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CONTENTS

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The Changing Competition Between Commercial Banks and Thrift Institutions for Deposits

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COMMERCIAL banks and thrift institutions (savings and loan associations and mutual savings banks) compete in various ways for deposits of customers. Commercial banks offer a full range of services and attract customers with "one-stop" banking. One of these services is the checking account. This type of account provides depositors with a convenient and widely accepted means of making third party payments, but because of Federal regulations, deposits in these accounts do not explicitly bear interest.

Thrift institutions, on the other hand, historically have not been able to offer checking accounts. If depositors of a thrift institution desire to make payments to third parties, they either withdraw cash from their savings accounts or withdraw funds in the form of checks written by the thrift institution on its demand deposit account at a commercial bank. While the depositors may find this method of payment less convenient than using a checking account, they earn interest on their deposited funds. Moreover, the rate of interest that thrift institutions are allowed to pay on savings deposits is somewhat higher than that permitted for commercial banks.

Recent competition for deposits between commercial banks and thrift institutions has been undergoing rapid change and intensification. Thrift institutions (thrifts) have started to offer new services which remove much of the inconvenience associated with making payments from savings accounts. As a consequence, savings accounts at thrifts are now becoming more like checking accounts at commercial banks.

This article describes changes occurring at some savings and loan associations and mutual savings banks which, by making deposit accounts at these institutions more attractive for making payments, enable the institutions to compete more effectively with commercial banks for customers' deposits. Innovations at savings and loan associations and mutual savings banks are discussed in the first sections of the paper. The impact of the changes on competition between commercial banks and thrifts is examined in the next section. The response of commercial banks and their regulators to the challenge posed by the increased competition is then described.

NEW SERVICES AT THRIFT INSTITUTIONS

Savings & Loan Associations

The Federal Home Loan Bank Board (FHLBB), which regulates Federally chartered savings and loan associations (S & Ls), has encouraged greater competition between S & Ls and commercial banks by allowing Federal S & Ls to offer a number of new services to their customers. In January 1974, the FHLBB adopted a temporary regulation which permits Federal S & Ls to operate experimental place-of-business funds transfer systems. These systems allow customers to conduct financial transactions through the use of electronic signals generated by on-line computer terminals as well as off-line automated teller machines.[1] The terminals, which are called remote service units, allow depositors to conduct transactions with their S & Ls at places of business other than the associations' offices. The remote service units, which may be

[1]Transactions initiated through the use of on-line computer terminals are instantly communicated to and verified by the S & L's central computer. Off-line facilities generally are not connected directly to the computer of the S & L; transactions initiated at these terminals are recorded on magnetic tape or a like medium which is subsequently delivered to and read by the S & L's computer.

shared with other Federally insured financial institutions, are not treated as branch or satellite offices of the S & Ls by the FHLBB.

Also, in January 1974 the funds transfer system initiated by the First Federal Savings and Loan Association, Lincoln, Nebraska was approved under the new regulation.[2] This place-of-business system allows depositors of First Federal to make deposits to or withdrawals from their interest-bearing savings accounts at two Hinky Dinky supermarkets in Lincoln. Transactions are made with the use of plastic cards on which account information is encoded on magnetic stripes. At the supermarket, Hinky Dinky employees transmit transaction data to First Federal's central computer which records the actions. Settlement is accomplished electronically by entries to the accounts of depositors and Hinky Dinky at First Federal. At the supermarket, money is accepted from or disbursed to the customer-depositor by the employees through cash drawers maintained by Hinky Dinky for completion of the physical part of the transactions.

Within two months after the installation of the system, legal action interrupted this service. The state of Nebraska first brought suit against Hinky Dinky on the grounds that the supermarket was offering banking services without a license. The Nebraska Banking Association also brought suit, charging that First Federal was violating the state's anti-branching laws. With litigation still pending, the savings and loan services in the two Hinky Dinky stores resumed operation in September of last year. Since resumption of the service, First Federal has installed its funds transfer units in three additional Hinky Dinky stores in Lincoln and has received FHLBB approval to expand the service to 19 of the supermarket chain's stores in eastern Nebraska.

In April of last year, the state of Washington enacted legislation which allows state chartered commercial banks, mutual savings banks, and S & Ls to establish any number of unmanned facilities throughout the state, provided that those operating the facilities share the costs and operation of the terminals when asked to do so by the state authorities. Commercial banks are required to share facilities with other commercial banks and have the option of sharing with thrift institutions. Thrifts are permitted, but not required, to share facilities. These facilities are not considered branches under Washington law.

An electronic facility began operation in July 1974 on a 24-hour basis in Bellevue, Washington.[3] In this case, the unit is shared by four mutual savings banks, ten Federal savings and loan associations, and two state-chartered S & Ls. Unlike the Hinky Dinky terminal, this automated teller machine is unmanned and is operated by the depositor, independent of any business. Cash disbursements are made through the use of automatic cash dispensers which are activated by the depositor's magnetic card. Deposits are handled in a manner similar to that used for night depositories.

Other S & Ls across the country have also initiated funds transfer systems, implementing place-of-business terminals and automated teller machines similar to those just described. Because of the rapid development and implementation of these systems in many states, only two have been described here in detail. A list of the savings and loan associations which have received FHLBB approval for electronic transfer systems is presented in Exhibit I.

In addition to these electronic innovations, other changes have taken place which permit savings and loan associations to compete more effectively for deposits. One such change involves the bill payment services which S & Ls are able to offer. At the depositor's request, Federal S & Ls may honor nontransferable orders to transfer funds, periodically or otherwise, from the depositor's savings account to third parties. In the past, such payments were limited to housing-related items and loans on these items, such as payments on mortgages, rent, taxes, utilities, and home improvements. The FHLBB recently removed the housing-related restriction, thus allowing Federal savings and loan associations to offer a full range of bill payment services.

In December of last year, the FHLBB also adopted a regulation which gives depositors traveling more than 50 miles from their home access to their savings account balances through any other Federally-insured savings and loan association by means of a Travelers Convenience Withdrawal. The S & L at which a customer has requested such a withdrawal notifies, by wire or telephone, the S & L at which the customer has a deposit account to deduct the amount of the withdrawal from that account. Funds are then disbursed by the cooperating savings and loan association, and the S & Ls which have chosen to offer this service make settlements among themselves.

[2]"Nebraska S & L Begins Point-of-Sale EFTS," *American Banker,* January 16, 1974.

[3]"15 Washington State Thrifts to Test Electronic Teller," *American Banker,* February 21, 1974.

Exhibit I

EFTS Applications Approved by FHLBB
(May 2, 1975)

Institution[1]	Number and Type[2]	Location
California		
California Federal Savings & Loan Association, Los Angeles	5 M	supermarkets
Glendale Federal Savings & Loan Association	70 POS	supermarkets
San Diego Federal Savings & Loan Association	4 A	airports
Colorado		
Joint Denver Project (6 Federal Savings & Loan Associations, 6 State Savings & Loan Associations)	1 A	free standing building
Florida		
Boca Raton Federal Savings & Loan Association	7 A	shopping centers
Joint Project West Palm Beach (4 Federal Savings & Loan Associations)	2 A	supermarkets
United Federal Savings & Loan Association, Fort Lauderdale	4 A	shopping centers
Illinois		
Iroquois Federal Savings & Loan Association, Watseka	1 A	shopping center
Iowa		
First Federal Savings & Loan Association of Council Bluffs	2 M	supermarkets
Kansas		
Capitol Federal Savings & Loan Association, Topeka	4 M	supermarkets
Minnesota		
Twin City Federal Savings & Loan Association, Minneapolis	1 A[3]	airport
	7 M	supermarkets
	6 M	department stores
Nebraska		
First Federal Savings & Loan Association of Lincoln (shared with First Federal Savings & Loan Association of Omaha and 3 State Savings and Loan Associations)	24 M[4]	supermarkets
New Jersey		
Collective Federal Savings & Loan Association, Egg Harbor	1 M	supermarket
Ohio		
Buckeye Federal Savings & Loan Association, Columbus	27 M	supermarkets
	3 M	department stores
Oklahoma		
Tulsa Federal Savings & Loan Association	2 A[5]	shopping centers
Pennsylvania		
First Federal Savings & Loan Association of Pittsburgh	5 M	supermarkets
Washington		
Bellevue Project, Seattle (10 Federal Savings & Loan Associations, 4 Mutual Savings Banks, 2 State Savings & Loan Associations)	2 A	shopping centers
Wisconsin		
First Federal Savings & Loan Association of Madison	3 M	supermarket/discount department stores

[1]Institutions are listed alphabetically by state.
[2]Type refers to automated teller terminal (A) or merchant operated terminal (M). POS terminals are located at the check-out counter.
[3]Terminal is operational.
[4]Five terminals are operational.
[5]One terminal is operational.
Source: Federal Home Loan Bank Board EFTS Status Report.

Mutual Savings Banks

Financial institutions in New England have attracted widespread attention by offering Negotiable Order of Withdrawal (NOW) accounts. Unlike conventional savings accounts, NOW accounts permit depositors to make check-like withdrawals from their interest-bearing savings accounts for making payments to third parties. The withdrawal orders are cleared through the Federal Reserve System's check clearing facilities by means of special routing numbers which are assigned to the thrift institutions.

This type of account was first offered in 1972 by the Consumers Savings Bank of Worcester, Massachusetts, and was rapidly initiated at other savings banks in Massachusetts and New Hampshire.[4] At the time, commercial banks in those states opposed the use of NOWs and urged a ban on them by Congress. Legislation was subsequently enacted which limits the use of NOW accounts to these two states, but allows not only mutual savings banks but also commercial banks and savings and loan associations within these states to offer such accounts.

This legislation, which permitted an additional 427 depository financial institutions to offer NOW accounts, affected the competitive balance among institutions in the two states. Of these newly eligible institutions, commercial banks introduced the majority of the new NOW accounts. The 200 mutual savings banks in Massachusetts and New Hampshire, which were previously the only financial institutions permitted to offer NOW accounts, experienced a decline in their NOW account deposits during the initial implementation of the legislation. As more financial institutions began to offer NOW accounts, service charges on drafts from the accounts were reduced or eliminated by many

[4]"Early History and Initial Impact of NOW Accounts," *New England Economic Review* (January/February 1975), pp. 17-26.

institutions and, in addition, some commercial banks began to offer free checking accounts.

Thrift institutions have also been involved in a new system for making payments, called "pay-by-phone," which was initiated last fall by a savings bank in Connecticut and one in Minnesota. Under this system, depositors at these savings banks who open special interest-bearing accounts may make payments to third parties without writing checks or negotiable orders of withdrawal. Depositors use their telephones to make payments to utilities, merchants, and other organizations which participate in the system.

Approval by state banking authorities is necessary before such a system can be put into effect. Although the pay-by-phone system was judged to be illegal under Connecticut's existing statutes, the People's Savings Bank, Bridgeport, has been permitted to continue its pay-by-phone operations on a test basis until the end of 1975. At the same time, it was ruled that under the current provisions no other Connecticut mutual savings bank should be permitted to initiate such a system.

At the People's Savings Bank, depositors who open a special account are given a personal identification code number in addition to an account number. The customer can then dial a special telephone number and give these numbers to the operator who is told which companies and what amounts to pay. This information is transcribed by the operator, who tallies the total amount paid and informs the customer of the balance left in the account.

Minnesota is the only other state in which regulatory authorities have approved a pay-by-phone plan on a test basis. At the Farmers and Mechanics Savings Bank, Minneapolis, the pay-by-phone system operates either through an operator, as above, or by computer for those depositors with push-button telephones. With a push-button phone, the depositor indicates the amounts to be paid by depressing the corresponding telephone digits. The companies which participate in the Minnesota system, as well as those using the Connecticut system, receive daily printouts listing the name, account number and amount paid by every customer, along with a cashier's check issued by the savings bank for the total amount of payments.

IMPACT OF THE CHANGES

Advantages of Thrifts in Competing for Deposits

Until recently, thrift institutions have not provided commercial banks with much competition in offering checking account services. Although deposit accounts at thrifts pay interest, it is less convenient to make payments from these accounts than from checking accounts. With the recent changes in services at some thrift institutions, much of the inconvenience associated with making payments from saving accounts has been eliminated, thus making such accounts better substitutes for checking accounts at commercial banks.

Thrift institutions have had an advantage over commercial banks in two other important respects: maximum interest rates thrifts are allowed to pay and reserves they are required to hold. Commercial banks have been prohibited from explicitly paying interest on demand deposit accounts by legislation first enacted in the 1930s.[5] Thrift institutions, on the other hand, have introduced accounts which approach demand deposit accounts in function but which conveniently circumvent the interest rate prohibition on the accounts. Moreover, thrift institutions are permitted by law to pay higher maximum rates of interest on time and savings accounts than commercial banks may pay on comparable accounts. From the depositor's standpoint, interest rate regulations help make new accounts at thrifts more attractive than traditional checking accounts.

Although both thrift institutions and commercial banks are required to hold reserves against time and savings deposits, the amount and form of these reserves are different. Commercial banks are generally required to hold much larger reserve ratios than are thrift institutions. The amount of reserves thrifts are required to hold may be satisfied with earning assets; much of commercial bank reserves are held in a form that does not earn interest.

Response by Commercial Banks and their Regulators

The response of the banking sector to the changes initiated by thrift institutions has been varied. In general, independent commercial banking organizations

[5]This legislation was passed to prevent a recurrence of "excessive" interest rate competition which was thought to be an important factor in the large number of bank failures during the 1930s.

have forcefully opposed the changes initiated by the FHLBB, especially regarding the use of automated tellers and place-of-business terminals by savings and loan associations. Commercial bankers claim not only that they are competitively disadvantaged by the changes, but also that such piecemeal actions frustrate legislative financial reform now being advanced. If the new services are to be maintained at the thrifts, many commercial bankers say, then thrift institutions and commercial banks should be subject to equivalent reserve requirements and interest rate limitations.

The Comptroller of the Currency was the first Federal bank regulator to respond to the FHLBB's ruling on the use of remote service units by S & Ls. The Comptroller, whose office regulates national banks, issued an interpretive ruling in December 1974 concerning the use of off-premise electronic funds transfer terminals. The ruling permits national banks to operate Customer-Bank Communication Terminals (CBCTs).[6] Through these remote terminals, existing bank customers can initiate transactions resulting in deposits to or cash withdrawals from their accounts, transfers of funds between checking and savings accounts, and payment transfers from their own accounts to accounts maintained by other bank customers.

In the ruling, the Comptroller stated that banks should be permitted to meet competition from savings and loan associations which have taken advantage of the new FHLBB regulations on remote facilities. It was specified in the ruling that CBCTs are not branch banks; a definition of these units as branch banks would have imposed on the banks geographic and capital restrictions which might have prevented them from meeting the competitive challenge posed by the thrifts. Since CBCTs are not considered to be branches, a bank is required only to file a written 30-day notice with the Comptroller's office of its intention to install remote point-of-sale terminals or automated teller machines. No formal approval is

Exhibit II

CBCT Notifications filed with the Comptroller of the Currency
(May 30, 1975)

Institution[1]	Number and Type[2]	Location
California		
Bank of America National Trust and Savings Association, San Francisco	3 A	supermarkets
Colorado		
First National Bank, Fort Collins	1 A	loan production office
Florida		
First National Bank in Ft. Myers	1 A	shopping center
Sun First National Bank of Leesburg	2 A	mobile home parks
Georgia		
First National Bank of Atlanta	1 A	university campus
	1 A	shopping center
Illinois		
Continental Illinois National Bank and Trust Company, Chicago	2 A	central financial district
	1 A	train station
	124 M	62 supermarkets
Mid-West National Bank of Lake Forest	1 M	supermarket
Iowa		
Iowa-Des Moines National Bank	5 M	supermarkets
Minnesota		
Zapp National Bank, St. Cloud	1 A	shopping center
Missouri		
First National Bank in St. Louis	1 A	factory
	1 A	supermarket
Nebraska		
The United States National Bank of Omaha	2 M	supermarkets
	1 M	department store
	2 M	yet to be determined
Omaha National Bank	14 M	supermarkets
	5 M[3]	restricted line department stores
New Jersey		
The National State Bank, Elizabeth	1 A	[4]
Ohio		
The Central Trust Company, Cincinnati	2 A	supermarkets
	1 A	plant
Oklahoma		
First National Bank & Trust Company of Enid	1 A	shopping center
Utica National Bank, Tulsa	2 M	shopping centers
Oregon		
United States National Bank of Oregon, Portland	1 A	shopping center
Tennessee		
First National Bank of Memphis	2 A[5]	supermarkets
Washington		
Peoples National Bank of Washington, Seattle	1 A	[4]
Seattle-First National Bank	5 A	shopping centers
	1 A	business district
Wisconsin		
First National Bank in Menomonie	1 A	shopping center
	1 A	supermarket

[1]Institutions are listed alphabetically by state.
[2]Type refers to unmanned automated CBCT (A) or manned CBCT (M).
[3]Facilities shared with First Federal Savings & Loan of Lincoln.
[4]Additional information requested.
[5]Cash dispensers only.

[6]The original December ruling sanctioned CBCTs without geographic restrictions. However, in a recent modification of this ruling, the Comptroller limited the location of CBCTs to within 50 miles of the main office or closest branch of a bank, effective June 1, 1975. The revised ruling permits exception to the geographic limit if the terminal is to be shared with one or more local depository financial institutions.

required. Exhibit II presents a listing of CBCT notifications filed with the Comptroller of the Currency as of May 30, 1975.

The First National Bank in St. Louis was the first to make use of the Comptroller's ruling when it opened one remote facility at a supermarket and another at a factory in December of last year. Both CBCTs are located beyond the boundaries of the City of St. Louis. Under Missouri law, facilities of St. Louis banks must be situated within the city limits. A legal controversy followed the installation of the CBCTs when the Missouri Commissioner of Finance filed suit against First National Bank claiming that by conducting banking business at sites other than those prescribed by law (within the city limits), First National Bank violates Missouri's branching statutes. First National Bank contends that CBCTs are communication devices, not branches, and as such are not subject to the state's branching law. The St. Louis bank defends its use of CBCTs on the grounds that they are necessary to meet the rising competition from the thrifts.

State authorities remain divided on the issue of CBCTs as branch banks. Oregon, Washington, and Massachusetts have authorized remote automated facilities through legislation and do not define them as branches. In Michigan, the Commissioner of the Financial Institutions Bureau ruled that automated facilities are branch banks and therefore fall under Michigan's branching laws. The Attorneys General of Texas, Florida, and Kansas also have authorized the use of CBCTs in some circumstances, although branch banking is prohibited in these states. In Missouri, as in many other states, bills have been presented to the legislature which provide state chartered banks competitive equality with national banks in issues concerning the establishment of electronic terminals.

Other Federal bank regulators have advanced changes in an attempt to match in some ways actions taken by the FHLBB. The Federal Deposit Insurance Corporation (FDIC), the primary Federal supervisor of insured state banks that are not members of the Federal Reserve System, has proposed an amendment which would permit banks under its supervision to expand the scope of withdrawals made from savings accounts of depositors for the purpose of bill payment. Preauthorized withdrawals are currently sanctioned for the payment of charges related to real estate or mortgage loans. Under the proposal, a depositor may give the bank written authorization to make withdrawals from a savings account to meet a wider range of recurring obligations. The bank would make the payments either by a transfer of funds to the creditor's account or by drawing a check on itself payable to the creditor.

In a similar action, the Board of Governors of the Federal Reserve System has proposed permitting member banks to offer preauthorized bill payments from savings accounts of their depositors. These withdrawals could be used to pay any type of indebtedness to a third party and may be made by a transfer between accounts in the bank or by transmitting a check drawn on the bank to the creditor or to another bank for the account of the creditor. In addition, effective April 7, 1975, the Board of Governors authorized member banks to allow their customers to use the telephone to initiate withdrawals or transfers of funds from savings accounts. In revoking a policy in effect since 1936, the Board of Governors noted that security and technological improvements now make such telephone transactions safe.

IMPLICATIONS

The larger scope of services now offered by thrift institutions represents an emerging trend toward closer alignment of deposit powers of thrifts with those of commercial banks. Thrifts have initiated services which have given these institutions an edge over commercial banks in competing for customers' deposits. Commercial banks have then made similar changes in order to maintain their competitive position.

For customers, this trend creates a greater number of alternatives for demand deposit services. Convenience of making financial transactions has been significantly increased, especially through the use of electronic funds transfer systems and telephone services. Nonpecuniary costs of transactions have decreased. With the new services, customers are able to have accounts which approach the convenience and function of checking accounts and earn a higher rate of interest than on comparable accounts at commercial banks.

The more competitive financial system which is evolving is primarily the result of competitive forces set in motion by financial institutions which are striving to obtain customers' deposits. Some of the changes which have already been adopted by financial institutions have been included in financial reform legislation which has been proposed in recent years.

In 1970 the Presidential Commission on Financial Structure and Regulation (better known as the Hunt

Commission) was appointed to study the framework of the nation's financial system and propose changes which would improve its functioning. Among other proposals, the Commission recommended expanding the power of thrift institutions and enabling them to offer limited checking account and credit card services. The proposed Financial Institutions Act of 1975 incorporates many of the proposals of the Hunt Commission and addresses itself to issues which have appeared since that time.

These proposals favor allowing thrifts and commercial banks to offer NOW accounts on a nationwide basis. In order to further competitive equality among different types of institutions, the proposals recommend phasing-out interest rate ceilings on all time and savings deposits and subjecting depository institutions to uniform reserve requirements. Indeed, if thrift institutions and commercial banks are becoming more similar in function, regulations governing the institutions should reflect these similarities. None of the reform proposals, however, has been enacted into legislation.

CONCLUSION

The move by thrift institutions to make savings accounts more convenient for making payments and thus more similar to checking accounts at commercial banks has intensified competition for deposits between the two types of institutions. Although legislation designed to achieve a more competitive financial system has failed to be enacted, competitive forces within the system are leading the financial institutions toward this end. It remains to be seen how the financial system will ultimately be affected by the changes taking place. In any event, these changes present evidence that competition remains an integral force in our financial system.

Paying More Taxes and Affording It Less

NANCY JIANAKOPLOS

ONE of the many side effects of inflation is that it results in a transfer of resource command from the private sector to the public sector of the economy. The Government's status as a net monetary debtor and the progressive income tax structure are the vehicles by which this resource transfer occurs. This article discusses how inflation and the progressive tax structure interact to generate Government revenue and reduce the take-home pay of taxpayers.[1]

Figures from the Bureau of Labor Statistics show that from the fall of 1973 to the fall of 1974, personal income taxes for a family of intermediate income rose by 25.1 percent, while the budget necessary to maintain their standard of living rose by 13.5 percent.[2] Thus, even if a family's income before taxes kept pace with inflation, their disposable income (total income less taxes) decreased as taxes took up an increasing proportion of their budget.

How and why did taxes increase faster than income? What are the economic consequences of this resource transfer and are there possible remedies? In order to answer these questions, the tax liabilities of an individual family over a number of years are examined. Next, the aggregate effects of increased taxation are discussed. Finally, possible remedies for these tax increases are presented.

One Family's Experience

In 1967 the Bureau of Labor Statistics calculated that an income of $9,076 would be required to maintain a family of four at an intermediate standard of living. From this budget $1,365, or 15 percent, would be paid as personal taxes (social insurance contributions and personal income taxes). In 1974 the same family would require a budget of $14,333 to maintain an intermediate standard of living. Of this amount $2,790, or 19.5 percent, would be paid as personal taxes.

In order to understand why taxes have taken up an increasing proportion of the family budget, the income and tax liabilities of a typical family are examined over a number of years. The examination consists of comparing the rise in actual tax liabilities with the rise in income, assuming income increases equal the rate of inflation. The Bureau of Labor Statistics (BLS) provides budget information for a hypothetical family of four which consists of a husband, employed full-time; a wife, not employed outside the home; a boy, 13; and a girl, 8. The BLS constructs budgets for this family at three standards of living — low, intermediate, and high. This study considers the intermediate level family budget. In the spring of 1967, which is regarded as the base year, this budget equalled $9,076.[3]

For illustrative purposes, this base period budget is increased each year at the same rate as the consumer price index (CPI). This increase would allow pre-tax income to keep pace in some measure with the rate of inflation. The CPI is not a complete measure of increases in the cost of living, but it has several attributes which make it suitable for the purposes of this analysis.[4] The CPI is frequently used in union contracts as the measure of changes in the cost of living, activating wage increases for workers covered by the contract. The effects of increases in income and social security taxes are not included in the CPI, but increases in excise, sales, and real estate taxes are included. For this reason only the effects of Federal and state income taxes and social security contributions are considered here.

It is assumed that by increasing the family income each year at the same rate as the increase in the CPI, the pre-tax *real* income of the family remains constant in terms of 1967 purchasing power. On this basis the family's money income before taxes rose from $9,076 in 1967 to $13,407 in 1974.[5]

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[1]For another aspect of inflation serving to finance the government, see Charlotte E. Ruebling, "Financing Government Through Monetary Expansion and Inflation," this *Review* (February 1975), pp. 15-23.

[2]A family budget for an intermediate income level totaled $14,333 in autumn 1974, according to BLS figures. See U.S. Department of Labor, Bureau of Labor Statistics, *Autumn 1974 Urban Family Budgets and Comparative Indexes for Selected Urban Areas,* No. 75-190 (April 9, 1975).

[3]Jean C. Brackett, "New BLS Budgets," *Monthly Labor Review* (April 1969), pp. 3-16.

[4]For a review of the adequacies and shortcomings of the CPI, see Denis S. Karnosky, "A Primer on the Consumer Price Index," this *Review* (July 1974), pp. 2-7.

[5]This figure differs from the 1974 BLS budget of $14,333 because the BLS budget includes not only those cost-of-living increases included in the CPI, but also allowances for increased personal income and social security taxes.

Exhibit I

FEDERAL TAXES

Year	Real Family Income	Money Family Income[1]	Taxable Income	Federal Tax Liability	After-Tax Money Income	After-Tax Real Income[3]	Tax as a Percent of Money Income
1967	$9,076	$ 9,076	$5,768	$ 956	$ 8,120	$8,120	10.5%
1968	9,076	9,457	6,111	1,098[2]	8,359	8,022	11.6
1969	9,076	9,968	6,571	1,219[2]	8,749	7,968	12.2
1970	9,076	10,556	7,056	1,231[2]	9,325	8,018	11.7
1971	9,076	11,010	6,879	1,167	9,843	8,115	10.6
1972	9,076	11,373	6,667	1,127	10,246	8,177	9.9
1973	9,076	12,078	7,266	1,241	10,837	8,142	10.3
1974	9,076	13,407	8,407	1,470[4]	11,937	8,082	11.0

[1]Inflated by the annual growth rate in the consumer price index.
[2]Includes surcharge.
[3]Deflated by the annual average consumer price index for each year.
[4]Excludes rebate.

Federal Income Tax

The family's Federal income tax liability is calculated using the status of "married filing jointly," claiming four exemptions and using the standard deduction, actual tax rates, exemptions, and deductions applicable from 1967 through 1974.[6] During this period there were several changes in the Federal income tax structure: income tax surcharges were implemented during 1968, 1969, and 1970, and there were changes in the value of allowable exemptions and the standard deduction in 1970, 1971, and 1972. Tax rates and tax brackets, however, did not change during this period. The 1974 tax rebate is excluded from consideration in this article since it was not paid until 1975.

The family's Federal income tax liability increased every year except for 1971 and 1972 (see Exhibit I). In 1974, for example, the family paid $229 more in Federal income taxes than in 1973, even though the family's real income before taxes was held constant. Their real income after Federal income taxes actually decreased from $8,120 in 1967 to $8,082 in 1974.

Despite tax cuts in 1970 through 1972, the portion of family income paid in Federal income taxes increased from 10.5 percent in 1967 to 11 percent in 1974. The increases were much sharper in the periods when tax laws remained the same. For example, from 1967 to 1969, Federal income taxes as a percent of the family income increased from 10.5 to 12.2.

The progressive tax structure in combination with inflation was a major cause of taxes accounting for an increasing share of the family budget. Taxes are paid on money income, and as money income increases, the taxpayer can be pushed into a higher tax bracket. The hypothetical family was pushed into a higher bracket in 1974 when its taxable income rose above $8,000. Prior to this, 19 cents of the marginal dollar of taxable income was collected as tax, whereas in 1974, 22 cents of the marginal dollar was paid in taxes. Therefore, the effect of the progressive tax structure is to tax more than a proportional share of income increases, even if these increases do not result in increased purchasing power.

Social Security Taxes

The family's social security tax liability is calculated by applying the rates in effect from 1967 to 1974 to the family's money income (see Exhibit II). This family's income is above the taxable ceiling in every year and, therefore, the maximum contribution is paid each year.

In every year from 1967 through 1974, except 1970, the family's social security tax liability increased. This is because in every year, except 1970, the taxable income ceiling and/or the rate of employee contribution was raised. The family's social security liability increased from $290 in 1967 to $772 in 1974. Social security taxes as a percent of the hypothetical family's money income rose from 3.2 percent in 1967 to 5.8 percent in 1974. Increases in social security taxes were much greater than increases in family income. The family's money income rose by 48 percent in the period from 1967 to 1974 while social security contributions increased by 166 percent. Real income, after social security contributions were deducted, fell from $8,786 to $8,555. This was a loss of $231 of 1967 purchasing power due to this tax alone.

[6]If applicable exemptions and deductions in either 1967 or 1974 had been used for all years, the conclusions reached would have been the same, but the real income lost through the combination of inflation and taxes would have been greater.

Exhibit II

SOCIAL SECURITY CONTRIBUTIONS

Year	Real Family Income	Money Family Income[1]	Social Security Income Ceiling	Percent Social Security Employee Contribution	Social Security Tax Liability	After-Tax Money Income	After-Tax Real Income[2]	Tax as a Percent of Money Income
1967	$9,076	$ 9,076	$ 6,600	4.4 %	$290	$ 8,786	$8,786	3.2%
1968	9,076	9,457	7,800	4.4	343	9,114	8,747	3.6
1969	9,076	9,968	7,800	4.8	374	9,594	8,738	3.8
1970	9,076	10,556	7,800	4.8	374	10,182	8,755	3.5
1971	9,076	11,010	7,800	5.2	406	10,604	8,742	3.7
1972	9,076	11,373	9,000	5.2	468	10,905	8,703	4.1
1973	9,076	12,078	10,800	5.85	632	11,446	8,600	5.2
1974	9,076	13,407	13,200	5.85	772	12,635	8,555	5.8

[1]Inflated by the annual growth rate in the consumer price index.
[2]Deflated by the annual average consumer price index for each year.
Source: *Social Security Bulletin*

The social security tax changes were implemented in order to finance increased benefits which were legislated in an attempt to help recipients keep pace with the rising cost of living. Therefore, inflation was a major factor necessitating increased social security taxes.[7] Beginning in January 1975, increases in social security benefits are linked directly to changes in the consumer price index, making the inflation-social security tax relationship more direct.

State Income Taxes

The family's state personal income tax liability is calculated by assuming that they lived in Missouri, filed a "joint-married" return, claimed four exemptions and used the standard deduction. The Federal income tax calculated in Exhibit I, as well as the standard deduction and personal exemptions applicable, were deducted from income in order to obtain a figure for income taxable by the state. Missouri tax rates were increased in 1971. The structure of the Missouri personal income tax was changed in 1973 to conform with the Federal income tax structure.

State personal income taxes affected the family's budget in a manner very similar to Federal personal income taxes (see Exhibit III): the state tax liability increased from $82 in 1967 to $198 in 1974; the percentage of the family's money income paid in the form of state income taxes increased from 0.9 percent in 1967 to 1.5 percent in 1974; and after-tax real income fell from $8,994 to $8,943 over the period. Since Missouri state tax rates are lower than Federal tax rates, the dollar increase in state tax liabilities was not as great as for the Federal tax.[8] However, Missouri brackets are narrower than Federal brackets so that the family was pushed into higher brackets more frequently.

The family did receive some relief from increased state income taxes as a result of their increased Federal tax liability. Federal income taxes are deductible items in calculating Missouri state income tax, and thus the increasing Federal tax reduced to a certain degree the amount of income taxable by the state. Nevertheless, the family lost purchasing power over the period as a result of increasing state taxes.

Combined Tax Burden

A look at the composite effect of Federal and state income taxes and social security contributions shows that in every year taxes increased above the previous year's level (see Exhibit IV). The hypothetical family's combined tax liability increased from $1,328 to $2,440. In terms of 1967 purchasing power, the family's income remained unchanged at $9,076, while their tax liability, also in terms of 1967 purchasing power, increased by $324. In 1967, taxes took 14.6 percent of the family budget. By 1974 the figure had climbed to 18.2 percent. Inflation and taxes had combined to erode their income despite the fact that they received annual cost-of-living increases.

[7]The changing age distribution of the population and expanded programs were also contributory factors. For a further discussion of the social security system, see Richard A. Musgrave and Peggy B. Musgrave, *Public Finance in Theory and Practice* (New York: McGraw-Hill Book Company, 1973), pp. 346-350, 390-395, 666-676.

[8]The family's income was in the 4.5 percent bracket for 1974 Missouri state income taxes, compared to the 22 percent bracket for Federal income taxes.

Exhibit III

STATE TAXES

Year	Real Family Income	Money Family Income[1]	Taxable Income	State Tax Liability	After-Tax Money Income	After-Tax Real Income[2]	Tax as a Percent of Money Income
1967	$9,076	$ 9,076	$4,466	$ 82	$ 8,994	$8,994	0.9%
1968	9,076	9,457	4,686	87	9,370	8,992	0.9
1969	9,076	9,968	5,051	97	9,871	8,990	1.0
1970	9,076	10,556	5,625	114	10,442	8,979	1.1
1971	9,076	11,010	6,143	171	10,839	8,936	1.6
1972	9,076	11,373	6,546	190	11,183	8,925	1.7
1973	9,076	12,078	5,825	158	11,920	8,956	1.3
1974	9,076	13,407	6,737	198	13,209	8,943	1.5

[1]Inflated by the annual growth rate in the consumer price index.
[2]Deflated by the annual average consumer price index for each year.

The Aggregate Experience

Inflation in combination with the progressive tax structure serves to increase the government's share of national income. The increase is more than proportional to the increase in household incomes because as incomes rise, some people whose incomes were too low to be taxed are now taxed, and others, as in the previous example, are pushed into higher marginal tax brackets. Inflation has the effect of an "unauthorized" (in contrast to a legislated change in the tax structure) tax rate increase. This increase in taxes shifts command over resources from the private sector to the government sector, and thus dampens private demand.

The tax system, as currently formulated, has what is often referred to as a "built-in stabilizing" feature.[9] In times of inflation, the tax system generates an automatic restraint on private spending by increasing the government's proportion of private income. Likewise, in times of demand-induced recessions, the tax structure is intended to exhibit a stabilizing influence on private incomes by reducing the proportion of income which is transferred from the private sector to the public sector by taxes. In all previous postwar recessions, personal taxes as a percent of personal income declined or remained constant (see accompanying chart). However, the recent recession, which in its early stages was supply-induced rather than demand-induced, was accompanied by severe inflation.[10] Taxes as a percent of personal income increased from 14.3 percent in 1973 to 14.8 percent in 1974. Rather than cushioning the recessionary tendencies, the "built-in stabilizers" associated with taxes

Exhibit IV

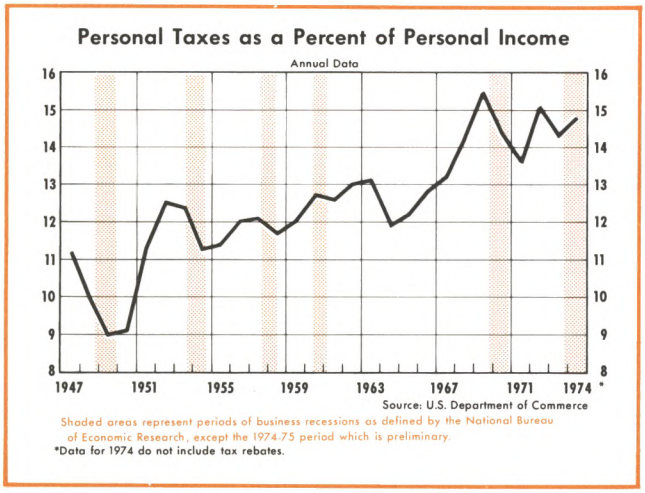
COMBINED TAX LIABILITY — FEDERAL, STATE, AND SOCIAL SECURITY

Year	Real Family Income	Money Family Income[1]	Federal Tax Liability	Social Security Liability	State Tax Liability	Combined Tax Liability	After-Tax Money Income	After-Tax Real Income[2]	Taxes as a Percent of Money Income
1967	$9,076	$ 9,076	$ 956	$290	$ 82	$1,328	$ 7,748	$7,748	14.6%
1968	9,076	9,457	1,098[3]	343	87	1,528	7,929	7,609	16.2
1969	9,076	9,968	1,219[3]	374	97	1,690	8,278	7,539	17.0
1970	9,076	10,556	1,231[3]	374	114	1,719	8,837	7,598	16.3
1971	9,076	11,010	1,167	406	171	1,744	9,266	7,639	15.8
1972	9,076	11,373	1,127	468	190	1,785	9,588	7,652	15.7
1973	9,076	12,078	1,241	632	158	2,031	10,047	7,548	16.8
1974	9,076	13,407	1,470[4]	772	198	2,440	10,967	7,425	18.2

[1]Inflated by the annual growth rate in the consumer price index.
[2]Deflated by the annual average consumer price index for each year.
[3]Includes surcharge.
[4]Excludes rebate.

[9]For a theoretical discussion of built-in stabilizers, see Armen A. Alchian and William R. Allen, *University Economics: Elements of Inquiry*, 3rd ed. (Belmont, California: Wadsworth Publishing Company, Inc., 1972), pp. 716-718.

[10]See Norman N. Bowsher, "Two Stages to the Current Recession," this *Review* (June 1975), pp. 2-8.



served to amplify this cyclical downswing in private spending.

Some Possible Remedies

There are several ways that "unauthorized" tax increases resulting from inflation could be controlled. A tax rebate system could return to the taxpayer precisely the amount of inflation-induced tax collections. The Committee on Internal Revenue Taxation has estimated that $7 billion of the $15 billion increase in 1974 Federal income taxes resulted from the interaction of inflation and the tax structure. It also estimated the average inflation-induced tax per return by income brackets (see Table I). Using these estimates of the impact of inflation on Federal income taxes, the hypothetical family would have received a $75 rebate.[11] Rebates would be higher for higher income families, but a greater *percentage* of the taxes paid by lower income families would be returned.

As the examples of the hypothetical family's tax liabilities indicated, increased deductions and exemptions gave the family some short-term relief from inflationary tax increases. An annual increase in the size of the standard deduction, exemptions, and tax bracket ceilings could offer a long-term solution. The increases could be based on the increase of a particular price index in a manner similar to the treatment of family income in Exhibits I-IV. This indexation would help to eliminate "unlegislated" tax increases.[12]

[11]It should be noted that the rebate system described in this case would be used only to return inflation-induced taxes, not to stimulate economic activity.

[12]For a more complete discussion of indexation, see Jai-Hoon Yang, "The Case For and Against Indexation; An Attempt at Perspective," this *Review* (October 1974), pp. 2-11.

Table I

TAX INCREASES RESULTING FROM INFLATION

Income	Excess Taxes in 1974, Average Per Return	Excess Tax as a Percent of Present-Law Tax
$ 0 — $ 3,000	$ 31	44%
$ 3,000 — $ 5,000	37	16
$ 5,000 — $ 7,000	46	9
$ 7,000 — $ 10,000	54	7
$ 10,000 — $ 15,000	75	6
$ 15,000 — $ 20,000	118	6
$ 20,000 — $ 50,000	243	6
$ 50,000 — $100,000	934	5
$100,000 and over	1,738	3

Source: Joint Committee on Internal Revenue Taxation

An alternative method of indexation would be to deflate family income and itemized deductions by the price index rather than inflate the exemptions and the standard deductions. The tax calculated in this manner would then have to be reinflated so that payments would be in current dollars. The tax system would then approach a system of taxing real income rather than money income.

Conclusion

The most effective method to avoid inflation-induced increases in tax payments is to attack the problem at the core. It is the interaction of inflation and the tax structure which results in the more than proportional increase in taxes. Either stabilizing the price level or changing the progressive structure of the tax rates could relieve the taxpayer of the burden of inflation-induced tax increases.

By using tax rebates, indexing the tax structure, or stabilizing prices, inflation-induced tax increases could be avoided, but such schemes deal with symptoms, not the disease of inflation itself. Since 1967, a taxpayer whose income kept pace with inflation actually lost purchasing power, and inflation in combination with the progressive tax structure served as a vehicle to transfer resources from the private sector to the public sector. Stabilization policy takes on even greater importance when not only the obvious consequences of a changing price level are noted, but also when the less apparent consequences, such as the "unauthorized" tax increases resulting from inflation, are recognized.

Balance-of-Payments Concepts—What Do They Really Mean?

DONALD S. KEMP

THE Advisory Committee on Balance-of-Payments Statistics Presentation of the Office of Management and Budget is currently holding meetings on the usefulness of current balance-of-payments concepts. The Committee is interested in hearing suggestions regarding ways in which international data may be presented in a more useful format. These hearings reflect a growing concern in government, academia, and the business community over the meaning of balance-of-payments data as currently reported.

While the subject of balance-of-payments reporting techniques has been debated since the inception of the practice, the debates have intensified lately as a result of a number of factors. On the one hand, there has been a surge of interest in what has been called the monetary approach to the balance of payments.[1] This approach to payments theory views international transactions within a framework that differs significantly from the current conventional wisdom.[2] If one views international transactions within this monetary framework, the currently employed balance-of-payments concepts have little meaning. On the other hand, the problems of interpreting current balance-of-payments concepts have further intensified as a result of the evolution of a system of floating exchange rates among the world's major trading countries and the rapid accumulation of international reserves by the members of the Organization of Petroleum Exporting Countries (OPEC).

This article discusses the general concept of the balance of payments as well as the appropriateness of various measures of this concept. Its aim is to foster a better understanding of the balance of payments and the meaning of the various measures of this concept that are currently used. In light of the issues raised in this discussion, some proposals for the reform of the method of presenting data relating to international transactions will be made. The discussion will allude to the following propositions:

1) There is a widespread misunderstanding of the forces that give rise to, and the impact of, balance-of-payments deficits and surpluses and exchange rate movements.

2) This misunderstanding has led to undue concern on the part of policymakers, inducing costly recommendations for trade restrictions, controls on capital movements, and export promotion in order to solve balance-of-payments and exchange rate "problems" which simply do not exist.

3) The way balance-of-payments statistics are currently reported serves to exacerbate these misunderstandings.

4) The above propositions apply under both fixed and floating exchange rates. However, the problems alluded to are particularly acute now that we have switched from one exchange rate regime to another.

NOTE: The author acknowledges the helpful comments on earlier drafts from Allan H. Meltzer and Wilson E. Schmidt. They are, of course, blameless for any remaining errors.

[1]For a discussion of this approach, see Donald S. Kemp, "A Monetary View of the Balance of Payments," this *Review* (April 1975), pp. 14-22.

[2]The monetary approach is concerned with the impact of the *balance of payments* on the domestic economy via its impact on the money supply. In contrast, the current conventional wisdom in payments theory (the elasticities and absorption approaches) is concerned primarily with the *balance of trade* alone and assumes that either there are no monetary consequences associated with international transactions or, to the extent the potential for such consequences exists, they can be and are neutralized by domestic monetary authorities.

This is because the implications of the switch are confusing in themselves and because many of the ways in which balance-of-payments statistics are reported have been made completely obsolete as a result of the switch.

FUNDAMENTAL MISUNDERSTANDING

The fundamental misunderstanding alluded to in the first proposition stems from the fact that most balance-of-payments analyses focus on either the current or the capital account separately. In order to place the balance of payments in its proper perspective, it is necessary that all accounts be considered simultaneously. In addition, one must recognize that the transactions recorded in balance-of-payments statistics bear the same relationship to foreign and domestic monetary policies as do purely domestic transactions to domestic monetary policy.

Viewed within a monetary framework, balance-of-payments surpluses and deficits and movements in exchange rates are the result of a disparity between the demand for and supply of money. The exact process by which the disparity is corrected is a technical issue and subject to alternative interpretations.[3] Basically, however, when such a disparity exists, spending units attempt to draw down (build up) their money balances through the purchase (sale) of real and/or financial assets. In so doing they increase (decrease) the demand for all assets. Under alternative situations the exact pattern by which spending units adjust their money balances in this fashion will be different. The pattern will depend on, at a minimum, the cause of the change in the quantity of money supplied relative to the quantity demanded, the initial conditions under which the change occurred, and the impact of other exogenous events on spending units. However, the point is that an excess supply of or demand for money will be cleared through the markets for goods, services, and securities. Furthermore, and what is crucial for an understanding of the balance of payments, in an open economy (one in which there are international trade and capital transactions) the markets through which money balances are adjusted extend beyond national boundaries.[4]

[3]For a thorough discussion of the process by which such a disparity is corrected, see Roger W. Spencer, "Channels of Monetary Influence: A Survey," this *Review* (November 1974), pp. 8-26.

[4]The existence of free international markets for goods, services, and securities is a fundamental assertion of the monetary approach to the balance of payments. See Kemp, "A Monetary View of the Balance of Payments," p. 16.

Suppose, for example, that the domestic monetary authorities increase the money supply in country j, which leads to an increase in the demand for goods, services, and securities in that country. Any such increase in domestic demand will result in a tendency for prices of domestic real and financial assets in country j to rise, in the short run, relative to those in foreign markets. As a result, spending units in country j will simultaneously reduce their purchases of domestic real and financial assets in favor of foreign assets while domestic suppliers of these assets will seek to sell more at home and less abroad. At the same time, foreign spending units will decrease their purchases of the assets of country j and foreign suppliers will attempt to sell more of their own assets in country j. All of these factors work in favor of an increase in the demand for imports and a decrease in the demand for exports in country j.[5]

Adjustment Under a System of Fixed Exchange Rates

Under a system of fixed exchange rates, the adjustments described above will result in an accumulation of money balances by foreigners in return for the real and financial assets they sell to spending units in country j. This exchange of money balances for real and financial assets will be captured in the balance-of-payments statistics as an overall deficit in the trade and capital accounts.[6] The foreign recipients of these money balances have the option of converting them into their own currencies at their respective central banks. These foreign central banks will then present the balances they accumulate through such conversions to the central bank in country j in return for primary reserve assets. Since these primary reserve assets are one of the components of a country's monetary base (and thus a determinant of its money supply), the effect of this transaction will be a decrease in the money supply of country j back towards its initial level and an increase in the money supplies of its surplus trading partners.

[5]The terms "imports" and "exports" refer to more than just imports and exports of goods and services. It includes all transactions which involve the purchase or sale of domestic assets (real and financial) in foreign markets. For example, the purchase of a foreign security by a U.S. citizen would be considered an import.

[6]A deficit in the trade account reflects an exchange of money balances for real assets (goods and services). A deficit in the capital account reflects the exchange of money balances for financial assets. In order to determine the total accumulation of money balances by foreigners, it is necessary to combine all of the trade and capital accounts.

Under a system of fixed exchange rates, the primary channel by which international trade and capital transactions can have an impact on aggregate economic activity is via the international reserve flows described above and their subsequent impact on the money supply (both foreign and domestic).[7] However, one is unable to gauge the magnitude of this impact by looking at either the trade or the capital accounts separately. For example, the effects on aggregate economic activity of a deficit in the merchandise trade account *alone* could be partially or fully neutralized by a surplus in one of the capital accounts. If such a situation arose, the negative aggregate demand effects resulting from an increase in imports of goods would be partially or fully offset by an inflow of capital and a resulting increase in investment demand. If the two effects fully offset each other, there would be no gain or loss of international reserves and the money supply would not be affected by the international trade and capital transactions.

In light of the above considerations, the crucial balance-of-payments concept is that which captures all transactions reflecting the adjustment of the supply of money to the level demanded. That is, the balance-of-payments concept which is most useful as a measure of the impact of international transactions on the domestic economy is one in which the only transactions considered "below the line" are those which have an influence on domestic and foreign money supplies.[8] Henceforth, we will refer to this balance as the *money account*. For the United States this account would be composed of a composite of changes in U.S. primary reserve assets (gold and holdings of foreign currency balances) and changes in foreign deposits at Federal Reserve Banks.[9]

Adjustment Under a System of Freely Floating Exchange Rates

Under a system of freely floating exchange rates the balance of payments (on a money account basis) is always in equilibrium (total imports equal total exports) and there are no money supply changes associated with foreign transactions. In this case the adjustment to the disparity between the supply of and demand for money is accomplished by changes in domestic prices and exchange rates (which change concomitantly with, and accommodate, the required movement in domestic price levels).

In order to analyze the process by which the required adjustment takes place under freely floating exchange rates, it is necessary to begin with an analysis of the market for foreign exchange. The demand for imports determines the demand for foreign exchange and the demand for exports determines the supply of foreign exchange. The exchange rate will always seek the level at which the quantities of foreign exchange supplied and demanded are equal, and thus also the level at which the value of import demand equals the value of export demand. Thus, in value terms, imports will always equal exports and there is never either a surplus or a deficit in the balance of payments (on a money account basis).

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[7]Within the monetary approach framework there are other channels through which international transactions can have an impact on aggregate economic activity. For example, some changes in the terms of trade and in the volume of trade and capital flows can affect the productive capacity of a given economy. However, it should be noted that both of these channels relate to the concept of the gains from trade, which is distinctly different from the concept of the balance of payments. The only other channel through which international transactions can have an impact on aggregate economic activity is through their impact on the ownership of the total money stock. For example, the size of the total U.S. money stock (as currently measured) is not affected by changes in foreign-owned deposits at U.S. commercial banks. However, the distribution of the total U.S. money stock between U.S. and foreign ownership is affected by such changes. This source of international influence on the U.S. economy would be significant only if the volume of foreign-owned deposits was large and if the behavior pattern of foreign dollar owners differed significantly from that of domestic dollar owners. The evidence relating to this issue is, as yet, highly tentative. However, the consensus seems to be that the influence of foreign-owned deposits on the U.S. economy is minimal. For a discussion of the concept of a domestically owned money stock, see Albert E. Burger and Anatol Balbach, "Measurement of the Domestic Money Stock," this *Review* (May 1972), pp. 10-23.

[8]Balance-of-payments accounting is based on the principle of double entry bookkeeping. Total debits must equal total credits, and therefore it is impossible for the entire balance of payments to show either a deficit or a surplus. The only way we can observe a difference between credits and debits is to select certain items out of the balance of payments and compare credits and debits for the given subset of items. A particular subset is usually chosen because the net of the transactions included therein is significant, for some reason, in sign and amount. According to current usage, an imaginary line is drawn through the balance of payments so that the items selected for a subset appear "above the line" and the remaining items are said to be "below the line." For a more thorough discussion of standard balance-of-payments statistics presentation, see John Pippenger, "Balance-of-Payments Deficits: Measurement and Interpretation," this *Review* (November 1973), pp. 6-14.

[9]The *money account* captures the net impact of all international transactions on the U.S. money supply. Of all international transactions, the only ones that affect the money supply are those that affect some component of the monetary base. Since U.S. holdings of gold and foreign currency balances (primary reserve assets) and foreign deposits at Federal Reserve Banks are the only components of the monetary base that are affected by international transactions, the entire impact of these transactions on the money supply can be captured by observing the changes in these items. As such, the *money account* includes changes in only these items below the line.

Let us now return to the previous example in which there is an increase in the quantity of money supplied relative to the quantity demanded. As in our previous example, there will be an increase in the demand for imports (the demand for foreign exchange) and a decrease in the demand for exports (the supply of foreign exchange). Under freely floating exchange rates, the inevitable consequence will be a rise in the exchange rate (the price of foreign currencies in terms of the domestic currency).[10] As such, a rise in the exchange rate is the natural consequence of the existing money stock exceeding the quantity of money demanded.

The upshot of the foregoing analysis is that under fixed exchange rates the crucial balance-of-payments concept for gauging the impact of international trade and capital transactions on the domestic economy is the balance in the money account. Furthermore, exchange rate movements and money account deficits and surpluses are merely part of the adjustment mechanism by which a disparity between the existing supply of and demand for money is being corrected. They are symptoms of a problem, but they themselves are not the problem. The fact is that equality between the supply of and demand for money must and will be restored, and the money account deficits and surpluses and exchange rate movements are merely a mechanism by which the required adjustment is accommodated.

Most furor over balance-of-payments statistics and exchange rate movements stems from the failure to recognize the above proposition. For example, the belief is widespread that deficits in the trade account are "bad" because they represent a net drain on demand for the output produced in the deficit country. In reality, however, one is unable to gauge the impact of international transactions on domestic demand by focusing on the trade account alone. Even if a trade account deficit is not offset by a surplus in the capital account, the resultant deficit in the money account merely reflects the fact that the stock of money exceeds the quantity of money demanded. Somehow this disparity must be and is corrected. In a regime of fixed exchange rates, the money stock will be decreased automatically through the outflow of international reserves which is associated with the money account deficit.

In a similar fashion, most concern over the depreciation of a currency in a regime of floating exchange rates is also misdirected. It is curious that the belief is widely held that the depreciation of a nation's currency is a cause of domestic inflation. To the contrary, depreciations are not the source, but are the result of inflationary pressures. The depreciation occurs for the same reason that money account deficits occur with fixed exchange rates — that is, because there exists a disparity between the supply of and demand for money which must be corrected.

When such a disparity exists under floating exchange rates, the excess supply of money itself will result in an increase in the demand for domestically supplied real and financial assets as well as for foreign exchange (the demand for foreign supplies of real and financial assets). Consequently, all prices (the price of foreign exchange included) will rise. As with all increases in the price level, the result will be an increase in the demand for money as spending units attempt to maintain the real value of that proportion of their wealth that they elect to hold in the form of money balances. In short, the original disparity between the demand for and supply of money will be corrected via a rise in domestic prices and a depreciation in the foreign value of the domestic currency (a rise in the price of foreign exchange).

In view of the foregoing analysis, balance-of-payments deficits and surpluses and exchange rate movements should *not* be viewed as evils that are to be avoided at all costs. They are not problems in themselves, but are one of the means by which other problems are corrected. In fact, in light of the nature of the forces which give rise to them, they are, in a sense, desirable.

BALANCE-OF-PAYMENTS CONCEPTS

Since they are summaries, balance-of-payments data are presented in categories composed of similar types of international transactions (for example, merchandise trade, long-term capital, etc.). The transactions grouped together in any particular category are similar in that, given the existing institutional framework within which they occur, the forces giving rise to, and the impact of, them is supposed to be similar.[11] To the extent that any set of groupings ever was appropriate or informationally useful, this usefulness can be greatly diminished if there are changes in the forces which give rise to, or the impact of, that

[10] That is, the domestic currency will depreciate in value relative to other currencies. Other currencies will now be worth more units of domestic currency than before.

[11] See Exhibit I and Table I for an outline of the groupings currently employed in balance-of-payments data presentation. These illustrations will be useful references for the remainder of this article.

Exhibit I

SUMMARY EXPLANATION OF U.S. BALANCE OF PAYMENTS

(To be used in conjunction with Table I)

The U.S. balance of payments is a summary record of all international transactions by the Government, business, and private U.S. residents occurring during a specified period of time.

As a series of accounts and as a measure of economic behavior, balance of payments transactions are grouped into seven categories: merchandise trade, services, transfer payments, long-term capital, short-term private capital, miscellaneous, and liquid private capital. We successively add the net balances of the above categories in order to obtain:

Merchandise Trade Balance
Goods and Services Balance
Current Account Balance
Basic Balance
Net Liquidity Balance
Official Settlements Balance

Below the dashed line there are two additional categories, U.S. liabilities to foreign official holders and U.S. reserve assets. These serve to finance the transactions recorded above the dashed line.

There are interrelationships between these accounts. For example, the credit entry associated with an export of goods could result from the debit entry of a private bank loan, a Government grant, a private grant, or an increase in U.S. holdings of foreign currency or gold.

Merchandise Trade: Exports and imports are a measure of physical goods which cross U.S. boundaries. The receipt of dollars for exports is recorded as a plus and the payments for imports are recorded as a minus in this account.

Services: Included in this account are the receipt of earnings on U.S. investments abroad and the payments of earnings on foreign investments in the U.S. Sales of military equipment to foreigners and purchases from foreigners for both military equipment and for U.S. military stations abroad are also included in this category.

Transfer Payments: Private transfers represent gifts and similar payments by Americans to foreign residents. Government transfers represent payments associated with foreign assistance programs and may be utilized by foreign governments to finance trade with the United States.

Long-term Capital: Long-term private capital records all changes in U.S. private assets and liabilities to foreigners, both real and financial. Private U.S. purchases of foreign assets are recorded as payments of dollars to foreigners, and private foreign purchases of U.S. assets are recorded as receipts of dollars from foreigners. Government capital transactions represent long-term loans of the U.S. Government to foreign governments.

Short-term Private Capital: Nonliquid liabilities refers to capital inflows, such as loans by foreign banks to U.S. corporations, and nonliquid claims refers to capital outflows, such as U.S. bank loans to foreigners. These items represent trade financing and cash items in the process of collection which have maturities of less than three months. The distinction between short-term private capital and liquid private capital is that the transactions recorded in the former account are considered not readily transferable.

Miscellaneous: Allocations of special drawing rights (SDRs) represent the receipt of the U.S. share of supplemental reserve assets issued by the International Monetary Fund. SDRs are recorded here when they are initially received by the United States. The category errors and omissions is the statistical discrepancy between all specifically identifiable receipts and payments. It is believed to be largely unrecorded short-term private capital movements.

Liquid Private Capital: This account records changes in U.S. short-term liabilities to foreigners, and changes in U.S. short-term claims reported by U.S. banks on foreigners.

NOTE: For analytical purposes the dashed line below the official settlements balance could be moved. For example, if this line were placed under one of the balances above, then all transactions below that line would serve as financing, or offsetting, items for the balance above.

Table I

U. S. BALANCE OF PAYMENTS, 1974p

(Billions of Dollars)

		Net Balance	Cumulative Net Balance
Merchandise Trade:			
Exports	+ 97.1		
Imports	−103.0		
Merchandise Trade Balance		− 5.9	− 5.9
Services:			
Military Receipts	+ 3.0		
Military Payments	− 5.1		
Income on U. S. Investments Abroad	+ 29.9		
Payments for Foreign Investments in U. S.	− 16.7		
Receipts from Travel & Transportation	+ 10.2		
Payments for Travel & Transportation	− 12.7		
Other Services (net)	+ 0.3		
Balance on Services		+ 9.1	
Goods and Services Balance			+ 3.2
Transfer Payments:			
Private	− 1.1		
Government	− 6.1		
Balance on Transfer Payments		− 7.2	
Current Account Balance			− 4.0
Long-term Capital:			
Direct Investment Receipts	+ 2.3		
Direct Investment Payments	− 6.8		
Portfolio Investment Receipts	+ 1.2		
Portfolio Investment Payments	− 2.0		
Government Loans (net)	+ 1.0		
Other Long-term (net)	− 2.4		
Balance on Long-term Capital		− 6.7	
Basic Balance			−10.6
Short-term Private Capital:			
Nonliquid Liabilities	+ 1.7		
Nonliquid Claims	− 14.7		
Balance on Short-term Private Capital		−13.0	
Miscellaneous:			
Allocation of Special Drawing Rights (SDR)	*		
Errors and Omissions	+ 5.2		
Balance on Miscellaneous Items		+ 5.2	
Net Liquidity Balance			−18.3
Liquid Private Capital:			
Liabilities to Foreigners	+ 15.7		
Claims on Foreigners	− 5.5		
Balance on Liquid Private Capital		+10.3	
Official Settlements Balance			− 8.1
The Official Settlements Balance is Financed by Changes in:			
U. S. Liabilities to Foreign Official Holders:			
Liquid Liabilities	+ 8.3		
Readily Marketable Liabilities	+ 0.6		
Special Liabilities	+ 0.7		
Balance on Liabilities to Foreign Official Holders		+ 9.5	
U. S. Reserve Assets:			
Gold	0.0		
Special Drawing Rights	− 0.2		
Convertible Currencies	0.0		
IMF Gold Tranche	− 1.3		
Balance on Reserve Assets		− 1.4	
Total Financing of Official Settlements Balance			+ 8.1

*There was no SDR allocation for 1974.
P — Preliminary
NOTE: Figures may not add because of rounding.

particular set of transactions, or if there are changes in the institutional framework within which these transactions occur. Thus, given the changes which have occurred in the field of international trade and finance in the last few years, it would not be at all surprising to find that some previously meaningful balance-of-payments groupings had become almost meaningless.

Foremost among these changes has been the movement of the world's major trading nations from a fixed to a floating exchange rate regime and the surge in the accumulation of official reserves by OPEC members. In this section the current methods of presenting balance-of-payments statistics will be analyzed in light of these changes. Each individual account will be discussed in terms of its relevance prior to these changes and, where appropriate, in light of the movement to floating exchange rates and the rapid growth of OPEC reserves.

Current Account

The current account measures the extent to which the United States is a net borrower from, or net lender to, foreign countries as a group. With the exception of unilateral transfers (gifts and similar payments by American governmental units and private citizens to foreign residents), all of the transactions recorded above the line in this account represent the transfer of real assets (goods and services) between the United States and its trading partners.[12] The transactions recorded below the line in this account represent the means by which the United States is able to finance the purchase of net imports from other countries or, in the case of a surplus, how net exports have been financed by our trading partners. For example, the United States had a $4 billion deficit on current account in 1974. This means that, on balance, the United States received $4 billion more in goods and services (imports) than it gave up (exports) in return. The United States was able to do this by borrowing $4 billion from foreigners. The borrowing was financed through a net of all of the transactions which appear below the line in the current account. Thus, for the purpose of balance-of-payments analysis, the value of the current account balance lies in its usefulness as a measure of the net transfer of real resources between the United States and the rest of the world. Another way of viewing this balance is that it measures the change in our net foreign investment. In other words, in 1974 foreigners invested (made loans amounting to) $4 billion in the United States.

This balance carries additional significance in that it is a component of the nation's GNP accounts. It is included in the GNP accounts because it is *supposed* to capture the contribution of foreigners to domestic aggregate demand. However, it alone tells us very little about the impact of international transactions on domestic economic activity. It only measures the magnitude of foreign demand for current output (goods and services) and completely ignores the impact of foreign investment decisions on U.S. economic activity. As mentioned previously, transactions in the capital account could offset completely the impact of current account transactions on the U.S. money supply. As such, implications drawn from the current account regarding the domestic impact of foreign transactions can be highly misleading.

These same objections are equally appropriate, if not more so, to the two more narrowly defined balance-of-payments concepts — the merchandise trade balance and the goods and services balance. While these balances are among those which receive the greatest amount of attention, their implications for the domestic economy are greatly overstated.

Basic Balance

The basic balance isolates long-term capital transactions above the line along with all of the transactions included in the current account. All capital flows involving assets whose original maturity exceeds one year are defined as long term, and therefore "basic" transactions. The original theoretical justification for the basic balance seems to be that it catches the *persistent* forces at work in the balance of payments and thus could be a leading indicator of long-run trends.

However, this is clearly not the case. Both portfolio investments and long-term private loans are included in long-term capital, and both are now highly sensitive to short-run changes in interest rates and changes in expectations about relative inflation rates, monetary policies, and growth. The meaningfulness of the long-term capital concept might have some appeal on a theoretical basis, but data problems make its em-

[12]The current account excludes earnings on direct investments which are both earned and reinvested abroad. However, these reinvested earnings are no different than other sources of U.S. income from abroad in the sense that they represent a transfer of command over real resources. In recent years these reinvested earnings have been quite large. For example, in 1971 they amounted to $3.2 billion, while in 1972 and 1973 they amounted to $4.7 billion and $8.1 billion, respectively.

pirical counterpart extremely difficult to construct and, therefore, it is not very useful.

Net Liquidity Balance

The net liquidity balance may be thought of as a measure of the total of U.S. dollars which accrue to foreigners, during an accounting period, as a result of all of the transactions recorded above the line — that is, imports and exports of goods and services, unilateral transfers, inflows and outflows of long-term capital, and nonliquid short-term capital. Below the line it combines the changes in our reserve assets and the changes in our liquid liabilities to both private and official foreigners. The original intent of this balance was to measure the change in *potential* pressure on our reserve assets. The thinking was that official institutions could use their dollar assets to buy our reserve assets; private holdings of dollars were a potential threat if private foreigners sold their dollars to central banks, who could in turn use them to buy our reserve assets.

There are a number of problems with this measure which make its relevance and usefulness highly questionable. These problems are both theoretical and empirical and are greatly magnified by the recent institutional changes which have occurred in international finance.

The main empirical problem with this measure is that it attempts to distinguish between liquid and nonliquid liabilities. Every U.S. liability to foreigners has a combination of attributes, some of which qualify them for classification as liquid and some of which qualify them for classification as nonliquid. As a result, the classification of many assets as liquid or nonliquid must be somewhat arbitrary. For example, foreign portfolio investments in the United States are classified as nonliquid liabilities. However, these liabilities of the United States are readily convertible into liquid form — that is, they may be sold at any moment in time for cash or a demand deposit. Thus, the exchange market implications of the growth of foreign portfolio investments in the United States are not much different from those of a growth in foreign-held bank deposits (which are classified as liquid).

Suppose, however, that all liabilities to foreigners could be meaningfully subdivided into liquid and nonliquid categories. It would still be inaccurate to declare that all liquid liabilities to foreigners represent potential pressure on our reserve assets. There are many reasons why foreigners wish to hold liquid claims against the United States, not the least of which is for transactions purposes. The U.S. dollar is indeed an international currency which may be used in transactions throughout the world. Only those foreign-held claims which are in excess of those desired for transactions purposes can be rightfully considered as a potential source of pressure on our reserve assets.

While it is surely impossible, for empirical as well as theoretical reasons, to determine what proportion of total U.S. liabilities are being held for transactions purposes, the proportion is probably large. In order to determine accurately potential pressures on our reserve assets, it would be necessary to further subdivide U.S. liquid liabilities to foreigners into those held for transactions purposes and those held for speculative (or other) purposes. Indeed, it is only this latter category of liquid claims that represent potential pressures on our reserve assets.

The above problems have become decidedly more acute in the wake of the quadrupling of petroleum prices and the surge in the dollar holdings of OPEC members. Since the transacting currency of OPEC members is the U.S. dollar, the role of the dollar as an international medium of exchange, and thus its transactions demand, has been greatly enhanced. At the same time, many OPEC members have been accumulating extensive dollar denominated liquid claims. While this may be only a short-run phenomenon, the fact is that these liquid U.S. liabilities do not represent a potential threat to our reserve assets. Rather, these liabilities represent only a short-term depository for OPEC receipts while they decide how they wish to extend the maturity distribution of their claims into long-term (and therefore nonliquid in balance-of-payments parlance) investments.

To the extent that there ever did exist a conceptual basis for trying to measure the net liquidity balance, that basis no longer exists as a result of the shift from a system of fixed to one of floating exchange rates. With floating exchange rates there is no potential pressure on our primary reserve assets because the dollar is no longer convertible into them.[13]

[13] Under fixed exchange rates the United States stood ready to buy and sell foreign currencies in order to support the value of the dollar at a specific price in terms of other currencies. Primary reserve assets (international reserves) are stocks of gold and foreign currencies held by the U.S. Government in the event that such market intervention became necessary. For example, a decrease in the demand for dollars vis-a-vis gold or foreign currencies was accommodated by the purchase of dollars in return for foreign currencies or gold from the stocks of reserve assets. Thus, the dollar was said to be readily convertible into our reserve assets. How-

Official Settlements Balance

The official settlements balance is intended to measure the change in dollar balances which accrue to foreign official institutions only. In this balance-of-payments concept all private transactions are counted above the line, whereas in the net liquidity balance some private transactions (liquid private capital flows) are counted below the line. The original intent of this balance was to measure *directly* the net exchange pressure on the dollar and on U.S. reserve assets.[14] Since only those dollar denominated U.S. liabilities which are held by foreign official institutions could be exchanged for reserve assets, this balance focuses on only those transactions which give rise to changes in these liabilities.

The usefulness of this balance has always rested on the questionable distinction between private and official transactions. The idea is that all transactions listed above the line are the result of market-determined private (autonomous) actions and all transactions below the line are the result of official (accommodating) actions undertaken in support of fixed exchange rates. The thinking was that all official transactions could be considered as accommodating and all private transactions as autonomous. This probably never was the case and certainly is not the case now, given recent institutional changes in international finance.

The rapid accumulation of reserves by official agencies of OPEC members are included below the line in this balance, but they are clearly not the result of official action aimed at stabilizing exchange rates. These OPEC reserves largely represent investment decisions by OPEC members which are based on considerations of income, liquidity, and risk. In other words, many official transactions are clearly autonomous and not accommodating, and should therefore be included with other autonomous transactions above the line.

While the above discussion relates to the blurred distinction between autonomous and accommodating transactions, there are other problems which blur the distinction between private and official transactions. For example, many foreign official institutions invest their dollar balances in the Eurodollar market. The result of such transactions on the balance-of-payments accounts is to increase private (Eurodollar bank) claims on the United States and reduce official claims. However, in reality, since the foreign official institution still maintains ownership and control of a claim against the United States, there has been no reduction in official claims against it.

To the extent that the official settlements balance ever did measure what it was supposed to measure, the relevance of this concept has disappeared as a result of the shift to floating exchange rates. As a result of this shift, exchange rate authorities are no longer *obligated* to prevent movements in exchange rates through official intervention in the foreign exchange market. The net exchange pressure on the dollar is no longer captured by changes in reserve asset holdings.

PROPOSALS FOR REFORM

In view of the considerations aired in the foregoing discussion, it is often the case that the present method of presenting balance-of-payments data is more misleading than useful. In some instances the balances currently reported have absolutely no economic meaning and often do not give an accurate measure of the impact of international trade and capital transactions on aggregate economic activity. This is because none of the currently reported balances capture the effects of international transactions on the money supply, and it is primarily through their effects on the money supply that these transactions have any appreciable impact on aggregate economic activity.

Under fixed exchange rates there is only one really meaningful balance — the balance in the money account. This account is the only one that captures the effect of international transactions on the money supply. However, at present this balance is not reported. Under freely floating exchange rates there are no meaningful balance-of-payments concepts, because in this case international transactions have no impact on the money supply. In this case the money account is always in balance, and therefore of no significance.

ever, with floating exchange rates the U.S. Government is no longer *obligated* to intervene in the market for foreign currencies and changes in the demand for the dollar are accommodated by movements in the dollar exchange rate. In other words, with floating exchange rates the U.S. Government no longer *guarantees* the convertibility of the dollar into its reserve assets.

[14]The official settlements balance was originally supposed to reflect the effects of past measures taken in support of the fixed dollar exchange rate, while the net liquidity balance was supposed to reflect the potential need for such measures in the future. This is because the net liquidity balance includes liquid *private* capital, a potential source of future pressure on fixed exchange rates, below the line. On the other hand, in the official settlements balance the only transactions carried below the line are those which reflect past *official* measures.

Thus, there is little, if any, reason why the publication of balance-of-payments data in the currently employed format should be continued. Not only is this format virtually without economic meaning, but it is often quite misleading. While there are many theoretical and empirical problems associated with any kind of aggregation of data pertaining to international transactions, the problems are unnecessarily exacerbated by the present practice of drawing balances on the various subaccounts (that is, the merchandise trade balance, the goods and services balance, the current account balance, etc.). These problems could be significantly reduced if the data were just presented and no balances were drawn.

In a world of freely floating exchange rates, changing pressures on the dollar are captured by movements in the exchange rate and not by some theoretically and empirically meaningless balances. For this reason, it would be helpful if international trade data were to include changes in the effective exchange rate.[15] However, we recognize that the current exchange rate arrangement cannot be realistically considered as an experiment with freely floating exchange rates. It is rather an experiment with a "managed float."[16] Whether recent official intervention activities have had any effect on the exchange rate or not, the fact is that they, as will any official exchange rate intervention activities, have had an impact on the U.S. monetary base. Thus, as it turns out, given the current "managed float," both the money account balance and changes in the effective exchange rate each convey some useful information.

Thus, any proposals for reform of the methods of presenting balance-of-payments data should include, at a minimum, a recommendation that the currently employed balances not be drawn and that the words "deficit" and "surplus" be dropped from any reference to international data. This would not prevent individuals from computing balances if they wished; it would only remove the implied government sanction of these concepts as economically meaningful.

In addition, any proposed reforms should address themselves to the obviously arbitrary classification of certain transactions as relating to liquid, illiquid, short-term, or long-term capital flows. They should also recognize that under a managed float changing pressures on the dollar are captured by movements in the exchange rate and the money account balance. With these goals in mind, a classification scheme similar to that presented in Exhibit II is suggested.

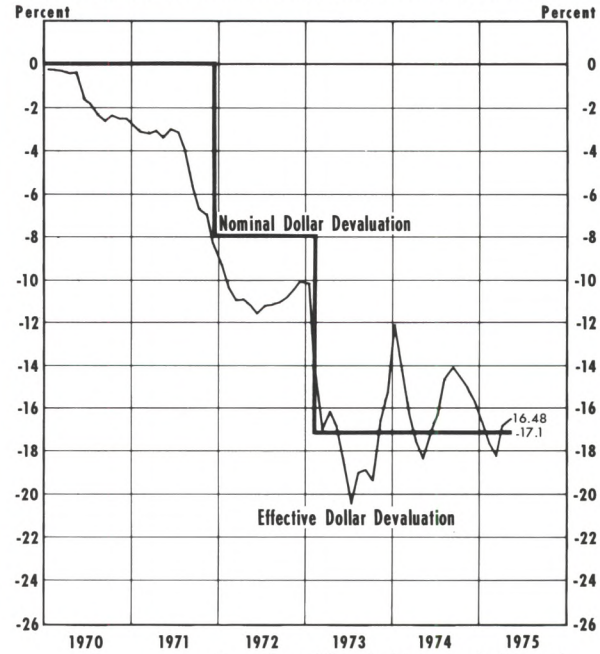
Exhibit II

INTERNATIONAL TRANSACTIONS, 1974p

	Millions of Dollars
Merchandise Exports	$100,047
Merchandise Imports	108,027
Service Exports	42,600
Service Imports	31,431
Unilateral Transfers (Net)	9,005
Direct Investment Abroad	6,801
Direct Investment in U.S.	2,308
Portfolio Investment Abroad	1,951
Portfolio Investment in U.S.	1,199
Deposits Abroad (Demand, Time, at Central Bank)	1,129
Deposits in U.S. (Demand, Time, at Central Bank)	20,746
Money Account Balance	46

Sources: *Survey of Current Business*, Board of Governors of the Federal Reserve System *Bulletin*, *Treasury Bulletin*.

Nominal and Effective Dollar Devaluation



Sources: IMF and the Federal Reserve Bank of New York
Note: Nominal devaluation is measured by the change in the dollar price of gold. Effective devaluation is measured by the appreciation of eleven major currencies relative to the par values which prevailed as of May 1970. The appreciation is then weighted by separate export and import shares with the United States based on 1972 trade data.
Latest data plotted: May

[15]The change in the effective exchange rate is a trade weighted average of changes in the exchange rate between the dollar and the currencies of the United States' trading partners.

[16]In other words, exchange rates are currently neither fixed at an officially specified level nor are they allowed to move completely free of official foreign exchange market intervention.

The advantages of this type of approach to the classification of international data are as follows:

1) No balances are computed or reported.

2) It allows individuals to make their own judgments regarding whether or not a particular transaction is related to liquid, illiquid, short-term, or long-term capital flows and to draw their own conclusions regarding the significance of changes in these flows.

3) It recognizes that pressures on the dollar are reflected in changes in exchange rates and in the money account balance and not by changes in the volume of a particular subset of transactions.

CONCLUSION

The current method of presenting data relating to international commerce attempts to group transactions so that the net of the transactions included in any category (the balance in that account) is significant for some reason in sign and amount. The transactions grouped together in any particular category are *supposed* to be similar in that, given the existing institutional framework within which they occur, the forces giving rise to, and the impact of, them is *supposed* to be similar. The idea is that the balance in that account should serve as a guide to policymakers as they attempt to gauge the impact of international transactions on domestic economic activity.

A particular balance is an appropriate guide to policy or is informationally useful only to the extent that it is based upon a correct perception of the forces which give rise to, and the impact of, the transactions included therein. The thrust of this article is that the balances highlighted in current balance-of-payments statistics are based on an incorrect perception of such forces and impacts. As such, these balances have very little economic meaning and are, therefore, often a misleading guide to policymakers. As an alternative, it is suggested that international trade and capital transactions be viewed within the framework presented in the first sections of this article.

Therefore, the conclusion of this article is that the present methods of presenting data concerning international transactions should be reformed so that it more closely reflects the underlying economic realities of international commerce. At a minimum, any such reform should include a discontinuation of the practice of calculating the balances which are currently presented. While this would not prevent individuals who wish to do so from calculating such balances, it would remove the implied governmental sanction of these balances as having some special economic or policy implications.

In addition, the above reform would also result in a discontinuation of the constant references to "deficits" and "surpluses" in the balance of payments. The words "deficits" and "surpluses" in this regard convey meanings that are not at all appropriate to the realities of the impact of international commerce on domestic economic activity. For example, every month we hear that the merchandise trade account was either in "deficit" or "surplus." A deficit in this account merely means that the United States imported more merchandise than it exported during that month. In other words, the United States received more goods during that month than it was forced to give up, and it was able to do so by borrowing from foreigners. Despite the stigma associated with the word "deficit", this information tells us virtually nothing about the overall impact of international commerce on domestic economic activity.