The Financial Congeneric*

"The laws of production of wealth partake of the character of physical truths. There is nothing optional or arbitrary in them. It is not so with the distribution of wealth. That is a matter of human institution solely". I. S. Mill. Principles of Political Economy.

Introduction

Recent developments in commercial banking in the United States have exerted a profound impact on the financial structure. Concern about the growth of "financial congenerics" has prompted the passage of the One Bank Holding Company legislation of 1970, intended to contain the expansion of commercial banking into other types of business activity, in addition to the traditional loan-deposit function. A "financial congeneric" may be defined as a One Bank Holding Company (hereinafter IBHC) organized by a bank, with the bank as the principal subsidiary, designed for the purpose of assuming a variety of financially related activities. Debate in this respect has centered around possible anti-competitive aspects of banks and non-bank enterprises being owned by the same corporation and the unique role of commercial banks in the economy.

As an indication of the magnitude in the growth of IBHC's, it is estimated that in 1955 there were 117 such holding companies in

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¹ Although major banks have not sought to do so, the banking law prior to the passage of the recent legislation did not prohibit a IBHC from diversifying into non-financial types of activities. Major banks have refrained from doing so, presumably in self-interest and also because they recognized that forthcoming legislation would require divesture of activities clearly outside the domain of commercial banking.

existence with commercial bank deposits of \$11.6 billion, but in October of 1970 there were approximately 1,200 IBHC's with deposits of \$150 billion (see Table 1). Most of the recent formations were financial congenerics organized by the nation's major banking institutions.

Year									Number of IBHC's	Commercial Bank Deposits (billion \$		
December 1955											117	11.6
December 1965											550	15.1
December 1968											783	108.2
October 1970 .											1,200	150.0

In addition to the financial congeneric, as defined, two other types of IBHC's may be distinguished. There is what may be termed the "traditional" IBHC, which refers to organizations that have operated for a long period of time controlling a bank as well as non-bank enterprises. These were usually closely-held corporations that were set up to provide a convenient means of combining management and ownership of small banks in order to realize certain tax and management advantages. Secondly, there is the conglomerate organization which usually refers to a corporation owning a bank and where the bank is not the major corporate activity. All types of "one bank" holding companies had been exempted from the Bank Holding Company Act of 1956, which provided for special regulation by the Federal Reserve Board of multibank holding companies beyond Federal State regulation of the individual banks included in such holding companies.

The increase in the number of IBHC's, indicative of the transformation of the banking system, is the result of two principal factors. First, commercial banks, which have been diversifying into financially related lines of business for at least a decade, have in

recent years been faced with numerous law suits by competitors claiming that banks have an unfair competitive advantage and are illegally engaged in such activities. Second, the introduction of legislation in Congress, to regulate "one bank" holding companies, which had remained exempt from the Bank Holding Company Act of 1956, induced a number of major banks to reorganize into holding companies before the law would become effective in order to take advantage of the "grandfather clause" usually contained in new legislation.

This paper will focus on events which led to commercial bank diversification culminating in the formation of the financial congeneric — a bank-dominated IBHC. In order to facilitate our presentation, this paper will be divided into three sections. Because commercial banking is a closely regulated industry, it will first focus on recent banking history and the factors that shaped a regulatory philosophy tending to restrict diversification and competition within the banking community, leading to the recently passed legislation extending Federal regulation to one-bank holding companies. Second, the paper will describe some of the more important functionally-related services offered by financial congenerics, apart from the conventional deposit and loan services of commercial banks. Finally, it will examine the economic forces that led toward

1. Recent Development of U.S. Commercial Banking

commercial bank diversification into functionally-related areas.

In order to gain a better perspective of the development of the financial congeneric, it may be useful to review certain events of the past fifty years that had a pronounced impact in defining the functional role of the commercial bank in the U.S. economy. This is not an attempt to give a complete banking history of the period, but merely to consider those economic and institutional factors which tended to limit the services provided by commercial banks and to restrict competition among banks and non-banking financial institutions. This section concludes with a discussion of the IBHC legislation of 1970 which is designed to extend Federal regulation to one-bank holding companies.

In 1921 more than 30,000 banks served the nation. This was the end of a trend that began at the turn of the century which saw an average of 500 banks a year added to the system (see Chart 1).

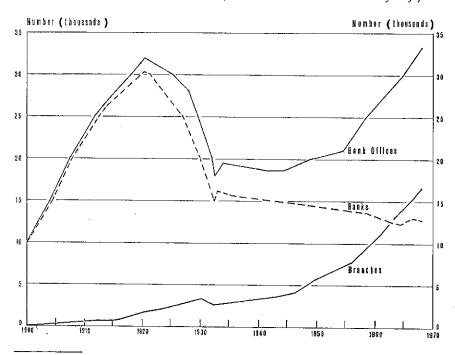
² Statistical source: Staff of the House Committee on Banking and Currency, Report on the Growth of Unregistered Bank Holding Companies - Problems and Prospects, 91st Cong., 1969 and The Federal Reserve. It should be noted that these are estimated figures. The precise number of IBHC's is unknown since they have not been required to register with any federal bank regulatory agency due to their exemption from the Bank Holding Company Act of 1956.

Today there are fewer than half as many banks as existed in 1921. During the 1930-1933 crisis 9,000 banks failed, but perhaps more significant were the 5,000 suspensions which took place in the 1921-1929 period when most of the economy was prosperous.³

There were many factors that contributed to this development in the decade of the 1920's. Many rural banks suffered the consequence of a depressed agricultural sector amidst a generally prosperous economy. A considerable increase in bank competition prior to the adjustment in the 1920's is strongly suggested by the increase in number of banks (see Chart 1). Improved transportation, with the

CHART I

NUMBER OF COMMERCIAL BANKS, BRANCHES AND OFFICES 1900-1967 4



³ See, for example: Bank Mergers and Concentration of Bank Facilities, a staff report to subcommittee No. 5 of the Committee of the Judiciary, 1952, pp. 8-25, and The Banking Structure in Evolution - A Response to Public Demand, 102nd Annual Report, The Administrator of National Banks, 1964, pp. 7-13.

development of the automobile, led to increased competition among banks and the disappearance of many small and relatively less efficient banks. There were many bank consolidations during this period, which, to a large extent, may have been the result of earlier growth in the size of business corporations which banks served and the need for banks to provide a greater variety of services for which only large banks would have the necessary resources.5 It appears that economies of scale were most evident in connection with the trust business 6 and the financing of foreign trade or the rendering of services to customers going abroad. In a recent article, Peltzman 7 argues that the volume of mergers may be a good proxy variable suggesting an increase in economies of scale. If there is an increase in the size at which a bank's cost curve becomes flat, previously efficient banks will become inefficient in the process and therefore must expand their size. A merger is a convenient way to achieve this result.

Diversification in banking during this period represented an attempt by banks to perform for their customers all of the financial services for which they had need, rather than have them depend in part on other institutions. Despite the restraint that State and Federal banking laws prior to the passage of the 1933 Act placed on activities of commercial banks, they managed to develop such diverse lines of business as trusts, insurance, acceptances, investments, banking and loan brokerage services. One large bank reportedly advertised forty-three separate service divisions all working to provide its customers a well-balanced banking service.8 It is suggested in the literature that one of the reasons banks desired to increase their services during this period was increased competition in banking. Developments during this earlier period may be analogous to the present trend toward diversification or the creation of a full service bank which, as will be subsequently discussed, appears to be related to increased competition from non-bank financial institutions in recent years.

⁴ Sources: Bank Mergers and Concentration of Banking Facilities, p. 11, 1962; Recent Developments in The Structure of Banking, p. 17, 1962 and Annual Reports, FDIC, 1961-1967.

⁵ For a discussion of developments during this period see: B.M. Anderson, "Bank Consolidations in a Period of Speculation", The Chase Economic Bulletin, Vol. 9, No. 5, October 1929, J.M. CHAPMAN, Concentration of Banking, Columbia University Press, 1934, pp. 51-84 and R.B. Westerfield, Money Credit and Banking, New York, 1938, pp. 915-939.

⁶ J.M. CHAPMAN, op. cit., p. 75.
7 S. Peltzman, "Bank Entry Regulation: Its Impact and Purpose", The National Banking Review, December 1965.

⁸ R.B. WESTERFIELD, op. cit., p. 988.

Also significant during the later part of the 1920's was the development of group banking, as a means whereby a holding company could share in ownership and control of several banks. Because the holding company was not itself a bank, it was not subject to state or Federal supervision — somewhat similar to the position of the IBHC which did not fall within the scope of the Bank Holding Company Act of 1956 and remained therefore free from the regulation of Federal and State agencies, applying to its subsidiary bank. Although the holding company did not function as a bank, it took a direct part in the operations of constituent banks.9 It served as a credit bureau, offered expert analysis of securities and portfolio management, enabled member banks to participate in the granting of larger lines of credit, and allowed members to hold a smaller amount of cash than would be safe for a unit bank. The holding company device also served as a convenient means to enter the mortgage lending business; one common method was to acquire or establish a mortgage company subsidiary, operating as an autonomous entity for the group as a whole.10

The Banking Act of 1933. The large number of bank failures between 1900 and 1933 and the role attributed to their underwriting activities in the collapse of the stock market in 1929 induced the view, in Congress and the nation, that serious conflicts of interest existed between banks and other financial and nonfinancial businesses. As part of the separation of commercial and investment banking, the Banking Act of 1933 prohibited banks from brokerage activities, underwriting private stock and bond issues, engaging in certain non-banking activities, and generally redefining what banking business should be. The general regulatory philosophy of the time was to discourage competition primarily because the lesson of history was interpreted in the sense that unrestrained competition in earlier periods contributed to bank failures.

The reorganization of the banking structure resulting from the chaos following the bank failures in the 1930-1933 period was largely over by the end of 1934 and for the next twelve years there

was relative stability in the banking system. However, primarily as a result of merger, the number of banks continued to decline slowly. The most significant development in the period 1935-1950 appears to have been the decline in the number of small banks. A Federal Reserve staff report estimates that in 1935 nearly 55 per cent of the commercial banks had deposits of less than one-half million dollars, while in 1950 only six percent of all banks had this amount of deposits. Meanwhile, the deposits of the very largest banks increased substantially.¹²

Over the past decade there has been a considerable increase in the number of bank offices, primarily due to the increased number of branches (see Chart 1). Thus, for example, between 1960 and 1964 the number of bank offices increased almost 20 per cent, reflecting not only the needs generated by economic growth during that period but also an apparent unfilled demand that existed from prior years.¹³ In addition, banks also now face a considerable amount of competition from non-bank financial institutions as will be discussed in connection with the growth of the financial congeneric.

The Bank Holding Company Act of 1956. This Act was the first attempt to regulate holding companies which controlled banks. Over the period 1933-1956, unregulated bank holding companies grew rapidly, especially in some western states. In 1948 the Federal Reserve Board initiated proceedings against the Transamerica Corporation, 14 a large bank holding company, for alleged violation of the Clayton Antitrust Law. This company operated a wide variety of nonbank businesses in addition to controlling 47 banks in five western states. The Federal Reserve lost the case in the Courts; however, the suit attracted so much attention that numerous bills

⁹ J. M. Снарман, op. cit., pp. 343-364.

¹⁰ Ibid., pp. 72-84.

¹¹ Commercial Banks and Their Trust Activities: Emerging Influence on the American Economy, Staff Report for the Subcommittee on Domestic Finance, Vol. 1, July 8, 1968, pp. 11-12.

¹² Bank Mergers and Concentration of Banking Facilities, op. cit., pp. 12-24, and Recent Developments in the Concentration of Banking, Special Staff Report of the Board of Governors of the Federal Reserve System, 1962.

¹³ The Banking Structure in Evolution - A Response to the Public Demand, op. cit., p. 9.

¹⁴ A good discussion of the Transamerica Case is found in Bank Mergers and Concentration of Banking Facilities, op. cit., pp. 42-44. Transamerica held the following investments outside the field of commercial banking: (1) All of the stock of Capital Co. engaged in the real estate business; (2) All of the stock of Allied Building Credits, Inc., a mortgage company; (3) Occidental Corp., whose subsidiary was the largest life insurance company on the Pacific coast; (4) Pacific National Fire Insurance, a marine, fire and auto insurer; (5) 99 percent of Adel Precision Products Corp., a manufacturer of aircraft parts and other equipment; (6) and others.

to regulate bank holding companies were introduced between 1949 and 1956. Hearings related to these bills finally led to the passage of the Bank Holding Company Act of 1956. This Act defined a bank holding company as any organization which: (1) directly or indirectly owns, controls, or holds with power to vote 25 per cent or more of the voting shares of each of two or more banks, or (2) which controls the election of a majority of the directors of two or more banks, or (3) for the benefit of whose stockholders 25 per cent or more of the voting shares of each of two or more banks is held by trustees. The function of multi-bank holding companies was made subject to authorization by and registration with the Board of Governors of the Federal Reserve, and any further acquisition of banks was similarly subject to Board's approval, with due consideration for aspects of intra-bank competition and public service. Registered bank holding companies were, among other things, to refrain from engaging in any line of business other than banking, managing banks or providing certain services to subsidiary banks. Even at the time of the passage of the bill the Board of Governors of the Federal Reserve expressed objection to the two-bank definition, which provided the means for today's financial congenerics to avoid Federal regulation through the formation of the "one" bank holding company.¹⁵

The Bank Merger Act of 1960. During the 1930's and for many years subsequent to that, as noted earlier, the general mood was a rejection of competition and an emphasis on regulation. However, until the passage of the Bank Merger Act of 1960, bank mergers were not even subject to the approval of the Federal bank regulatory agencies or the scrutiny of the Justice Department. Bank mergers were considered outside of the provisions of the Sherman or Clayton Antitrust Laws ¹⁶ and almost exclusively within the domain of state laws. The Bank Merger Act of 1960 extended to bank mergers the multi-bank holding company control already

vested in the Federal Reserve and recognized the special role of the Justice Department in its application of anti-trust legislation, which placed emphasis on the possible anticompetitive aspects of bank mergers. A 1966 amendment to the Bank Merger Act stressed further the Justice Department role and somewhat the emphasis on competition by giving specific recognition to the convenience and needs of the community.¹⁷

One Bank Holding Company Legislation of 1970. The legislation approved by Congress last year has extended Federal Reserve regulation to one bank holding companies that were exempt from the Bank Holding Company Act of 1956 because of that Act's "two bank" definition. 18 A bill passed by the U.S. Senate in November of 1070 had to be reconciled with a more stringent version passed by the House late in 1969. Both bills had the same general purpose of closing the loophole in the 1956 Act thus keeping banking separate from non-bank business and of bringing them in conformity with multi-bank holding companies, which are required to receive Federal Reserve approval in order to enter into functionally related areas. One of the key differences between the two bills was the cutoff date provided in order to determine whether the acquisition of a nonbanking enterprise by a one-bank holding company should be allowed to stand. The Senate bill set the date as of June 30, 1968, while the House bill set the cutoff date at May 9, 1956 — the date of enactment of the Bank Holding Act of 1956.

The House bill (H.R. 6778) provided that non-bank business engaged in by one-bank holding companies must be "functionally" related to banking and authorized the Federal Reserve Board to rule on proposed acquisitions of non-bank businesses, but would have specifically forbidden certain activities such as insurance, travel agency or property leasing. The Senate bill had no such restrictions. Under it, the Federal Reserve would have retained authority to rule

¹⁵ A discussion of the Bank Holding Company Act of 1956 and subsequent amendments is found in: S. J. Weiss, "Bank Holding Companies and Public Policy", New England Economic Review, Jan.-Feb. 1969, pp. 1-30, and J. F. Zoellner, "Bank Holding Companies", Monthly Review, Federal Reserve Bank of Kansas City, pp. 10-16, Feb. 1969.

¹⁶ For discussion of bank mergers and the enforcement of the Bank Merger Act of 1960 see: G.R. Hall and C.F. Phillips, Jr., Bank Mergers and the Regulatory Agencies, Federal Reserve, 1964.

¹⁷ W.E. Whitesell, "Bank Merger Act of 1966: Past, Present and Prospects", Business Review, Federal Reserve Bank of Philadelphia, Nov. 1968, pp. 3-9.

¹⁸ The extensive hearings, testimonies and exhibits relating to the proposed legislation are found in: Hearings before the Committee on Banking and Currency, House of Representatives, Ninety-First Congress H.R. 6778, Parts I, II and III and Hearings before the Committee on Banking and Currency, United States Senate, Ninety-First Congress on S. 1052 and S. 3823, and H.R. 6778, U.S. Government Printing Office, Washington, D.C.

¹⁹ H.R. 6778 as amended and passed by the House of Representatives.

on acquisitions; however, related activities would include any activity the performance of which by an affiliate of a holding company could be reasonably expected to produce benefits to the public, such as greater convenience, increased competition or gains in efficiency, outweighing possible adverse effects, such as undue concentration of resources, decreased competition, conflict of interest, or unsound

banking practices.

The differences between these bills were reconciled in the House-Senate Conference Committee and the final legislation directed the Federal Reserve Board to rule on acquisitions of non-bank enterprises made by IBHC's in order to determine if such activities are closely related to banking.20 Moreover the compromise legislation decided against a particular cutoff date in deciding whether the acquisition of a non-bank enterprise by a IBHC should be allowed to stand. Instead, the Federal Reserve has been directed to examine every holding company whose bank has assets of more than \$60 million and to decide if acquisitions of non-bank enterprises made before June 30, 1968 caused undue concentration of resources, unfair or decreased competition, conflicts of interest or unsound banking practices. For other IBHC's, however, acquisitions made on or before that date will generally be free from Federal regulation. Thus, it appears that the recently passed legislation will continue to allow IBHC's to provide financial services closely related to banking subject to the review of the Federal Reserve.

2. Financial Services Offered by Financial Congenerics

Aside from the traditional deposit and loan functions of the commercial bank, the following are the more important financially related services provided by financial congenerics:

Credit cards and related facilities: Bank credit card and check credit plans involve the extension, upon demand, of a predetermined amount of credit to the holder of such a card. It may be noted that automatic overdraft is specifically forbidden in banking legislation; therefore it must take the form of a "line of credit agreement" entered by the bank and the customer. Check credit plans are linked directly to the bank through the checking account and generally take the form of the bank crediting the customer's account,

when drawn upon over and above the outstanding balance for the amount of the debit. Some banks provide this service free of charge, provided the amount of credit extended is repaid within 25 days of receiving a statement from the bank. Credit cards, on the other hand, involve a three party agreement among bank, merchant and the card holder.²¹

Bank participation in credit cards did not begin until 1951 when the Franklin National Bank of New York started its plan. During the next several years nearly 100 banks — primarily small ones — entered the business expecting to make substantial profits. Large profits did not materialize and about one-half of these banks discontinued their plans in a short time. Of the 197 banks that had credit card plans in 1967, only 27 had started their plans prior to 1958. Check credit plans apparently developed independently of credit cards; the first such plan was introduced in 1955 by the First National Bank of Boston.²² The growth in the number of banks offering one or more credit-card and check-credit plans may be summarized as follows:

TABLE 2 23

	Credit C	Card Plans	Check Credit Plans			
Year Started	New Entries	Cumulative Total	New Entries	Cumulative Total		
1955 or earlier	27	27	13	13		
1956- 5 7		27	13	26		
1958-59	31	58	204	230		
1960-61	3	61	32	262		
1962-63	2	63	21	283		
1964-65	5	68	39	322		
1966-67	322	390	410	732		
1968-69	817	1,207	396	1,128		

Note: Where a span of years is indicated, it covers two full years.

23 Source: Bank Credit Cards and Check Credit Plans, op. cit., p. 9 and The

Federal Reserve, Washington, D.C.

²⁰ Public Law 91-607.

²¹ Bank Credit Cards and Check Credit Plans; a Federal Reserve System Report,

²² Ibid., pp. 7-8. A short discussion of credit card plans is found in R.W. Pullen, "Bank Cards and Related Plans", New England Business Review, F.R.B. of Boston, December 1966 and "Bank Credit Cards Stampede in the Midwest", Business Conditions, A Review of the Federal Reserve Bank of Chicago, June 1967, pp. 6-9.

Ownership and Operation of Travel Agencies: National banks may, as incident to their banking powers, provide travel services for their customers. These services may include the issuance of travel credit cards, the sale of trip insurance or the rental of automobiles as an agent for a local rental service.²⁴ The right of a national bank to provide such services is being contested in the courts.

Direct Lease Financing: Leasing by National banks has been permitted only since 1962 as a result of a favorable decision by the Comptroller of the Currency.²⁵ However, indirect leasing practices have a long tradition in railroad-equipment financing through the placement of intermediate "equipment certificates" guaranteed by a trust conveying to the bank (on its own or on behalf of other holders) title to the equipment itself held as pledge. Despite the short time in which national banks have been allowed to provide this financial service, it is estimated that by June of 1970 no less than 372 banks had leases outstanding and the value of leased equipment totaled \$759 million.

Leasing activity by banks appears to have only two restrictions. They may engage only in full pay-out leases and can buy equipment only at a customer's request as opposed to stockpiling.26 Arrangements may be grouped into three basic types: (1) financial, (2) true leases, and (3) tax-exempt. The financial lease is similar to a deferred sale and the return to the bank is the interest it charges; at lease termination, title is transferred to the lessee. The true lease — for tax purposes - does not allow the lessee to use the equipment for its full economic life; nevertheless, the lessee may purchase the equipment at its fair market value after the bank has fully recovered all costs and fees. The tax-exempt lease is made to political subdivisions such as states, counties, or municipalities, the obligations of which are tax-exempt. This has been growing in recent years, especially because of the difficulties encountered in new bond issues or budget appropriations proved insufficient to meet capital investment needs. The number of National banks with direct lease financing and the dollar value of such financing may be summarized as follows:

Table 3 27

	Date											Number of National Banks with Direct Lease Financing	Amount (in millions \$)		
June 196	— 6													204	293.0
June 196	7										ď			218	360.5
June 196														270	460.0
June 196														340	646.8
June 197	o		,											372	758.6

Underwriting Activities: Commercial banks may underwrite general credit obligations of States and municipalities, but may not (though they may purchase seasoned) underwrite new bonds linked to specific revenue. Banks have been very active in underwriting general obligations in competition with investment bankers, while the latter have a near monopoly in revenue bond issues. Recently, interest has been expressed in allowing commercial banks to expand their underwriting activities to include revenue bonds.²⁸ A recent study by Paul Smith, Senior Economist at the Comptroller's Office, estimated that at least \$236 million could be saved by municipalities between 1968 and 1975 if legislation were enacted to permit commercial banks to compete with investment bankers in the revenue bond market.²⁹

Loans with Equity Participations: Somewhat surprisingly commercial banks have been able to participate in the equity market through the use of warrants, or a new device called "shadow warrants". Ommercial banks cannot own stock in a corporation and

28 Ibid., p. 257.

²⁴ The Bank Structure in Evolution - A Response to Public Demand, op. cit., p. 256.
25 Comptroller Saxon's views on this matter are found in: The Banking Structure in Evolution - A Response to Public Demand, op. cit., pp. 258-259.

²⁶ H. T. LUNDHAL, "Banks and Equipment Leasing", The Journal of Commercial Bank Lending, May 1969, pp. 23-28.

²⁷ Source: Comptroller of the Currency, Division of Statistics.

²⁹ W.P. SMITH, Commercial Bank Entry Into Revenue Bank Underwriting, National Banking Studies, 1968, p. 48.

³⁰ Rule 7312 found in the Comptroller's Manual states that: "A national bank may take as consideration for a loan a share in the profit, income or earnings from a business enterprise of a borrower. Such share may be in addition to or in lieu of interest. The Borrower's obligation to repay principal, however, shall not be conditioned upon the profit, income or earnings of the business enterprise".

thus may not exercise a warrant under normal circumstances, but such banks can sell their warrants in the market. In addition there is the so-called "shadow warrants" whereby the loan issued by the bank for a given amount has tied to it a "kicker", an additional return based on the increase in value of the common stock of the borrowing company. Therefore, for example, if a bank made a loan for \$10 million to a company whose stock was selling for \$25 per share and the price of the stock increased to \$50 over a two or three year period, the bank would receive the entire principal on the loan plus interest and, in addition, a certain agreed-upon multiple of shares.³¹

Insurance Activity Incidental to Banking: National banks may act as a general insurance agent for any fire, life or other insurance company in any place in which a bank has an office in a community the population of which does not exceed five thousand.³² They have also a general authority to act as agents in the issuance of insurance to cover the balance of loans held by a bank in the event of a customer's death or for auto insurance so long as the auto loan is outstanding.

Trust Department Activity: A recent study by the staff of the House Committee on Banking and Currency estimates that in 1967 \$250 billion in assets were held by bank trust departments.³³ While bank trust departments may not be considered a new service, certain developments, which center around the controversy of separation of commercial banking from investment banking as required by the Banking Act of 1933, are new. Thus, for example, in 1966 the First National City Bank of New York put into operation a commingled investment account to be operated as a collective investment fund under Regulation 9 of the Comptroller's Office. The FDIC and the Comptroller supported this plan and the Federal Reserve ruled that such a fund did not violate section 32 of the Banking Act of 1933. Members of the investment banking and the mutual fund industry, however, have argued that banking law intended to prohibit banks

from operating a mutual fund in which a bank could favor the deposit or loan customers of its commercial department.³⁴ The right of First National City Bank and other bank trust departments to provide this financial service is also being argued in the Supreme Court.³⁵

Commercial Paper: In addition to the foregoing activities, commercial banks have also entered the commercial paper market through their parent holding companies in order to acquire funds. Commercial banks, under Federal Reserve rules, cannot themselves sell commercial paper except at such terms and rates and subject to the same reserve requirements as applicable to time deposits; these restrictions did not apply to the sale of commercial paper by the holding company during 1969-70. Thus, commercial banks used the holding company device as a means of avoiding the effects of tight monetary policy whenever market rate rose above interest rate ceilings on time deposits.36 Outstanding bank related commercial paper reached a peak of \$7.5 billion in June of 1970.37 The application of reserve requirement on such paper, imposed by the Federal Reserve and the liberalization in June 1970 of interest rate regulation on large certificates of deposit have since reduced the amount to 3.1 billion by the end of 1970.

Real Estate and Mortgage Financing: National and state banks can generally make mortgage loans, but their right to carry on certain mortgage servicing activities either directly or through a subsidiary corporation has been challenged. The issue is not if a bank can properly service a mortgage loan that the bank itself has made, but whether it can lawfully service such loans made by others through the purchase of stock in a mortgage servicing company. The Comptroller of the Currency ruled that the servicing of mortgage loans held by others was a logical and economically sound extension

³¹ J.F. Holahas, "Is there a Kicker in your Bank", The Journal of Commercial Bank Lending, May 1969, pp. 2-7.

³² The Banking Structure in Evolution - A Response to Public Demand, op. cit., pp. 256-257.

³³ Commercial Banks and their Trust Activities: Emerging Influence on the American Economy, op. cit., p. 1.

³⁴ For a discussion of bank collective funds see: Cecil P. Bronston, "Bank Collective Investment Funds - Historical Review and Suggestions for Actions", Trusts and Estates, December 1966, pp. 1185-1189; Cecil P. Bronston, "Collective Investment Funds", Trusts and Estates, December 1967, pp. 1156-1159; and James J. Saxon and Dean E. Miller, "Common Trust Fund", The Georgetown Law Review, Vol. 53, pp. 994-1008.

³⁵ Oral argument in the United States Supreme Court was scheduled for December, 1970. Investment Company Institute V. Camp, U.S. Supreme Court, No. 61, October Term, 1970.

³⁶ Commercial Paper Cures Many Banks", Journal of Commerce, June 4, 1969, p. 1. 37 Federal Reserve Bulletin, October 1970, p. A-37.

of the former activity,³⁸ and most major bank holding companies maintain at present "realty" subsidiaries. At the same time, there was a liberalization of lending rules in the early 1960's pertaining to real-estate loans in the direction of increasing loan-to-value limits, maturities of amortized loans on residential real-estate and total bank lending limits on such loans which made banks more competitive with other institutions in this area.³⁹

Data Processing Services: A bank may own and operate data processing equipment which is incidental to carrying on the business of banking. Moreover, the Comptroller of the Currency has ruled that if a bank is to achieve full utilization of such equipment, it may make available its excess capacity for the use of others though it is acquired for the primary purpose of performing services incidental to banking.40 The right of national banks to perform computer services is under attack in Federal courts.

3. Economic Evolution of the Financial Congeneric

The sudden growth in IBHC's during the past several years gives the appearance of a sudden transformation of the U.S. commercial banking system from that oriented toward the traditional loan-deposit commercial banking function into a financial congeneric providing a greater variety of financial services. As indicated above, the phenomenal growth in IBHC's, from an estimated 550 with commercial bank deposits of \$15 billion in 1965 to approximately 783 with deposits of \$150 billion by October of 1970, was in part the result of concern that new legislation would prohibit the future formation of such holding companies rather than an immediate transformation of the banking structure from an economic as opposed to a legalistic point of view. Moreover, some of the impetus for the formation of IBHC's seems to have come from an attempt by commercial banks to avoid costly law suits brought against them by competitors claiming that banks were providing non-bank services as

prohibited by banking law and that banks had an unfair advantage in providing such services.41 Commercial bank diversification, as suggested earlier, is not a new phenomenon and the current trend toward the expansion of commercial banking services into functionally related activities appears to have evolved somewhat gradually over the past several years.42

The Financial Congeneric

There are many complex reasons for the present trend toward diversification within the commercial banking industry. Generally, economists and financial analysts agree that the financial congeneric movement is the result of substantial internal and external pressures on banks to diversify.43 Increased competition between commercial banks and other financial institutions as well as increased cost pressures are sometimes suggested as reasons for this development but equally important may be the changed attitude among bank regulators and the courts concerning the desirability of competition within the banking community.

The competitive factor: Following the Great Depression, competition among banks was discouraged. This was reflected in legislation of the era which prohibited banks from paying interest on demand deposits and a regulatory policy which kept interest rates that banks could pay on savings deposits artificially low and noncompetitive with other financial institutions. As previously noted, until the passage of the Bank Merger Act in 1960, banks were not generally considered subject to the provisions of the anti-trust laws. Consequently, the anti-competitive aspects of bank mergers were generally disregarded. A changed attitude on the part of bank regulators, the Congress and the courts has evolved over the past decade, that has resulted in a favorable attitude toward competition among banks in a stable economy.

42 Although there is a lack of statistical data on the growth of many of these bank services, a review of court decisions, financial reports of commercial banks and pronouncements in the financial press indicate that the growth of financially related services has been

a gradual process.

³⁸ Mr. Saxon before the House Committee on Banking and Currency, June 29, 1965. 39 Remarks of James J. Saxon Before the House Committee on Banking and Currency, June 30, 1965. Reprinted in The Banking Structure in Evaluation, op. cit., p. 255. 40 ROBERTSON, op. cit., p. 152.

⁴¹ N.S. ROGERS, Statement on behalf of the American Bankers Association before the House Banking and Currency Committee on H.R. 6778 and H.R. 9385, April 29, 1969.

⁴³ See, for example, R.M. Robertson, The Comptroller and Bank Supervision: A Historical Appraisal, Washington, D.C., April 1968; N.S. Rogers, Statement on behalf of the American Bankers Association before the House Banking and Currency Committee on H.R. 6778 and H.B. 9385, April 29, 1969; and "Congress and the Congenerics", Bank Stock Quarterly, M. A. Schapiro & Co. Inc., New York, Sept. 1968.

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Banks now face a considerable amount of competition from other financial institutions, such as savings banks and credit unions, which have grown rapidly since World War II. In 1946 commercial banks held 70 per cent of the assets of the four major intermediaries — commercial banks, life insurance companies, savings and loan associations and mutual savings banks; just a decade later it stood at 57 per cent. Likewise, in 1946 total deposits accounted for 64 per cent of the liabilities of commercial banks, whereas a decade later they stood at 54 per cent.44 Non-bank intermediaries enjoyed a remarkable growth in the post-war era for several reasons. They were favored by beneficial tax laws and in particular they had the ability to maintain a massive savings flow largely due to interest restrictions placed on commercial banks. The growth in savings deposit and the increase importance of savings institutions as competitors of commercial banks for these deposits is indicated by the following table:

TABLE 4

GROWTH IN TIME-SAVINGS AND DEMAND DEPOSITS: 1945-1968 45

Tyma Danasit	Year End Levels (Billions of Dollars)										
Type Deposit	1945	1950	1955	1960	1965	1968	1969	1970			
Savings and Time Deposit at:											
Savings Institutions	23.1	34.9	62.8	103.5	172.6	208.4	216.3	221.8			
Commercial Banks .	30.4	36,9	50.1	73.3	147.2	203.7	192.8	202.4			
Demand Deposit at Com- mercial Banks	101.4	95-7	114.2	121.6	144.3	165.5	172.7	162.6			

The deposit and other cost factors: Pursuant to Regulation Q, commercial banks were allowed to pay an interest rate of only 2.5 per cent on savings deposits from 1935 until 1957. In that year the rate was raised to three per cent on savings deposits and more

recently, reflecting inflation and record high market rates, the schedule has been adjusted upward sharply. Changes in Regulation Q requirements may be summarized as follows:

Table 5

MAXIMUM INTEREST RATES PAYABLE ON TIME AND SAVINGS DEPOSITS 46

	Percent											
Type of Maturity of Deposit	Feb. 1935	Jan, 1936	Jan. 1957	Jan. 1962	July 1963	Nov, 1954	Sept. 1966	Apr. . 968	Jan, 1970			
Savings Deposits:												
Less than 12 months	2.5	2.5	3.0	3.5	3.5	4.0	4.0	4.0	4.5			
12 months or more	2.5	2.5	3.0	4.0	4.0	4.0	4.0	4.0	4.5			
Time Deposits - Multiple Maturity: 1-3 months							4.0 5.0	4.0 5.0	4·5 0			
Time Deposits - Single Maturity:												
Less than \$100,000	l			i			5.0	5.0	5.0			
\$100,000 or more:												
r-3 months	2.5	1.0	1.0	1.0	1.0	4.0	5.5	5.5	6.50			
3-6 months	2.5	2.5	2.5	2.5	4.0	4.5	5.5	5.75	6.75			
6-12 months	2.5	2.5	3.0	3.5	4.0	4.5	5.5	6.25	7.5			
12 months or more	2.5	2.5	3.0	4.0	4.0	4.5	5.5	6.25	7.0			

^{*} Note: 6.25 if less than 60 days. Effective June 24, 1970 maximum interest rates on deposits of \$100,000 and maturities of less than 90 days were suspended until further notice.

Reflecting these changes, time deposits in commercial banks have grown at a rapid rate in recent years (see Table 4) and correspondingly this has meant increased costs to commercial banks. As an indication of the magnitude of this change and the increased costs to commercial banks, in 1955 savings deposits accounted for 30 per cent of total commercial bank deposits of \$164 billion; however, just ten years later, savings deposits accounted for 50 per cent of total commercial bank deposits of \$292 billion and to only 44 per cent of \$365 million by 1970. Since U.S. banking law does

⁴⁴ Robertson, op. cit., pp. 144-147.

⁴⁵ Source: Federal Reserve, "Flow of Funds Accounts".

⁴⁶ Source: Federal Reserve Bulletin - Jan. 1967, p. 94 and Jan. 1969, p. A-11, and Nov. 1970, p. A-11.

not permit commercial banks to pay interest on demand deposits, the shift from demand to time deposits (while total deposits were growing rapidly and interest rates paid on time deposits were rising) resulted in substantial additional costs to commercial banks during the period. This was compensated, however, by the lower reserve requirements (3%-6%) on time as compared with demand deposits (12½%-19½%). Also, during 1969 commercial banks found it necessary to borrow heavily in the Euro-dollar market at considerably higher interest rates. Euro-dollar liabilities of U.S. commercial banks to their foreign branches increased from \$4.2 billion at the end of 1967 to the peak of \$14.8 billion by November 1969. Such liabilities were thereafter reduced, following the application by the Federal Reserve (as of October, 1969) of a special reserve requirement (10%) on such borrowing, to \$8.4 billion by the end of November, 1970. (Such requirement has since been raised further, as of January 1971, to 20% on any new borrowing, to halt an accelerating repayment trend by the banks: but by early March the outstanding amount has fallen further to below the \$5 billion mark).

The economy of scale factor: Another rising cost factor, which is sometimes cited as an incentive for banks to expand their service activity, is the high cost of computer equipment and the desire to utilize it to its fullest capacity. Indeed, this was one of the reasons given by Comptroller Saxon for allowing National banks to expand into the computer and business service areas. Apparently this is also an incentive toward growth in the average size of individual banks within the banking community since there are economies of scale related to the utilization of such equipment.⁴⁷ The Federal Reserve Bank of Boston has conducted a series of studies on economies of scale in commercial banking including an analysis of technology and the utilization of computer and other equipment.⁴⁸ These studies suggest that productivity differences among equipment used, e.g., computer vs. conventional machines, contribute economies of scale.⁴⁹ There appears to be two methods of achieving such economies: one by external growth through merger, which recently has been under a

47 Even though a computer need not be purchased or leased, it still requires a specialized staff to successfully use its services.

close watch by the regulatory agencies, and the other is through diversification which allows a fuller utilization of such equipment through internal growth.

Changes in attitude: One factor which deserves special emphasis in any appraisal of functional changes in commercial banking over the past decade is the changing attitude on the part of bank regulators concerning expansion into services and practices previously not allowed.

A liberal interpretation of existing laws — especially by the Comptroller of the Currency — was to a large extent responsible for this. It has been emphasized that bank regulation in a stable economy is quite different from bank supervision in an unstable economy plagued with bank failures. The following changes in banking practices resulted from rulings issued by the Comptroller's office during the past decade, which had a profound impact on freeing the competitive environment for national banks: (1) to engage in direct leasing of personal property, (2) to act as agents for the issuance of insurance incidental to banking, (3) to issue negotiable certificates of deposit in size and terms suitable for institutions and corporations and (4) to acquire directly the stock of foreign banks. In addition, there was a liberalization of lending rules related to real estate loans which made national banks more competitive with non-bank financial intermediaries.⁵⁰ Banking laws are silent on many issues with which bank supervisors must deal and it seems evident that liberal rulings in recent years on various points at issue have allowed for diversification on the part of commercial banks into today's financial congenerics.

A number of other reasons are sometimes suggested for the current trend toward diversification in commercial banking. First, there has been pressure on banks to expand and diversify from stockholders impressed with the enhanced appeal of the growth and leverage of stocks in other industries: i.e., the relative decline of the rate of return to capital invested in old-style banking. Second, there are changing needs on the part of business and consumers in a rapidly changing economy and banks have diversified to meet these new challenges. Third, there is emphasis on young aggressive

⁴⁸ F. W. Bell and N. B. Murphy, "Economies of Scale in Commercial Banking", New England Business Review, April 1967, pp. 2-11.

⁴⁹ Also, that computers tended to make banking more capital intensive.

⁵⁰ Robertson, op. cit., pp. 150-151.

management in banking, less conservative than their forefathers,

bringing new ideas and willing to change.

Most of the discussion in the literature concerning the trend toward functional differentiation, which has culminated in the formation of the financial congeneric, emphasizes internal and external pressures on banks such as increased competition with non-bank financial institutions or increased costs which have "forced" banks to diversify. Thus far, there is a lack of emphasis in the literature on the economic gains to be gotten through diversification with or without increased cost or competition. The analysis presented in Appendix A is an attempt to suggest such motivation within a Chamberlainian framework.51 Although the evidence at hand strongly suggests pressures toward change because of increased competition, increased costs and other factors, all we need assume is (1) the profit motive and (2) changing institutional factors, which would allow banks to diversify or differentiate their product. The desire for higher profits coupled with a "liberal" interpretation of the existing laws (institutional change) could have themselves been sufficient to explain this trend in the banking industry, which has resulted in the growth of the financial congeneric.52

Service and price differentiation: Edwards 53 and other economists 54 have suggested that the economic theory most applicable to banking is that of monopolistic competion. The typical market consists of many commercial banks providing similar deposit-loan services. In order to illustrate how a profit maximizing commercial bank might set the price of its loans, Edwards utilized a price discrimination model (see Appendix A, Model I). The essence of price discrimination is that the elasticity of demand in two separate loan markets must not be equal. If the elasticities of demand are

51 E. CHAMBERLAIN, Monopolistic Competition, Harvard University Press, 1958.

the same in both loan markets, only one interest rate can prevail (assuming no cost differences). In order to maximize profits, the bank simply equates the marginal revenue in each loan market to the bank marginal cost of providing loans. The price of the loan (interest rate) is therefore determined by the elasticity of demand for the loan in each market.

Although the above discussion is a useful starting point in our analysis, it is of limited applicability in considering the pricing problems facing the diversified bank. This formal model is limited only to cases in which the demand curve in each separate market is independent of the interest or price charged in the other market. It therefore cannot be utilized in an analysis of pricing problems whereby a bank separates its customers into markets through product or service differentiation which is essentially what a financial congeneric would do. That is, to separate out strong and weak markets for particular types of banking services through functional differentiation. To the extent that expanding banking services represent diversification into financially related areas, the pricing problem facing the bank is to exploit strong and weak markets because of differing elasticities of demand for the various lines of financially related services provided by the financial congeneric.

Price discrimination is usually defined in the literature as the act of selling a homogeneous good or service produced by a particular firm to different buyers at different prices.⁵⁵ Stigler has enlarged upon the definition to include price policies whereby two or more similar type goods are sold in different ratios to marginal cost.56 Thus if a bank can make a larger percentage of profit on a credit card loan as opposed to a conventional loan or if it can make a larger profit on a check overdraft loan rather than a consumer instalment loan, the pricing problem is conceptually similar to price discrimination - strong and weak markets for the loan or service are being exploited because people have differing elasticities of demand for the financially related product line. Hirshleifer has developed a model whereby such related demand output decisions can be made, and the analysis seems especially applicable to the

⁵² Changes in the interpretation of existing banking laws were apparently the result of recognition on the part of banking authorities of changing economic conditions, e.g., "increased" competition, economic stability and increased costs in banking.

⁵³ F.R. EDWARDS, "The Bank Competition Controversy", The National Banking Review, September 1965 - Reprinted in Studies in Banking Competition, pp. 303-336; F. R. EDWARDS, Concentration and Competition in Commercial Banking, A Statistical Study, Ph. D. Dissertaton, Harvard, 1964.

⁵⁴ D. A. Alhadeff, Monopoly and Competition in Banking, University of California Press, 1954; T. Smith and Greenspun, "Structural Limitations on Bank Competition", Spring, 1968, pp. 40-70, in Law and Contemporary Problems; and T.G. Flechsic, Banking Market Structure and Performance, 1965.

⁵⁵ See, for example, A.C. Pigou, The Economics of Welfare, 4th ed., 1960, pp. 275-289; Joan Robinson, Economics of Imperfect Competition, 1936, p. 179; and W. J. Baumol, Economic Theory and Operations Analysis, 1965, p. 312.

⁵⁶ G. J. Stigler, The Theory of Price, 1966, p. 81.

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price-output decisions faced by the financial congeneric (see Ap-

pendix A, Model II).57

The financial congeneric, in making its price and output decisions for its related services, would take into account the effect that a price change on one financial service would have on another substitute service. The bank would maximize profits by equating the marginal revenue in each service market to the bank's marginal cost.58 In effect, the firm is able to exploit strong and weak markets for a line of financial services. This concept may be applied to the adding of accessories to a service; thus, it would be an advantage to the bank to have a higher mark up on loans with insurance attached relative to those without. Because demands for the financial services are related, the additional sale of a credit card loan can adversely affect the demand for ordinary consumer installment loans; this must be taken into account by the financial congeneric in order to achieve an optimal output and pricing decision.

To the extent that a bank is able to execute successfully such a policy through diversification and differentiation of its service line, profits will correspondingly increase. There will also be a greater opportunity for increased joint product production capability and gains from voluntary tie-in sales of old and new bank services. Thus, there appears to be a strong underlying profit incentive toward

diversification in commercial banking.

Conclusion

There are many complex reasons why commercial banks have found it desirable to diversify in recent years. Most of the current literature suggests that banks have been forced to diversify into related areas of finance because of internal cost pressures and increased competition, both within the commercial banking community or from other financial intermediaries such as savings and loan associations. In addition to competition from non-bank financial institutions, there seems to have been a changed attitude concerning the desirability of competition in the banking industry on the part

of bank regulators, the Congress and the courts. Prior to the passage of the Bank Merger Act of 1960, little emphasis was placed on possible anti-competitive aspects of bank mergers, and it seems that competition among banks was more feared than encouraged primarily as a result of failures which contributed to the depression. Regarding bank costs, it was noted that since World War II there has been a shift and an increase in the volume of time deposits, on which commercial banks pay interest, as compared with interest-free demand deposits. In addition, changes in Regulation Q requirements on the part of the Federal Reserve allowed banks to compete more effectively with saving and loan institutions and this has resulted in a corresponding cost increase for commercial banks in the form of higher interest rates on bank savings deposits. Another cost factor which is often cited as an incentive for banks to expand their service activity is the high cost of computer equipment and the desire to utilize it to its fullest capacity.

Recognizing these as well as other changes in the banking industry, particular regard may be given to a more liberal interpretation of existing banking laws on the part of bank regulators, which allowed banks to diversify into financially related activities previously considered outside of the domain of commercial banking. Although the evidence at hand strongly suggests pressures toward diversification from increased competition in the financial community as well as increased costs in operation, economic theory suggests that banks, like any other profit-motivated enterprise, would diversify if it were profitable to do so provided that they were allowed to do so. Diversification into related activities is an effective way to exploit differing elasticities of demand for products and services and to increase profits in the process. Banks, like any other business, have a strong economic incentive to diversify and will do so under appropriate market and regulatory conditions.

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⁵⁷ J. Hirshleifer, "Economics of the Divisionalized Firm", Journal of Business,

⁵⁸ For simplicity, we have assumed the marginal cost of providing the two services Vol. 30, Jan. 1057, pp. 96-108. to be equal.

APPENDIX

Model I - Traditional Price Discrimination Model.

For the simple case of two separate loan markets, the model takes the following form:

 $m=R_1(q_1)+R_2(q_2)-C$ (q_1+q_2) where the subscripts 1 and 2 denote the revenues and quantities loaned in each market. The profit (m) for the bank is equal to total revenue from market one and two combined less the total cost. And setting the partial derivatives equal to zero;

$$\frac{\partial \mathbf{m}}{\partial \mathbf{q}_{1}} = \mathbf{R'}_{1} (\mathbf{q}_{1}) - \mathbf{TC'} (\mathbf{q}_{1} + \mathbf{q}_{2}) = 0$$

$$\frac{\partial \mathbf{m}}{\partial \mathbf{q}_{2}} = \mathbf{R'}_{2} (\mathbf{q}_{2}) - \mathbf{TC'} (\mathbf{q}_{1} + \mathbf{q}_{2}) = 0$$

where R is revenue, q is quantity sold, and TC it total cost; subscripts one and two denote the separate markets. Thus $MR_1=MR_2=MC$ and profits are maximized. The essence of price discrimination is that the elasticity of demand in the two separate markets must not be equal. Since marginal revenue can be espressed in terms of price (interest rate) and demand elasticities and MR=i ($i-\frac{i}{e}$) where i is the interest rate and e is the point elasticity of demand, it is essential that the e's in the two markets be unequal if two interest rates are to prevail. Thus, if $MR_1=MR_2$ as above then i_1 ($i-\frac{i}{e_1}$) = i_2 ($i-\frac{i}{e_2}$) and $i_1\neq i_2$ only if $e_1\neq e_2$. If the elasticity of demand is equal in both markets, there can be no differences in interest rates, assuming no cost differences.

Model II - A Theoretical Model for Diversification in Banking.

If we assume for simplicity that a financial congeneric is producing two services, I and 2, and for each service the demand is downward sloping and the demands are related, the marginal revenues may be derived as follows: Since $R = P_1Q_1 + P_2Q_2$ and R equals total revenue, P_1 and P_2 are the prices of the two services and Q_1 and Q_2 are the quantities sold. Then, if e represents the elasticity of demand we have:

$$\begin{split} \frac{\partial R}{\partial P_1} &= Q_1 \ (1 + e_{11}) + P_2 \frac{Q_2}{P_1} \ e_{12}, \\ \frac{\partial R}{\partial P_2} &= Q_2 \ (1 + e_{22}) + P_1 \frac{Q_1}{P_2} \ e_{21}. \end{split}$$

In the above e_{11} and e_{22} are the ordinary elasticities, while e_{12} is the cross elasticity of demand showing the proportionate change in Q_2 as a function of the proportionate change in P_1 and e_{21} is the cross elasticity showing the proportionate change in Q_1 as P_2 changes. Therefore, the bank in making its price and output decisions for its related services would take into account the effect a change in the price of one service would have on another substitute service. The bank would maximize profits by equating the marginal revenue in each service market to the bank's marginal cost. For simplicity in presentation, we have assumed that the marginal cost of providing the two services are equal.

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