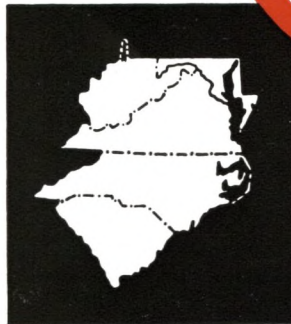


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Economic Aspects of Health Care and Medical Insurance Programs

Economists have recently applied some of the tools of economic analysis to the health industry. Their analyses have included studying the welfare implications of the health insurance system and its effect on the efficiency of the price system in general. The purpose of this article is to explain some of the economics of health care and medical insurance programs by focusing on a recent proposal made by the Committee for Economic Development. This proposal would expand and reorganize the system of health insurance in the United States.

Medical Care in the U. S. In 1950, only 4.6 percent of the Gross National Product was health related. By 1972, 7.6 percent of GNP stemmed from purchases of health care. The rising demand for care has been accompanied by rising prices. From 1962 to 1972, when all consumer prices were increasing 38 percent, the medical care component of the Consumer Price Index increased 59 percent.

Physicians In 1950, there were 1.49 physicians per thousand persons in the United States. In 1970, there were 1.7 per thousand. Although the total number of physicians per capita has been rising, the distribution of physicians by specialty has changed. The number of general practitioners, pediatricians, and specialists in internal medicine per thousand persons fell from 0.75 in 1950 to 0.50 in 1970. The CED concluded in their study that there is presently a surplus of surgeons and a shortage of physicians who supply primary medical care (general practitioners, obstetricians, pediatricians, gynecologists, and specialists in internal medicine). Although it is difficult to document for certain whether surgeons are in surplus, the data indicate that purveyors of primary care may be in short supply. If so, an unfortunate allocation of medical resources has occurred. Almost 90 percent of all visits to physicians are visits to providers of primary care. These physicians, moreover, provide initial access to specialists and/or to hospital care in the current system.

Hospitals Between 1963 and 1970, the number of hospital beds per thousand persons increased 16 percent, an extraordinary rate of growth. Although

the available beds per thousand have increased substantially, price behavior would indicate a shortage. Throughout the sixties, per diem charges for hospitals have been averaging rates of increase of 12-16 percent per annum. As will be noted subsequently, however, many observers contend that price increases in hospital rates are largely determined by the level of health insurance coverage. The CED study argues that, price behavior notwithstanding, there is a surplus of hospital beds at the present time.

Many observers have also indicated that hospitals seem to underutilize expensive capital equipment. The DeBaKey Commission on Heart Disease, Cancer, and Stroke found that 30 percent of the 777 hospitals equipped to perform open heart surgery had no cases during the year of the study. Of the 548 that did have cases, 87 percent had an average of less than one operation per week. The Commission found similar underutilization of Cobalt radiation treatment facilities, which are also extremely expensive. The CED, which was very critical of such practices, also noted the tendency of almost all hospitals to underutilize treatment facilities over weekends. Treatment in almost every hospital in the country virtually halts on Saturday and Sunday, even though patients remain in the institution over that interim at no reduction in rate.

In the past, health insurance plans through their benefit policies have encouraged treatment in hospitals rather than in physicians' offices and inpatient rather than outpatient status. Both policies have been expensive. Recent steps have been made by insurance groups to remedy this situation, however. Blue Cross plans, for example, now include outpatient options for certain services. These options have tended to reduce hospital stays and may, in the long run, substantially reduce the total cost of hospital care. In the short run, they probably will not reduce costs by a large amount, since a large percentage of hospital expense (including many salaries) is fixed.

General Status Several critics have argued that the health insurance system combines with certain supply rigidities to make health care more expensive than is necessary. These arguments will be noted

later. Almost no critic of the medical care system in the United States, however, has argued that excellent medical care is unavailable to the majority of Americans. Some have argued, however, that medical care for the very poor is not adequate. At the present time, health care for the very poor is provided by charitable actions on the part of physicians and hospitals, by clinics connected with medical schools that exchange free care for the opportunity to give the students and interns practical experience, and, of course, through Medicare and Medicaid.

The CED Proposal The Committee for Economic Development recently released a pamphlet, "Building a National Health-Care System." The CED is an organization of businessmen and scholars, and its Subcommittee on Health Care Problems includes some of the most respected corporate leaders in America, two university presidents, and one vice president. Their pamphlet recommends the establishment of a mandatory national health insurance system. All employed persons and their families would receive a basic level of protection through expansion of existing health insurance programs. The aged unemployed would receive benefits through an extended Medicare program. Benefits to all other unemployed persons and their families would be administered through Federally-sponsored community trusteeships. The employment plans would be financed by employer and employee contributions; the community trusteeships by general revenue support for the poor; and the plan for the aged, Medicare, as it is presently financed.

A system of co-payments and premiums, which would be related to the family income level, would be devised. The required payments would be gradually reduced for lower income families, and those families with incomes below poverty levels would be exempted from all charges. A National Health Advisory Board would be established to coordinate the existing programs. Temporary governmental price controls would be adopted for the transition period. Finally, a regional planning and administrative structure would be developed to coordinate the regional health care needs with the planning of new facilities.

The CED proposals, if adopted, could lead to drastic changes in the medical care industry. The price control program and the development of national and regional planning boards probably represent the most fundamental philosophical changes for the organization of the industry.

Economic Implications of Health Insurance

Health insurance has been the subject of much recent analysis in economic literature. Many economists have argued that the present health insurance system is not an efficient method of meeting consumer needs and that it has contributed to the inflated price of medical care during recent years. Martin Feldstein, an economist and professor at Harvard University, recently published an article [3] that concludes that the present system of health insurance produces a net welfare loss for the economy. Chart 1 illustrates his argument.

This chart, which depicts demand for medical care, has price of medical services on the vertical axis and quantity demanded on the horizontal. Suppose that before insurance, consumers wanted quantity Q_0 of medical care at price P_0 , which was exactly equal to the cost of providing a unit of service. At point A, the market is said to be at equilibrium. Now introduce health insurance. If the health insurance system were structured so that the immediate out-of-pocket expense to the patient with insurance amounted only to a price P_1 per unit of medical service, he would demand a greater quantity of benefits, Q_1 . Since the cost per unit of care is P_0 , however, the insurance system pays the difference shown by rectangle ABCD in the chart. The welfare loss from price distortion is equal to the area of triangle ABD. Individuals included in the health insurance plan thus buy more medical services than they would have been willing to buy had they known the true cost.

The price distortion effect as presented thus far can be justified as a normal and legitimate cost of insurance, i.e., the area of triangle ABD represents the price that the consumer pays for averting risk. Through a complex econometric analysis, however, Feldstein shows that in most circumstances the loss to the consumer outweighs the benefit that he gains from averting risk.

An individual who is completely risk averse cannot by definition suffer a welfare loss from insurance. Such persons, however, are extremely rare. An example of a person who is almost completely averse to risk is the individual who would refuse to bet on the flip of a coin because he might lose a penny even if he could win a million dollars, i.e., he refused a 50-50 chance at 100 million to one odds.

Feldstein limits the degree of risk aversion in his analysis to that of an individual who requires two to one odds to take a 50-50 chance. This maximum is probably sufficient for the great majority of persons, especially since most of the premium dollar of the health plans currently in use is not expended for

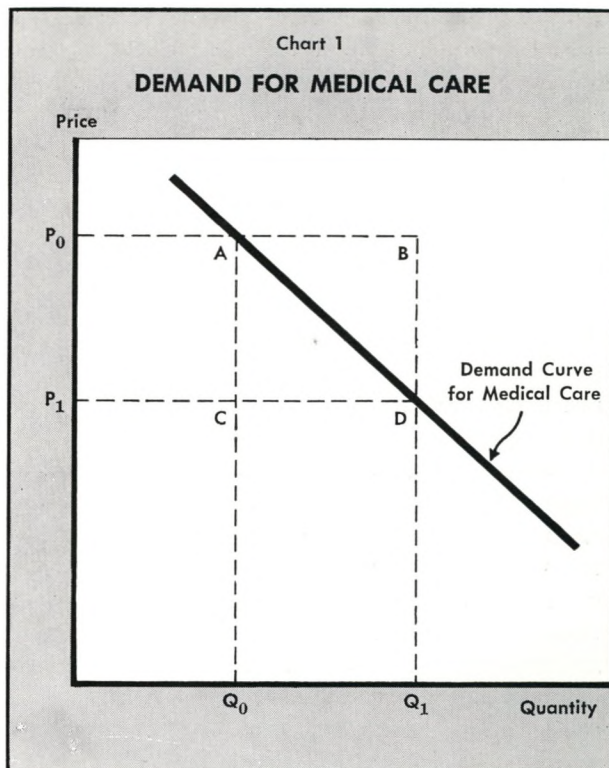
coverage of serious long-term illnesses. The consumer is probably quite averse to risking a loss of his entire asset portfolio if he is faced with a "dread disease." He is probably less averse to bearing the risk of lesser expenses.

In any event, Feldstein estimates the total net welfare loss from health insurance to range as high as \$4 billion per year, the exact estimates depending upon risk, demand, and quality shift parameters. The only case in which he finds a net welfare gain from the insurance system is that in which better insurance coverage *induces* better quality medical care, resulting in a shift in consumer demand for medical care. Moreover, for net welfare to be positive, the shift in demand must be large, so large that this situation is not likely. For a more detailed discussion, see Feldstein, [3, p. 275].

Feldstein's price distortion analysis applies even if one assumes all health plans are properly administered and geared to cut costs of treatment. To summarize his argument, if there is an insurance plan and if the price of medical service is related to the quantity demanded, the consumer will purchase more medical services than he would if he knew their true cost to him. This additional purchase arises because, with insurance, the out-of-pocket costs of medical care for each individual are lower than the total costs of care. Moreover, in all reasonably realistic cases this price distortion effect costs the consumer more than he would be willing to pay to avoid risk if he were making full information direct choices.

Feldstein's conclusions rest upon an important assumption about the demand for medical care, that quantity is responsive to price changes (in economic terminology, that demand is not totally inelastic). This assumption has been found to be realistic by another economic study, that of Rosett and Huang [6], who used sophisticated econometric techniques to measure the responsiveness of quantity demanded to price of medical care. Their analysis concluded that, depending on income level, consumers would increase their purchases of medical care from 3.5 percent to 15 percent as a result of a 10 percent decline in the price of the service. The findings were somewhat surprising, because they even found some relationship between quantity and price for relatively high income patients. Examples given of increased demands for services attributable to price distortions include length of stay in the hospital, type of room, hospital treatment rather than treatment in a physician's office, inpatient versus outpatient status, etc.

In general, economists have argued that the present health insurance system promotes "Cadillac" quality



medicine when consumers may have preferred "Vega" style care. Also, consumers are naturally most averse to risk and most interested in insuring themselves against long-term physically and financially catastrophic illnesses. While many insurance plans have improved their long-term coverage in recent years and many are introducing options designed to remedy the situation, Feldstein is probably still accurate when he maintains that "health insurance provides very complete reimbursement for relatively small and moderate hospital bills but is generally quite inadequate for the small proportion of families that have very large expenses" [3, p. 276]. A 1963 national survey found that among the insured families with medical expenditures in the top 20 percent of the national distribution, only one-third received insurance benefits exceeding one-half of their expenditures, and one-third received benefits less than one-fifth of their expenditures [3, p. 276].

Physicians Other recent articles investigate the effects of a comprehensive health insurance plan on the pricing of physicians' services, [2, p. 5], following the general thesis that physicians' fees are greatly influenced by their patients' ability to pay. For example, it is argued that a physician experiencing an excess demand for his services would be much more likely to raise his fees if the excess demand were attributable to an increase in the community's overall

coverage by health insurance than if the increased demand were due to the death, retirement, or exodus of another physician in the community. Thus, it is postulated that physicians are not profit maximizers but are oriented to community service. Since most physicians have excess demand for their services at existing rates, increased insurance coverage or more generous benefit payments will nearly always immediately increase the price of physicians' services.

In examining the supply side of the pricing equation, one of the articles found that physicians as a group are characterized by the so-called backward-bending supply curve. This finding indicates that many physicians substitute leisure for work when their income rises, which implies that price increases for physicians' services can mean decreases in the quantity of services supplied. For the proper operation of the price system, this result is perverse, at least in the short run. A further implication is that increased health insurance coverage or more generous benefit payments can result in fewer physicians' services offered.

Hospitals Other recent studies have investigated the operation of the hospital [4, p. 5]. Economists have exhaustively analyzed the welfare implications of the profit-making firm. Until recently, however, the not-for-profit institution was largely ignored, partially because there were relatively few around. Such institutions, however, have become more and more prevalent and economists have turned their attention to them. In an article, "The Not-for-Profit Hospital as a Physician's Cooperative," Pauly and Redisch examine nonprofit hospitals for efficiency in meeting consumer demands at minimum cost. Their conclusions are not encouraging.

The typical nonprofit hospital is governed by a Board of Directors drawn from the community at large and is usually composed of volunteers who serve purely as a community service project. The board usually has little expertise in hospital administration or medicine. Most of the policies, therefore, are determined by the hospital administrator and the physicians that practice in the hospital.

The hospital administrator can gain prestige, other job offers, and higher income by becoming known as the administrator of an excellent medical facility having a high quality staff of physicians. The incentive system for the hospital administrator, therefore, induces him to upgrade the quality of the institution whenever he can. Oftentimes quality upgrading is synonymous with acquisition of the latest capital equipment.

The physicians on the staff, at least according to Pauly and Redisch, also are interested in maximizing the quality of the institution. On the one hand, they gain more prestige by practicing in such an institution. On the other hand, they can better satisfy their patients and justify higher fees if they provide the latest treatments and tests for them.

Health insurance, in such a nonprofit institution, allows hospital administrators to cover the costs of quality improvements with higher rates. Insurance plans also allow physicians to order tests and treatments that they might not order if the costs were to be paid out-of-pocket by the patient. Knowledge that funds can be raised to purchase quality improvements can also induce physicians to request new equipment. Quality improvements are easily justified to the Board of Directors, who also want their hospital to be up-to-date.

The result of this incentive system, which maximizes prestige and service instead of pecuniary profit, is that expensive capital equipment will often be duplicated in a community and, consequently, underutilized. Another result is that more hospital employees will be on the payrolls than might otherwise be necessary. It apparently costs a hospital two-thirds as much to maintain an empty as a full bed because they usually hire personnel and install equipment in the basis of 100 percent occupancy [7, p. 31].

The Blue Cross-Blue Shield Insurance Program

The largest health insurance system in the United States is the Blue Cross and Blue Shield Program. Thirty-five to forty percent of the U. S. population is covered by one of the Blue Cross plans. Thus, any discussion of health insurance should include an examination of these programs.

At the present time, the Blue Cross plans are responding to some of the shortcomings of health insurance mentioned above. The plans are attempting to promote outpatient treatment. They have included recently so-called "pre-admission testing" in which diagnostic work prior to surgery can be performed on an outpatient basis. Also, they have a skilled nursing facility benefit for persons who do not require hospital care but cannot yet be treated at home. They have, at least in certain areas of the country, cooperated in the introduction of regional planning, usually in the form of a Regional Council that investigates the need for new facilities in the region. Several plans throughout the country have adopted "prospective reimbursement."

"Prospective reimbursement" requires the hospital to submit its budget estimates in advance to Blue Cross for approval and negotiation. If disapproved,

a hospital becomes non-participating, and its full reimbursement requests will not be granted. Thus, if actively approached from the viewpoint of community coordination, the "prospective reimbursement" procedure may be able to reduce duplication of capital equipment, and the Regional Councils may be able to reduce duplication of structures.

Blue Cross has also recently changed its coverage for long-term illnesses. The standard group plan has a stipulated maximum number of hospital days (the maximum varies by the choice of the group and options exist for 90-day, 180-day, and 360-day limits). The plans, also, have a major medical option, however, that pays 80 percent of the costs over a certain deductible amount up to a certain specified lifetime maximum limit. In the past, the limit was \$20,000, but some plans have recently added an option that groups may select with a maximum benefit as high as \$250,000. Finally, Blue Cross has for years been trying to promote the group practice concept; many of its plans will handle the financing for prepaid group practice arrangements.

Thus, the Blue Cross-Blue Shield Program has incorporated many of the suggestions mentioned above. However, in the area of price control and co-payment policy, some major differences remain between the economists, the CED, and the Blue Cross-Blue Shield Program.

The basic Blue Cross plan is not devised on a co-payment basis. The basic plan pays the entire fee for a semi-private room. Blue Shield plans pay on a "usual, customary, and reasonable" fee schedule. To the extent that physicians' fees exceed the schedule, some co-payment is charged.

Although efforts seem to be in progress by Blue Cross to hold down hospital charges, the most typical response to a hospital's request for reimbursement for a covered situation is still to pay the benefit in full. Opposition to increases in daily rates is seldom seen, and it remains extraordinarily easy for hospital administrators to pass cost increases on to the consumer. The fee schedule for physicians paid by Blue Shield is based upon regional surveys of the usual charges for particular services, after taking the complexity of the case into account. Apparently, the only "unreasonable" requests are those in the highest 10 percent in the area. Virtually no rate regulation is attempted. Thus, the co-payment system for physicians' fees would include only the services not covered by Blue Shield and the divergence between the highest-charging physicians and their regional compatriots.

Economic Implications of the CED Mandatory National Health Insurance Proposal The CED, in proposing a national health care system, suggested ways to circumvent some of the generally negative economic effects mentioned above. However, many of the economic criticisms of the present method of financing the health care system have implications relevant to the CED proposals. Any health insurance system affects the price mechanism. It is far from clear, however, that all systems inevitably must cause a net welfare loss for the economy as a whole.

One of the more basic implications of the CED proposals, at least to economists, has not yet been investigated. By utilizing employer-based insurance, the CED plan, in effect, raises the minimum wage. Many economists have been critical of the minimum wage concept for years. They argue that it distorts prices and results in lower employment for unskilled workers, handicapped workers, teenagers, and others whose productivity does not justify their being hired at the wage level dictated by the minimum wage. These economists argue that it would be more efficient for the Government to pay direct income subsidies to the poor from general tax revenues than for the Government to try to remedy poverty through the minimum wage concept. Many economists, therefore, would prefer to see the national health programs financed by overall, not employer-based, taxation. However, employer-based plans are now in use throughout the country, and their use would greatly simplify the transition to a national health plan. If the imposition of the plan were coupled with a reduction in the minimum wage, many of the economists' misgivings on this score would be overcome.

In any event, the CED proposes that the health insurance program be expanded. Thus, if their proposals are to be economically sound, they should either (1) minimize the price distortion effect of insurance or (2) counteract its effects. Economic analysis has shown that the welfare loss from insurance will be smaller (1) the greater the average consumer's aversion to risk, (2) the greater the co-payment, (3) the less the quantity of care sought varies with the price of care, and (4) the more that insurance induces greater efficiency and better quality care. Thus, to minimize or offset the welfare loss, a health insurance plan should include co-payments, with the coverage becoming more comprehensive the longer the duration of the disability.

The CED has foreseen some of these economic suggestions for health insurance. Although the exact nature of the co-payment system is not spelled out in its pamphlet, the CED does recommend such a system. The amount of co-payment is to be based

upon a sliding scale determined by the income level of the beneficiary, and those families with incomes beneath the standard poverty level would be exempted.

With respect to the sliding scale recommendation, economic studies have shown that the lower the income of the recipient, the more the quantity of care demanded varies with its price. Thus, lower income families would be dissuaded from seeking "Cadillac" style medicine by lower co-payment requirements than would higher income families.

The CED suggestion that families in poverty should be completely exempted from co-payments, however, is another matter. The above principles, applicable only to those families in poverty whose breadwinner is employed and who receive coverage through the employer-based plan, indicate that some co-payment is necessary. Since the recipients are still, in effect, paying for the plan themselves through their employer's contributions and through its effect on their wage rate, the families will experience some net welfare loss unless they are almost completely averse to risk. Even families in poverty are not likely to be completely averse to risk. In fact, some economists have argued that very low income families tend to be risk-takers because they have an overwhelming need to spend their income for current consumption.

For the unemployed in poverty, the basic principles are not directly relevant. Since their insurance plans are to be financed from general revenue support funds, the analysis is considerably more complex. It depends, among other things, upon tax incidence for low-income families. On balance, however, it seems that the lower the co-payment for these families the greater the net welfare gain for them. Whether zero co-payments for unemployed families in poverty would induce a net welfare gain for society as a whole, however, is an unanswered question.

Finally, the CED health plan would insure all beneficiaries against long-term illnesses. That improvement would seem to be in keeping with risk aversion principles.

The conclusions reached thus far regarding the economic soundness of health insurance in general and the CED plan in particular are based upon economists' studies of the industry. Defenders of national health plans have used a counter argument, which usually runs as follows. The non-pecuniary discomfort and loss of time associated with visits to physicians' offices and stays in hospitals is sufficient to offset any significant effect of price on the quantity of medical treatment demanded. The argument continues that except for the very poor, whose general health would be greatly benefited by removing pe-

cuniary considerations from their health care decisions, few persons would increase the amount of care demanded even if it were entirely free. Moreover, national health plans allow physicians to practice more preventive medicine. And more prevention means greater overall productivity per physician and less time expended per patient in the long run ("An ounce of prevention . . ."). This latter argument, based upon productivity, has not yet been analyzed by economists; but some small-scale studies by physicians indicate that it is worth pursuing. Studies have shown, however, that the quantity of medical care demanded, even for high income families, varies with price. Reportedly, the Canadian National Health System is considering the initiation of a co-payment schedule, because some citizens are "abusing" their free medical care privileges.

Price Effects An implication of the economists' analyses of pricing policies in the health industry is that prices of medical care would increase rapidly with a national health plan. Temporary price controls are suggested by the CED to prevent this rapid increase. The difficulty with this CED recommendation, however, is that unless excess demand can be eliminated, prices will rise as soon as the controls are removed. Since the removal of excess demands for health care in the United States is probably a long-term situation, the proponents of the national health insurance system should recognize that the "temporary" price controls proposed may be more akin to permanent controls.

Dispersion of Medical Care In an attempt to remedy duplications and consequent underutilization of facilities and equipment, the CED proposed a system of regional planning boards. These agencies, to be called Regional Health Service Agencies, would have boards appointed by the Secretary of Health, Education, and Welfare, which would oversee the development of new facilities and the operations of old ones.

The agencies, at first glance, appear to be an excellent suggestion. Indeed, many areas already have regional councils. If the agencies were able to gather an expert staff and receive the cooperation of area physicians and hospital administrators, they would prove to be enormously effective. Economics, however, suggests some reason for skepticism. Economists have shown that the incentive system for nonprofit hospitals encourages duplication of facilities. The regional planning boards envisaged by the CED, therefore, may have difficulties in obtaining the needed cooperation of physicians and hospital

administrators. This lack of cooperation may be even more prevalent if the regional boards are to have price-fixing authority.

Given these considerations, the existing regional councils are more likely to be effective for coordinating regional health needs. A separate agency might be developed to regulate prices, if such were the goal. However, the price control agency, like other independent regulatory agencies that have that function, may soon find itself in danger of being dominated by those regulated.

The CED Proposals to Increase the Supply of Medical Services

The CED also recommends programs designed to promote increased efficiency in supplying primary medical manpower geared to care. These programs include the establishment of group practices, health maintenance organizations, specialities in family practice, and an expanded use of paramedical personnel. While the CED observes that the nation's health needs can probably be satisfied by more efficient use of the existing stock of physicians, their recommendations involve rather extensive changes in the method of practice of most physicians.

Group practices involve physicians banding together to provide, in some cases, a complete health package. Many physicians favor such arrangements because immediate consultations are available and because night work can be parcelled out among them. The CED favors such arrangements because they allow physicians to do much diagnostic work in offices that otherwise might have to be done on an inpatient basis in the hospital and because preventive medicine can be practiced. Also, they contend that the group practice may allow increased usage of paramedical personnel. Such persons, trained in specific skills and for diagnosis of specific complaints, may greatly increase physician productivity.

Health maintenance organizations as foreseen by the CED are little but extensions of the group practice concept. Patients would enroll in an HMO plan that would have benefits including (ideally) physicians' services, hospital services, surgical care, prenatal or postnatal care, well-baby care, and immunizations. Such HMO's would, according to the CED, also promote greater productivity for physicians.

The new family practice specialities are designed to provide primary medical care. Essentially, they are designed to make general practice more attractive to young interns. Under such a program, the prospective general practitioner will undertake a residency in family practice rather than entering practice

immediately after internship. He thus receives more training than the usual general practitioner and is able to think of himself as a specialist.

The CED proposals all seem interesting, and physicians may find them worth pursuing. Many of them are already being adopted across the country. Introduction of such programs on the scale envisioned by the CED, however, would involve a massive training program for physicians and a drastic reorganization of their normal methods of practice. It would therefore seem to be difficult to achieve any large-scale adoption by physicians of the CED recommendations in the next few years.

Hospitals were also encouraged to increase their supply of services. The CED suggested that hospitals continue full operation on weekends and improve their management procedures. The latter improvement would come as a result of technical assistance to be provided to hospital administrators.

Ambulatory care centers, already in use by some hospitals, were also endorsed. These centers, as seen by the CED, could utilize physician assistants and provide primary medical care through trained teams of personnel. The centers would perform many duties now done on an inpatient basis in hospitals; they typically would include physicians, social workers, assistant physicians, and therapists.

The CED also calls for a National Manpower Program designed to relocate medical personnel and to reorganize the health care delivery system. The manpower policy would be designed to develop personnel to:

- (1) alleviate certain general shortages, (2) overcome the geographic maldistribution in inner-city and rural areas, (3) provide primary care, and (4) staff the new delivery systems, which will be operated to a greater extent by allied health manpower. The fundamental need is for a large increase in the number of allied health workers and in the actual delegation of responsibilities by physicians to capable and appropriately trained assistants. [1, p. 80]

Summary and Conclusions Economists have long argued that the price system ideally ought to be used to allocate resources. In the case of medical care, however, the basic assumptions of capitalistic pricing theory are continually violated. Physicians are not profit maximizers, and they continually experience excess demand for their product; so there is little price competition among them. Moreover, because of the insurance system, if they move together in increasing prices, whatever they decide to charge will be "usual, customary, and reasonable;"

and consumer demand will not be substantially diminished, since co-payments will rise only minimally, if at all. Moreover, if physicians as a group choose to substitute more leisure for work when their incomes increase, increased prices lessen competition even more. The solution, of course, is that the pricing system would work if there were a larger supply of physicians. To an economist, therefore, the most obvious answer to the health care dilemma is to increase the supply of physicians.

Since the major problem seems to be a shortage of physicians entering primary care, economists might argue that (1) more medical schools should be developed that are specifically designed to produce physicians who will practice in primary care areas, and/or (2) that financial incentives (for instance, lowered income taxes) should be allowed to induce physicians to provide primary care. The tax incentives could be provided via a program similar to an investment tax credit or a depletion allowance. An immediate example of a national program to increase the supply of physicians would be the establishment of medical colleges, perhaps under the Veterans Administration, designed to make family practice physicians out of qualified veteran medical corpsmen (or other interested veterans). Other examples would include grants to medical colleges for increasing the enrollment of prospective family practice physicians and grants to individuals to lower the costs of their education.

According to recent analysis, the existing system could be greatly improved if larger co-payments were required for minor and moderate medical expenses. While some sort of national health insurance system would be acceptable to many economists, some modification of the CED proposal would probably be necessary. Co-payments scaled by income level, as is suggested by the CED, could be accepted; but analysis indicates that no one should be completely exempted. Moreover, the co-payments should be required on a per diem, not a deductible, basis.

The suggested price control agency might be economically feasible, but it may not be temporary. If a national health program were adopted, everyone would be covered; and nothing in a physician's "social conscience" would prevent fee and rate increases. Thus, if price controls were to be only temporary, either excess demand must be eliminated or the co-payment system must be used to restrain price increases.

The incentive system for the not-for-profit hospital is said to encourage duplication of expensive capital equipment. Economic opinion on how to deal with this problem might be quite diverse, but one possible solution would be to promote more competition with profit-making hospitals. By increased competition for patients, providing of course that co-payments are part and parcel of the national insurance system, the not-for-profit institutions might be forced into better resource allocations.

Other economists might argue that the not-for-profit hospital is the perfect subject for price controls. Permanent price controls might well prevent the duplication of capital equipment in that increased costs could not readily be passed along to patients. Thus, price controls for this particular segment of the industry could lead to a better allocation of resources, one of the few instances where price controls might have such a result. The price control agency, by granting certain requests for cost-pass-throughs and disallowing others, could in effect oversee the regional development of hospital care. In any case, most economists would agree that if permanent price controls are adopted they should be used only to reduce capital equipment duplication, not to restrict other cost-pass-throughs.

William E. Cullison

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Fifth District Bank Loans: 1965 - 1972

Introduction Between 1965 and 1972 insured commercial banks in the Fifth District exhibited higher growth rates than the national average in all major loan categories except financial loans. This article reviews briefly recent growth trends and the changing composition of bank lending in the District and the nation.

During the period the size and strength of real estate loans by commercial banks in both the District and the nation stood in sharp contrast to the traditional position of the commercial banks as primarily lenders to businesses and consumers. Considering the long-term nature of real estate lending, compared to the relatively short-term nature of bank liabilities, sizable increases in mortgage loans apparently represented a bold step for many commercial bankers. The combination of increased proportions of time deposits

among bank liabilities and moderate total loan demand at commercial banks relative to the supply of funds in 1971 and 1972, however, largely explains this development in bank lending.

Another interesting loan category of increasing importance to banks is consumer loans. Financial analysts have begun to predict that during the 1970's consumer loans may well overtake commercial and industrial loans as the dominant type of bank lending. During 1965-1972, the consumer loan category showed strong growth, which, in turn, meant that many individuals used the District's, and the nation's, banks to finance the purchase of automobiles, appliances, furniture, and mobile homes as well as, among other things, repairs and modernization of older homes, education, travel, and emergency situations. Individuals increasingly used installment loans and

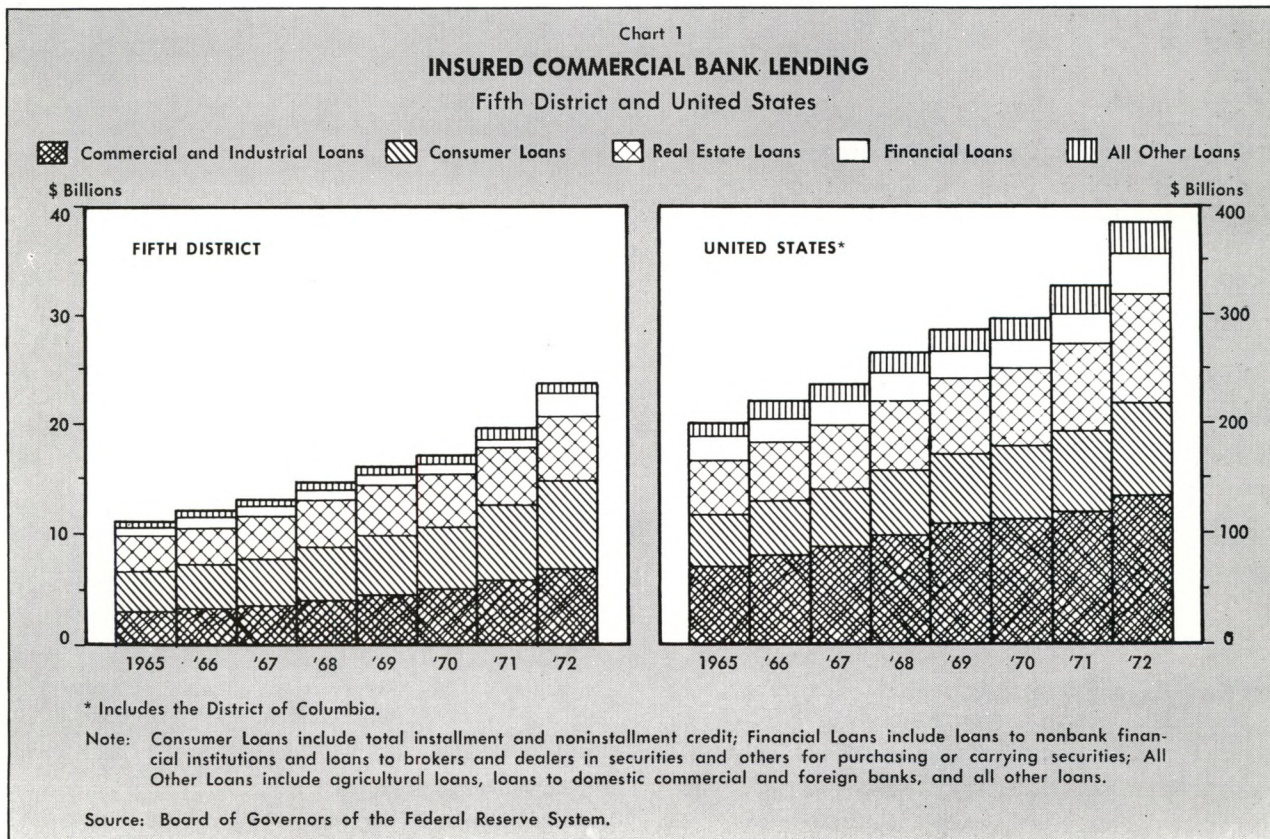
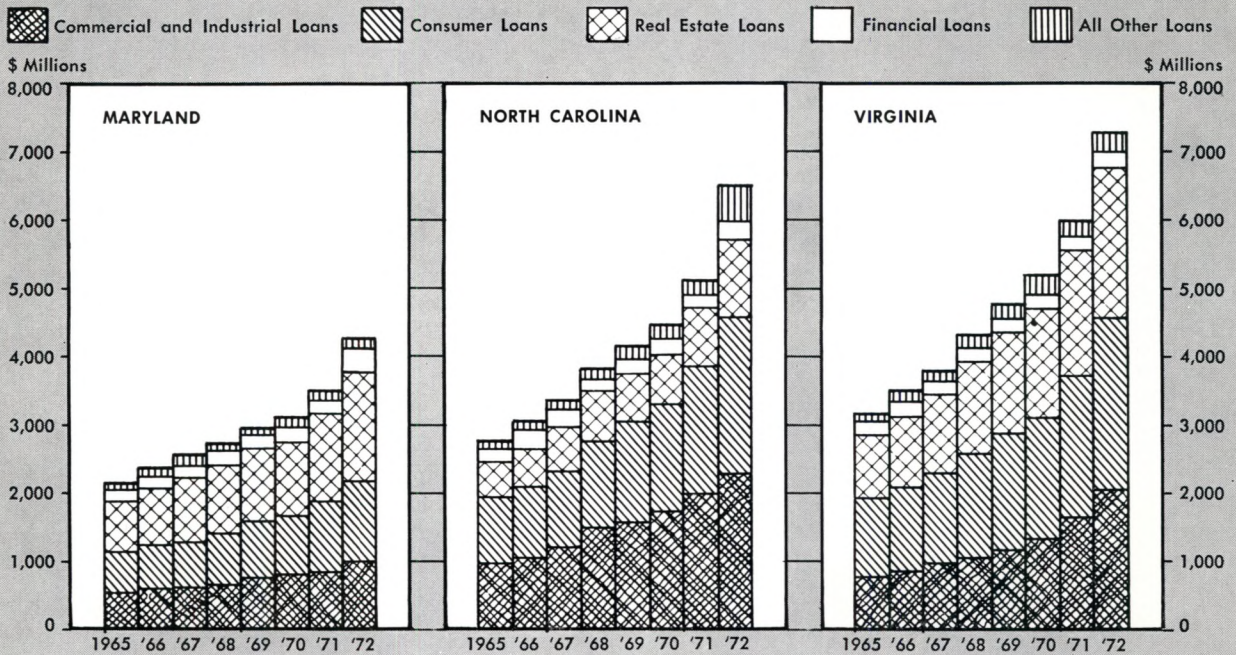


Chart 2

INSURED COMMERCIAL BANK LENDING
Maryland, North Carolina, and Virginia



Note: Consumer Loans include total installment and noninstallment credit; Financial Loans include loans to nonbank financial institutions and loans to brokers and dealers in securities and others for purchasing or carrying securities; All Other Loans include agricultural loans, loans to domestic commercial and foreign banks, and all other loans.

Sources: Federal Deposit Insurance Corporation, *Assets, Liabilities, and Capital Accounts: Commercial and Mutual Savings Banks*; Board of Governors of the Federal Reserve System.

credit cards to handle miscellaneous personal expenditures. Bank credit card lending, moreover, has become more important, as credit cards change from mere cash substitutes to a means of financing big-ticket items.

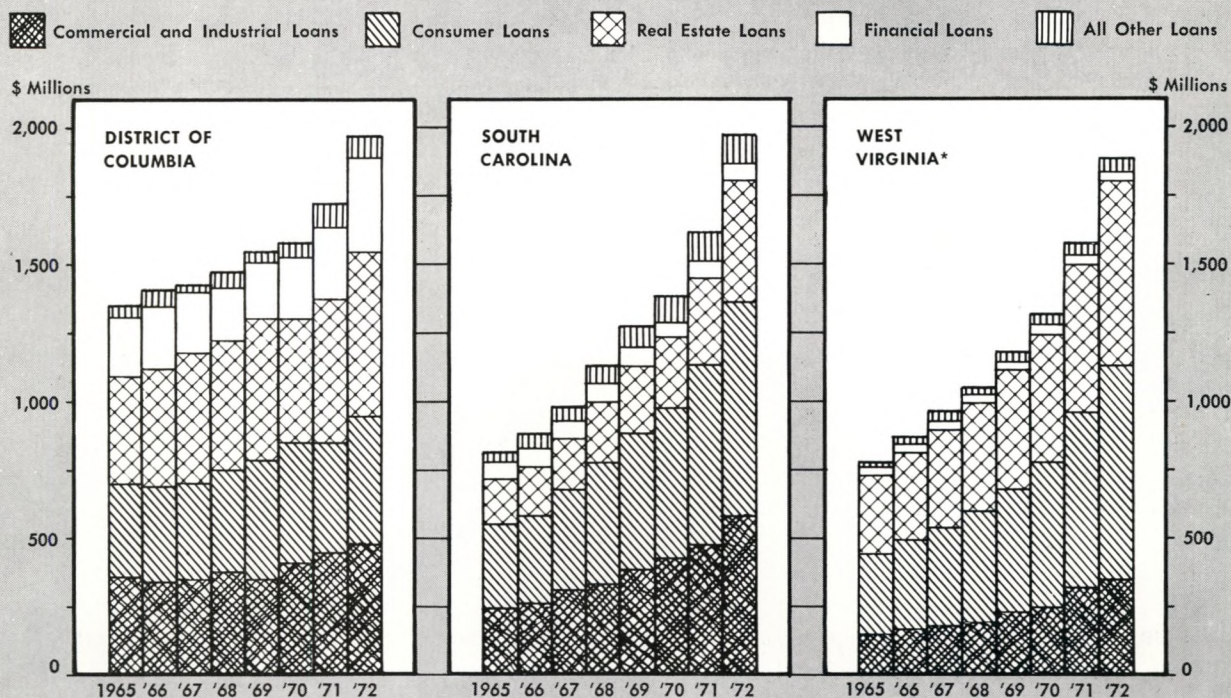
When change takes place gradually and undramatically, it often goes unnoticed. Looking at Fifth District loan activity in retrospect for 1965-1972 should make changes in bank loan portfolios more clearly visible. The table and three charts accompanying this article highlight and summarize the changes during this period.

Fifth District and U. S. Banks Chart 1 compares bank lending in the Fifth District with the U. S. during 1965-1972. For the Fifth District, consumer loans consistently had the largest dollar amounts outstanding in each year from 1965 to 1972. The District growth rates for commercial and industrial loans and for real estate loans, however, closely approximated the growth rate of consumer loans for

the overall period. Financial loans in the Fifth District advanced at a much slower pace in comparison. Apparently this type of lending tends to be concentrated at large "money market" banks. Among those types of loans included in the "other" category, agricultural loans, i.e., loans to farmers exclusive of real estate loans, grew at a rate closely paralleling the District's financial loan growth rate. The remaining prominent type of loan in the "other" category, loans to domestic commercial and foreign banks (which exclude Federal funds sold), increased sharply in both the U. S. and the Fifth District during 1971 and 1972, with the rate of increase for the District much greater than for the U. S.

Commercial and industrial loans for the U. S. showed disappointing growth compared to the District. Nevertheless, in each of the years 1965-1972, the loan category with the largest amount of dollars outstanding at all insured U. S. banks was commercial and industrial loans.

Chart 3
INSURED COMMERCIAL BANK LENDING
 District of Columbia, South Carolina, and West Virginia



* Excludes six counties that are part of the Fourth Federal Reserve District.

Note: Consumer Loans include total installment and noninstallment credit; Financial Loans include loans to nonbank financial institutions and loans to brokers and dealers in securities and others for purchasing or carrying securities; All Other Loans include agricultural loans, loans to domestic commercial and foreign banks, and all other loans.

Sources: Federal Deposit Insurance Corporation, *Assets, Liabilities, and Capital Accounts: Commercial and Mutual Savings Banks*; Board of Governors of the Federal Reserve System.

Maryland, North Carolina, and Virginia Banks

In Chart 2 Maryland, North Carolina, and Virginia were grouped together because the total volume of bank loans outstanding in each of these states was similar. Total bank loan growth in North Carolina and Virginia, especially during 1971 and 1972, far outstripped the pace set by Maryland banks. In all three states, as in the District as a whole, financial loans were a small portion of total lending and demonstrated only moderate growth for the period discussed. For these three states and the Fifth District, consumer loans have been the largest loan category for the entire period in terms of dollars outstanding. The largest single loan category in the District may be seen in Chart 2 in the form of consumer loans in Virginia. In contrast to North Carolina and Virginia, where bank lending has been dominated by business and consumer loans, the largest amount of bank lending in Maryland was in the form of real estate loans. Bank lending in

North Carolina and Virginia differed in this 1965-1972 period in that business loans were dominant in the former state while consumer loans were dominant in the latter. In the "all other loans" category, much of the growth in 1971 and 1972 for the District and for the U. S. was attributable to loans to domestic commercial and foreign banks. Agricultural loans for North Carolina and Virginia were relatively sizable but grew rather slowly. Agricultural loans in Maryland were modest in both overall size and growth.

District of Columbia, South Carolina, and West Virginia Banks

In Chart 3 the District of Columbia, South Carolina, and the West Virginia portion of the Fifth District,¹ also grouped together on the basis of size, are compared. Although South Carolina and the Fifth District portion of West Vir-

¹ Six West Virginia counties in the northern panhandle of the state are part of the Fourth Federal Reserve District.

ginia have small loan volume in terms of dollars outstanding, the growth rates for these two states in the consumer, real estate, and commercial and industrial loan categories were greater than for the other states, the whole District, or the United States. Yet, in the District of Columbia growth rates were modest since they were only about half the rate for all insured U. S. banks. Growth in financial loans was, not surprisingly, insignificant except for the District of Columbia, whose banks expanded these loans at the same rate as the overall Fifth District rate. While South Carolina and West Virginia banks achieved similar overall growth rates in their loan portfolios, the composition of their portfolios differed noticeably. Both states expanded consumer loans appreciably, but South Carolina apparently placed greater emphasis on business loans while real estate loans were dominant in West Virginia. The marked increase in all other loans in 1971 and 1972 appears to be attributable more to certain miscellaneous types of loans than to domestic commercial and foreign bank loans as was the case with the states in Chart 2. Agricultural loans were small and have shown little growth. Quite obviously, such would be the case for the District of Columbia, but agricul-

tural loans would be expected to be more sizable in West Virginia and South Carolina. This apparent anomaly may be explained in part by the use of end-of-year rather than midyear figures, since fewer agricultural loans would be outstanding in December as opposed to June. Further, commercial banks have typically permitted various Federal Government agencies to handle the bulk of agricultural lending.

Trend and Cyclical Movements Since 1965 total bank loans at all U. S. and Fifth District banks have exhibited a relatively steady upward trend. Such behavior largely reflects the underlying economic growth characterizing this period. Although the rate of increase of bank loans may fall off when the growth of real economic output declines, as long as the growth of nominal output remains positive, continued increases in the total quantity of bank loans outstanding will most likely occur. On those two occasions between 1965 and 1972 when the pace of economic activity slowed markedly (1967 and 1970), bank loan portfolios similarly grew more slowly. Thus, there is some evidence of cyclical movement within the more dominant upward trend of the period.

Table I

GROWTH RATES OF TOTAL BANK LOANS

(Percent)

Area	1965 to 1966	1966 to 1967	1967 to 1968	1968 to 1969	1969 to 1970	1970 to 1971	1971 to 1972	Average ¹
United States ²	8.8 ³	7.8	11.4	8.2	3.9	10.0	18.5	9.8
Fifth District	9.4	6.9	12.2	9.6	7.0	14.8	22.2	11.7
Maryland	10.5	4.8	8.8	8.9	5.1	13.7	21.3	10.4
North Carolina	10.3	10.3	13.7	8.9	6.5	15.3	26.9	13.1
Virginia	10.1	8.5	13.8	10.4	9.0	15.1	21.5	12.6
District of Columbia	3.7	1.6	2.7	5.7	1.1	9.1	14.3	5.5
South Carolina	8.7	10.8	13.8	13.5	8.5	16.9	22.1	13.5
West Virginia ⁴	11.0	10.7	9.5	11.9	12.0	19.5	20.0	13.5

¹ Equally weighted mean of the seven year-to-year growth rates.

² Includes the District of Columbia.

³ All growth rates are positive.

⁴ Excludes six West Virginia counties that are part of the Fourth Federal Reserve District.

Sources: Percentages computed from Federal Deposit Insurance Corporation and Board of Governors of the Federal Reserve System data.

Both trend and cyclical movements in bank loan behavior are illustrated by the growth rates presented in Table I. These growth rates are percentage rates of change for total loans from year-end to year-end. The average growth rate is simply an arithmetic mean of the seven yearly growth rates. Thus, total bank loans for the U. S. grew at an average rate of 9.8 percent per year from the end of 1965 to the end of 1972, as contrasted to an 11.7 percent rate for the Fifth District. Loans at District banks have shown a stronger upward trend in recent years because the processes of industrialization and urbanization have spread throughout the District more rapidly than they have across the nation during the sample period. Within the Fifth District, the more highly developed and urbanized areas of Maryland and the District of Columbia showed slower average rates of growth. Alternatively, West Virginia and South Carolina,

which have traditionally been the least urbanized and industrialized areas in the Fifth District, had the highest average rates of growth in total loans.

An examination of the yearly growth rates in Table I reveals the presence of some cyclical movement. Slower-than-average growth rates were evident among all geographic categories in 1967 and 1970, while higher-than-average growth rates were particularly apparent in 1971 and 1972. The term "mini recession" has frequently been applied to 1967 while the period from November 1969 through November 1970 has been designated a full-fledged recession. A broad economic recovery emerged during 1971 and accelerated through 1972. The growth rates of bank loan portfolios across the nation and in each of the Fifth District areas exceeded the total period averages in 1972 by extremely wide margins.

Susan A. Whitlock