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THE DECLINE AND FALL OF THE STOCK CERTIFICATE IN AMERICA

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Equity interests in United States business corporations have long been typically evidenced by stock certificates – brightly colored engraved pieces of paper, issued to identified persons whose names are registered on books kept for that purpose by the issuing corporations. During the last decade, stock certificates have been the subject of considerable study and debate.

In the late 1960s, a period of sustained high trading activity, clearance and settlement problems threatened to engulf the securities industry in an avalanche of paper. Because the rights represented by stock certificates can, in most cases, be effectively transferred only by the physical delivery of the certificates themselves, many analysts of the so-called 'paperwork crunch' identified stock certificates, or, more accurately, the procedures necessitated by the requirement of their physical delivery, as the principal factor contributing to the chaotic state of affairs.

Proposals for reform abounded. This article discusses what was proposed, what has been accomplished and what remains to be done.

1. The rise of the stock certificate

The stock certificate was a truly marvelous invention which responded to the needs of the market. By the process of embodying the rights of a corporate shareholder in a piece of paper, the shareholder was able to transfer his rights by simply handing that piece of paper to the transferee. The purchaser, secure in the knowledge that he had received that for which he had bargained, could confidently pay the price to the seller and the deal was done. In a market environment in which trading was substantially carried on by professionals who dealt face-to-face, the delivery of certificates was the paradigm of simplicity.

Despite the fact that corporate shares were not money obligations, stock certificates ultimately acquired almost all the other attributes of negotiable instruments. Ownership was transferred by delivery with appropriate endorsements. Liens were created by pledge and were perfected against third parties by the lender's possession. Purchasers for value without knowledge took free of claims and defenses not noted on the certificate. Creditors could reach the shares owned by their debtors only by seizure of their certificates. Jurisdiction in certain legal proceedings was

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determined by location of the certificates. Indeed, the stock certificate – a device developed to facilitate trading – had become the central indispensable element upon which an entire legal regime was based. [1].

Concurrently with these legal developments, however, the market environment, which militated in favor of the negotiable instrument approach, was itself radically changing. First, corporate shares were no longer traded almost exclusively in face-to-face confrontations. Rather, trading had become a nationwide, even global, enterprise conducted through a network of brokers, correspondents, exchanges and other intermediaries. Second, modern electronic technology permitted a contemplated transfer to be communicated to the corporate issuer, registered on its books and acknowledged to the transferee in a matter of minutes.

In short, the basic characteristics of the environment had been transposed. The delivery of certificates, an essential element at every step of the settlement process and formerly accomplished with little expense or effort, had become a time-consuming and cumbersome task. Conversely, virtually instantaneous communication with corporate issuers, the impossibility of which had formerly constituted an insurmountable obstacle, was now well within reach.

2. Response to the crisis

The 'paperwork crunch' engendered an enormous amount of activity. Articles were written [2]. Studies were commissioned. Committees were formed. Subcommittees of both houses of the Congress conducted extensive hearings [3]. Two state legislatures enacted statutes that expressly permitted the issuance of corporate shares not evidenced by certificates [4].

The range of proposals for corrective action was broad and the degree of reform proposed was varied. Some viewed the stock certificate as an absolutely essential element that could not be eliminated without the creation of utter chaos. Others expressed the view that the total elimination of certificates was the crux of meaningful reform. Most thoughtful students of the problem realized that, although the stock certificate was the most visible evidence of the paperwork problems of the securities industry, it performed important functions which, in its absence, would have to be accomplished by other means. They agreed that if securities transactions were to be effectively conducted without the employment of stock certificates there was a need not only for innovative technology but also for new rules of law.

In 1971 the Section of Corporation, Banking and Business Law of the American Bar Association established a Committee on Stock Certificates. That committee was charged with the duties of determining what legislation, if any, was needed to facilitate the elimination of negotiable stock certificates and of drafting such legislation. The project was jointly financed by the Section and by the American Bar Endowment through the Fund for Public Education of the American Bar Association. It was thought desirable to conduct the study independently of financial support from various industry groups any of which might either benefit from or be prejudiced by any changes recommended. The author of this article served as the Reporter for that committee.

A. Procedural reform

Needless to say, the securities industry was not sitting idly by waiting for new legislation. Within the industry, a number of significant reforms were introduced with the objective of improving the traditional method of settling transactions by the delivery of stock certificates.

In order to reduce the risk of error, the industry had adopted a system assigning a unique 8-digit number to each issue of securities and required that this number be imprinted on all newly-issued certificates. A start was made to assign another set of numbers to identify each of the banks, brokers and other regular participants in securities transactions. Such numerical identification not only improved manual certificate processing but seemed to be an essential element in any of the various mechanical processing systems that were then being studied.

It was suggested that every stock certificate be encoded with information that could be read by magnetic or optical scanning devices, devices which would then be employed by all segments of the industry. Alternatively, it was proposed that the customary 8″ by 10″ certificates be replaced by tabulating card-size certificates which could be processed at high speeds on existing data processing equipment. Neither of these approaches was ultimately adopted, presumably on the grounds that the required capital investment would exceed the prospective benefits, especially in light of the fact that existing certificates, outstanding in the hands of shareholders, would have to continue to be accommodated for the indeterminate future.

The so-called 'jumbo certificate' for more than 100 shares was introduced with significant effect. Until then, the certificate for 100 shares had been the common medium of exchange in the industry. Since each certificate had to be received, handled, accounted for and delivered, a tremendous amount of unproductive effort was expended in large transactions. Thus, the use of single certificates for hundreds, or even thousands, of shares resulted in substantial savings. As an example, in the seven-year period from 1967 to 1973, the number of new certificates issued by one widely held corporation was reduced by more than half while the number of shares transferred more than tripled. During that period, the average number of shares represented by each newly issued certificate increased from 77 to 509 and thus constituted, adjusting for volume, an 85% reduction in certificate issuance [5]. Similar, though less measurable, economies have undoubtedly been experienced by brokers, banks, institutional investors and all others who, in the course of their business, must count, store and otherwise deal with stock certificates.

A further reform, the significance of which extends beyond the immediate results, was the adoption of the Continuous Net Settlement (CNS) system. Until as recently as 1974, transactions on the New York and American Stock Exchanges were settled by the Daily Balance Order (DBO) system. In the DBO system, the aggregate transactions of each broker for each day were analyzed and it was determined whether a given broker was a net seller or buyer of each issue traded. Each broker was then instructed to deliver or receive certificates to or from other brokers. Since the identity of the brokers on the 'other side' could not be ascertained until the daily balance was struck, each broker had to have in his actual possession inventories of certificates sufficient to make deliveries required at settlement.

In the CNS system, pioneered by the Pacific Coast Stock Exchange and adopted by the National Clearing Corporation at its inception, the clearing house becomes, for settlement purposes, the 'other side' of every trade; each member makes settlement by either delivering or receiving certificates to or from the clearing house. CNS was adopted by the New York and American exchanges in 1974 [6].

Because each broker knew that all settlements would be made with the clearing house, brokers were willing to leave with the clearing house certificates they did not currently need. The clearing house thereby acquired control of a pool of certificates from which it could make deliveries even though some of its members may have failed to make deliveries to it. As a consequence, CNS reduces the cumulative impact of the failure of some members to make timely delivery. The records of the clearing house, of course, indicate the share balance of each broker who is entitled to receive certificates left with it.

Unfortunately, the accumulation of a pool of certificates under the control of the clearing house, although mitigating the impact of 'fails', spawned a different problem. These certificates remained in the names of their former owners and became readily transferable by reason of endorsements. Thus, upon the payment of a dividend or other distribution by the issuing corporations, the mechanics of obtaining the payment from the registered owner through a chain of intermediate owners became enormously complex. At one point, the Pacific Coast Stock Exchange reported that some $ 650,000 in such dividends had, in effect, been 'lost' [7].

B. The securities depository

It was but a small, and extremely logical, step from the clearing house, with its pool of certificates left with it by its members, to the securities depository. The depository is an independent entity, usually but not necessarily associated with a clearing house, interposed between issuers and owners. Certificates left by owner-participants with the depository are returned to the issuer and re-issued in the name of the depository or its nominee. Thus, with the inevitable exception of a small number of certificates entering or leaving the depository system, the bulk of the depository's holdings are registered in the depository's name.

Since the depository maintains accurate records of participant accounts, it can serve as an effective channel between the various issuers and the participants who own the respective issues. When the depository, as *registered* owner, receives distributions from the issuer it can almost simultaneously credit the accounts of the various owner-participants with the cash or stock it receives. Similarly, corporate communications, proxy statements and the like initially coming to the depository as the registered owner can be effectively directed by it to the owner-participants. And when the depository operates in conjunction with a clearing house, it can easily charge or credit cash to the accounts of its broker-participants in connection with the settlement of their transactions.

Both outright transfers and pledges of securities between participants in a depository are effectuated merely by making appropriate entries on the depository's books. When both parties to a transaction are participants, therefore, the transaction can be settled without certificate delivery. If, then, participation in a depository (or a system of inter-related depositories) is sufficiently widespread to comprehend most active trading entities, the problems incident to certificate delivery can be substantially reduced, without eliminating the certificates themselves.

The Banking and Securities Industry Committee, which thoroughly explored the problems of clearance and settlement several years ago, suggested that a well-developed depository system might well, of itself, be sufficient to preclude another 'paperwork crunch'. Although there are several depositories operating in the United States, the Depository Trust Company (DTC), a successor to the Central Certificate Service of the New York Stock Exchange, has emerged as the most significant. At the end of 1977, 204 brokers, 53 banks and 8 other depositories had, on deposit with DTC, securities with an aggregate market value of close to 140 billion dollars. During 1977, transactions with an aggregate market value of over 350 billion dollars were effected by entries on DTC's books, none of which required the physical delivery of securities. In 1977, DTC collected from issuers and credited to participants cash dividend and interest payments in excess of 5.5 billion dollars [8].

The 'paperwork crunch' of the 1960s resulted from a sustained volume of trading in the neighborhood of 30 million shares per day. By 1978, 30 million share days had become routine and trading volumes of 50 to 60 million shares per day had been successfully handled without significant problems. It is apparent that, at least insofar as settlement between brokers is concerned, DTC and other depositories associated with regional exchanges outside of New York have all but eliminated the kinds of problems that, ten years ago, resulted in a near breakdown of the clearance and settlement process.

With minor exceptions, the depository system has developed within the existing framework of certificate-based law. Although, for transactions between participants, certificates have been rendered almost meaningless by their immobilization in the depository's vaults, they continue to exist and, indeed, continue to be employed in transactions with non-participants. A few additions to Article 8 of the Uniform Commercial Code, adopted more than 15 years ago in anticipation of a depository system, have proved entirely adequate to enable transactions to proceed with full confidence in their legal implications [9].

It should be noted, however, that the benefits of transfer without certificate delivery through the use of a depository are available only for securities held by professionals. Participation in depositories is limited, by the rules of the depositories themselves, to brokers, banks, institutional investors and the like. The individual investor shares in these benefits only to the extent that he leaves his securities in account with his broker, a custodian bank or other intermediary.

C. The individual investor

While brokers and other professionals have succeeded in immobilizing their stock certificates in depositories, a large and growing segment of the investing public has cheerfully foregone the possession of stock certificates, and the attendant inconvenience, by an entirely different route. Millions of small investors in corporate stock presently hold all or part of their shares in functionally uncertificated form.

The earliest appearance of this phenomenon stemmed from the rise of open-end investment companies, the so-called mutual funds. Mutual funds, which are entities that acquire a portfolio of securities and issue their own shares to small investors, have long been a popular investment medium. For a relatively modest fee, they enable the investor of modest means to acquire a diversified investment portfolio under continued professional management.

Most mutual funds stand ready at all times to issue additional shares or to redeem outstanding shares, at a price equal to the then existing net asset value of their shares. Thus, the typical transactions in mutual fund shares are the sale of newly issued shares and the redemption, *i.e.*, purchase, of outstanding shares. Many of the funds offer plans in accordance with which shares can be periodically purchased by or from shareholders for predetermined dollar amounts.

It was apparent from the beginning that negotiable stock certificates served no function in transactions where the only parties involved were the issuer and the shareholder. Unlike transactions in which shares were routinely transferred to unrelated third parties, there was no need to have a piece of paper to assure the purchaser that his seller owned the stock and that the issuer had registered or would register the requested transfer. Consequently, the mutual funds typically issued certificates only upon the express request of their shareholders, and experience has shown that fewer than 10% of the shareholders request them.

In practice, the purchaser of mutual fund shares either sends his check to the issuer's transfer agent or authorizes the transfer agent to apply dividends to the purchase of additional fund shares. The purchase is confirmed by a simple statement, not materially different from the duplicate deposit slip given by a bank to its depositor. In redemption transactions, the transfer agent, upon receipt of authenticated instructions from the shareholder, sends payment to the shareholder together with a statement evidencing the reduction of the share balance. Periodic statements, similar to the monthly or quarterly bank statement, list all increases and decreases in the share balance during the relevant period.

The widely held belief that unsophisticated stockholders would not readily accept the concept of uncertificated securities has been largely dispelled by the mutual fund experience. Mutual fund shareholders, who are, in the main, the least sophisticated members of the investing public, appear to be satisfied not to have certificates and have, thereby, saved themselves and the issuers time, trouble and money.

The Dividend Reinvestment Plan (DRP) is of more recent origin. The first DRP's were offered in the late 1960s by The First National City Bank, which marketed the plans as a means for small shareholders of corporations to acquire additional stock in the same corporations at a reasonable cost. In the typical DRP, the shareholder authorizes the transfer agent to apply dividends payable to the shareholder to the purchase of additional shares of the issuer. The transfer agent then aggregates the total amounts payable to all participants, purchases additional shares of the issuer's stock on the market and holds that stock for the benefit of the participants in proportion to their respective contributions. By making a bulk purchase, the cost of the transaction can be spread ratably among the participants and, even after deducting reasonable compensation for the transfer agent, results in a net acquisition cost substantially less than would have been incurred in a large number of individual purchases.

Encouraged by the public's reception of the bank DRP's, a number of corporations, with continuing capital needs, decided to offer their own DRP's, for the joint benefit of the participating shareholders and the corporations themselves. Corporate DRP's differed from bank DRP's only in that the shares acquired by the reinvested dividends were not already outstanding shares purchased on the market, but, rather, were new shares issued by the corporation. Indeed, the corporations found that the DRP's were so efficient as devices for raising capital that many of them, to encourage additional participation by shareholders, offered to sell the new shares at a discount, typically 5%, from the market price. By late 1978, more than 900 corporations offered DRP's to their shareholders. Of these, eighty issued new stock and forty of these offered participants a discount from the market price. In the aggregate, approximately 2 billion dollars in dividends is reinvested by the shareholder-participants each year. In the American Telephone and Telegraph Company plan, alone, there are more than 700,000 participants, mostly small individual investors [10].

Since the typical transaction in the DRP's is the periodic purchase of a small number of shares by the participants, either as part of a bulk purchase by the agent bank or directly from the issuer, unaccompanied by the purchaser's intention to sell in the foreseeable future, there is no immediate need for the issuance of certificates and, following the mutual fund example, certificates are issued only upon request. Few are requested. As is the case with mutual fund shares, simple statements amply satisfy the requirements of the shareholders.

Thus, the mutual funds and, more recently, the DRP's have brought into existence many millions of corporate shares for which the owners have no stock certificates. If certificates representing these shares in fact exist, they are retained by the transfer agents or the issuing corporations and serve no function other than to comply with technical legal requirements that corporate shares be evidenced by certificates.

So long as transactions are confined to the periodic purchase or redemption of shares, there is no need to issue certificates. When, however, a different kind of transaction is contemplated, the system cannot accomodate it. If, for example, the owner of mutual fund or DRP shares wants to borrow, using his shares as collateral, the present law provides no guidance as to how the transaction can be accomplished. The prudent lender will search in vain for legal guidelines for certificateless stock and, in the end, demand that a certificate be issued for him to hold.

D. Certificateless systems

Unlike either the depositories, which are the nominal holders of the stock certificates under their control, or the mutual funds and DRP's, in which the transfer agent or issuer is deemed to be holding the participants' certificates, systems have been developed which are expressly designed to dispense with certificates entirely.

An important early report concluded that a satisfactory system of stock transfer operating entirely without certificates was technologically feasible [11]. One bank transfer agent, the First National Bank of Boston, in an effort to be in the vanguard of things to come, instituted for a medium-sized corporation whose securities were traded primarily in the Boston area a wholly certificateless system bearing the somewhat anomalous title of Transfer Agent Depository (TAD). The TAD was designed to accept transfer instructions, confirm registrations of transfer, register pledges and, in general, do whatever needed to be done to effectuate all kinds of stock transactions, but all without the issuance of certificates.

There was little doubt that existing technology was up to the problems that needed to be solved. The chief obstacle to be overcome was the absence of legal rules that could be applied in order that the parties could confidently predict the consequences of their actions. With the only law available firmly based on the existence of certificates, TAD was necessarily based on fictional, and often questionable, assumptions. Could the transfer agent be, at once, the agent of both the issuer and the shareholder? Could the transfer agent be the bailee of a certificate when no certificate existed? Such inquiries made for interesting intellectual discourse, but in the absence of clear answers, the TAD concept did not make much headway. Hard-headed business people do not speculate on using a legally questionable system when a safe alternative is readily available. In the present state of the law, the stock certificate, despite its inconvenience, is that alternative.

By way of contrast, several trillion dollars of transactions in United States bonds are each year effected by book-entry and without certificate delivery. This program, conducted by the Federal Reserve Banks, has been phenomenally successful in all but eliminating the physical delivery of securities in the settlement of transactions in government obligations. There are, of course, many substantial differences between this program and the TAD system described above. It is suggested, however, that one very significant distinction is that the Treasury's Book-Entry program is supported by federally promulgated rules, with the force of law, which facilitate transactions by clearly articulating their legal consequences. Similar support is lacking for TAD at the present time.

3. The ABA stock certificate project

The Committee on Stock Certificates, referred to earlier, issued its report in 1975 [12]. After analyzing the problem and reviewing the progress made previously, the Committee offered two principal recommendations for law reform [13].

The first was the suggestion that the various state corporation laws be amended to provide expressly for the issuance of stock not represented by certificates. An amendment to the Model Business Corporation Act, adopted by the ABA Committee on Corporate Laws, provides that a corporation should have the option to issue its stock in either certificated or uncertificated form or both. Even prior to the Committee's recommendations, two states, Michigan and California, had adopted amendments with similar import. It should be noted, however, that, even without the benefit of such amendments, corporations with DRP's, mutual funds, and the issuer in the experimental TAD project have been able to rationalize that the issuance of functionally uncertificated stock is within the competence of corporations under various present corporate laws, so long as certificates are available upon shareholder request.

The second principal recommendation of the Committee was that there be a comprehensive statutory framework to regulate the rights, responsibilities and duties of the issuers of, and persons who deal with, uncertificated securities. A suggested framework was presented as a proposed revision to Article 8 of the Uniform Commercial Code. The revision sets forth parallel rules for transactions in both certificated and uncertificated stock and attempts, insofar as practicable, to minimize disparity of procedures and results.

This proposed revision was presented to the Permanent Editorial Board for the Uniform Commercial Code, a unique body jointly constituted by the American Law Institute and the National Conference of Commissioners on Uniform State Laws. After review, presentation, discussion, and further amendment, revised Article 8 was approved by the membership of both the Institute and the Conference in 1977, and is now included in the 1978 Official Text of the Uniform Commercial Code [14]. Even before the publication of the Official Text, the revision had been adopted by Minnesota, to take effect on January 1, 1979.

4. Quo vadis?

In the ten years since the 'paperwork crunch', the atmosphere of panic has disappeared. The desirability of continuing reform and improvement is still clearly acknowledged, but there are no longer urgent cries to abolish the stock certificate and impose some kind of certificateless system by legislative fiat. The securities industry has, by internal effort, brought the problems within manageable limits, even if it has not solved them completely. Stock certificates and certificateless transfer systems continue to exist side by side within the same issues and will, in all probability, continue to do so for some time.

The development of the securities depository system has unquestionably been the most significant factor in the picture. Although the stock under the depositories' control constitutes only a minor fraction of all outstanding stock, that fraction includes a large proportion of the stock held by brokers for their customers. And it is precisely these shares that account for a significant part of trading activity. The stock certificates held by long-term investors in their safe deposit boxes do not, and never did, constitute a threat to the orderly functioning of the settlement process.

As a natural outgrowth of their experience with the clearing houses, broker participation in depositories was immediate and widespread. Participation by other entities has been more tentative, but it appears that an increasing number of banks, insurance companies, mutual funds and other institutions are beginning to avail themselves of the unique advantages the depository can offer [15]. Non-broker participation is further encouraged by a movement, made possible by a 1973 amendment to the Uniform Commercial Code, to disperse the ownership of the depository among all its participants in contrast to the previous requirement that depositories be wholly owned by securities exchanges [16].

Along with depository expansion, however, there remains the need for complementary alternatives. The ever-increasing number of shares held by individuals and others in Dividend Reinvestment Plans will almost inevitably produce a demand for effective methods of dealing with these shares. The currently available response of issuing certificates on request requires much wasted time, effort and expense. That inefficiency could be avoided by procedures developed under revised Article 8, which expressly treats such shares as uncertificated securities and provides a legal framework for dealing with them. If such procedures are, in fact, successfully developed, it would be a logical step to extend them beyond DRP shares to other shares owned by the same shareholders.

Even within the depository system, the elimination of certificates could be useful. There is no reason why the depositories' growing holdings of stock need be evidenced by certificates. To the extent that these shares are registered in depository name, a simple statement from the issuer would seem entirely adequate to evidence the depository's ownership and would render unnecessary the expensive and cumbersome safekeeping of certificates which are destined either to be retained indefinitely or returned to the issuer at some future date. Revised Article 8 explicitly provides for depositories holding uncertificated shares [17].

With the support of an express statutory framework, totally uncertificated systems, such as the TAD experiment, could be launched without the impediment of uncertainty as to legal consequences which has heretofore retarded their development. Whether such systems will better satisfy the needs of the market can be determined only if they compete on equal ground. Revised Article 8 provides them with a firm legal foundation.

It is anticipated that the Article 8 revision will be submitted to the legislatures of a number of important commerical states during 1979. If widespread adoption follows, a legal framework will have been established within which the questions of whether and to what extent corporate stock should or should not be evidenced by certificates can be decided solely on the basis of which form better suits commercial requirements. If the stock certificate in America is to become an endangered species, it will be only because another system more effectively serves the needs of the marketplace. Indeed, could there be a more appropriate way to determine the fate of this archsymbol of capitalism?

Notes

[1] Most of these rules were codified in the Uniform Stock Transfer Act, which was adopted by a large majority of the states. That statute has been superseded by Article 8 of the Uniform Commercial Code, now in force in every state except Louisiana.

[2] *See, e.g.*, Jolls, *Can We Do Without Stock Certificates? A Look at the Future*, 23 Bus. Law. 909 (1968); Kendall, *The Certificateless Society: A Realistic Appraisal*, 24 Bus. Law. 141 (1969); Smith, *A Piece of Paper*, 25 Bus. Law. 923 (1970); *Symposium on the Certificateless Society*, 26 Bus. Law. 603 (1971).

[3] An unusually rich assortment of material reflecting a diversity of views, descriptions, studies and proposals is collected in the report of Congressional Hearings and the appendices thereto. *Study of the Securities Industry: Hearings Before the Subcomm. on Commerce and Finance of the House Comm. on Interstate and Foreign Commerce*, 92d Cong., 1st Sess. (1972); *Securities Industry Study: Hearings Before the Subcomm. on Securities of the Senate Comm. on Banking, Housing and Urban Affairs*, 92d Cong., 1st Sess. (1972); *Clearance and Settlement of Securities Transactions: Hearings on S. 3412, S. 3297 and S.2551 Before the Subcomm. on Securities of the Senate Comm. on Banking, Housing and Urban Affairs*, 92d Cong., 2d Sess. (1972).

[4] Michigan Business Corporation Act §335, 15 Mich. Stat. Ann §21.200 (335) (1974); Cal. Corp. Code §416(b).

[5] Memorandum of Bethlehem Steel Corporation, Feb. 5, 1973, revised June 7, 1974.

[6] *See* Rustin, *Big Board, Amex Circulate Definitive Plan on Switch in Securities-Clearance System*, Wall St. J., Oct. 1, 1973, at 4.

[7] *See* Rustin, *Pacific Exchange Sets a $ 650,000 Reserve for Possible Securities-Depository Losses*, Wall St. J., Dec. 5, 1973, at 7.

[8] The Depository Trust Company, 1977 Annual Report, at 1.

[9] *See* Uniform Commercial Code §§8-102(3), 8-102(4), 8-313(1)(e) and 8-320 (1962 Official Text).

[10] Newsletter, The Stock Transfer Association, Inc., Jan. 15, 1979, at 11 and 12.

[11] Robbins, Werner, Johnson, Greenwald, *Paper Work Crisis in the Securities Industry: Causes and Cures (1969)*, Appendix BB, 4 Study of the Securities Industry, *supra* n. 3, at 2159.

[12] Report of the Committee on Stock Certificates, American Bar Association, Sept. 15, 1975.

[13] For a description of the Committee's approach, *see* Aronstein, *A Certificateless Article 8? We can Have It Both Ways*, 31 Bus. Law. 727 (1976).

[14] The 1978 Official Text, includes, as Appendix I, an extensive introductory comment and detailed explanations of the changes in Article 8 and related sections of other articles, adopted in 1977. Copies are available from West Publishing Co., St. Paul, Minnesota.

[15] *See* The Depository Trust Company, 1977 Annual Report, at 6 and 7.

[16] *See id.*, at 3 and 4.

[17] DTC has already established procedures, without explicit statutory support, to leave certificates in the custody of the respective transfer agents. *See* The Depository Trust Company, 1977 Annual Report, at 9 and 10.

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