THE METAMORPHOSIS OF MARKETS: COMMERCIAL AND INVESTMENT BANKING

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1. The process of market change

Financial markets are changing. The crystal balls of all observers are hazy, but recent remarks by Dee W. Hock, president of VISA U.S.A., Inc., suggest that in the next decade or so the reformation will be radical. According to Mr. Hock, there is "an accelerating evolution in the exchange of value". Plastic cards will "unlock a value reservoir to which [buyers and sellers] have never had access". He forecasts that "investment houses, insurance companies, mortgage companies and other repositories of value will provide card access to the value reservoirs they hold.... When cards ... reach their full potential, they will identify a [payor] from anywhere in the world in full possession of all his assets, whether credit, deposit, investment, or equity — a customer ready to exchange them for whatever you sell" [1].

This projected metamorphosis in financial markets is largely unrecognized. Most commercial bankers, trust officers, mutual funds managers, investment bankers, and their respective regulators pay scant attention to this scenario. Their experiences and the laws, rules and procedures under which they operate do not portend such fundamental change. This lack of cognizance is typical in markets experiencing change. The English handloom weavers did not foresee the impact of the powerloom on their economic and social conditions; ferry boat operators gave no consideration to the effect of bridges on their operations; carriage manufacturers generally ignored the early automobiles; most farmers failed to anticipate the technological, social and economic implications which were to be wrought by the replacement of horses and mules with the tractor; for many years railroad executives saw trucks as complementary to, not competitive with, rail services; steam locomotive manufacturers literally derided the possibility of an efficient diesel locomotive. More to

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This article is written in memory of the late Reed O. Hunt. Mr. Hunt was a shrewd judge of both men and markets; he was wise enough never to confuse which ought to be the master and which the servant.
the point, it took decades for bankers, bank regulators, engravers of bank notes — and economists — to recognize that demand deposits are as much 'money' as are bank notes.

In the process of market change, while some firms and individuals fare remarkably well, others realize gross failures. Those who do not adapt to a new technology are replaced and disappear. Interestingly, efforts to prevent market incursions, whether by private action or through appeals to legislators and regulators, have ultimately failed to protect the status quo. There is an inevitability about market change even if its form is not precisely predictable. One reason for this inevitability is an apparently endless, if numerically small, swarm of potential innovators, some few of whom mark the great successes and many of whom fail, perhaps to try again [2].

Market change, then, comes from someone perceiving a new way of performing an existing service, a new way of improving an existing service, a way of providing a new service to replace an existing service, or some combination of these. Where regulation is a factor, a feature of the innovative act is often the discovery of a means to circumvent regulatory constraints. The change agent may be an existing firm in the most affected market, a firm entering from another market, or a completely new entity.

Commercial banks, their trust departments, and investment bankers are on the threshold of a metamorphosis that will drastically alter their roles and postures in financial markets. Their markets have changed and will continue to change as old firms find new products and new markets and as new firms enter. Old regulations will change or be circumvented. New regulations will appear, some favoring new market organizations and some seeking to preserve the old.

2. Market metamorphosis — old style

Changes in the structure and performance of financial markets and institutions are hardly new. History is not about to repeat itself in the developing interfaces between commercial and investment banking, but a brief account of some changes of years ago — and of the consequent policy responses — is an instructive predicate to the arguments that follow.

A. Early history of trust departments

Trust institutions arose in the United States in the early 19th century and were at first largely independent of commercial banks. Banks began entering the trust business in volume after the Civil War. Because the newly chartered national banks were prohibited from trust activities and because state chartered banks were effectively precluded from the issuance of bank notes, the remaining state banks looked for new services. One — and really the most important one — was extension of
checking deposit banking for businesses. Another was the provision of trust services. State banks also had lower reserve requirements and chartering provisions were less stringent. By the turn of the century, the state banks far outnumbered the national banks, with the larger ones commonly operating trust divisions.

By 1897, the American Bankers Association organized what was to become its Trust Division. National banks were finally given the right to engage in the trust business through the Federal Reserve Act of 1913 [3], the constitutionality of which was clarified in First Nat'l Bank v. Union Trust Co. [4]. Actually, a number of aggressive national banks had long been providing trust services by means of interlocks and agreements with state banks or independent trust companies [5]. This is a good illustration of the use of innovative contracting to circumvent laws and regulations.

B. Pre-depression mixing of commercial and investment banking

With the growth of trust business, commercial banks gradually began to engage in underwriting and brokerage in securities markets [6]. Commercial bank underwriting was further stimulated by the rise in security market activities during World War I and, especially, during the 1920s. As commercial banks entered investment banking, trust companies and investment bankers increasingly accepted deposits and made commercial loans, often without the encumbering regulations governing commercial banks. The commercial banks also entered each other's markets. Where permitted by state law, entry occurred by branching, either de novo or by merger [7]. Open interest rate rivalry for both time and demand deposits developed in the larger 'money market' cities. These market changes heralded intensified rivalry in all markets because of both intraindustry and interindustry competitive forces [8].

The new competition resulted in bank failures well prior to the Great Depression. Over 1,000 commercial banks ceased operations because of absorptions, suspensions, or liquidations in every year from 1924 through 1929, although presumably only a few of these failures were directly related to the trust and securities aspects of their business. An unknown number of trust companies and investment bankers — certainly a small number relative to the totals — also failed during the 1920s. With the Crash of 1929, failures became systemic. From 1930 to 1933, nearly 12,000 commercial banks suspended operations [9], and many investment bankers and securities dealers went bankrupt or, by popular accounts, accepted their fates by leaping from office windows.

C. Legislative and regulatory responses

The 1931–33 assessment indicated two principal causes of instability in financial markets. One was the intensified competition caused by 'everyone trying to get into everyone else's ball game'. The other was the concomitant development
of practices that were deceptive, fraudulent and manipulative.

The Subcommittee on Stock Exchange Practices of the Senate Committee on Banking and Currency (the Pecora Committee) found that banks had recommended the purchase of securities in which they had direct or indirect interests without disclosure to customers of material facts, extended loans with inadequate or nonexistent collateral to companies in which they had investment interests, made loans to officers and favored customers for speculative purposes, and used 'inside' information to take positions in securities inconsistent with the interests of and explicit recommendations to customers. Investment bankers on their part had knowingly abetted the complex manipulations of Insull, Kreuger and other financiers, with gross failures to disclose, and 'with numerous instances of incompetence and irresponsibility' [10].

These findings led to the 1930s legislation that established extensive new regulation of the banking system. Understandably, the legislative and regulatory responses were protective. Measures designed to reduce or eliminate interindustry and intra-industry competition, to prevent the use of deceptive and fraudulent practices, and to provide emergency support for weak or failing banks were effected. The Reconstruction Finance Corporation Act (1932) [11] gave the War Finance Corporation added powers to make emergency loans to banks; the Glass-Steagall Act (1932) [12] permitted member banks of the Federal Reserve System to use government obligations to meet reserve requirements and authorized emergency loans to members; the Emergency Banking Relief Act [13] legalized (post hoc) the closings of the Bank Holiday and further extended Reconstruction Finance Corporation loan powers; the Thomas Amendment (1933) [14] authorized the Federal Reserve to purchase $3 billion in government securities from the market.

The Banking Act of 1933 [15] gave the Comptroller more supervisory powers, established the Federal Deposit Insurance Corporation, gave national banks branching powers equivalent to those of state banks, prohibited payment of interest on demand deposits, and created controls over interest payments on time and saving deposits. The Act declared in section 16 that dealings of national banks in securities and stocks "shall be limited to purchasing and selling such securities and stock without recourse, solely upon the order, and for the account, of customers, and in no case for its own account, and the [bank] shall not underwrite any issues of securities or stock . . ." [16].

In even more comprehensive language that affected investment bankers and all commercial banks, both state and federally chartered, section 21 prohibited "any organization" that is engaged "to any extent whatever in the business of receiving deposits subject to check or to repayment upon presentation of a passbook . . . [from also engaging] in the business of issuing, underwriting, selling, or distributing, at wholesale or retail, or through syndicate participation, stock, bonds, debentures, notes, or other securities . . ." [17].

The subsequent Banking Act of 1935 [18] enlarged the supervisory powers of the Federal Deposit Insurance Corporation, reorganized the Board of Governors of
the Federal Reserve System, gave de jure status to the Federal Open Market Committee, extended interest rate regulation to all insured banks, tightened chartering standards for national banks and, through insurance provisions, made the chartering standards for all banks except non-insured, non-member state banks essentially the same as those for national banks. Competition, whether among commercial banks or between them and investment banks, was in large measure prohibited.

Investment banks and securities dealers, previously subject only to state 'Blue Sky' laws, were brought under Federal regulation by the Securities Act of 1933 [19] and the Securities Exchange Act of 1934 [20]. The latter act established the Securities and Exchange Commission. Registration of issues in excess of $300,000 was required, 'full' disclosure was mandated, the exchanges, dealers and brokers, and listed securities were required to be registered, and devices and practices such as market pools, wash sales, price pegging, some forms of short selling and 'own-account' trading by brokers were prohibited or regulated. Bank margin loans were regulated by the Board of Governors. The Public Utility Holding Company Act of 1935 [21] extended SEC regulation to this area. Legislation of 1939 [22] and 1940 [23] made further regulatory extensions to associations of dealers, trustees of security issues (including bank trust departments), and investment companies and investment advisors.

This legislation, with its accompanying regulatory and supervisory apparatus, remains today as the primary restraint on inter- and intra-industry competition among commercial banks, investment banks and securities dealers.

3. Market metamorphosis — new style

New market opportunities for financial institutions appeared shortly after World War II. These were the mixed result of post-war real economic growth, a heavy demand for capital, actual and anticipated inflation, rising interest rates — sometimes with inverted yield curves — and new technologies that created the means to circumvent the restrictive laws and regulations of the pre-war period.

A. Competition among commercial banks in the post-World War II period

Immediately after World War II, the commercial banks literally disdained the retail business. They were in an extremely liquid position because of their large portfolios of government obligations. Commerical loan demands could be met by selling government holdings and substituting higher yielding commercial loans [24]. By the early 1950s, however, the banks had largely depleted their inventories of governments. Continued growth and loan demands required that they seek new sources of money, and they had to do this in the face of generally rising interest rates and, indeed, the strong attraction of rising stock market prices. The banks, that is, found that they had to compete for funds in the complex money market. This development ushered out the period of market stability that had characterized the prior twenty years [25].
The more aggressive banks turned to branching, both de novo and by merger. The number of branches rose from 4,665 in 1950 to 21,424 by 1970. The branches were a means of bringing the banks to the retail customer, but they also meant that individual banks were moving into the markets of others. The banks also began to compete for savings and time deposits by increasing interest rates, by foregoing the right to require notice of withdrawal and by offering various types of accounts with differing yields.

At first the rate maxima set by the Federal Reserve were graduated upward to accommodate the banks' needs for funds, but the growing rivalry among the banks and, by the mid-1960s, between the banks and the thrift institutions caused extension of the rate regulations to the latter and, generally, the imposition of constraining rate limits. Thus, in the tradition of the 1930s, regulators sought to temper the effects of competition by increasing regulation. Banks responded by attempts to circumvent the regulations. They issued new types of liability instruments (e.g., certificates of deposit and subordinated debt), they participated in a growing commercial paper market, and they borrowed Euro-dollar funds.

Efforts at retail continued. Consumer lending grew rapidly. Checking accounts could not bear interest, but they could be provided with no service charges and in packages that contained items such as free travellers checks, prizes for deposits, free tax advice, etc. Recently, and very pertinent to this paper (see below, Part 4), easy transfers from interest-bearing accounts to the transactions balances of checking accounts were promoted. The growing competition between the thrift institutions and the banks resulted in the introduction of NOW accounts [26] and to demands by some thrifts to be permitted directly to offer checking accounts. 'Check-like' accounts, designed to provide services prohibited by law and regulation, also emerged. Interindustry competition was again apparent.

This pressure led commercial banks to look elsewhere for market opportunities. Their activities as banks were stringently circumscribed, but beginning in about 1965, a loophole in the Bank Holding Company Act of 1956 [27] was extensively used to get into other markets. One-bank holding companies were formed, with a bank as one subsidiary and with other subsidiaries — either bought or formed anew — engaged in lines such as consumer finance, mortgage banking, equipment leasing, computer services, travel agencies and insurance. By the time the movement was somewhat constrained by the 1970 amendments to the Bank Holding Company Act of 1956 [28], the number of one-bank holding companies had grown from 550 in 1965 to 1,352. The percentage of total deposits held by their bank subsidiaries rose from five percent to thirty-five percent in just five years.

B. Intersecting markets of commercial banks, trust departments and investment banks in the post-war period

The demand for funds by banks and their efforts to find new markets in which to 'buy money' were occasioned by high and rising interest rates. The new market-
ing approaches coincided with fundamental money market changes in 1960–62, the ‘crunches’ of disintermediation and high rates in 1965–66 and 1969–70, and the phenomenally high rates of 1973–74 and 1978–79. They also coincided with increased efforts on the part of investment bankers and securities dealers to attract funds to their markets. During most of the period up to 1975, the prices of equity securities were rising and incentives to get savings to flow to that market rather than into the fixed-value and low yielding bank liabilities were developing. The trust departments of banks, as institutional investors, became aware of new market opportunities. This marked the beginning of the direct competitive interface between investment and commercial banking.

The first efforts of investment banks to tap new business in the post-World War II economic environment were in the area of mutual funds. The concept of pooling the savings of many individuals into a common fund is an ancient one, but the institutionalization and active marketing of the pooling through mutual funds are relatively new. In 1940, mutual funds held less than half a billion dollars of the nearly $80 billion of stock outstanding — about one-half of one percent. By 1968, the funds held about $51 billion in equity issues, representing roughly eight percent of the total amount outstanding. There was rapid growth in holding by other institutional investors as well, particularly in pension funds (largely managed and held by bank trust departments) and in funds of life insurance companies. The years of the ‘institutional investor’ had arrived [29].

As mutual funds and other institutional investors became more important in stock exchange trading, intraindustry competition developed in these markets also. Unlike the banking industry, where interest rates on deposits and other practices are ostensibly regulated by public agencies, stock trading rules were set by the New York Stock Exchange. To circumvent the rules, particularly the schedule of minimum commission rates and requirements for trades by member firms to be transacted on the floor, the institutional investors made new markets and, where this was impossible, negotiated elaborate schemes for ‘give-ups’, which are commission remissions and rebates [30]. Rules, whether public or private, can often be circumvented when markets offer opportunities. The ‘new markets’ comprised an extension of the Over-the-Counter market into a ‘third market’ of direct transactions and increased use of regional exchanges. The third market generated a trading volume adequate to induce the formation of a computerized quotation system, NASDAQ. With rights of non-members to trade with members by wire connections and off-the-floor established under the antitrust laws [31], the SEC finally abolished fixed commission schedules on May Day, 1975. By that time the new markets had so displaced the old that the number of member firms and offices had declined drastically through mergers and failures.

C. Commercial banks increase their investment banking functions

There were less obvious happenings going on in the background. The high performance of the stock market and mutual funds through the 1950s made the pro-
hibit against "issuing, underwriting, selling, or distributing" any securities pain-
fully binding for commercial banks which, by the late 1950s, were looking for new
ways to attract funds. The provision that they could purchase and sell securities
"upon the order, and for the account, of customers", seemed to offer a possible
loophole. Nonetheless, the Federal Reserve Board, with powers to regulate trust
activities deriving from the 1913 and 1918 legislation, had not, in its Regulation
F [32], authorized investment agency or commingled accounts.

The opportunity for bank pressure for regulatory and legislative changes came in
1961 when President Kennedy appointed James J. Saxon to be Comptroller of the
Currency. Consistent with his general views that there was "an urgent need for a
thorough re-examination of existing policies and practices" of bank regulation,
Saxon undertook a campaign to change bank trust powers [33].

Large trust department banks wanted Regulation F changed so that certain
investments beneficial to their commercial departments would not be regarded as
conflicts of interest. They proposed a complete re-examination of Regulation F
with an eye to the relaxation of the limits for participations in common trust funds,
the admission of investment agency accounts, the use of advertising for common
trust funds, and increases in the transferability of participations to other trusts
without capital gains taxation. It was recommended that the trust powers of
national banks be regulated by the Comptroller instead of the Federal Reserve, so
that the banks could "keep pace with the changing needs of the public for such serv-
ices" [34].

In the Act of September 28, 1962, Congress transferred the regulation of the
fiduciary capacities of national banks to the Comptroller [35]. In April, 1963, the
Comptroller issued a new Regulation 9 [36] with the express purpose of giving
"banks greater operating discretion and greater freedom to compete in additional
trust-related areas" [37]. Regulation 9 reflected the new market environment.
Rather than being a detailed and confining set of rules, it was "a general pronounce-
ment" [38]. Some additional regulations and reporting requirements were imposed,
but the limits on participations were liberalized [39] and the collective investment
of managing agency funds was authorized [40]. These developments provided the
green light for market metamorphosis with increased interindustry competition, and
also the green light for litigation.

First National City Bank (now Citicorp), an organization with a history of inno-
vating new ways to attract funds, took advantage of the new freedom. With the
approval of the three Federal Bank regulatory agencies, it applied in 1965 to the
SEC for exemptions from the Investment Company Act of 1940 so that it might
organize and manage commingled funds with participations issued and distributed
to the general public by the bank [41]. The SEC approved the exemptions, despite
opposition from the Investment Company Institute, the National Association of
Security Dealers, the Association of Mutual Fund Sponsors, the Investment Bankers
Association of America, and the Association of Stock Exchange Firms. First
National City began operations and the investment banking community brought
suit against the Comptroller in 1967. In 1971, the Supreme Court held that bank sponsorship and distribution of open-ended commingled funds violated the Glass-Steagall Act [42]. According to the Court, the rules of the 1930s were meant to apply to the markets of the 1960s and 1970s.

Recognizing that its actions in directly selling shares in commingled funds might be declared illegal, First National City organized a Special Investment Advisory Service (SIAS) in 1967, with purchases and sales of securities to be made through Merrill Lynch, Pierce, Fenner and Smith under a power of attorney signed by the participant [43]. This was contested by the SEC as a violation of the Investment Company Act of 1940 and the Securities Act of 1933 and the plan was abandoned [44].

Given this posture of law and regulation, a few trust departments tried to find other more acceptable ways into fund operations which would not involve the direct underwriting, sale and distribution of securities. By law, trust departments were restricted to the roles of acting for the account of customers, and as agent, advisor, custodian or fiduciary, while underwriting, selling and distributing could be done only by investment banks and security dealers. The answer, then, was for the trust departments to develop contractual arrangements with investment banks that would violate neither the securities laws and regulations, nor the Comptroller’s Regulation 9 and yet would permit commingled funds. While many investment bankers retained allegiance to the intent and spirit of the Glass-Steagall Act, a few strayed from the fold and joined with the banks [45]. As advisors, custodians, and transfer agents, the trust departments of banks found a way into the mutual fund business in the same manner as the national banks developed trust services despite regulatory prohibitions prior to 1913.

D. Trust departments and investment banks enter commercial bank markets

As the involvement of trust departments in mutual fund activities marked a step by commercial banks into investment banking, investment bankers moved in the opposite direction. Short-term interest rates rose dramatically after 1972. The prime rate averaged 4.66% in 1972 and 8.20% in 1973. By July, 1974, the prime was at 12%. The federal funds rate was at times much higher. Rates on Treasury bills and bankers acceptances behaved similarly [46]. These rates were well above the yields on stocks, however computed, and resulted in a depression of stock prices. The high rates accentuated the need for corporate cash management and, in particular, made any balances held in zero-yielding demand deposits extremely costly.

This situation provided the ingredients for another market innovation — the ‘cash-managing’ or ‘money-market’ fund. A few investment firms and a few banks operating through investment firms started these funds, specializing in portfolios of debt comprised of Government bonds, Treasury bills, commercial paper, bankers acceptances and certificates of deposit. The Reserve Fund, begun in 1972, was the
first of these, but by mid-1976 at least fifty funds were in operation [47]. In June, 1974, the Reserve Fund was yielding 11.42%, with other funds not far behind [48]. Firms and individuals thus had a place to put money at market yields, gaining the advantages of fund diversification while retaining liquidity, and the sellers of obligations — borrowers who had traditionally used commercial bank loans — had a new source of funds.

Money market funds provide for wire order redemptions and transfers; most offer redemption and transfer by ‘check’; transfer by card may soon be possible. The minimum amount necessary to open an account varies from $1,000 to $100,000, but the smaller figure is typical. Service charges for checks are levied and minimum check sizes — usually $250 or $500 — are set. At least eight of the funds restrict sales to institutions, but the others are available to individuals. From the point of view of the user, these funds look like interest-bearing checking and transactions accounts. They are subject to a few restrictions on use, and there are service charges, but since they can be used to write drafts for payments to the order of others, the funds have the salient characteristics of ‘money’ [49].

Even more ‘check-like’ than the money market fund is the Merrill Lynch ‘Cash Management Account’ (CMA) introduced in July, 1977. Investment banking firms have traditionally invested margin account funds and paid interest to the owners of those accounts, with dividends and interest earned on customers’ other investments also being credited to the margin accounts. Under a plan developed in cooperation with City National Bank of Columbus, Ohio, itself a leader in electronic funds transfer innovations, the collective margin accounts became a money fund, with checking privileges and with access through a VISA debit card. The card permits ordinary card usage for purchases, plus the usual cash advances. Overdraft protection is afforded by any excess balance in the margin account and by margin loans before the advances on the card are used. There is privately arranged insurance of up to $300,000 per account [50].

The CMA plan is still in the experimental stages but, if it is successful, an investment banking firm, with the cooperative facilities of a commercial bank, will indeed have entered the most distinctive service of commercial banking [51]. This is the most interesting indication that Mr. Hock’s forecast that cards will provide access to value reservoirs throughout the financial markets will indeed become a reality. Demand deposits of commercial banks, earning no interest, will be replaced by other institutional liabilities if present regulations persist.

4. The future: markets and public policy

A. The electronic funds transfer system

Over the past decade, there has been a great deal of discussion about an electronic funds transfer system (EFTS). Beyond the discussion, there has been enough
implementation to see how the emerging EFTS is likely to function. Some financial institutions — probably large commercial banks — will have host computer operations connected with terminals at retail outlets, other types of non-financial businesses, households, and their own automated teller and other terminal facilities. There will be terminals and smaller computer capabilities at other banks and thrift institutions connected to the host computer, providing operationally distributed processing for many types of transactions. These will connect with their respective retail, household and business customers. Card companies, securities dealers, insurance companies, and other institutions holding ‘inventories of values’ denominated in dollars will also connect directly or indirectly through other financial institutions to host computers and automated clearing facilities. Dollar conversions to and from foreign currencies will, through the Society for Worldwide Interbank Financial Telecommunications or successor organizations, become reality. In truth, as Mr. Hock foresees, many new types of assets will be convertible to payments orders depending only on contract terms and transactions costs.

With EFT, the financial system will increasingly operate as an integrated whole. Transfers will occur within a single institution (e.g., from a savings to a demand deposit), between institutions of the same class (e.g., from a demand deposit in one bank to a demand deposit in another), between deposit institutions of different classes (e.g., from a thrift institution to a commercial bank), between deposit and non-deposit financial institutions (e.g., from a commercial bank to a security dealer), between non-deposit financial institutions (e.g., from one security dealer to another), between any of the financial institutions and the non-financial sector (e.g., from a security dealer to a furniture store, as in the Merrill Lynch plan) or among various foreign currencies.

B. Regulation of investment and commercial banking in an EFT environment

With EFT technology, it will be impossible to prevent commercial banks and their trust divisions from engaging in securities transactions. Funds will flow from market to market. It will be impossible to prevent investment bankers and security dealers from effecting funds transfers, just as it is currently impossible to prevent the thrift institutions from engaging in funds transfers. The intentions of the 1930s legislation will be thwarted as every ‘corner of the market’ is laid open to competitive attack.

Legislation could, of course, be designed with the intention of preventing or delaying this mixing of markets. This was the response of the 1930s. The technological environment is very different now, however. In 1935, one could order the sale of a security, receive a check, deposit the check in a bank, and write a draft for the purchase of goods. It was a costly and time consuming process, but the value of the securities was used by the individual to purchase the goods. The difference in the current state of technology is that EFT makes the set of transactions needed to sell a security in order to buy goods virtually instantaneous and entails very small
transactions costs. Legislative impediments would only make the EFT network loops more complex. They would be similar in effect to cutting all direct telephone lines between New York and Chicago: calls would just be rerouted, with the caller not recognizing that his voice travelled by way of San Francisco. The technology is here, just as were the technologies of the powerloom, the automobile, the tractor, the truck, the diesel locomotive and the demand deposit.

As technology evolves, it is becoming increasingly clear that the laws and regulations of the 1930s are in fact accelerating the mixing of markets rather than retarding it. Further, rather than protecting commercial banks, the legislation is contributing to their difficulties. In the absence of regulatory reform, the public will suffer along with the banks.

The now ancient prohibition of interest on demand deposits, in an environment of high interest rates, forces bank customers and other financial institutions to look to alternative liabilities for the holding of transactions balances. This prohibition, combined with new technology, is the primary reason for the increase in the turnover velocity of demand deposits in recent years. Bank customers hold minimum balances in demand deposits, using them only when other less costly transactions media are not available.

Regulation of interest in savings and time deposits similarly induces alternative asset holdings. Funds move to higher interest rate options, many of which now afford transaction services as well as higher yields. New fund institutions are buying funds from and selling funds to commercial bank customers at the same time. In this light, bank trust departments, with money market funds accessible by check or by card, are clearly in competition with their own and other commercial departments. They complement the trust activities of smaller banks by providing high yielding, liquid investments. They provide a substitute for currency and demand deposits, paying current market rates on what are essentially transactions balances.

Preservation of the commercial banking function requires not restrictive legislation, but rather legislation freeing the commercial banks so that they can compete in buying and selling funds. Absent such liberalization, EFT is likely to transform commercial departments into mere transactors of funds transfers — the "switchboards" in the EFTS — with greatly reduced direct involvement of their own assets and liabilities in the funds intermediation process. The more restrictive the regulations, the faster will the transition occur. As of this writing, high rates are spurring new ventures by non-commercial bank institutions, including trust departments, into funds transfers [52].

Unhappily, unlike Mr. Hock, and reminiscent of the handloom weavers, the ferry boat operators, the carriage manufacturers, the railroads, the steam locomotive manufacturers and the issuers of bank notes, commercial bankers and their regulators generally either fail to see what the future holds or are content to adhere to short-term solutions. A few are attempting to adapt to the new world despite the old regulations; some are succeeding [53].

The change, it should be recognized, is going to be radical enough to cause a
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major restructuring of commercial banking and other deposit institution markets. If regulations are relaxed, some banks and other deposit institutions will be unwilling or unable to adapt to the market forces. If regulations are not relaxed, other institutions will take their place. This is a dilemma most institutions choose to ignore. On balance, a policy of gradually removing the constraints of the 1930s with the types of reform suggested by the Commission on Money and Credit [54], the Heller Committee [55], the Hunt Commission [56], the proposed Financial Institutions Act [57] and the Financial Reform Act [58], and by the National Commission on Electronic Fund Transfers [59], is the best policy route to follow. Still, one should be sanguine neither about the probability of orderly adoption nor about their effectiveness in maintaining present market structures even if passed.
Notes

[2] The arguments of Joseph Schumpeter in Schumpeter, The Theory of Economic Development (1911), and Schumpeter, Capitalism, Socialism and Democracy (1942) are relevant. For a more systematic exposition of relationships between innovation and market structure, see Phillips, Technology and Market Structure, ch. 1 (1971). In this context, the innovator may be a business firm or an individual and the concept of an innovation is broad. The development of the supermarket or of a new franchising system is as much an innovation as is the introduction of the transistor. The new uses of the bank holding company in the 1960s were innovations.
[3] Federal Reserve Act of 1913, ch. 6, § 11(k), 38 Stat. 251 (1913). Section 11(k) of the Act provided that the Federal Reserve Board could empower national banks to exercise trust functions to the extent allowed state banks by the laws of the state in which the national banks were located. The Act left open the possibility that states could deny national banks these equivalent powers. Section 11(k) was amended by the Act of Sept. 26, 1918, ch. 177, § 2, 40 Stat. 967 (1918) (current version in 12 U.S.C. §§ 92a(a), (b) (1976), to guarantee national banks the same scope of trust powers as competing state banks. The amendment was upheld in Burns Nat'l Bank. v. Duncan, 265 U.S. 17 (1924), with Justice Holmes holding that it states "in a roundabout and polite way that whatever may be the state law, national banks... may act as executors if trust companies competing with them have that power". 245 U.S. at 24.
[6] At the same time, some investment banking firms entered commercial banking activities, taking deposits and making commercial loans. The first three decades of this century were characterized by relatively free chartering and some chartering rivalry between the Comptroller of the Currency and the state agencies. The number of state banks grew from 5,007 in 1900 to 20,635 in 1920; national banks grew from 7,420 in 1900 to 9,656 in 1920. As noted in text, the latter were less popular because of more stringent regulations, higher reserve requirements, a prohibition on branching and, until 1913, the prohibition on trust operations.
[7] The McFadden Act, ch. 191, 44 Stat. 1224 (presently codified in scattered sections of 12 U.S.C. (1976)) allowed national banks nearly the same scope of branching power as that allowed state banks by the law of the state in which the national banks were located. The primary reason for passage of this Act was to create near-parity in branching powers between national and state banks. In 1900, there were only 119 branches; by 1925, there were 2,525 branches, more than half of which were less than five years old, and all of which were state bank branches.
[10] Stock Exchange Practices: Hearings Before the Senate Comm. on Banking and Currency, 73rd Cong., 1st and 2nd Sess. (1934). See Stone, The Public Influence of the Bar, 48 Harv. L. Rev. 1 (1934) for the view that these practices and, in particular, failure to observe the fiduciary principle, were the main causes of the financial disaster.
[15] Banking Act of 1933, ch. 89, 48 Stat. 162 (1933) (presently codified in various sections of 12 U.S.C., see 12 U.S.C. § 227 (1976)). Sections 16, 20, and 21 of the Banking Act of 1933 are commonly known as the Glass-Steagall Act, and further references to this Act will refer to these sections. The Glass-Steagall Act is not to be confused with the Glass-Steagall Act of 1932, supra n. 12, which concerns regulation of Federal Reserve Banks.


[24] The price of long-term government obligations was 'pegged' to yield about 2.25% by the Federal Reserve until 1951. Short-term rates on government bills were allowed to rise after 1947.


[26] A NOW account is a 'negotiable order of withdrawal' on an interest-bearing savings account, which in effect allows thrift customers to write checks on their savings accounts.


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[34] Id. at 37. Banks also sought permission for trust departments to retain the bank’s own stock when received in kind, to purchase the bank’s stock for profit-sharing trusts where bank employees are the beneficiaries, and to invest in the bank’s own savings accounts and certificates of deposit. Id. at 32–33.


[38] Id. at 50.


[43] The minimum amount accepted for investment was $25,000. It was and remains common practice for banks, with the blessings of regulators, to discriminate against small savers in the terms offered on their deposit liabilities as well as on their commingled funds.


[45] This behavior led to dissension in the Investment Bankers Association. The trust department banks and some investment bankers were sympathetic to changes involving banks while another group, now the Securities Industry Association, consisting of the traditional investment bankers, was not.


[48] The performance of individual funds, with comments, is reported weekly in Donoghue’s Money Fund Report (formerly Butler’s Money Fund Report).

[49] See Money Market Funds, N.Y. Times, Mar. 6, 1979, at D-1. During the period January 1978 to February 1979, the assets of these funds more than tripled.


[52] For an excellent description and analysis of the innovative ways in which ‘money substitutes’ have been developed to circumvent regulatory obstacles, see Grantham, Velk and Fraas, On the Microeconomics of the Supply of Money, 29 Oxford Econ. Papers 319 (1977).

[53] When the Federal Reserve and the Federal Deposit Insurance Corporation proposed in early 1978 the relaxation of rules governing transfers from savings to demand deposits in commercial banks, both the Interdependent Bankers Association of America (small bankers, largely) and organizations of the thrift institutions opposed the move. In the short-term, they feared paying directly for transactions funds, ignoring the long-term prospects of disintermediation to non-deposit institutions which will replace their functions. The rules were, nonetheless, changed in late 1978.
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