Mutual companies may argue for parity between themselves and noncorporate partnerships or tax-exempt

25/ Capital gain income can also be passed through to shareholders and receive favorable individual income tax treatment.

mutual organizations. Stock corporations, on the other hand, may argue that they are disadvantaged in competing in the marketplace if only they have to pay corporate tax. If a tax-exempt organization keeps its costs competitive and passes through its cost savings to its customers, then its market share will grow at the expense of taxable entities. The latter concern has been reflected by the corporate taxation of several types of mutual organizations with large market shares, such as life insurance companies, property and casualty insurers, savings banks, and savings and loan associations.

Tax rules cannot deal only with comparisons of average tax rates between two companies, but instead must determine the amount of equivalence to apply all the way through the system. Parity implies equal treatment of both investment and noninvestment income at both the corporate and individual levels. At the corporate level, the amount of income that is deductible as payments to depositors and policyholders must be separated from the income that is taxable to the mutual company. Some investment income of a mutual company could be treated as equivalent to interest income paid to creditors or as a pass-through of passive income similar to that made to noncorporate partners or to mutual fund owners.

Some degree of parity must also be established at the individual level. For stock companies, both interest payments to creditors and dividend payments to stockholders are subject to tax. The problem of parity between mutual and stock companies is especially acute when the difference between individual and corporate rates is large. In the case of income earned by life insurance companies, for instance, much income passed through to individuals is exempted from tax. A simple rule that would go a long way toward insuring equal tax treatment of mutual and stock companies, and lessening many of the conflicts between them, would be to require that all income be subject to tax at least once at either the individual or corporate level.

One administrative difficulty with taxing mutual owners similarly to equity owners comes in measuring the income earned by the mutual company. Because mutual owners are also creditors and customers, any "equity income" can be deducted by being paid out as interest to creditors, or as a reduction in the price of services. A mutual company can run on a nonprofit basis by simply relabeling its distributions or retentions. In the case of insurance companies, distributions are often called policyholder dividends regardless of whether they represent income or return of capital.

Any attempt to tax mutual companies, therefore, will be frustrated by their ability to reduce taxable income through distributions in the form of price reductions or increases in deductible payments. Without an imputation of a return on the nonfinancial capital of mutual companies, their taxable income is likely in practice to be limited to a portion of observable returns from financial investment, or to retained capital, whether it represents total earnings or not. In the case of life insurance companies, Congress in 1959 attempted to achieve parity by giving stock companies several special deductions to reduce their tax liability. Since the deductions were not based upon income, the problem of mismeasurement and parity remained, albeit at lower average tax rates for both mutual and stock life insurance sectors.

D. Economic Implications of the Allocation of Income Among Recipients

As long as there are differences in tax rates among taxpayers, accurate attribution of income to taxpayers will be necessary to insure fairness among taxpayers with equal incomes and the efficient allocation of investment and service activity among financial institutions. When a given participant can be engaged in transactions with financial institutions in

different roles--as customer, creditor or owner of the institution--some simplification can be gained by taxing him at the same rate in any role. On the other hand, efficiency also demands that he not be taxed at a lower or higher rate on income generated from financial institutions than on other income. As long as the income tax system remains unintegrated for all corporations, it will be impossible to meet both standards. More generally, as long as there are any tax rate differentials on income--whether because of an unintegrated corporate tax, a progressive rate schedule, zero tax rates for some income, or the lack of tax refunds for losses or negative income--it will be necessary to allocate income correctly among recipients. Where attributation of income to specific individuals is administratively infeasible, a substitute tax levied at the business level could be used to insure that income is included in the tax base at least once. Where the income earned by mutual companies can be distributed through price reductions, or nontaxable policyholder dividends, limits are necessary to prevent all income from being made nontaxable. In addition, parity between mutual and stock companies may require some imputation for returns from nonfinancial capital of the mutual owners.

III. ISSUES RELATED TO THE ATTRIBUTION OF INCOME BY TYPE OF ACTIVITY

Economic theory holds that resources will not be allocated efficiently if taxpayers face different tax rates for providing equally valuable services or products in the economy. We have seen that resources can be misallocated when the tax rate is related solely to the form of organization (e.g., corporate or noncorporate) providing goods and services. In like manner, inefficiency may result whenever different tax rates apply to the same amount of income merely according to the type of activity generating that income. If firms or persons are taxed differently according to whether they produce apples or chairs,

then too few apples or too many chairs may be produced. Similarly, if financial institutions are taxed differently according to the type of financial activity they perform, or income from different products is taxed differently then too much or too little of each activity may result.

If differential rates are established for different activities, then proper measurement and attribution by type of activity becomes necessary to avoid all income being taxed at the rate applicable to the lowest taxed activity. Equation 2.1 can be used to illustrate the incentive of different marginal tax rates on the effects of attribution of net income between activities.

$$2.1) \quad Y_c = (1-t_{c1})(i'-i_1-c_1) + (1-t_{c2})\ (p-i_2-c_2)$$

Total after-tax company income, Y_c, equals the sum of net after-tax investment income, $i'-i_1-c_1$, and net after-tax service income, $p-i_2-c_2$. If the marginal tax rate on investment income, t_{c1} is greater than the marginal tax rate on service income, tc_2, then as high a proportion of receipts (i' and p) as possible would be attributed by the taxpayer to service activity, while expenses (i_3 and c_3) would be used to offset investment income wherever possible. Such attribution would reduce tax liability and increase after-tax income.

Unbundling products into investment and service components is theoretically possible, but in practice the accurate measurement of each component is exceedingly difficult. A company selling a joint product can alter terms of the contract. The allocation of income and expenses can then occur simply in the pricing of the joint product.

A. Attribution According to Activities of the Taxpayer

Differential tax rates across activities occur primarily at the company level. The Tax Code, for instance, distinguishes between investment income and underwriting income in determining the tax of insurance companies. Underwriting income, or income from the sale of services, is generally subject to a lower rate of tax. The lower effective tax rate on underwriting income is due to special deductions which can only be taken against underwriting income, and not against investment income.

One result of such rules is obvious. Firms first attempt to reallocate gross receipts to the activity with the lowest marginal tax rate. Costs, on the other hand, will be allocated to the activity with the highest marginal tax rate. Tax policymakers and administrators in turn attempt to devise further rules to restrict such reallocation, and so forth. Because many costs are common to both investment and noninvestment activities, these rules can become quite complex because they require a matching of income and costs even when such items are more or less fungible.

Rules are not only required within companies but across companies as well. In the case of a life insurance company, for instance, gross income at one time could be converted from investment income to underwriting income through a reinsurance agreement in which a company with excess investment income effectively sold that income to another company and received back compensation which was treated as underwriting income. Another method of reducing taxes is through consolidation of life insurance companies; by adding together the income of each affiliated company rather than counting each company's income separately, it is often possible to reduce total liability. Attempts to limit each of these types of arbitrage do not address the underlying incentives of differential tax rates and, thus, leave the potential for more novel ways to convert income and costs.

B. Attribution to Financial Institutions by Types of Products Sold

In addition to rules which distinguish between sources of income within the financial institution, broader tax rules distinguish income earned for selling particular products according to the "type" of financial institution. Distinquishing between types of financial institutions and types of products, however, is increasingly more difficult as deregulation and diversification occurs in the financial services sector. The Tax Code does not reflect the increasing similarity of institutions and their products or services. Each major type of financial institution is still subject to its own peculiar set of tax rules at the company level, and special tax treatment at the individual level may be allowed only if a product is sold by a particular industry. These different tax rules create substantial barriers to effective deregulation and diversification and cause tax-induced competitive imbalances.

The division between institutions often is quite arbitrary. A life insurance company, for instance, is defined as a company with at least 50 percent of its total reserves for life, annuity, and health considerations. Some insurance companies may qualify as either life companies or property and casualty companies, with completely different tax rules, depending on how certain pension reserves are classified. Distinctions between mutual savings banks and savings and loan associations with respect to the favorable bad debt reserve deduction is also fairly arbitrary and has encouraged some stock companies to switch to mutual ownership.

Acquisition of subsidiaries, mergers, consolidations and other reorganizations are increasingly used to take advantage of differential tax regimes across financial institutions. Life insurance companies, for instance, have allocated income between

themselves and property and casualty insurance subsidiaries so that gains are taxed at lower rates to the life insurance parent, while losses offset income of the property and casualty subsidiary with the higher rate of tax.

Differential tax treatment of institutions by type of products requires further arbitrary distinctions. Favorable tax treatment of investment income of life insurance products is allowed only when those products are sold by life insurance companies. Many investment vehicles that contain very little insurance protection are currently treated as life insurance for tax purposes. If no limits were established, all financial institutions would begin combining their savings investment with a minimal insurance "wrapper" in order to gain access to favorable tax treatment as life insurance.

C. Economic Implications of Differential Tax Rates Across Activities

Differential rates of tax across activities of a company will distort the level of each type of activity undertaken. Companies often go the great lengths to reallocate income and expenses between activities to minimize tax. Differences in the tax treatment of various types of financial institutions their products will also affect economic efficiency and encourage various forms of reorganizations for tax purposes. Rules allocating income and costs between activities and defining different institutions are necessary to prevent these tax games, but such rules may themselves be arbitrary and cause other distortions as market forces change. The induced inefficiences and complexity of rules will be a positive function of the difference in effective tax rates across activities.

IV. ISSUES RELATED TO THE TIMING OF INCOME RECEIPT

Rules of accounting for expected future losses or liabilities have a major impact on income tax liabilities. Just as improper attributions to the wrong taxpayer or the wrong type of activity can affect the total amount of taxes to be paid, so also can attribution to the wrong time period affect the present value of taxes paid and the present value of after-tax income.

Improper accounting of contingent liabilities or losses affects tax liabilities primarily through the exemption, deferral or speed-up of tax on some income. Tax deferral, for instance, can significantly reduce the effective tax rate on income, and is often equivalent to borrowing current tax liability from the Federal government at a zero interest rate.

A. Methods of Tax Accounting for Expected Future Losses or Liabilities

Three methods of accounting for future expected losses or liabilities were described in Part 1. First, under a self-insurance cash method, a business can recognize and deduct future liabilities when they occur. Second, under the cooperative insurance method, businesses with expected future liabilities from current operations can purchase insurance to cover such liabilities and deduct the cost of insurance when paid. Current accounting for future liabilities through cooperative insurance not only speeds up the deduction for those liabilities, but changes the timing of the associated tax payments. A deduction for future liabilities is taken when they occur, but the deduction is fully or partly offset by the inclusion of the insurance proceeds in taxable income. The present value of the insurance premiums (deductions) should equal the present value of expected future losses plus the return to the insurer.

Under the third method of accounting for expected future liabilities, the qualified reserve method, firms self-insure and treat additions to reserves as a current expense. When the qualified reserve method is used to measure taxable income, three rules are necessary for the qualified reserve method to be equivalent to the other two methods for tax as well as other accounting purposes. These rules are essential to insure that the qualified reserve method is not abused. First, all income on qualified reserve assets must be counted as income when earned. No further deduction should be allowed when the income is credited to the reserve to meet future liabilities.

Second, since all additions to qualified reserves are deducted currently, all withdrawals of qualified reserves must be included in the current year's taxable income. Inclusion of the withdrawal may be partially or wholly offset by a deduction for the payment of liabilities or losses. Firms must also make withdrawals of excess reserves on a periodic basis. 26/ This requirement prevents taxpayers from timing withdrawals for periods when their taxable income is temporarily low. To be more exact, the rate of tax on the withdrawal of any excess reserve needs to equal the rate of tax which was applied to the earlier excess deposit.

Third, current deductions for additions to qualified reserves must be limited to reasonable expectations of the future contingencies for liabilities or losses. In the absence of taxes, this third rule was necessary only to insure equivalence of annual accounting, but not the present value of total income over time. With taxes, however, the present value of after-tax income can also be changed if taxes are deferred or accelerated through use of unreasonable expectations.

26/ Withdrawal of excess reserves requires the valuation of reserve assets. Such valuation must take into account the market value of the reserve assets because a company could always sell or reinsure its liabilities at their true market cost.

There would be no limit, however, on the amount of funds placed in nonqualified reserve accounts to meet self-imposed or government-imposed regulations nor on the use of the cash method of accounting for future expected contingencies--except that losses or liabilities must be paid first from qualified accounts set aside for tax purposes. To insure both that withdrawals from qualified reserves are made only for the purpose of covering expected future liabilities and also that tax deductions are not allowed for payments that may never take place, qualified reserve investments should be maintained and separately accounted from the firm's other assets. 27/

When all three accounting rules for tax deductible additions to qualified reserves for future contingencies are followed, there is less likelihood of a tax advantage to a firm that self-insures and uses the qualified reserve method over a firm that uses the cash or cooperative insurance method.

B. Equivalence of Proper Qualified Reserve Method with Accounting for Future Losses When They Occur

To examine more rigorously the rationale behind these rules, let us compare a firm using the cash method, and establishing nonqualified reserves for future contingencies out of after-tax dollars, with a firm using the qualified reserve method. The future value of the nonqualified reserves for a firm investing an amount of funds out of after-tax dollars, $A(1-t)$, earning a constant rate of return, r, over T periods and with liabilities of L in period T is shown in equation 2.2. Note that the return on the investment, as well as income used to make the initial deposit, is subject to tax.

$$2.2)\quad FV = [A(1-t)][1+r(1-t)]^T - L$$

27/ At least one author argues that reserve funds should be severed from the control of self-insurers and should not include securities or notes of the insurer. See Seymour Fiekowsky, "Self-Insurance," pp. 12-13.

On the other hand, suppose that additions to qualified reserves are deductible and, therefore, that the reserves for certain types of liabilities or losses are established out of pre-tax income. Our rules state that all withdrawals of qualified reserves, as well as income on reserve assets, must be subject to tax. In this case, the future value of the qualified reserves established out of pre-tax income, A, is shown in equation 2.3. Note that the future value (or present value at time T) is exactly the same as in equation 2.2.

$$2.3)\quad FV = [A][1+r(1-t)]^{T}(1-t) - L$$

Table 2.2 illustrates the potential equivalence of these alternative methods of accounting for expected future liabilities with a specific example. A firm is assumed to be subject to a constant marginal tax rate of 50 percent and to earn a pre-tax rate of return of 20 percent on its investments. As in Table 1.2, the firm has receipts of $90.57 for its services in the initial year and expects future liabilities from the initial year's activity with a present value of $75.47.

The first example shows a firm using the cash method of self-insurance; future liabilities are deducted when they occur. The firm pays a large tax liability in the initial year because it has no expenses to deduct. After-tax income is then set aside in a nonqualified reserve for the expected future liabilities. In this example, after-tax income is placed in the column labeled "Other Assets" to distinguish it from qualified reserve assets established out of pre-tax income. Investment income is subject to tax in the current year. In the second year, losses of $50 occur. Since those losses are deducted and used to offset the firm's other income, tax liability on other income is reduced by $25. The value of the firm's assets falls by $20.02 (-$50.00 + $25.00 + $4.98) between the first and second year. When the final expected expense occurs in the fourth year, a similar

Table 2.2

Equivalence of Alternative Methods of Tax Accounting for Expected Future Liabilities

Example 1

Accounting for Future Liabilities When they Occur -Cash Method

			Before Tax Income			After Tax Income				Reserve Balances		
Year	Receipts	Additions to Qualified Reserves	Activity	Qualified Assets	Other Assets	Activity	Qualified Assets	Other Assets	Actual Losses	Qualified Assets	Other Assets	Tax Liability
0	$90.57	$ 0	$90.57	$ 0	$ 0	$45.29	$ 0	$ 0	$ 0	$ 0	$45.29	$45.29
1	0	0	0	0	9.06	0	0	4.53	0	0	49.82	4.53
2	0	0	-50.00	0	0	-25.00	0	4.98	50.00	0	29.80	-20.02
3	0	0	0	0	5.96	0	0	2.98	0	0	32.78	2.98
4	0	0	-50.00	0	6.56	-25.00	0	3.28	50.00	0	11.05	-21.72

Final Net Worth = $11.05

Example 2

Qualified Reserve Accounting with Correct Additions to Reserves

			Before Tax Income			After Tax Income				Reserve Balances		
Year	Receipts	Additions to Qualified Reserves	Activity	Qualified Assets	Other Assets	Activity	Qualified Assets	Other Assets	Actual Losses	Qualified Assets	Other Assets	Tax Liability
0	$90.57	$75.47	$15.10	$ 0	$ 0	$7.55	$ 0	$ 0	$ 0	$75.47	$7.55	$7.55
1	0	0	0	15.10	1.51	0	7.55	0.75	0	83.02	8.30	8.30
2	0	0	0	16.60	1.66	0	8.30	0.83	50.00	41.32	9.13	9.13
3	0	0	0	8.26	1.83	0	4.13	0.91	0	45.45	10.04	5.04
4	0	0	0	9.10	2.01	0	4.55	1.00	50.00	0	11.05	5.55

Final Net Worth = $11.05

Example 3

Qualified Reserve Accounting with Excess Additions to Reserves

			Before Tax Income			After Tax Income				Reserve Balances		
Year	Receipts	Additions to Qualified Reserves	Activity	Qualified Assets	Other Assets	Activity	Qualified Assets	Other Assets	Actual Losses	Qualifed Assets	Other Assets	Tax Liability
0	$90.57	$90.57	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$90.57	$ 0	$ 0
1	0	0	0	18.12	0	0	9.06	0	0	99.63	0	9.06
2	0	0	0	19.92	0	0	9.96	0	50.00	59.59	0	9.96
3	0	0	0	11.92	0	0	5.96	0	0	65.55	0	5.96
4	0	0	22.10	13.12	0	11.05	5.56	0	50.00	0	11.05	17.61

Final Net Worth = $11.05

offset occurs and the loss is again deducted. At the end of the fourth year the firm's final net worth is $11.05 after all income and expenses are accounted for, and no further losses are expected. Unlike qualified reserves, withdrawals from nonqualified reserve accounts are not included in taxable income because they have been established out of after-tax income.

In the second example, the firm is allowed to use the qualified reserve method of self-insurance and deduct additions to qualified reserves in the current year. The example assumes that the firm correctly estimates the present value of future losses and follows the three strict accounting rules previously described. When the magnitude of losses, probability of occurrence of losses, and return on reserve assets are correctly estimated, the qualified reserve balance is exactly depleted when no further liabilities are expected. The present value of current deductions (additions to qualified reserves) is equal to the present value of future liabilities. No excess reserve assets exist at the end of the fourth year. Moreover, income on all reserve assets is subject to tax in the current year. While withdrawals of qualified reserve assets are technically subject to tax, in this example they are exactly offset by deductions for payments of the actual liabilities. The firm's net worth at the end of the fourth year is $11.05, exactly the same as the firm which accounted for liabilities under the cash method.

The third example illustrates that <u>if our first two accounting rules are enforced</u>, the qualified reserve method can be nondistortionary even when the estimated present value of the expected liabilities differs from the actual liabilities. Excessive additions to qualified reserves may have been made because either the estimated liabilities were overestimated or the rate of return on reserve assets was underestimated. Income on all reserves, including excess reserves, is subject to tax in each year. Because withdrawals of excess reserves, $22.10 (equal

to $15.10 in present value) are not offset by losses or liabilities, our rules also require taxable income to increase by the amount of excess qualified reserves. The inclusion of all withdrawals of excess reserves ($15.10) in taxable income exactly offsets in present value terms the prior excess deductions ($90.57 - $75.47). The firm's net worth at the end of the fourth year is $11.05, which is identical to the two preceeding cases.

The necessity of our third accounting rule can be seen by examining the assumptions in Table 2.2 and in equations 2.2 and 2.3 to achieve equivalence of the alternative methods. First, the tax rate must be the same over time. If the tax rate upon withdrawal of reserves is lower than the tax rate at the time that the deposits to reserves are made, then the qualified reserve method of self-insurance creates a greater future value for a firm than will the cash method of self-insurance. Different tax rates may apply at different times because a firm has current or future losses and cannot fully take advantage of a current deduction. Thus, a firm in a current loss situation would probably prefer the cash method; a firm with sufficient current profits would probably prefer the qualified reserve method since future losses may not be fully deductible. 28/

Second, if the tax rate differs between the firm and the insurance company offering cooperative insurance, then the firm will prefer to self-insure if its rate is lower. The company will prefer to purchase cooperative insurance if the rate of tax on earnings of the insurance company, including earnings on its own reserves, are lower. The company also may prefer to purchase cooperative insurance if the tax treatment of the insurance company reserves is favorable.

28/ One reason for the lack of full deductibility is limitations of operating loss carrybacks under current tax law.

Finally, the example assumes that rates of return are equivalent under all alternatives. If reserve investments are restricted, for instance, they may receive a lower rate of return than would unrestricted investments. In that case, a firm may prefer the cash method over the qualified reserve method if the former method allows assets of the firm to serve as implicit reserves, while the latter method requires explicitly that there be separate funding and more "prudent" investment of qualified reserve assets.

C. Deviations from Proper Tax Accounting of Reserves

As can be seen by these examples, strict rules are required for firms to be treated equivalently under the alternative accounting methods. For this reason, the use of the cash method or cooperative insurance method is often preferable to the use of the qualified reserve method. Firms will generally not be at a disadvantage if they can only deduct expenses when they are paid.

Unfortunately, the current tax system often provides unequal treatment of qualified reserve accounting and other methods of accounting for future contingencies. The deviations from proper reserve accounting fall into three general categories. First, investment income on reserve accounts is seldom fully subject to taxation. Partial or no taxation of income on reserves increases the amount of outstanding reserves and lowers the amount of additions needed to cover future liabilities. A firm's overall tax liability is lowered below what it would be if future expenses were deducted as they occur under the cash method of self-insurance or were covered by cooperative insurance. A deduction for additions to qualified reserves, combined with nontaxation of the earnings on the reserves and full taxation of withdrawals [case 1], is equivalent to exemption of all capital income on nonqualified reserves (established out of after-tax income) [case 2] as can be seen in equation 2.4:

$$2.4)\quad FV = \underbrace{[A][1+r]^T(1-t)}_{\text{[case 1]}} = \underbrace{[A(1-t)][1+r]^T}_{\text{[case 2]}}$$

We need to distinguish here between nontaxation of investment income at the individual and the company level. If the qualified reserves are essentially the deposits of individuals, a company level deduction is proper for income on those reserves. The failure to tax reserve income currently in that case provides the tax preference at the individual level. Even if such a preference is desired, it should not be dependent upon the method of accounting used. In particular, the individual preference (as well as indirect gains to the institutions which can offer this preference) should not be an accidental by-product of qualified reserve accounting. For reserves which represent assets of the company, of course, favorable treatment of reserve income is of benefit to the company. Where the taxation of the income on reserves is a hybrid--excluded or deferred if attributed to individuals, but taxable if attributed to the company--a company might gain significant benefits if it could allocate more to individuals currently than later events would warrant.

Second, tax accounting rules for qualified reserve accounts seldom require the withdrawal and inclusion of excess reserves in taxable income. In some cases, the amount of additions to reserves is unrelated to the frequency or magnitude of the expected losses or to the expected return on reserve assets. Certain thrift institutions, for instance, can deduct up to 40 percent of their taxable income as additions to bad debt reserves. 29/ These additions generally need be made only on paper; amounts are never required to be withdrawn and subject to tax. The reserve method thus enables a significant share of thrift institutions' income to escape taxation permanently.

Third, even if the first two problems were met--earnings on reserves were taxed and excess reserves were withdrawn periodically--it is likely that the withdrawals would not be subject fully to tax if earnings on reserves were taxed. Instead, it would be argued that earnings that were taxed and

29/ Excess bad debt loss deductions may be subject to the corporate minimum tax.

redeposited should be treated as withdrawals of capital. While this double taxation argument would be correct by itself, it would ignore the double tax which exists on all income which is saved, for instance, by other income earners or taxpayers using the cash method of self-insurance. If one examines equations 2.2 and 2.3, it will be seen that equivalence is reached because there is a tax assessed twice in each case.

Even when reserve accounting is fairly accurate, and all the proper rules are followed, attribution of income among recipients can be difficult. For instance, the appropriate rate to apply to reserves would be the tax rate of each beneficiary. The owner of a firm may prefer to keep passive investments in the firm if those investments would be taxed at a lower rate (as reserves) than if distributed. Similarly, creditors or policyholders may prefer that a financial institution keep some of their deposits or premiums as reserves if the rate of tax on those reserves were lower than their personal rate of tax and if they could be insured some right of eventual withdrawal or other use of the funds.

Since reserve accounting changes the timing of income receipt, "current" income recipients or future policyholders may also benefit from excess deductions which were paid for by current savers or policyholders. Technically, the income and tax liability associated with the withdrawal of excess reserves would be taxed to the beneficiaries, but those beneficiaries may include some taxpayers no longer engaged in transactions with the institution. One method of more closely allocating income across time would again be to require that deposits to reserves be calculated as accurately as possible, and that there be periodic withdrawal of excess reserves. Such withdrawals would decrease the transfer of tax liabilities across time from one group of taxpayers to another.

V. SUMMARY: GENERAL RULES FOR THE TAX TREATMENT OF INCOME FLOWING THROUGH FINANCIAL INSTITUTIONS

For transactions involving financial institutions, both efficiency and equity require proper rules of accounting and attribution of total economic income by type of income recipient, type of activity, and timing of income receipt. This section sets forth seven general rules regarding the taxation of income flowing through all categories of financial institutions. In cases where conflicting public policy goals are present, the rules specify "second-best" alternatives designed to minimize possible distortions.

Rule #1. The initial tax base of individuals and businesses should include all economic income. Correct measurement of net economic income requires separating costs of earning investment income from costs of consumption of services; separating the return to capital from the return of capital; and allowing deductions related only to the proper measurement of net economic income. If total revenue from a tax base of economic income is considered to be too high, the effective tax rate should be lowered directly (or through an equivalent across-the-board deduction) rather than through special provisions which simultaneously distort the measure of income and allocation of resources.

Rule #2. If special tax preferences are still provided, they should apply as directly as possible to the activity that is to be encouraged. If saving or investment is the favored activity, then the tax preference should be based upon total saving, investment or income from capital. If policy objectives are nonetheless pursued with specific assets receiving favorable tax treatment, then competitive balance among financial institutions can be attained only if the same tax preference applies to income from the asset regardless of the financial institution

handling the asset. Moreover, fairness among investors and savers requires that any special preference be straight-forward and simple so as to avoid favoring only investors who can arrange complex transactions.

If the preferred activity is consumption of a particular service, then the preference should be based upon the cost of the service. Thus, if a preferred form of financial service is provided along with investment services as a single joint product, the value of the tax preference should not be related to the amount of investment income.

At the level of the financial institution, tax preferences on investment income or deductions for expenses of borrowing may need to be limited to reduce tax arbitrage--that is, borrowing to purchase preferred assets. Competitive balance again requires that company-level preferences for certain types of activity or investment be made available on a uniform basis to all types of financial institutions and nonfinancial businesses as well. These preferences should also be explicit and straightforward to facilitate proper evaluation of their cost and effectiveness.

Rule #3. Economic income may need to be imputed or taxed indirectly in a few special cases where income cannot be directly observed. In the case of mutual organizations, the customer may receive a price reduction or later "dividend" which is equivalent to a return to his equity ownership. Parity between mutual and stock companies may require use of this imputation to avoid higher effective tax rates on the income of stock companies when they perform identical services at identical costs. The use of arbitrary deductions to lower the taxes paid by competitive stock companies, however, will almost always create disparities among different types of stock institutions.

Rule #4. Where the allocation of income among specific individuals is difficult, administrative simplicity may require a tax levied at the business level as a substitute for, rather than as

an addition to, taxation at the individual level. Such a "substitute tax" should not be available for large marginal investments of any one individual (that is, if the substitute tax rate is below the highest individual rate, then some limit must be placed on the extent to which income flowing through the financial institution can be sheltered).

Rule #5. The tax system should not differentiate among sources of income by type of activity generating that income. Investment income and income from other services should be taxed at the same rate. Different institutions should not pay different tax rates according to their principal activity or the percentage of their assets in specific forms. If certain types of financial products are granted special treatment, it will be necessary to develop rules to identify intended beneficiaries and to prevent tax-motivated consolidations and transactions.

Rule #6. Since most firms accurately account for economic income by taking deductions only when actual losses and liabilities occur, or when premiums for cooperative insurance are paid, alternative forms of reserve accounting should not create competitive imbalance by assessing less tax on the same income. Current deductions for future liabilities and losses should be allowed only if the taxpayer elects to adhere to specific rules governing "qualified" reserve accounts, as outlined in Rule #7. Since most contingent liabilities or losses of nonfinancial businesses are met without use of qualified reserves, the types of assets and liabilities for which qualified reserves are used must be defined by statute or regulation. There is no limit, however, on the amount of after-tax dollars that can be placed in nonqualified reserve accounts to meet any self-imposed or government-imposed regulations.

Rule #7. Current deductions for additions to reserve accounts, if allowed, should be limited to additions to "qualified" reserve accounts governed under the following strict tax accounting rules:

a) All income earned on qualified reserves must either be subject to tax currently at the company level or credited to individuals and taxed similarly to other individual sources of capital income.

b) All withdrawals of qualified reserves must be included in the current year's taxable income. As actual losses or liabilities occur, they must be covered first out of qualified reserves established for those contingencies. The incurrence of the loss or the payment of the liability is deductible from income, and will generally offset income made taxable by withdrawal of qualified reserves. Excess qualified reserves, however, must be withdrawn periodically and subject to tax on the full amount of the withdrawal.

c) Calculation of additions to qualified reserves must be based on reasonable expectations of future contingencies for liabilities or losses. Reasonable expectations should be based as closely as possible on the riskiness and amount of each type of asset or liability involved.

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