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DEFINING MONEY: PROBLEMS AND ISSUES

Charles W. Hall

The effect of monetary policy on employment, income, and prices stems from its influence on a wide range of financial variables ranging from the monetary base,¹ bank reserves and the money stock to the total liquidity of the economy, interest rates and financial flows in general (see Chart 1). The degree of importance assigned to any one of these variables in the transmission of monetary policy from Federal Reserve actions to the ultimate goals of policy depends both on one's theory of how the economy functions and on the interpretation and evaluation of a limited amount of empirical evidence. Some analysts and policymakers can be expected to shift the focus of their interest and concern from one set of financial variables to another as economic conditions change, or as new evidence on the role of various financial variables becomes available.

¹The monetary base is calculated as follows:

Total Federal Reserve Credit Outstanding
 plus Gold stock
 plus Special Drawing Rights
 plus Treasury currency outstanding
 minus Treasury cash holdings
 minus Treasury deposits at Federal Reserve banks
 minus Foreign deposits at Federal Reserve banks
 minus other deposits at Federal Reserve banks
 minus other Federal Reserve liabilities and capital
 equals Source Base
 plus Reserve adjustments
 equals Monetary Base

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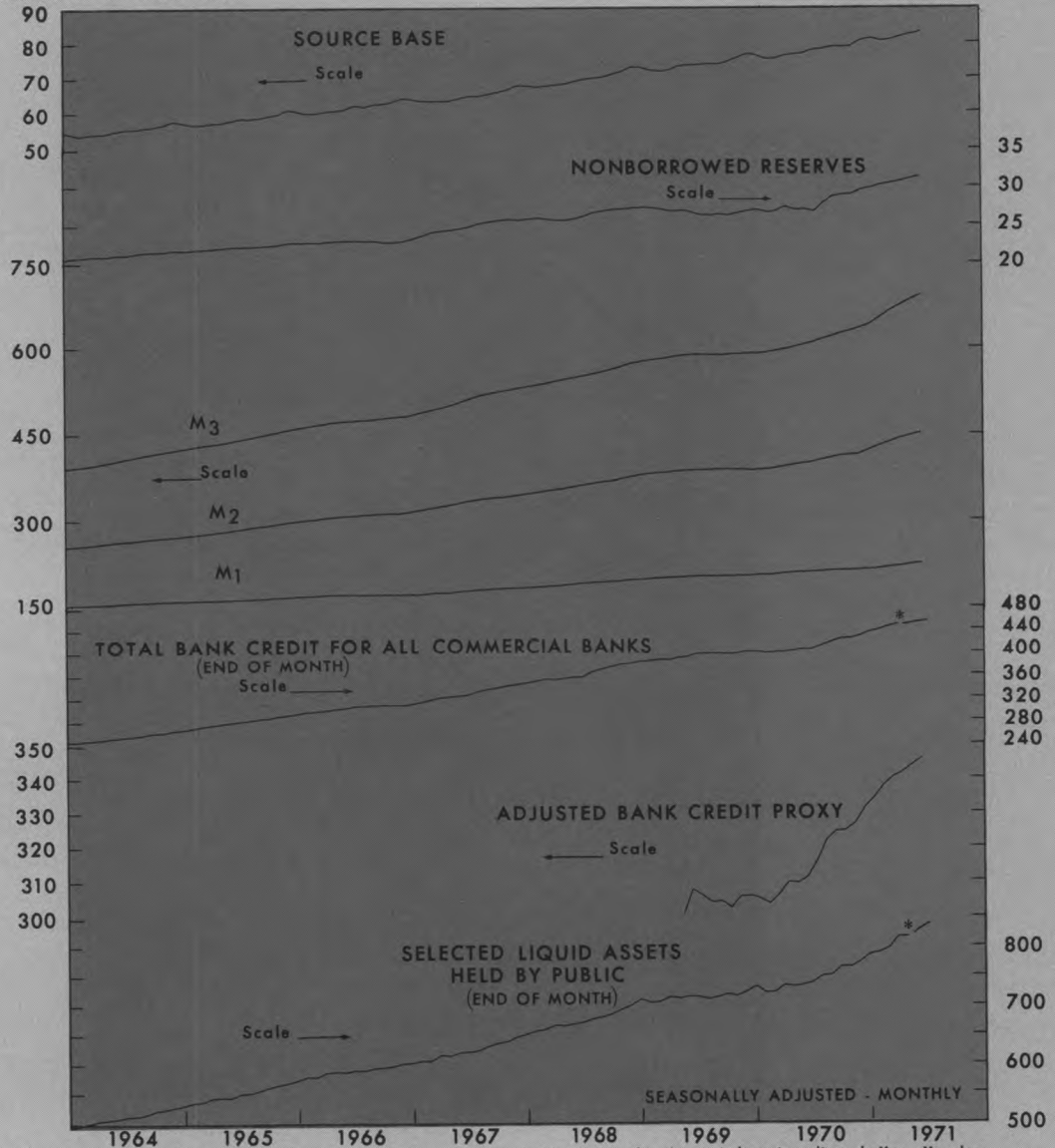
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Chart 1.

SELECTED FINANCIAL MEASURES

BILLIONS OF DOLLARS

BILLIONS OF DOLLARS



NOTE: Source base: for derivation, see Footnote 1; M1: currency in circulation plus demand deposits adjusted; M2: M1 plus total time and savings deposits, other than large, negotiable certificates of deposits, at commercial banks; M3: M2 plus deposits at mutual savings banks and savings and loan shares; total bank credit: total loans and investments of commercial banks; adjusted bank credit proxy: total deposits of member banks plus nondeposit sources of funds.

*Preliminary data

Last entry: June 1971

Source: Board of Governors of the Federal Reserve System

Recently, one of the financial variables—the money stock—has received considerable attention, both in the conduct of monetary policy and in economic literature. In early 1970, the Federal Open Market Committee (FOMC) began placing somewhat greater emphasis on money and bank credit in its policy deliberations and in its resulting directives to the Federal Reserve Bank of New York.² The increased emphasis placed upon these monetary aggregates reflected, in large part, a modification of operating procedures, rather than a change in the ultimate objectives of monetary policy—promoting maximum production, maintaining full employment, attaining price stability, and achieving balance of payments equilibrium.³

In addition, recent empirical studies have tended to provide support for the argument that the rate of change in the quantity of money has a substantial impact on the level of and changes in economic activity. The issue, however, continues over whether money is a major factor affecting economic activity.

Any analysis of the behavior and impact of money requires recognition of the problems involved in defining and measuring the money stock and in interpreting changes in its rate of growth. There is no one, universally accepted measure of money. In fact, several conceptual definitions of money have considerable merit. An empirical approximation of any one of the various

concepts, however, presents the difficulty of determining just what assets meet the criteria established by a theoretical concept. Some assets that are thought to exhibit a particular characteristic of money can be easily converted into other assets; for example, time deposits at commercial banks, which can be easily changed into demand deposits. Consequently, decisions on what should or should not be included in a particular measure of money are somewhat debatable. The problem of money stock measurement would not be particularly critical if the various measures tended to behave similarly. Such is not always the case, however.

This article discusses some of the problems associated with defining and measuring money and analyzing its behavior. To illustrate some of the complexities associated with money stock analysis, three readily available and widely used measures of money are examined.⁴ Because of the behavior of the individual components in the three measures, each measure provides a somewhat different view of monetary growth. The intent of the discussion focusing on alternative approaches to defining money is to explain why more than one measure of money exist.

MEASURES OF THE MONEY SUPPLY

Three measures of the money stock are widely used in economic analysis and carefully watched by those who interpret or formulate monetary policy; they are designated M_1 , M_2 , and M_3 . At times, however, these measures may give different views of the strength of monetary stimulus or restraint and thus make interpretation of

²In January 1970 the FOMC expressed its desire to "see a modest growth in money and bank credit." See the "Record of Policy Actions of FOMC," *Federal Reserve Bulletin*, April 1970, p. 334.

³For a thorough explanation of the circumstances surrounding the increased use of money and bank credit in the conduct of monetary policy see, "Monetary Aggregates and Money Market Conditions in Open Market Policy," *Federal Reserve Bulletin*, February 1971, p. 80.

⁴The three money supply measures and related data are published weekly in *Federal Reserve Statistical Release H.6* and monthly in the *Federal Reserve Bulletin*.

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monetary developments quite difficult. Any of the three measures of the money stock exhibits considerable variation on a week-to-week or month-to-month basis. Consequently, it is extremely difficult to discern developing patterns when analyzing short time periods. The divergence of growth rates may indicate that no single measure of the money supply can be considered the best for all times and purposes.

The M_1 measure is the traditional measure of money and corresponds to the long held view of money as that group of assets used as a means of payment. The measure includes currency in circulation, demand deposits held by the nonbank public at commercial banks,⁵ and foreign demand deposit balances at Federal Reserve banks. At the present time, the measure is adjusted to exclude interbank deposits, cash items in the process of collection, and Federal Reserve float. United States Government deposits at commercial banks are not included in any of the money stock measures.

The M_2 series is a somewhat broader measure of money. In addition to the items in M_1 , it includes all time and savings deposits at commercial banks except negotiable time certificates of deposit issued in denominations of \$100,000 or more by large, weekly reporting banks. The large, negotiable certificates of deposit are excluded from M_2 because they are essentially money market instruments issued by banks to attract funds.⁶ They bear a much closer resem-

⁵Demand deposits held by the nonbank public at commercial banks include deposits of state and local governments, foreign commercial banks, and foreign official institutions as well as deposits of individuals and businesses.

⁶See "Negotiable Certificates of Deposit," *Money Market Instruments*, (Federal Reserve Bank of Cleveland, 1970).

blance to commercial paper than to passbook savings accounts. In addition, the amount of certificates outstanding has varied sharply over time.

The third measure of the money stock (M_3) includes assets that are very close substitutes for time and savings deposits at commercial banks. In addition to all the assets included in M_2 , the M_3 measure includes deposits of mutual savings banks and savings and loan shares.⁷ Although deposits of mutual savings banks and savings and loan shares, as well as time and savings deposits at commercial banks, are not used for actual transactions purposes, there is some justification for including them in a measure of money. These assets can be easily converted into currency or demand deposits, and serve as a potential source of purchasing power; many analysts consider the latter to be an important characteristic of money.

Behavior of the Money Stock. An examination of the behavior of the three measures of money from January 1964 through June 1971 provides an indication of some of the problems associated with money stock analysis.⁸ The study also illustrates that the measures sometimes give conflicting signals of the strength of monetary behavior because they are composed of different assets.

⁷Measures of M_1 and M_2 consist of averages of daily data and are published on a monthly or weekly basis. Data for the nonbank thrift institutions, which are used in M_3 , are available only as of the end of each month. To approach a monthly average concept comparable to M_1 and M_2 , these end-of-month data are averaged to derive a monthly figure. Therefore, the figure for the deposits of the nonbank thrift institutions for any particular month is the average of the figure for the end of the month in question and the end-of-month figure for the preceding month.

⁸January 1964 is the first month for which comparable data for the three money supply measures have been published. June 1971 is the latest month for which the "Record of Policy Actions of the FOMC" has been published as of this writing.

All three measures of the money stock increased considerably from January 1964 through June 1971. The M_1 measure grew at an average annual rate of 5.3 percent, and M_2 and M_3 both increased at a 7.9 percent average annual rate. None of the measures grew at a steady pace within this seven and one-half year period, however. The rates of growth also varied considerably in relation to one another, reflecting changes in the demand for different types of financial assets and changes in economic conditions, monetary policy goals, and the financial environment.

Chart 2 shows the annual rates of growth in selected monetary policy periods for each of the three money stock measures and, therefore, the effect of different monetary policy actions on these measures.⁹ For example, from December 1968 through January 1970—a period of monetary restraint—the growth of all three measures fell considerably below the corresponding rates of increase from July 1968 through November 1968—the immediately preceding period when policy was less restrictive. On the other hand, when policy was eased, such as during the December 1966–November 1967 period, the rate of growth of the three measures accelerated.

Although the relationship between the broader measures— M_2 and M_3 —remained relatively more stable from period to period than the relationship between either of these two measures and M_1 , the relationships among the three measures varied considerably at times as monetary conditions changed (see Charts 2 and 3). In the December 1968–January 1970 period, M_1 grew at an annual

rate 3.3 percentage points slower than in the previous period of monetary ease. The growth rates of the M_2 and M_3 measures, on the other hand, were 7.0 and 5.4 percentage points, respectively, below those of the previous period. Because the behavior of the three measures differs, uncertainty exists concerning the degree of monetary restraint imposed during the period. Uncertainty also arises in periods of policy ease. For example, during the months from July through November 1968, the growth rate of M_1 remained unchanged relative to the previous period. The rates of growth of M_2 and M_3 accelerated, however. An incomplete development of economic theory makes it difficult to interpret such conflicting signals concerning the thrust of policy.

A comparison of one period of policy ease with another (or one period of policy restraint with another) also illustrates the varied behavior of the money stock measures. For example, the months from December 1966 to November 1967 and from July 1968 to November 1968 were both periods of monetary ease. Examination of the growth of M_1 would seem to indicate that the latter period experienced somewhat greater monetary thrust. From July 1968 to November 1968, M_1 grew at a faster rate than during the previous period of monetary ease. However, M_3 showed somewhat faster growth in the earlier period. This type of behavior by the measures of money makes it difficult to discern the relative strength of monetary growth.

During the period covered in this article, the three money stock measures also showed a sensitivity to the maximum interest rate ceilings set on deposits by the various regulatory agencies. When rates on money market instruments reach or surpass the rate ceilings on time and savings deposits at commercial banks, deposits at savings

⁹The intent of monetary policy from January 1964 to June 1971 is stated in the "Record of Policy Actions of the Federal Open Market Committee," which is published in various issues of the *Federal Reserve Bulletin*.

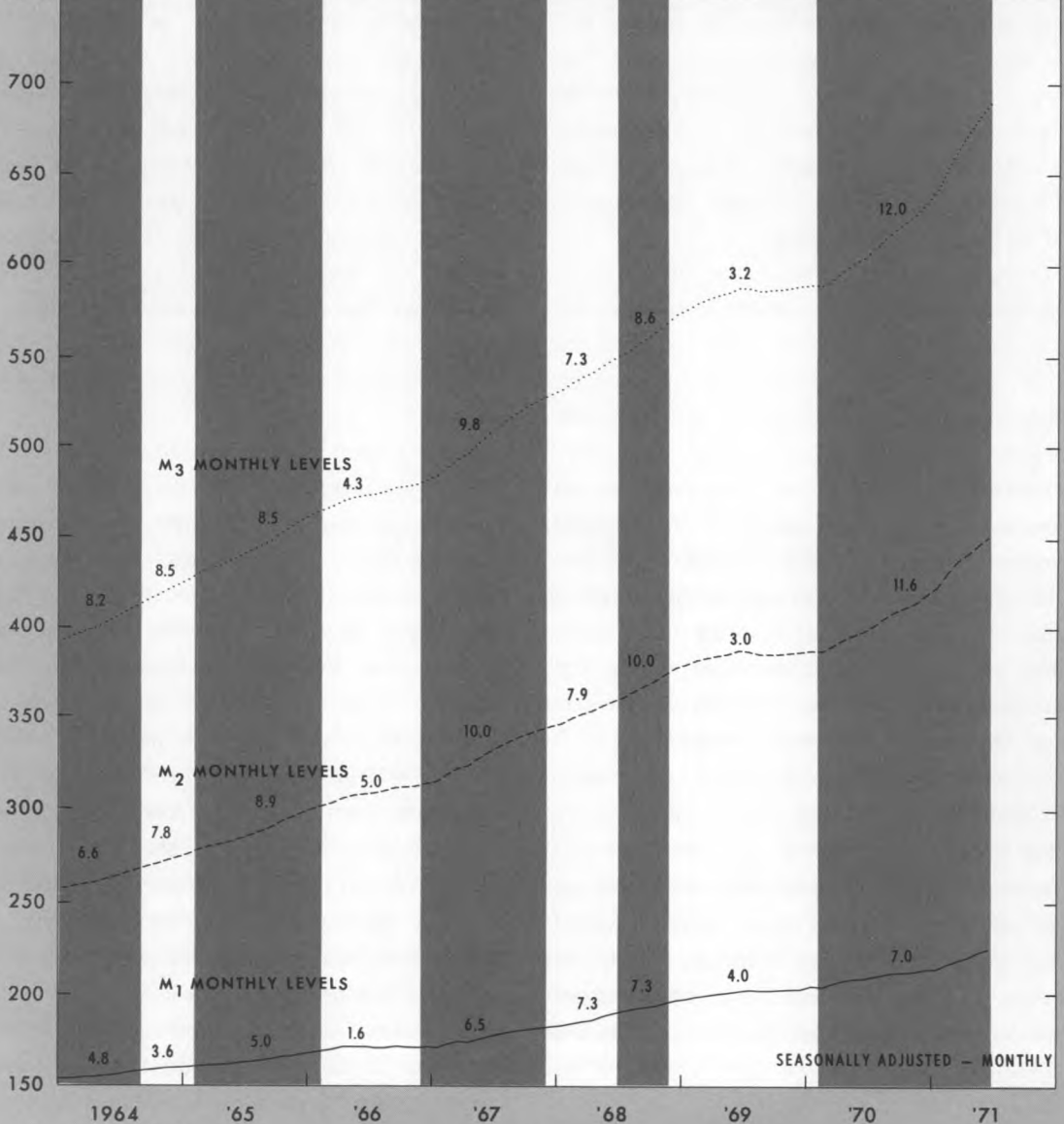
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Chart 2.

THREE MEASURES of MONEY SUPPLY: With Annual Rates of Growth For Selected Periods

BILLIONS OF DOLLARS

750

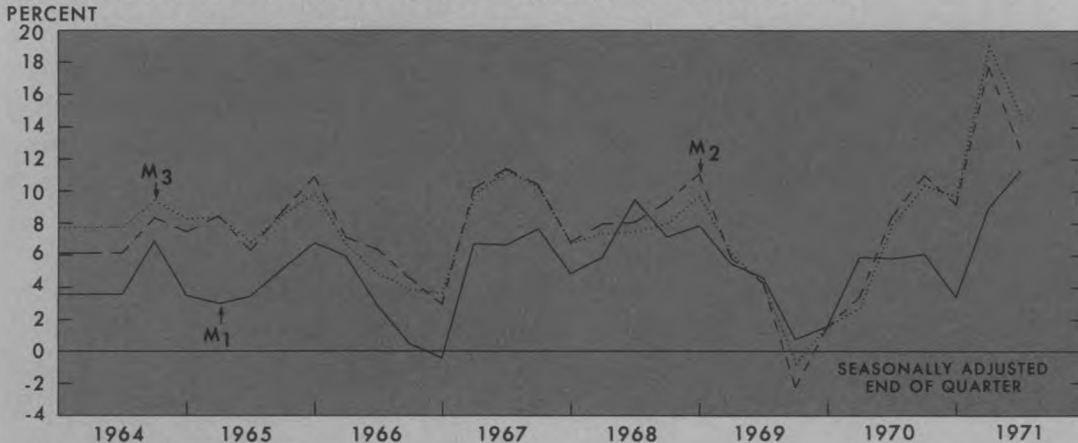


Last entry: June 1971

Source: Board of Governors of the Federal Reserve System

Chart 3.

ANNUAL RATES OF CHANGE IN THREE MEASURES OF MONEY SUPPLY



Last entry: 2Q '71

Source: Board of Governors of the Federal Reserve System

and loan associations, and deposits at mutual savings banks for extended periods, these deposits tend to become relatively less attractive to savers. Instead, funds are frequently placed directly with borrowers who are able and willing to pay a more attractive market yield. Under such conditions, the growth in savings deposits may slow or perhaps even decline. When such "disintermediation" or rechanneling of funds occurs, the rate of growth of M_1 may exceed that of either M_2 or M_3 . This type of situation existed for several months in the December 1968-January 1970 period, when the rate of growth of M_1 surpassed both M_2 and M_3 . Such money stock behavior, of course, does not always accompany a period of disintermediation. For several months in 1966, interest rate ceilings on savings deposits made them somewhat less attractive to savers. Nevertheless, the rate of growth of M_2 and M_3 exceeded the rate of increase of M_1 throughout the period. The disintermediation in 1966, however, was of shorter

duration than in 1969, and the spreads between money market rates and the ceilings were smaller.

More Recent Developments. The time period from February 1970 through June 1971 is of special interest in examining the behavior of the money stock. During this period, the Federal Open Market Committee (FOMC) placed somewhat greater emphasis on money than on money market conditions and encouraged moderate growth in both money and bank credit. Early in 1970, market interest rates began falling; eventually the rates fell below the effective interest rate ceilings on savings deposits at commercial banks and deposits at thrift institutions. In response to the falling interest rates, the quantities of funds flowing into savings accounts increased. This was reflected in the rapid growth rates of M_2 and M_3 after early 1970 (Chart 2).

On the other hand, M_1 exhibited different behavior. The measure grew at approximately a 6 percent annual rate during the first three quarters

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of 1970 (Chart 3). During the fourth quarter, however, the rate of growth of M_1 fell to a 3.4 percent annual rate. This shortfall was primarily a result of a temporary decline in the demand for currency and demand deposits because of the dampening effect of the automobile strike on economic activity. The growth of M_1 then accelerated sharply during the first six months of 1971, reflecting a rebound of economic activity from the strike, increased demand for currency and demand deposits, decreases in United States Government deposits, and a substantial increase in bank reserves.¹⁰

An examination of three measures of money and their sometimes conflicting behavior thus illustrates some of the difficulties in making judgments concerning changes in the money stock and raises the question: Why is there more than one measure of money?

DEFINING MONEY

On a conceptual level, there are several approaches that can be taken to define money. However, no matter what approach or combination of approaches is used, no unique, universally accepted concept or measure has resulted. The existence of the three measures of the money stock reflects this lack of general agreement concerning the precise definition of money.

The various approaches may be conveniently grouped into three general categories: (1) functional, (2) structural, and (3) empirical. The measures of money discussed earlier were pri-

marily derived by considering the functions of money. This functional approach, however, has failed to yield a single, unique concept of money. The two other approaches also present problems in defining money. All three approaches, of course, can be and are often combined; and depending upon the importance an analyst places on different functions and characteristics, varying groups of assets can be assumed to qualify as money.

The Functions of Money. The most widely used approach to defining money first involves identifying the functions of money and then isolating the assets that serve those functions. A basic function of money is its role as a medium of exchange (or use for transactions purposes). This function is fulfilled by those assets commonly accepted in exchange for goods and services. Money, however, also serves as a unit of value or unit of account, and the "value" of all goods and services is usually measured and expressed in terms of a monetary unit. Money is also widely used as a store of value. The holder of money is, in effect, a holder of purchasing power, which can be used as he sees fit for the things he wants to buy. Any valuable asset performs this function to one degree or another; however, certain assets have advantages over others in that they do not entail storage costs, do not become obsolete, and are more liquid than the other assets. Finally, money functions as a standard of deferred payment, or the unit in terms of which deferred or future payments are stated.

The functional approach to defining money necessitates focusing on the issue of whether it is possible to identify a unique set of assets that serves as an empirical counterpart to what are essentially abstract concepts. To be unique, these assets must meet some or all of the criteria established in the functional approach. It is also necessary that the assets selected possess a high

¹⁰For an explanation of the effect on the components of M_1 of changes in United States Government deposits see, "The Influence of Government Deposits on the Money Supply," *Economic Commentary*, Federal Reserve Bank of Cleveland, June 28, 1971.

degree of substitutability among themselves and exhibit a much lower degree of substitutability with alternative assets. The M_1 measure (currency and demand deposits) approximates money defined functionally as a medium of exchange. However, there is considerable difficulty in making a precise distinction between those assets that serve as a medium of exchange and those that do not. For example, travelers' checks also perform this function. In addition, assets such as savings accounts at commercial banks, although not usable themselves for transactions purposes, are so easily converted into transactions assets that the distinction is blurred.

This uncertainty has led some analysts to place increased emphasis on the other characteristics that monetary assets are thought to possess—liquidity, store of value, etc. Thus, the money supply is extended (as in M_2 and M_3) to include liquid assets that can be readily substituted for transaction assets and that possess some of the characteristics of money. Actually, there is a continuum of assets that, more or less, perform the various functions of money. Possible definitions and measures of the money supply are, therefore, not limited entirely to the three measures discussed in this article.

Alternative Definitions. The structural approach to defining money tends to emphasize the role of monetary control and, therefore, focuses on those assets over which the monetary authority has the greatest influence—such as high-powered money (currency in circulation plus reserves of member banks), bank reserves, or the monetary base. The approach also attempts to discern which of the groups of assets has the most stable demand and/or supply characteristics. For example, monetary control is enhanced if the demand for money is as stable as possible in terms

of a select number of explanatory variables (the rate of return on substitute assets, level of income, etc.). In this way, a change in the supply of money will have a predictable impact on these variables and not cause erratic shifts. In addition, the supply of money should be largely independent of demand so that a change in one variable will not cause an immediate offsetting change in the other. If monetary policy is to work through a group of assets called money, then this group of assets must have well-defined characteristics that facilitate a reasonable amount of control.

A third method of defining money is to take a purely empirical approach.¹¹ The analyst can seek groups of assets having specific, tested impacts on other economic variables. Again, if monetary policy is to work through the group of assets called money, changes in the supply of or demand for these assets must have discernible effects on such ultimate objectives as employment, income, and prices. A number of authors who define money in this manner have made statistical analyses of the relationships between different asset aggregates, which are consistent with the two preceding conceptual approaches, and income measures in an attempt to determine the closest empirical relationship. The conclusions drawn from empirical analysis, however, differ from study to study. The studies also fail to establish indisputable causation.

PROBLEMS OF MEASUREMENT

Money can be measured by considering a wide range of assets. On one hand, some experts believe that economic analysis and monetary control require a statistical measure of the money stock

¹¹This approach is favored by Milton Friedman and Anna J. Schwartz in *Monetary Statistics of the United States: Estimates, Sources, Methods*, (New York: Columbia University Press, 1970).

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that is closely related to the mechanism through which money is created or extinguished. Some economists view the monetary base or some measure of bank reserves as being more significant than the money stock measures discussed in this article. On the other hand, many analysts feel that the total liquidity of the economy is of greater significance. Consequently, they would probably consider M_3 to be the "best" of the three measures of money published and may actually prefer a broader measure, which might include such assets as travelers' checks, bank credit, large negotiable certificates of deposit, and Treasury bills, or even a measure of total liquidity.

The number of assets that can be included in a money stock measure is limited somewhat by the need for a measure that is timely. Too long a time period may be required to gather pertinent data on a particular asset for inclusion in a measure of money. Currently, figures on deposits at mutual savings bank and savings and loan shares, which are included in M_3 , are collected only once a month. Data on various other financial magnitudes are often less readily available. In addition to the time lags involved in the gathering of data, the measurement of money is also often limited by the necessity for estimating quantities of certain assets. This problem exists even in the calculation of the three money stock measures discussed in this article. For example, that portion of the demand deposit component accounted for by banks that are not members of the Federal Reserve System must be estimated by using benchmark measures, which can be calculated only twice a year as deposit data for these nonmember banks become available. The broader the measure of money, the more complex the problems of data collection become.

CONCLUDING COMMENTS

In recent years, the supply of money has received growing attention in economic theory, monetary policy considerations, and the financial press. However, disagreement still exists over the definition of money. The diversity of views concerning the appropriate concept of money arises from different approaches to defining money. If there were general agreement on the appropriate concept, however, problems associated with the derivation of the empirical counterpart to that concept would still exist in regard to the choice of assets to be included in a particular measure of money. The selection is complicated by the fact that some assets are capable of being converted easily into others.

The existence of alternative approaches to defining money, however, together with the measurement problems, help to explain why several money stock measures exist. If the analyst, as well as the policymaker, makes every effort to understand the information given by each of the measures, it should become apparent that the various money stock measures supplement each other, rather than act as substitutes for one another. Each measure gives a somewhat different aspect of the overall picture of monetary behavior. By assimilating the information given by the various measures, the analyst will obtain a more complete picture of money stock behavior. Although there may be times when one of the measures may be more accurate or useful than the other, no one measure is appropriate for all periods and all circumstances. Obviously, considerably more research is needed (and is underway) to improve our understanding of these important financial variables.



THE TRAVEL AND TRANSPORTATION COMPONENTS OF THE UNITED STATES BALANCE OF PAYMENTS

Richard D. Carter

During the past decade, international travel has increased at a phenomenal rate, and the expenditures of United States travelers abroad have exceeded spending by foreign visitors to the United States by ever increasing amounts. United States exports and imports of goods have also increased dramatically, and this, coupled with the growth in international travel, has resulted in a rapid increase in payments and receipts for transportation. In 1970, the combined travel and transportation components constituted the third largest item—following merchandise exports and direct investment income—in the export of goods and services and the second largest item—following merchandise imports—in the import of goods and services of the United States balance of payments. This article reviews the trends in United States travel and transportation expenditures and receipts during the past decade and the factors influencing these trends. It is the third in a series¹ covering the current account of the United States balance of international payments.

¹The previous articles are, "The Pattern of United States International Trade," *Economic Review*, Federal Reserve Bank of Cleveland, August 1970, and "Direct Foreign Investment of the United States," *Economic Review*, Federal Reserve Bank of Cleveland, March 1971.

AN OVERVIEW: TRAVEL AND TRANSPORTATION TRENDS

Total expenditures of United States residents traveling abroad and payments of passenger fares to foreign carriers, freight payments to foreign carriers, and foreign port expenses amounted to almost \$8.0 billion in 1970, an increase of about \$4.2 billion from 1961 (see Table I). During the same period, United States receipts from comparable transactions increased from more than \$2.7 billion to nearly \$6.0 billion. Thus, the net deficit in the travel and transportation components of the United States balance of payments almost doubled from about \$1 billion to nearly \$2 billion between 1961 and 1970.

Although this deficit on travel and transportation has contributed to the current United States balance of payments problems, it cannot be viewed in isolation. The travel and transportation components should be considered as integral parts of the overall balance of payments account. There are interrelationships among the various components of the balance of payments—although many are difficult, if not impossible, to measure—and they should be kept in mind when evaluating any one component. For example, even though the combined travel and transportation components

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TABLE I

**Combined Travel and Transportation Components
of the United States Balance of Payments
1961-1970**
(Billions of Dollars)

Year	Payments	Receipts	Net
1961	-\$3,728	\$2,752	-\$ 976
1961	-4,067	2,921	-1,146
1963	-4,430	3,130	-1,300
1964	-4,675	3,524	-1,151
1965	-5,112	3,794	-1,318
1966	-5,579	4,198	-1,381
1967	-6,188	4,436	-1,752
1968	-6,279	4,721	-1,558
1969	-6,950	5,170	-1,780
1970	-7,957	5,978	-1,979

Source: U. S. Department of Commerce

have been in persistent deficit during the last decade, they exert some positive, counterbalancing influence on other sectors of the balance of payments account. Travel spending abroad by United States residents can lead indirectly to the expansion of United States exports, since dollars spent in other countries represent a source of foreign exchange with which the recipient nation can purchase United States goods and services. Travel dollars are particularly important to developing nations in Latin America, the Middle East, Asia, and Africa because their methods of earning dollar exchange are limited. Increases in the number of United States residents traveling abroad also expand the business activities of foreign carriers who, in turn, may purchase a large share of their equipment from the United States aircraft industry. Of course, in addition to the economic influences exerted by international travel, important "invisible" benefits are derived from the exposure to new and different cultures of both United States travelers abroad and foreign visitors to the United States that result in better understanding of people, events, and conditions in

our ever shrinking world. These "invisible" benefits of travel, in particular, and transportation expenditures and receipts are important considerations in evaluating the impact of these components on the balance of payments.

TRAVEL COMPONENT

Definition. Payments associated with travel in foreign countries by United States residents are recorded in the balance of payments as imports of goods and services (outflows of funds), while receipts from foreigners traveling in the United States are recorded as exports of goods and services (inflows of funds). The travel component of the import account measures foreign expenditures of United States travelers for lodging, food, transportation within foreign areas, entertainment, personal purchases, and other outlays incidental to a trip abroad. It also includes passenger fares paid to Canadian and Mexican carriers by United States residents visiting these countries. The travel component does not, however, include expenditures of United States Government and military personnel stationed abroad or their dependents. These expenditures are included in the appropriate government transactions component of the balance of payments. Expenditures of United States citizens living abroad are likewise excluded since such citizens are classified as foreigners for balance of payments purposes. Also excluded are transoceanic passenger fares, which are part of the transportation component. Distinctions similar to those described above are made in measuring expenditures by foreign residents traveling in the United States, including passenger fares received by United States carriers from Canadian and Mexican visitors. These outlays are recorded as receipts from tourists in the export travel component.

TABLE II

Travel Payments and Receipts in the United States Balance of Payments
Selected Years
(Millions of Dollars)

Area	Transaction	1961	1964	1967	1970
World*	Payments	-\$1,785	-\$2,211	-\$3,195	-\$3,953
	Receipts	<u>947</u>	<u>1,207</u>	<u>1,646</u>	<u>2,319</u>
	Net	-838	-1,004	-1,549	-1,634
Western Europe	Payments	-600	-758	-944	-1,310
	Receipts	<u>133</u>	<u>157</u>	<u>227</u>	<u>318</u>
	Net	-467	-601	-717	-992
Eastern Europe	Payments	- 4	- 9	-14	-24
	Receipts	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>
	Net	- 4	- 9	-14	-24
Canada*	Payments	-425	-550	-1,070	-1,049
	Receipts	<u>451</u>	<u>448</u>	<u>575</u>	<u>885</u>
	Net	26	-102	-495	-164
Mexico*	Payments	-370	-490	-590	-720
	Receipts	<u>200</u>	<u>342</u>	<u>457</u>	<u>545</u>
	Net	-170	-148	-133	-175
Other Latin American and Western Hemisphere	Payments	-72	-229	-365	-480
	Receipts	<u>102</u>	<u>62</u>	<u>263</u>	<u>334</u>
	Net	30	-167	-102	-146
Japan	Payments	n.a.	-54	-58	-97
	Receipts	n.a.	<u>25</u>	<u>42</u>	<u>101</u>
	Net	n.a.	-29	-16	4
Australia, New Zealand South Africa	Payments	n.a.	-14	-22	-40
	Receipts	n.a.	<u>23</u>	<u>32</u>	<u>41</u>
	Net	n.a.	9	10	1
Other in Asia and Africa	Payments	n.a.	-112	-132	-233
	Receipts	n.a.	<u>38</u>	<u>50</u>	<u>95</u>
	Net	n.a.	-74	-82	-183

n.a. Not available.

* Includes passenger fares for Canada and Mexico.

Source: U. S. Department of Commerce

Travel Payments and Receipts. Both travel payments by United States residents traveling abroad and travel receipts from foreign visitors to the United States showed an almost continuous

increase during the 1961-1970 period (see Table II). The only interruption occurred in 1968 when travel payments fell 5.4 percent from the level of the previous year. This decrease, however, was

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more a reflection of the sharp increase in 1967 travel payments than a deviation from the general long-term uptrend. Canada's Expo-67 attracted large numbers of United States visitors and was the major reason for the 1967 jump in overseas travel payments. Because some foreign travelers were diverted from the United States to Canada, receipts from foreign visitors also eased in 1967. Largely as a result of this one event, the net deficit in the travel component of the United States balance of payments increased nearly \$500 million in 1967, compared with relatively small increases in previous years.

In 1968, the travel deficit narrowed as payments decreased from their high 1967 level and travel receipts continued to increase. In 1969 and 1970, however, the deficit in the travel component of the balance of payments resumed its relatively rapid rate of increase, largely because the number of United States residents traveling abroad increased at a faster pace than the number of foreign visitors to the United States. Rising travel costs, other than air fares, also contributed to the increased deficit. In 1970, the travel deficit amounted to \$1.6 billion, compared with \$838 million ten years earlier.

Numbers and Types of International Travelers.

The number of United States residents traveling abroad (excluding Mexico and Canada) increased by about 234 percent during the 1961-1970 period (see Chart 1). The largest part of this increase took place between 1966 and 1970 when the number of overseas travelers from the United States rose by more than two million or double the increase for the previous five years.

Travel to the European-Mediterranean area and "other areas" (including the Pacific, Asia, and Africa) increased at a faster pace than travel to the West Indies, Central America, and South America,

particularly during the latter part of the period (see Chart 1).

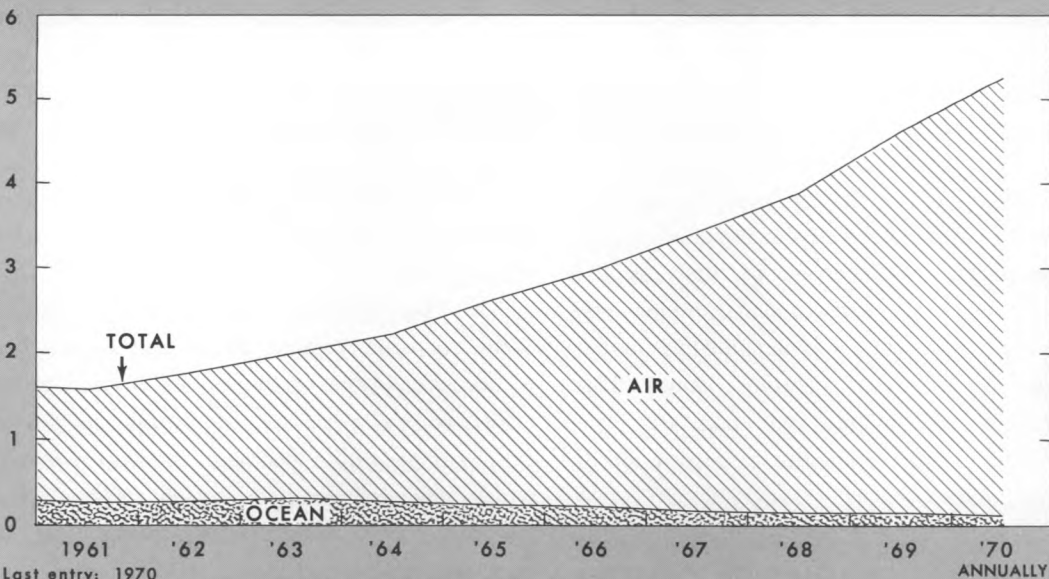
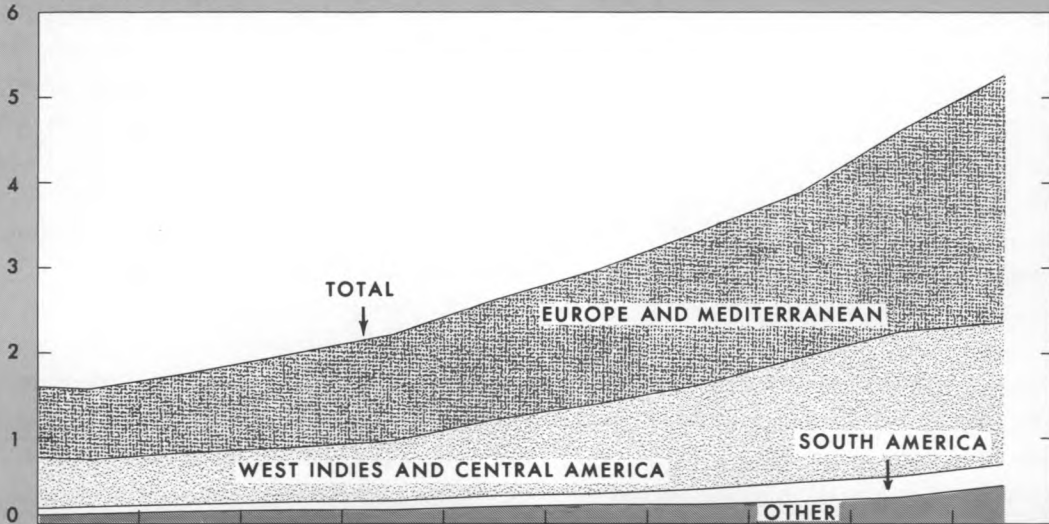
Although the recent recession in the United States did not slow the growth in numbers of overseas travelers, it did bring about some shift in the travel destinations. Travel to the European-Mediterranean area and "other areas" continued to increase rapidly in 1970, while travel by United States residents to South America increased only slightly and travel to the West Indies and Central America actually declined. Reductions in air fares across the Atlantic, particularly student fares, and the rapid growth of charter flights and package tours stimulated travel to Europe. Rising prices of Caribbean tourist services, coupled with the lower Atlantic air fare structure, were considered to be factors in the leveling of tourist travel to the West Indies area. Japan's Expo-70 was a major factor in the growth of travel to "other areas," primarily the Pacific and Far East.

Although the total number of United States residents traveling abroad increased dramatically during the 1961-1970 period, both the number and the proportion traveling by ocean declined (see Chart 1). In 1961, 17 percent traveled by ocean; while in 1970, ocean travel accounted for only slightly more than 2 percent of the total number of Americans traveling abroad. As a result of this shift, which reflects the easing in air fares and a sharp increase in charter flights and package tours, United States residents have been taking more, but shorter, trips abroad. For example, the average length of stay of American travelers to the European-Mediterranean area dropped from 45 days in 1963 to 27 days in 1970 (see Table III). This, of course, also influenced the average expenditures of these travelers. In 1963, each United States traveler to the European-Mediterranean area spent an average of \$680,

Chart 1.

**U. S. TRAVELERS* TO OVERSEAS COUNTRIES,
BY DESTINATION AND MEANS OF TRANSPORTATION**

Millions of travelers



Last entry: 1970

*Excludes cruise travelers and border areas of Canada and Mexico.

Source: U. S. Department of Commerce

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TABLE III

Length of Stay and Expenditures
of United States Travelers
European—Mediterranean Area
1961-1970

Year	Average Stay (Days)	Average Expenditures (Dollars per Stay)
1961	n.a.	\$757
1962	n.a.	692
1963	45	680
1964	41	637
1965	39	611
1966	37	583
1967	33	563
1968	30	512
1969	29	490
1970	27	490

n.a. Not available.

Source: U. S. Department of Commerce

exclusive of transatlantic transportation costs. In 1970, the average expenditure dropped to \$490 (see Table III).

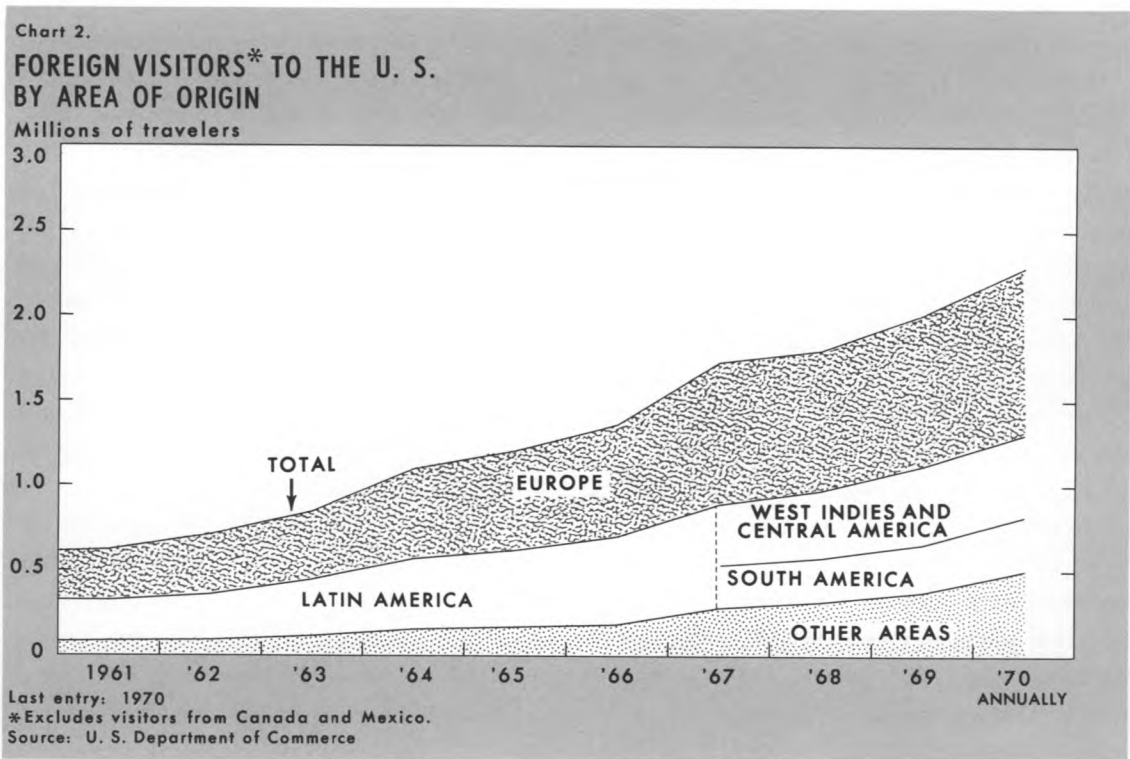
The type of individual traveling abroad is reflected in passport statistics. In 1970, 2.2 million United States passports were issued.² Of the passport recipients, 43 percent lived in just seven metropolitan areas, including New York, Los Angeles-Long Beach, Chicago, Washington, D. C., Boston, Detroit, and San Francisco-Oakland; 16 percent alone indicated they lived in the New York Metropolitan Area. By occupation groups, students made up 20 percent of total passport recipients in 1970; and students, housewives, teachers, and clerk-secretaries combined accounted for nearly 48 percent. Through June 1971, approximately 9.3 million valid passports were outstanding, which represents a large pool of potential foreign travelers.

²For further details on passport recipients, see "Summary of Passport Statistics Calendar Year 1970 Supplement No. 1," Passport Office, Department of State, Washington, D. C.

The number of foreign visitors to the United States, excluding those from Canada and Mexico, increased more rapidly during the 1961-1970 period than overseas travel by United States residents (267 percent compared with 234 percent). However, the number of foreign visitors to the United States was still less than one-half the number of United States travelers abroad (see Charts 1 and 2). The largest number of foreign visitors to the United States arrived from the European-Mediterranean area. The most rapid increase, however, has been in the number of visitors from "other areas;" that is, areas other than Europe and Central and South America.

In an attempt to alleviate the basic travel imbalance, efforts were made to encourage foreign travel to the United States, rather than limit American travel abroad. In 1961, the *International Travel Act* was passed for the purpose of strengthening domestic and foreign commerce by establishing the United States Travel Service within the Department of Commerce. In 1965, the Cabinet Committee on Travel Planning and Promotion and Discover America, Inc. (formed as a private, nonprofit organization) were established by President Johnson to bring the various elements of the United States travel industry together in an effort to increase the size of the United States tourist market.

The "gap" between the number of United States residents traveling abroad and the number of foreign visitors to the United States can be attributed to a variety of factors, including: (1) higher per capita income in the United States, which tends to stimulate foreign travel; (2) the language barrier and relatively higher cost of tourism in the United States; and (3) the fact that the United States travel industry is not structured to handle large numbers of middle-income, non-



English speaking visitors. Although travel by residents of other countries is expanding rapidly as a result of improved income levels, particularly in Europe, they appear to prefer traveling to countries other than the United States because of lower costs and fewer language problems.

Geographic Distribution of Travel Payments and Receipts. Reflecting the ease of travel to and from Canada and Mexico, United States travel payments to and receipts from these countries are larger than those with other individual countries. Travel payments to both Canada and Mexico accounted for 45 percent of total United States travel outlays in both 1961 and 1970; however, the proportion paid to Canada increased during the period, while Mexico's share declined. Travel receipts from these countries accounted for 68

percent of total travel receipts in 1961 and 61 percent in 1970. During the 1961-1970 period, travel payments to Canada increased at a faster pace than travel receipts, but the opposite was true in the case of Mexico (see Table II).

In 1962, the United States shifted into a deficit position in the travel account with Canada. This shift resulted, in part, from a devaluation of the Canadian dollar, which stimulated United States travel to Canada and made Canadian visits to the United States less attractive, and a reduction of the duty free exemption for Canadians who were traveling abroad. In addition, the 1962 Seattle Fair stimulated United States travel payments to Canada by attracting millions of Americans who also visited the western provinces of Canada. Since 1962, the United States has continued to run a

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deficit with Canada—the deficit taking a sharp jump in 1967 as a result of Expo-67 in Montreal.

United States travel payments to the group of countries that make up Western Europe represent another large part of total payments, while travel receipts from this geographic area are relatively small compared with travel receipts from Canada and Mexico. As a result, a major share of the deficit in the United States travel component of the balance of payments has been due to travel deficits with Western Europe. In 1961, 56 percent of the deficit in the United States travel account was due to imbalances with Western Europe; and by 1970, the travel deficit with Western Europe represented 61 percent of the total deficit in the travel account of the United States balance of payments. In only two of the last ten years (1966 and 1968) has the deficit in this account with Western Europe been smaller than during the previous year.

Many obstacles stand in the way of overcoming the deficit with Western Europe. Comparative incomes are lower in Europe than the United States, and Europeans are less able to pay the cost of transatlantic flights. Many potential European visitors fear high United States prices, problems associated with exchanging currencies, and a language barrier. As a result of these problems, the deciding factor for many foreign visitors is whether or not they have friends or relatives in the United States with whom they can stay.

Although the number of United States residents traveling abroad continued to increase in both 1966 and 1968, there was some diversion of travel away from Europe toward Mexico, the Caribbean, and South America. An economic slowdown in the United States in 1966 also may have influenced the dollar amount of average tourist expenditures in Europe. The 1968 slowdown in travel payments

to the Western European countries reflects, in part, civil disturbances abroad during the first half of the year. United States travel expenditures in France were affected the most by these disturbances, which also had an influence on travel to other European countries, particularly those in the Mediterranean area.

In the remainder of the world, a slight surplus in the travel account of the United States balance of payments has persisted with Australia, New Zealand, and South Africa as a group. A small surplus also developed in 1970 with Japan, reflecting the increase in foreign travel by the Japanese, which resulted, in part, from the rapid growth rate of the Japanese economy and the stimulus that affluence gives to both personal and business foreign travel.

TRANSPORTATION COMPONENT

Definitions. As with the travel component, payments associated with foreign transportation expenditures are recorded in the United States balance of payments account as imports of goods and services (outflows of funds) and receipts of transportation expenditures of foreigners are recorded as exports of goods and services (inflows of funds). The transportation component of imports measures passenger fares paid to foreign ocean and air carriers by United States residents for transoceanic transportation; freight payments to foreign-operated ocean, air, and other carriers (including rail and Great Lakes shipping in Canada) for the international transportation of United States imports; operating expenditures by United States carriers in foreign ports; and payments made to foreign owners for the charter of vessels and the rental of freight cars. Passenger fares for travel between the United States and Canada and between the United States and Mexico

are not included, and freight payments on United States exports carried by foreign carriers are not included since they do not result in transportation payments to or from United States residents. Foreign port expenditures (both ocean and air) by United States carriers are payments for landing services, fuel, and a variety of other expenses such as wages to foreign personnel and passenger food and services in foreign ports.

United States receipts for transportation services are composed of passenger fares received by United States ocean and air carriers from foreign residents traveling between the United States and foreign countries and between two foreign countries. The transportation component also measures the freight revenues of United States ocean, air, and other carriers (including rail, pipeline, and Great Lakes shipping) for the movement of United States exports; freight payments on goods transported between two foreign countries; port expenditure receipts from goods and services purchased in the United States by foreign transportation companies; and receipts from foreign operators for the charter of vessels and the rental of freight cars.

Transportation Payments and Receipts. United States transportation payments and receipts are directly related to the volume of merchandise exports and imports, the number of United States and foreign residents traveling abroad, and the nationality of the carrier that provides the transportation services. Between 1961 and 1970, the value of United States merchandise exports increased from about \$20 billion to \$42 billion, and the value of imports advanced from about \$15 billion to nearly \$40 billion. As previously noted, the number of international travelers also advanced sharply during this period. As a result of

these factors, total United States transportation payments increased from \$1.9 billion in 1961 to \$4.0 billion in 1970, and total transportation receipts advanced from about \$1.8 billion to nearly \$3.7 billion during the same period (see Table IV).

The various transactions measured by the transportation component of the United States balance of payments are interrelated. For example, during the past two decades, there has been a sharp decrease in the proportion of United States exports and imports transported by United States carriers (see Table V). This tended to increase the size of freight payments to foreign carriers. However, because more foreign ships were calling at United States ports, United States receipts from port expenditures of these foreign carriers increased (see Table IV). Also, the rapid growth in the number of United States residents traveling abroad has greatly increased passenger fare payments to foreign air carriers (foreign travelers tend to patronize their own countries' airlines, while United States travelers tend to be fascinated by the experience of flying on a foreign airline). This increase has been somewhat offset by the port expenditures paid by these foreign carriers and also by some growth in airfreight receipts of United States carriers. Both transportation payments and receipts have, however, been influenced by higher costs, both in the United States and abroad.

Despite these counterbalancing forces, the deficit in the transportation sector of the United States balance of payments trended upward during the 1961-1970 period (see Table IV). The continuous increase in the surplus of the port expenditure component has not been sufficient to totally offset growing deficits in the other components, however.

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TABLE IV

United States Transportation Transactions
Selected Years
(Millions of Dollars)

	<u>1961</u>	<u>1964</u>	<u>1967</u>	<u>1970</u>
Total transportation payments	-\$1,943	-\$2,464	-\$2,993	-\$4,004
Total transportation receipts	<u>1,805</u>	<u>2,317</u>	<u>2,790</u>	<u>3,659</u>
Net	-138	-147	-203	-345
<u>By Type of Transportation</u>				
Ocean transportation payments	-1,382	-1,717	-1,879	-2,319
Ocean transportation receipts	<u>1,331</u>	<u>1,732</u>	<u>1,851</u>	<u>2,258</u>
Net	-51	15	-28	-61
Air transportation payments	-481	-641	-1,020	-1,588
Air transportation receipts	<u>383</u>	<u>476</u>	<u>820</u>	<u>1,255</u>
Net	-98	-165	-200	-333
<u>By Type of Transaction</u>				
Passenger fare payments	-506	-635	-830	-1,215
Passenger fare receipts	<u>183</u>	<u>234</u>	<u>371</u>	<u>553</u>
Net	-323	-401	-459	-662
Freight payments	-768	-984	-1,222	-1,508
Freight receipts	<u>625</u>	<u>820</u>	<u>800</u>	<u>987</u>
Net	-143	-164	-422	-521
Port expenditures abroad	-399	-512	-598	-808
Port receipts in United States	<u>898</u>	<u>1,146</u>	<u>1,493</u>	<u>1,942</u>
Net	499	634	895	1,134
Other payments	-270	-333	-343	-473
Other receipts	<u>99</u>	<u>117</u>	<u>126</u>	<u>177</u>
Net	-171	-216	-217	-296

Source: U. S. Department of Commerce

SUMMARY

The travel and transportation components of the United States balance of payments have been in persistent deficit during the last decade, with the deficit growing from about \$1 billion in 1961 to nearly \$2 billion in 1970. The upward trend in numbers of international travelers has resulted from a growth of personal income in the United States and in foreign countries, coupled with decreases in air fares, which have attracted a larger

segment of the population to overseas travel. The rapid growth in world trade during the 1961-1970 period also contributed to the increase in transportation payments and receipts.

The advent of lower air fares, charter flights, and special tours has brought about a trend toward shorter overseas stays and, consequently, lower average expenditures per trip. Economic slow-downs during the period did not appear to hinder the growth in numbers of United States residents

TABLE V

Net Registered Tonnage in United States Ports
 Selected Years
 (Millions of Tons)

Year	Tonnage			Percent United States
	Total	United States Register	Foreign Register	
Entered				
Average 1946-1950	87	46	41	51%
1955	128	34	94	27
1960	162	30	132	19
1965	209	34	175	16
1967	221	31	190	14
1968	230	30	200	13
Cleared				
Average 1946-1950	87	45	42	52
1955	129	34	95	27
1960	167	31	136	19
1965	209	34	175	16
1967	220	31	189	14
1968	230	31	199	14

Source: U. S. Department of Commerce

traveling abroad, but did appear to have an influence on average expenditures, and resulted in some shifts in the destination of travelers.

Despite the growing deficit, the travel and transportation components of the United States balance of payments cannot be viewed independently from the other components of the

account. There are, for example, some offsetting influences such as increased purchases of United States goods and services by nations that earn United States travel dollars. The travel and transportation component of the United States balance of payments must, therefore, be viewed as an integral part of the overall balance of payments account.

