

April 17, 1953

MEMORANDUM RE: Sale of Stock to Employees of the Company

This memorandum does not deal with reality but with an abstract tax question and will be discussed here only from the tax point of view without any reference to other concentrations.

Assume that I, Leo Szilard, own 100% of the shares of the company, say a total of 1,000,000 shares, and assume further for the sake of simplicity that the company's net earnings after taxes is \$1 per share at this time. Assume further that I adopt the policy of paying henceforth \$1 dividend per share and finance expansion either by earnings which exceed a total of \$1,000,000 or taking up long term loans. There appears then, from a tax point of view, to be no objection to do the following:

I may sell to my employees who are in low income tax brackets, or preferably to their wives who have no income whatsoever, all my shares on the installment basis as follows:

Let us assume that the value of each share is assessed by the Treasury at seven times earnings, i. e., \$7.00. An employee who buys shares from me would be required to pay ~~\$4,000,000~~ on an installment plan basis either \$4,000,000 at the rates defined further below and 80% of the value of the share on the stock market after these \$4,000,000 have been paid or else he will be required to pay \$14,000,000 at the rate to be defined below. The employee has a choice between these two alternatives after he has paid on the installment plan \$4,000,000 in cash, but he can choose the first mentioned alternative only if the price of the stock on the stock market

at the time when he had paid the first \$4.00 exceed \$6,000,000. Otherwise the second alternative holds.

The rate at which the employee pays the installments of the purchase price is up to him except that he cannot pay in any one year less than 80% of the dividends he receives. It is advisable but probably not necessary to provide for some interest payment on the part of the purchaser, say at the rate of 3-1/2% per year, the interest to be paid on the difference between the \$7,00 assumed value of the share less the amount that he has already paid toward the purchase price.

The above scheme is a modification of the one I discussed with you in Princeton. I made this modification after discussing the problem with Joe in order to avoid the possibility that an employee purchases shares below their present value and as a result of this is held to have received a taxable income. Joe thinks that there is no doubt that the amount I would receive under this scheme is capital gain rather than income and he also thinks ~~it would~~ there would be no difficulty to get a ruling from the Treasury on this aspect of the transaction. Finally, for other reasons which I may discuss with you, he believes that in the real case in which I am concerned other methods of proceeding would achieve the same purpose and would achieve it better. This I may discuss with you if the occasion arises.

The above represents my understanding of Joe's response to my presentation and I can show him a copy of this memorandum so that he can verify whether my understanding is correct.

that the total payment of the university is in excess of \$8.00, otherwise the final payment of the university is deferred from year to year after a total of ten years, at such time as a market value of the shares reaches \$7.00.

D R A F T

Mr. Walter Bloom  
The Law School  
University of Chicago  
Chicago, Illinois

Dear Walter:

*The treasuries*

Do you see any objection from ~~the next~~ point of view to the following procedure?

*in 1953*

A closely Held Corporation is reorganized so that, say, one-quarter of the shares are A shares and three-quarters of the shares are B shares. For the first three years dividend is paid only on A shares and after that the B shares are converted into A shares, so that there is only one kind of share after the lapse of three years.

~~The corporation adopts, at this time, a policy for financing further expansion through long term loans and in distributing for the next three years the profits in the form of dividends.~~

At the time when it is already clear what this year's profits will be, most of the stockholders, or all of them, decide to sell their A shares to a non-profit corporation, say to a university on the following terms:

The university will pay a certain amount of cash and every year thereafter for two years a certain amount, either in cash or in non-transferable interest bearing notes serving as security. These notes are due six months after the B stocks are converted into A stocks. At that time the university is free to sell its holding of stock on the stock market and will make final payment to bring up the total payment, excluded of interest, to twice the market price of the stock.

Yours truly,

I shall assume for the sake of argument that a long term loan running 10 or 15 years ~~taken up~~ <sup>is authorized</sup> by the corporation in 1953 and that it is the policy of the corporation to finance further expansion of the corporation out of the loan. It is further assumed that under the terms of the loan, the corporation remains free to distribute, in the next three years, all of the net profits in the form of dividend. ~~I shall further assume~~ <sup>We now</sup> know, for the sake of ~~example~~ <sup>example</sup> that the corporation expects to make a net profit of \$1.00 per ~~share~~ year (on the average) in the next three years.

The majority ~~of the~~ stockholders and ~~and~~ a number of ~~share~~ other stockholders and perhaps all stockholders of the corporation sell their A shares in 1953 to a non-profit corporation, for instance a university, to which I shall simply refer to below as "The ~~University~~" <sup>U</sup>, at ~~that~~ <sup>a</sup> time when it is already known how much profit the corporation is going to make in 1953. The terms of the sale are as follows:

The university pays \$1.00 per share in cash at ~~that~~ <sup>the</sup> time of the sale. After the lapse of three years, the stock is introduced ~~on~~ <sup>by the University</sup> the stock market at that time ~~this~~ <sup>the B</sup> stock has been converted into A stock <sup>(so that)</sup> and there is only one kind of stock. At that time the university will make its final payment which is twice the value of its shares less the cash payment made at purchase, provided however, that the total payment of the university exceeds \$8.00 per share, otherwise the final payment is deferred until the next year, provided that at that time the university will pay the market value for the shares, provided once ~~again that the total~~ <sup>again</sup>

*If it is possible to place the stock price at*

Rough first draft

May 19, 1953

MEMORANDUM ON TWO KINDS OF SHARES

By Leo Szilard

In the following is described <sup>a</sup> ~~the~~ corporation which <sup>has</sup> ~~is~~ two kinds of shares issued, A shares and B shares. The B shares are convertible to A shares and the conversion ratio <sup>(increases)</sup> ~~changes~~ from year to year <sup>according to fixed rule cash time</sup> when dividend is paid. Another fixed rule governs how much dividend may be paid on B shares depending on how much dividend <sup>is</sup> ~~was~~ paid on A shares. <sup>These rules are so</sup> ~~fixed~~ <sup>constructed</sup> that for those who are in lower income brackets and want a high dividend, it is of advantage to hold A shares and for those who are in the higher income tax brackets and want capital gain, it is of advantage to hold B shares.)

The rules are such that ~~if for instance a company consistently plows back~~ <sup>not more than</sup> half of its net profits and pays out the <sup>rest</sup> ~~other half~~ in the form of dividends those who hold A shares can look forward to a dividend maintained at twice the level that <sup>a dividend</sup> ~~the company would have paid~~ on ordinary common stock. They can also look forward to the market price of their <sup>stock</sup> ~~stock~~ remaining at the same level (if there is no change in business conditions, <sup>and provided</sup> ~~if~~ the company remains moderately prosperous) <sup>if it is not</sup> ~~and if there is no inflation~~ they could look forward to rising price of the stock on the market <sup>if there is inflation</sup>, but in the absence of inflation and unchanged business conditions with the company doing average <sup>business</sup> ~~business~~ they cannot look forward to capital gain <sup>in the company if it plows back half of its net profits.</sup> ~~in the company if it plows back half of its net profits.~~

Those holding B stock cannot look forward to any dividend but they can look forward to realizing twice as much capital gain (whenever after holding the B stock long enough they sell <sup>some of</sup> their B stock on the <sup>stock</sup> market or convert some of their B stock into A stock and sell this A stock on the <sup>market</sup> market) than they could realize by holding ordinary common stock in a <sup>company</sup> ~~company~~ that pours out in general half of its net profits in the form of dividends. <sup>We have assumed here for the sake of argument that both the A stock and the B stock are traded on the stock market. If that is the case it is almost certain that the holder of B stock will get <sup>a</sup> ~~the~~ higher price for his B stock by selling it on the market than he could get by converting his B stock into A stock and selling the A stock on the market.</sup>

In addition to A and B stock there might be <sup>traded</sup> on the stock market also a composite stock consisting of one A share and one B share. Those who hold such composite stock as do those who hold an equal number ~~and~~ of A and B shares are essentially in the same position as if they were holding ordinary common shares of the corporation, <sup>since</sup> ~~since~~ they are practically unaffected by the rules which

define the privileges of the two kinds of shares. Obviously those who hold the and composite shares lose ~~in~~ benefits equally by ~~and~~ any of the rules which favor the A or B shares with respect to each other.

We shall now assume for the sake of illustration that we have to deal with a closely held corporation that has one million shares issued. This corporation shall now be reorganized to have 10,500,000 A shares of which 500,000 shares will be issued to <sup>the old</sup> stockholders and 500,000 B shares all of which shall be issued to the <sup>old</sup> stockholders. 10,000,000 A shares are thus retained by the corporation in its treasury.

B stock can be converted <sup>into</sup> to A stock every year in the <sup>time</sup> interval stretching from the seventh day after dividend has been paid to one week before the next declaration of dividend is due. It is assumed for the sake of discussion that dividend will be paid once a year. <sup>P</sup> The conversion ratio of B stock to A stock is one A stock for one B stock <sup>P</sup> (prior to the payment of the first dividend) and thereafter it is increased according to <sup>a</sup> predetermined formula ~~to be described~~ <sup>given</sup> below each time when <sup>a</sup> dividend is declared. This conversion ratio i.e. the number of the A stock that can be obtained from the corporation by surrendering one B stock does not change in between of declarations of dividends. Notwithstanding the formula given below, there is however an upper limit set for this conversion ratio and in our example it ~~cannot~~ <sup>may not</sup> exceed 20 A shares for one B share. Moreover, after 25 years all B shares are automatically converted into A shares at the then prevailing conversion ratio which may not exceed 20 A shares for one B share.

Irrespective of the existence of these two kinds of shares, the company decides freely each year how much of its net profit it wishes to pay out in share holders dividends. The B ~~shares~~ will however not receive any dividends on their B shares until the A share holders have received on their A shares a dividend which corresponds to their stake in the company. <sup>P</sup> The stake of the A share holders in the company is 50% <sup>a</sup> prior to the first dividend and it will change after each dividend payment according to <sup>a</sup> predetermined formula ~~given further~~ <sup>given</sup> below. According <sup>g</sup> to the above rule the B share holders will ~~therefore~~ receive no dividend unless the A share holders have received in dividend one-half of the first year's net profit. This preference of the A share holders in regard to dividends is cumulative in the sense that the B share holders will receive no dividends until the A share holders have received in the aggregate for ~~all~~ the preceding years a dividend given by the formula

$$P_1 X_1 (\text{before}) + P_2 X_2 (\text{before}) + P_3 X_3 (\text{before}) + \dots$$

where  $P_1, P_2, P_3$ , etc. represent the <sup>net</sup> profits of the first, second, third years, etc. and  $X_1$ , (before),  $X_2$  (before),  $X_3$  (before), etc. represent the stakes of the A share holders in the company during the week prior to the declaration of the dividend of the first, second and third years, etc. respectively.

To illustrate the above rules, let's assume that no B shares are converted into A shares so that the relative stakes of the A share holders remain at 50%. If we now further assume that the net profits of the corporation in the ~~xx~~ first year amounted to one million dollars, and if the company plows back one-half million dollars of the net profit, the ~~x~~ A share holders will receive in dividends \$500,000.00 and the B share holders will receive nothing. If the company plows back one-quarter of the net profits, then the A share holders will receive \$500,000.00 and the B share holders will receive in dividends \$250,000.00.

Let us now assume that the company plows back 75% of the net profit of the first year and pays the A share holders in dividends \$250,000.00, The B share holders receiving no dividend. If now in the next year the company makes again a net profit of one million dollars and if it decides to plow back one-quarter of this, it will have to pay the A share holders (because of cumulative rule) on dividends payable to A share holders) \$750,000.00 and will not pay any dividends to the B <sup>share</sup> stock holders. (In the case of our example a dividend of ~~one-half million~~ \$500,000 paid to A share holders represents a dividend of \$1 per share. Since we assumed that 500,000 A shares were initially issued and no B shares were converted into A shares.



In order to make it easier to understand the rules which govern the conversion of B shares into A shares and <sup>the</sup> rules from which one may calculate at anytime the relative stake of the A share holders and the B share holders, it is advisable to introduce a few concepts and designations.

We shall designate <sup>by (A<sub>n</sub>)</sup> the number of A ~~issued~~ shares issued <sup>up to</sup> (one week before the nths dividend is declared ~~by (A<sub>n</sub>)~~ and similarly <sup>by (B<sub>n</sub>)</sup> the number of B shares issued <sup>up to</sup> one week before the nths dividend is declared ~~by (B<sub>n</sub>)~~. If the relative stake of ~~all~~ the A share holders <sup>immediately</sup> after the nths dividend has been declared is fixed at X<sub>n</sub> <sup>(after)</sup> and similarly the relative stake of the B share holders immediately after the dividend is declared is fixed at Y<sub>n</sub> <sup>(after)</sup> then the relative stake of one A share is given by <sup>(after)</sup> X<sub>n</sub> / (A<sub>n</sub>) and similarly the relative stake of one B share is given by <sup>(after)</sup> Y<sub>n</sub> / (B<sub>n</sub>). <sup>A and B share</sup> ¶ The relative stakes of these shares <sup>We postulate</sup> does not change after the nths dividend has been declared until the next dividend is declared. <sup>during this</sup> During that interval the number of A shares which <sup>may</sup> can be obtained by surrendering one B share to the company <sup>shall</sup> is given by <sup>Y<sub>n</sub>(after) [A<sub>n</sub>]</sup> a shares for one B share.

<sup>postulates</sup> This just expresses the fact that the A shares obtained in exchange for one B share <sup>is so designed</sup> must represent the same stake in the company as the B share <sup>represents</sup> which is surrendered. <sup>one which is surrendered</sup> ¶ During the time interval between the nths dividend and the next dividend the stake of the A share holders and B share holders which is

changes, eventhough the stake of one A share and one B share remains unchanged simply because B shares are surrendered and A shares are issued in exchange.

For this reason the stake of the B share holders just prior to the declaration of the next dividend <sup>which is designated</sup> will be given by Y<sub>n+1</sub> (before) is given <sup>by</sup> <sup>surrendered</sup>  $Y_{n+1}(\text{before}) = Y_n(\text{after}) \frac{[B_n]}{[B_{n+1}]}$  <sup>number of B shares</sup>

similarly just before the declaration of the next dividend the stake of the A share holders X<sub>n+1</sub> (before) is given by  $X_{n+1}(\text{before}) = X_n(\text{after}) \frac{[A_n] + \text{number of A shares issued}}{[A_{n+1}]}$

for which we can also write  $X_{n+1}(\text{before}) = X_n(\text{after}) \frac{[A_n] + \frac{Y_n(\text{after}) [A_n]}{X_n(\text{after}) [B_n]} \text{ number of B shares issued}}{[A_{n+1}]}$

<sup>corresponding stakes</sup> This formula teaches how to compute from the stake of the A share holders and B share holders after the declaration of a dividend the ~~stake of the share holders,~~ before the declaration of the next dividend. ¶ Now we must see how does the stake of the A share holders and B share holders <sup>change</sup> at which at the time that the dividend is declared during which time there is no change in the number of A shares and B shares issued, <sup>change</sup> Since no B shares will be converted from one week before the declaration of dividend until one week after the payment of the dividend.

It is again true that  $X_{n+1} + Y_{n+1} = 1$

in interest payments

$Y_n(\text{before}) - b_n$   
 $X_n(\text{before})$

The change in the stake of the A share holders and B share holders at the time dividend is declared should reflect the fact that the A share holders have received more than their fair share of the profits in the form of dividends to the detriment of the B share holders. If when the  $n$ th dividend is paid the total dividend paid to the A share holders is given by  $a_n$  and the total dividend paid to the B share holders is represented by  $b_n$  then the expression  $b_n - a_n$  represents the amount which the B share holders received in excess of their due. If an equal amount were paid at that time to the B share holders and if the price of the A shares on the stock market on the day following the payment of this dividend is represented by  $A_n$  then clearly the B share holders could have bought with an amount of  $b_n - a_n$  a number of A shares given by  $\frac{b_n - a_n}{A_n}$  therefore it is logical to set as a rule that the stake of the A share holders after the payment of the  $n$ th dividend  $X_n(\text{after})$  be given by

$X_n(\text{after}) = X_n(\text{before}) \frac{[A_n] - [G_n]}{[A_n]} = X_n(\text{before}) - \frac{X_n(\text{before}) G_n}{A_n}$

and correspondingly the stake of the B share holders after payment of the  $n$ th dividend be set at  $Y_n(\text{after}) = Y_n(\text{before}) + \frac{X_n(\text{before}) G_n}{[A_n]}$

If we take into account the fact that at the time of issue the relative status of the A share holders were 50% and the relative stake of the B share holders were also 50% and if we further take into account that up to one week of the first declaration one A share was obtained by surrendering one B share it is clear that our rules defy precisely the relative status of the A share and B shares for both before and after of each declaration of dividend and then conversion and also the conversion ratio of A shares to B shares for every interval between any two dividends.

Again we have  $\frac{Y_n(\text{after})}{X_n(\text{after})} = 1$

$1 - X_n(\text{before})$

$Y_{n+1} = \left( 1 - \frac{B_{n+1} Y_n(\text{after})}{B_n} \right)$

$X_{n+1}(\text{before}) = X_n(\text{after}) \left( 1 + \frac{B_{n+1} Y_n(\text{after})}{X_n(\text{after}) B_n} \right)$

$$f_{n+1}(\text{before}) = f_n(\text{after}) - \frac{Y_n(\text{after})}{(B_n)} \quad (\text{B}_{n+1} \text{ surrendered in } \frac{1}{2} \text{ day})$$

$$(G_n) = \frac{E_n}{D_n}$$

the change in the state of the A share holders and B share holders after the dividend is declared should reflect the fact that the A share holders have received more than their fair share of the profits in the form of dividends to the detriment of the B share holders. If when the dividend is paid the total dividend paid to the A share holders is given by  $E_n$  and the total dividend paid to the B share holders is represented by  $D_n$  then the amount which the B share holders received is  $D_n$  and the amount which the A share holders received is  $E_n$ . If the amount were paid at that time to the B share holders and if the price of the A shares on the stock market on the day following the payment of the dividend is represented by  $X_n$  then clearly the B share holders could have bought with an amount  $D_n$   $\frac{1}{X_n}$  shares of A stock and so their position would be the same as if they had bought  $\frac{D_n}{X_n}$  shares of A stock and received no dividend. Therefore it is logical to set  $X_n$  as the price of the A share holders after the payment of the dividend  $X_n$  (after) be given by  $X_n(\text{before}) - \frac{E_n}{N_A}$  and correspondingly the price of the B share holders after payment of the dividend be set at  $X_n(\text{after}) = X_n(\text{before}) + \frac{D_n}{N_B}$ . If we take into account the fact that at the time of issue the relative status of the A share holders were 50% and the relative status of the B share holders were also 50% and if we further take into account that up to one week of the first declaration one A share was obtained by surrendering one B share it is clear that our prices here precisely the relative status of the A share and B share both before and after of each declaration of dividend. Therefore and also the conversion ratio of A shares to B shares for a dividend between any two dividends.

When one share of A is surrendered for one share of B, the conversion ratio is 1:1. If the price of A is  $X_A$  and the price of B is  $X_B$ , then the value of one share of A is  $X_A$  and the value of one share of B is  $X_B$ . If  $X_A = X_B$ , then the conversion ratio is 1:1. If  $X_A > X_B$ , then the conversion ratio is  $\frac{X_A}{X_B}$ . If  $X_A < X_B$ , then the conversion ratio is  $\frac{X_B}{X_A}$ .

MEMORANDUM ON TWO KINDS OF SHARES

By Leo Szilard

In the following is described a corporation which has two kinds of shares issued, A shares and B shares. The B shares are convertible to A shares and the conversion ratio increases from year to year according to a fixed rule each time when dividend is paid. Another fixed rule governs how much dividend may be paid on B shares depending on how much dividend is paid on A shares.

These rules are so constructed that for those who are in lower income brackets and want a high dividend, it is of advantage to hold A shares and for those who are in the higher income ~~the~~ brackets and want capital gain, it is of advantage to hold B shares. The rules are such that those who hold A shares can look forward to a dividend maintained at twice the level that a similar company would pay on ordinary common stock if it distributes one half of its net profits. They can also look forward to the market price of their A stock remaining at the same level (if there is no change in business conditions, and provided the company remains moderately prosperous) but in the absence of inflation and unchanged business conditions with the company doing average business they cannot look forward to capital gain as long as they do receive a high dividend.

Those holding B stock cannot look forward to ~~the~~ <sup>much</sup> dividend but they can look forward to realizing twice as much capital gain (whenever after holding the B stock long enough they sell some of their B stock on the stock market or convert some of their B stock into A stock and sell this A stock on the stock market) than they could realize by holding ordinary common stock in a similar company that pours out in general half of its net profits in the form of dividends.

We have assumed here for the sake of argument that both the A stock and the B stock are traded on the stock market. If that is the case it is almost certain that the holder of B stock will get a higher price for his B stock by

selling it on the market than he could get by converting his B stock into A stock and selling the A stock on the market.

In addition to A and B stock there might be traded on the stock market also a composite stock consisting of one A share and one B share. Those who hold such composite stock as do those who hold an equal number of A and B shares are essentially in the same position as if they were holding ordinary common shares of the corporation. They are practically unaffected by the rules which define the privileges of the two kinds of shares. Obviously those who hold the composite shares lose and benefit equally by any of the rules which favor the A or B shares with respect to each other.

We shall now assume for the sake of illustration that we have to deal with a closely held corporation that has one million shares issued. This corporation shall now be reorganized to have 10,500,000 A shares of which 500,000 shares will be issued to the old stockholders and 500,000 B shares all of which shall be issued to the old stockholders. 10,000,000 A shares are thus retained by the corporation in its treasury.

B stock can be converted into A stock every year in the time interval stretching from the seventh day after dividend has been paid to one week before the next declaration of dividend is due. It is assumed for the sake of discussion that dividend will be paid once a year. Prior to the payment of the first dividend the conversion ratio of B stock to A stock is one A stock for one B stock and thereafter it is increased according to a predetermined formula given below each time when a dividend is declared. This conversion ratio, i.e., the number of the A stock that can be obtained from the corporation by surrendering one B stock does not change in between of declarations of dividends. Notwithstanding the formula given below, there is however an upper limit set for this conversion ratio and in our example it may not exceed 20 A shares for one B share. Moreover, after 25 years all B shares are automatically converted into A shares at the then prevailing conversion ratio which may not exceed 20 A shares for one B share.

Irrespective of the existence of these two kinds of shares, the company decides freely each year how much of its net profit it wishes to pay out in dividends. The B share holders will however not receive any dividends on their B shares until the A share holders have received on their A shares a dividend which corresponds to their stake in the company. Prior to the first dividend the stake of the A share holders in the company is 50%, and it will change after each dividend payment according to a predetermined formula given below. Accordingly the B share holders will receive no dividend unless the A share holders have received in dividend one half of the first year's net profit. This preference of the A share holders in regard to dividends is cumulative in the sense that the B share holders will receive no dividends until the A share holders have received in the aggregate for all the preceding years a dividend given by the formula

$$P_1X_1 \text{ (before)} + P_2X_2 \text{ (before)} + P_3X_3 \text{ (before)} + \dots$$

where  $P_1, P_2, P_3$ , etc. represent the net profits of the first, second, third years, etc., and  $X_1 \text{ (before)}, X_2 \text{ (before)}, X_3 \text{ (before)}$  etc. represent the stakes of the A share holders in the company during the week prior to the declaration of the dividend of the first, second and third years, etc.

To illustrate the above rule, let's assume that no B shares are converted into A shares so that the relative stake of the A share holders remain at 50%. Further assume that the net profits of the corporation in the first year amounted to one million dollars.

If the company plows back one half million dollars of the net profit, the A share holders will receive in dividends \$500,000 and the B share holders will receive nothing. If the company plows back one quarter of the net profits, then the A share holders will receive <sup>*in dividends*</sup> \$500,000 and the B share holders will receive in dividends \$250,000.

Let us now assume that the company plows back 75% of the net profit of the first year and pays the A shareholders in dividends \$250,000, the B shareholders receiving no dividend. If now in the next year the company makes again a net profit of one million dollars and if it decides to plow back one quarter of this, it will have to pay the A share holders (because of cumulative rule on dividends payable to A shareholders) \$750,000 and will not pay any dividends to the B shareholders.

In order to make it easier to understand the rules which govern the conversion of B shares into A shares and the rules from which one may calculate at anytime the relative stake of the A shareholders and the B shareholders, it is advisable to introduce a few concepts and designations.

We shall designate by  $(A_n)$  the number of A shares issued up to one week before the  $n$ th dividend is declared and similarly by  $(B_n)$  the number of B shares issued up to one week before the  $n$ th dividend is declared. If the relative stake of the A shareholders immediately after the  $n$ th dividend has been declared is fixed at  $X_n$  (after) and similarly the relative stake of the B shareholders immediately after the dividend is declared is fixed at  $Y_n$  (after), then the relative stake of one A share is given by  $X_n$  (after) /  $(A_n)$ , and the relative stake of one B share is given by  $Y_n$  (after) /  $(B_n)$ .

The relative stakes of an A share and an B share does not change in the interval between the declaration of the  $n$ th dividend and the declaration of the next dividend. We postulate that during this interval the number of A shares which may be obtained by surrendering one B share to the company shall be given by

$$\frac{\text{(A issued in interval)}}{\text{(B surrendered in int.)}} = \frac{Y_n \text{ (after)} \times (A_n)}{X_n \text{ (after)} \times (B_n)}$$

This postulate is so designed that the A shares obtained in exchange for one B share represent the same stake in the company as represents the one B share which is surrendered.

During the time interval between the  $n^{\text{th}}$  dividend and the next dividend the stake of one A share and one B share remains unchanged. The stake of the A shareholders and B shareholders however changes, because B shares are surrendered and A shares are issued in exchange. For this reason the stake of the B shareholders just prior to the declaration of the next dividend, which is designated by  $Y_{n+1}$  (before), is given by

$$Y_{n+1} \text{ (before)} = Y_n \text{ (after)} - Y_n \text{ (after)} \times \frac{\text{(B surrendered in int.)}}{(B_n)}$$

similarly the stake of the A shareholders just before the declaration of the next dividend,  $X_{n+1}$  (before), is given by

$$X_{n+1} \text{ (before)} = X_n \text{ (after)} + Y_n \text{ (after)} \times \frac{\text{(B surrendered in interval)}}{(B_n)}$$

This formula teaches how to compute from the stake of the A shareholders and B shareholders after the declaration of a dividend the corresponding stakes before the declaration of the next dividend.

Now we must see how does the stake of the A shareholders and B shareholders change at the time that the dividend is declared (at which time there is no change in the number of A shares and B shares issued, since no B shares will be converted from one week before the declaration of dividend until one week after the payment of the dividend). The change in the stake of the A shareholders and B shareholders at the time the dividend is declared should reflect the fact that the A shareholders have received more than their fair share of the profits in the form of dividends to the detriment of the B shareholders. Based on this principle we are arriving at formulae which may be used to compute from the stake of the A shareholders before payment of the  $n^{\text{th}}$  dividend,  $X_n$  (before), and the stake of the B shareholders before payment of the  $n^{\text{th}}$  dividend,  $Y_n$  (before), and from ~~the total  $n^{\text{th}}$  dividend paid to A shareholders which were designated by  $a_n$  and the total  $n^{\text{th}}$  dividend paid to B shareholders by  $b_n$~~ , the stake of the A shareholders after the  $n^{\text{th}}$  dividend,  $X_n$  (after) and the stake of the B shareholders  $Y_n$  (after),



by taking into account how much dividend  $a_n$  was paid to the A shareholders in ~~total~~ <sup>TOTO</sup> and how much dividend  $b_n$  was paid to the B shareholders in ~~total~~ <sup>TOTO</sup>.

In general the A shareholders get <sup>larger</sup> dividend relative to their stake than the B shareholders get relative to their stake. The excess dividend,  $E_n$  which the A shareholders have received is given by

$$E_n = \frac{a_n \times X_n \text{ (before)}}{X_n \text{ (before)}} - b_n$$

If a sum equal to the amount given by this formula were paid to the A shareholders in ~~total~~ <sup>TOTO</sup> they could have bought on the stock market on the day following the payment of the  $n^{\text{th}}$  dividend a number of A shares ( $G_n$ ) which is given by

$$(G_n) = \frac{E_n}{D_n}$$

where  $D_n$  represents the stock market price of the A shares one day after payment of the  $n^{\text{th}}$  dividend. Therefore it is logical to set the rule that the stake of the A shareholders after the payment of the  $n^{\text{th}}$  dividend,  $X_n$  (after), be given by

$$X_n \text{ (after)} = X_n \text{ (before)} - X_n \text{ (before)} \times \frac{(G_n)}{(A_n)}$$

and accordingly the stake of the B shareholders after payment of the  $n^{\text{th}}$  dividend be set at

$$Y_n \text{ (after)} = Y_n \text{ (before)} + X_n \text{ (before)} \times \frac{(G_n)}{(A_n)}$$

The formulae given in this memorandum permit to calculate how the relative stake of the A stockholders and the B stockholders changes whenever a dividend is paid and how it changes in the interval between two dividend payments.

Therefore, if the initial stake of the A stockholders and B stockholders is defined (in the example which we discussed the initial stake was 50% both for the A stockholders and the B stockholders) ~~or formerly leaving~~ <sup>OUR FORMULAE</sup> no uncertainty as to the relative stakes of the A stockholders and B stockholders at any/time.

Similarly the conversion ratio of B shares to A shares is defined by our formula for each interval between two dividend payments.

If the A stock should not be traded on the stock market but if the composite stock which may consist of one A share and one B share is traded on the stock market the price of the composite stock one day after dividend payment can be used in place of the price of the A stock. The formula given cannot, however, be applied directly by substituting the price of the composite stock for the price of the A stock but rather a modified formula has to be used which has been derived and is available.

In case the composite stock is not ~~available~~ <sup>TRADED</sup> on the stock market either, then <sup>SOME</sup> value D may be set for the A stock at the time when the A and B stocks are first issued and this more or less arbitrary set price D for the A stock may be used in the formula in place of the market price  $D_n$  of the A stock.

In this memorandum we have so far assumed that the initial relative stake of the A stockholders and the B stockholders is the same, i.e., 50%. However, our formulae hold equally well if the initial stake of the A stockholders is different from the initial stake of the B stockholders except that the composite stock will in that case not consist of one A share and one B share but the ratio will be different.

In case of a company which has an opportunity to plow back say 75% of the profit it would be reasonable initially to issue A shares and B shares in such a manner that the relative stake of the A shareholders is 25% and the relative stake of the B shareholders is 75%. As time goes on and B shares <sup>MAY BE</sup> ~~are~~ converted into A shares the relative stake of the A shareholders <sup>MAY</sup> ~~will~~ increase and that of the B shareholders <sup>MAY</sup> ~~will~~ decrease. Such a change might be accompanied by a gradual change of dividend policy and the company might later on wish to plow back a smaller percent of the profits.

MEMORANDUM ON TWO KINDS OF SHARES

By Leo Sillard

In the following is described a corporation which has two kinds of shares issued, A shares and B shares. The B shares are convertible to A shares and the conversion ratio increases from year to year according to a fixed rule each time when dividend is paid. Another fixed rule governs how much dividend may be paid on B shares depending on how much dividend is paid on A shares.

These rules are so constructed that for those who are in lower income brackets and want a high dividend, it is of advantage to hold A shares and for those who are in the higher income ~~low~~ brackets and want capital gain, it is of advantage to hold B shares. The rules are such that those who hold A shares can look forward to a dividend maintained at twice the level that a similar company would pay on ordinary common stock if it distributes one half of its net profits. They can also look forward to the market price of their A stock remaining at the same level (if there is no change in business conditions, and provided the company remains moderately prosperous) but in the absence of inflation and unchanged business conditions with the company doing average business they cannot look forward to capital gain as long as they do receive a high dividend.

Those holding B stock cannot look forward to ~~any~~<sup>much</sup> dividend but they can look forward to realizing twice as much capital gain (whenever after holding the B stock long enough they sell some of their B stock on the stock market or convert some of their B stock into A stock and sell this A stock on the stock market) than they could realize by holding ordinary common stock in a similar company that pours out in general half of its net profits in the form of dividends.

We have assumed here for the sake of argument that both the A stock and the B stock are traded on the stock market. If that is the case it is almost certain that the holder of B stock will get a higher price for his B stock by

selling it on the market than he could get by converting his B stock into A stock and selling the A stock on the market.

In addition to A and B stock there might be traded on the stock market also a composite stock consisting of one A share and one B share. Those who hold such composite stock as do those who hold an equal number of A and B shares are essentially in the same position as if they were holding ordinary common shares of the corporation. They are practically unaffected by the rules which define the privileges of the two kinds of shares. Obviously those who hold the composite shares lose and benefit equally by any of the rules which favor the A or B shares with respect to each other.

We shall now assume for the sake of illustration that we have to deal with a closely held corporation that has one million shares issued. This corporation shall now be reorganized to have 10,500,000 A shares of which 500,000 shares will be issued to the old stockholders and 500,000 B shares all of which shall be issued to the old stockholders. 10,000,000 A shares are thus retained by the corporation in its treasury.

B stock can be converted into A stock every year in the time interval stretching from the seventh day after dividend has been paid to one week before the next declaration of dividend is due. It is assumed for the sake of discussion that dividend will be paid once a year. Prior to the payment of the first dividend the conversion ratio of B stock to A stock is one A stock for one B stock and thereafter it is increased according to a predetermined formula given below each time when a dividend is declared. This conversion ratio, i.e., the number of the A stock that can be obtained from the corporation by surrendering one B stock does not change in between of declarations of dividends. Notwithstanding the formula given below, there is however an upper limit set for this conversion ratio and in our example it may not exceed 20 A shares for one B share. Moreover, after 25 years all B shares are automatically converted into A shares at the then prevailing conversion ratio which may not exceed 20 A shares for one B share.

Irrespective of the existence of these two kinds of shares, the company decides freely each year how much of its net profit it wishes to pay out in dividends. The B share holders will however not receive any dividends on their B shares until the A share holders have received on their A shares a dividend which corresponds to their stake in the company. Prior to the first dividend the stake of the A share holders in the company is 50%, and it will change after each dividend payment according to a predetermined formula given below. Accordingly the B share holders will receive no dividend unless the A share holders have received in dividend one half of the first year's net profit. This preference of the A share holders in regard to dividends is cumulative in the sense that the B share holders will receive no dividends until the A share holders have received in the aggregate for all the preceding years a dividend given by the formula

$$P_1X_1 \text{ (before)} + P_2X_2 \text{ (before)} + P_3X_3 \text{ (before)} + \dots$$

where  $P_1, P_2, P_3$ , etc. represent the net profits of the first, second, third years, etc., and  $X_1 \text{ (before)}, X_2 \text{ (before)}, X_3 \text{ (before)}$  etc. represent the stakes of the A share holders in the company during the week prior to the declaration of the dividend of the first, second and third years, etc.

To illustrate the above rule, let's assume that no B shares are converted into A shares so that the relative stake of the A share holders remain at 50%. Further assume that the net profits of the corporation in the first year amounted to one million dollars.

If the company plows back one half million dollars of the net profit, the A share holders will receive in dividends \$500,000 and the B share holders will receive nothing. If the company plows back one quarter of the net profits, then the A share holders will receive <sup>*in dividends*</sup> \$500,000 and the B share holders will receive in dividends \$250,000.

Let us now assume that the company plows back 75% of the net profit of the first year and pays the A shareholders in dividends \$250,000, the B shareholders receiving no dividend. If now in the next year the company makes again a net profit of one million dollars and if it decides to plow back one quarter of this, it will have to pay the A share holders (because of cumulative rule on dividends payable to A shareholders) \$750,000 and will not pay any dividends to the B shareholders.

In order to make it easier to understand the rules which govern the conversion of B shares into A shares and the rules from which one may calculate at anytime the relative stake of the A shareholders and the B shareholders, it is advisable to introduce a few concepts and designations.

We shall designate by  $(A_n)$  the number of A shares issued up to one week before the  $n$ th dividend is declared and similarly by  $(B_n)$  the number of B shares issued up to one week before the  $n$ th dividend is declared. If the relative stake of the A shareholders immediately after the  $n$ th dividend has been declared is fixed at  $X_n$  (after) and similarly the relative stake of the B shareholders immediately after the dividend is declared is fixed at  $Y_n$  (after), then the relative stake of one A share is given by  $X_n$  (after) /  $(A_n)$ , and the relative stake of one B share is given by  $Y_n$  (after) /  $(B_n)$ .

The relative stakes of an A share and an B share does not change in the interval between the declaration of the  $n$ th dividend and the declaration of the next dividend. We postulate that during this interval the number of A shares which may be obtained by surrendering one B share to the company shall be given by

$$\frac{(\text{A issued in interval})}{(\text{B surrendered in int.})} = \frac{Y_n \text{ (after)} \times (A_n)}{X_n \text{ (after)} \times (B_n)}$$

This postulate is so designed that the A shares obtained in exchange for one B share represent the same stake in the company as represents the one B share which is surrendered.

During the time interval between the  $n^{\text{th}}$  dividend and the next dividend the stake of one A share and one B share remains unchanged. The stake of the A shareholders and B shareholders however changes, because B shares are surrendered and A shares are issued in exchange. For this reason the stake of the B shareholders just prior to the declaration of the next dividend, which is designated by  $Y_{n+1}$  (before), is given by

$$Y_{n+1} \text{ (before)} = Y_n \text{ (after)} - Y_n \text{ (after)} \times \frac{\text{(B surrendered in int.)}}{(B_n)}$$

similarly the stake of the A shareholders just before the declaration of the next dividend,  $X_{n+1}$  (before), is given by

$$X_{n+1} \text{ (before)} = X_n \text{ (after)} + Y_n \text{ (after)} \times \frac{\text{(B surrendered in interval)}}{(B_n)}$$

This formula teaches how to compute from the stake of the A shareholders and B shareholders after the declaration of a dividend the corresponding stakes before the declaration of the next dividend.

Now we must see how does the stake of the A shareholders and B shareholders change at the time that the dividend is declared (at which time there is no change in the number of A shares and B shares issued, since no B shares will be converted from one week before the declaration of dividend until one week after the payment of the dividend). The change in the stake of the A shareholders and B shareholders at the time the dividend is declared should reflect the fact that the A shareholders have received more than their fair share of the profits in the form of dividends to the detriment of the B shareholders. Based on this principle we are arriving at formulae which may be used to compute from the stake of the A shareholders before payment of the  $n^{\text{th}}$  dividend,  $X_n$  (before), and the stake of the B shareholders before payment of the  $n^{\text{th}}$  dividend,  $Y_n$  (before), ~~and from the total  $n^{\text{th}}$  dividend paid to A shareholders which were designated by  $a_n$  and the total  $n^{\text{th}}$  dividend paid to B shareholders by  $b_n$~~ , the stake of the A shareholders after the  $n^{\text{th}}$  dividend,  $X_n$  (after) and the stake of the B shareholders  $Y_n$  (after),

by taking into account how much dividend  $a_n$  was paid to the A shareholders in ~~total~~ <sup>Toto</sup> and how much dividend  $b_n$  was paid to the B shareholders in ~~total~~ <sup>Toto</sup>.

In general the A shareholders get <sup>a</sup> larger dividend relative to their stake than the B shareholders get relative to their stake. The excess dividend,  $E_n$  which the A shareholders have received is given by

$$E_n = \frac{a_n \times Y_n \text{ (before)}}{X_n \text{ (before)}} - b_n$$

If a sum equal to the amount given by this formula were paid to the A shareholders in ~~total~~ <sup>Toto</sup> they could have bought on the stock market on the day following the payment of the  $n^{\text{th}}$  dividend a number of A shares ( $G_n$ ) which is given by

$$(G_n) = \frac{E_n}{D_n}$$

where  $D_n$  represents the stock market price of the A shares one day after payment of the  $n^{\text{th}}$  dividend. Therefore it is logical to set the rule that the stake of the A shareholders after the payment of the  $n^{\text{th}}$  dividend,  $X_n$  (after), be given by

$$X_n \text{ (after)} = X_n \text{ (before)} - X_n \text{ (before)} \times \frac{(G_n)}{(A_n)}$$

and accordingly the stake of the B shareholders after payment of the  $n^{\text{th}}$  dividend be set at

$$Y_n \text{ (after)} = Y_n \text{ (before)} + X_n \text{ (before)} \times \frac{(G_n)}{(A_n)}$$

The formulae given in this memorandum permit to calculate how the relative stake of the A stockholders and the B stockholders changes whenever a dividend is paid and how it changes in the interval between two dividend payments.

Therefore, if the initial stake of the A stockholders and B stockholders is defined (in the example which we discussed the initial stake was 50% both for the A stockholders and the B stockholders) <sup>our formulae</sup> ~~we formerly leave~~ no uncertainty as to the relative stakes of the A stockholders and B stockholders at anytime.



Similarly the conversion ratio of B shares to A shares is defined by our formula for each interval between two dividend payments.

If the A stock should not be traded on the stock market but if the composite stock which may consist of one A share and one B share is traded on the stock market the price of the composite stock one day after dividend payment can be used in place of the price of the A stock. The formula given cannot, however, be applied directly by substituting the price of the composite stock for the price of the A stock but rather a modified formula has to be used which has been derived and is available.

In case the composite stock is not ~~available~~ <sup>TRADED</sup> on the stock market either, then <sup>SAME</sup> value D may be set for the A stock at the time when the A and B stocks are first issued and this more or less arbitrary set price D for the A stock may be used in the formula in place of the market price  $D_n$  of the A stock.

In this memorandum we have so far assumed that the initial relative stake of the A stockholders and the B stockholders is the same, i.e., 50%. However, our formulae hold equally well if the initial stake of the A stockholders is different from the initial stake of the B stockholders except that the composite stock will in that case not consist of one A share and one B share but the ratio will be different.

In case of a company which has an opportunity to plow back say 75% of the profit it would be reasonable initially to issue A shares and B shares in such a manner that the relative stake of the A shareholders is 25% and the relative stake of the B shareholders is 75%. As time goes on and B shares <sup>MAY BE</sup> ~~are~~ converted into A shares the relative stake of the A shareholders <sup>MAY</sup> ~~will~~ increase and that of the B shareholders <sup>MAY</sup> ~~will~~ decrease. Such a change might be accompanied by a gradual change of dividend policy and the company might later on wish to plow back a smaller percent of the profits.

Let us now assume that the company plows back 75% of the net profit of the first year and pays the A share holders in dividends \$250,000, the B share holders receiving no dividend. If now in the next year the company makes again a net profit of one million dollars and if it decides to plow back one quarter of this, it will have to pay the A share holders (because of cumulative rule on dividends payable to A share holders) \$750,000 and will not pay any dividends to the B share holders.

In order to make it easier to understand the rules which govern the conversion of B shares into A shares and the rules from which one may calculate at anytime the relative stake of the A shareholders and the B shareholders, it is advisable to introduce a few concepts and designations.

We shall designate by  $(A_n)$  the number of A shares issued up to one week before the  $n$ th dividend is declared and similarly by  $(B_n)$  the number of B shares issued up to one week before the  $n$ th dividend is declared. If the relative stake of the A shareholders immediately after the  $n$ th dividend has been declared is fixed at  $X_n$  (after) and similarly the relative stake of the B shareholders immediately after the dividend is declared is fixed at  $Y_n$  (after), then

the relative stake of one A share is given by  $X_n$  (after) /  $(A_n)$ . and the relative stake of one B share is given by  $Y_n$  (after) /  $(B_n)$ . in between

The relative stakes of the A and B shares does not change after the  $n$ th dividend ~~has been declared until~~ the next dividend is declared. We postulate that during this interval the number of A shares which may be obtained by surrendering one B share to the company shall be given by

$$\frac{(A \text{ issued in interval})}{(B \text{ surrendered})} = \frac{Y_n \text{ (after)} \times (A_n)}{X_n \text{ (after)} \times (B_n)}$$

This postulate is so designed that the A shares obtained in exchange for one B share ~~represent the same stake~~ represent the same stake in the company as represents the one B share which is surrendered.

*of the next*

During the time interval between the <sup>the</sup> dividend and the next dividend <sup>the</sup> stake of the A share holders and B share holders <sup>changes</sup>, <sup>even though</sup> the stake of one A share and one B share remains unchanged <sup>simply</sup> because B shares are surrendered and A shares are issued in exchange. For this reason the stake of the B shareholders just prior to the declaration of the next dividend, which is <sup>designated</sup> distinguished by  $Y_{n+1}$  (before), is given by

$$Y_{n+1} \text{ (before)} = Y_n \text{ (after)} \frac{(B_n) - (B \text{ surrendered in year})}{(B_n)}$$

$$= Y_n \text{ (after)} \frac{(B \text{ swrr})}{(B_n)}$$

similarly just before the declaration of the next dividend the stake of the A shareholders,  $X_{n+1}$  (before), is given by

$$X_{n+1} \text{ (before)} = X_n \text{ (after)} \frac{(A_n) + (A \text{ issued in year})}{(A_n)}$$

for which we can also write

$$X_{n+1} \text{ (before)} = X_n \text{ (after)} \frac{(A_n) + \frac{Y_n \text{ (after)} (A_n) (B \text{ swrr.})}{X_n \text{ (after)} (B_n)}}{(A_n)}$$

It is again true that  $X_{n+1} \text{ (before)} + Y_{n+1} \text{ (before)} = 1$

This formula teaches how to compute from the stake of the A shareholders and B shareholders after the declaration of a dividend the corresponding stakes before the declaration of the next dividend.

Now we must see how does the stake of the A shareholders <sup>and B shareholders</sup> changes at the time that the dividend is declared <sup>(at</sup> during which time there is no change in the number of A shares and B shares issued, since no B shares will be converted from one week before the declaration of dividend until one week after the payment of the dividend). The change in the stake of the A shareholders and B shareholders at the time dividend is declared should reflect the fact that the A shareholders have received more than their fair share of the profits in the form of dividends to the detriment of the B shareholders. We thus

arrive at a formula "

$$X_{n+1} \text{ (before)} = X_n \text{ after} + \frac{Y_n \text{ after } (B \text{ surrendered in year})}{(B_n)}$$

If when the <sup>the</sup> ~~nth~~ dividend is paid the total dividend paid to the A shareholders is given by  $a_n$  and the total dividend paid to the B shareholders is <sup>given</sup> represented by  $b_n$  then the expression

$$a_n \frac{Y_n(\text{before})}{X_n(\text{before})} - b_n$$

represents the amount which the B shareholders received in excess of their due.

If an equal amount were paid at that time to the B shareholders and if the price of the A shares on the stock market on the day following the payment of the nth dividend is represented by " $A$ "<sub>n</sub> then clearly the B share holders could have bought with <sup>plus</sup> an amount of

~~a number~~

$$\frac{a_n \times Y_n(\text{before})}{X_n(\text{before})} - b_n$$

A number of ( $G_n$ ) of A shares of <sup>where</sup>

$$(G_n) = \frac{a_n \frac{Y_n(\text{before})}{X_n(\text{before})} - b_n}{\text{"A"}_n}$$

Therefore it is logical to set the rule that the stake of the A shareholders after the payment of the <sup>the</sup> ~~nth~~ dividend,  $X_n$  (after), be given by

$$X_n(\text{after}) = X_n(\text{before}) \cancel{\left( \frac{P_n}{A_n} \right)} - X_n(\text{before}) \times \frac{(P_n)}{(A_n)}$$

and correspondingly the stake of the B shareholders after payment of the nth dividend be set at

$$Y_n(\text{after}) = X_n(\text{before}) + X_n(\text{before}) \times \frac{(P_n)}{(A_n)}$$

Again we have

$$X_n(\text{after}) + Y_n(\text{after}) = X_n(\text{before}) + Y_n(\text{before})$$

*stake = 1*

If we take into account the fact that at the time of issue the relative <sup>was</sup> ~~status~~ of the A shareholders ~~were~~ 50% and the relative stake of the B shareholders <sup>was</sup> ~~were~~ also 50% and if we further take into account that up to one week of the <sup>dividend declaration</sup> ~~first declaration~~ one A share was obtained by surrendering one B share it is

clear that our rules define precisely the relative stake of the A shareholders and the B shareholders both for before and after of each declaration of dividend. Our rules also define the conversion ratio of B shares to A shares for the time interval between any two dividends.

If the A shares are not on the market their market price cannot be used to calculate from it the change in the relative stake of the A shareholders and B shareholders at the time when dividend is paid. If however the composite stock which consists of one A share and one B share is traded on the stock market then the market price " $E_n$ " of this composite stock *paid on the day following* can be used for our purpose.

We have then for the relative stake of the A shareholders and B shareholders after the nth dividend:

$$X_n(\text{after}) = X_n(\text{before}) - H_n \frac{X_n(\text{bef})}{(A_n)} - H_n \frac{Y_n(\text{bef})}{(B_n)}$$

$$\text{and } Y_n(\text{after}) = X_n(\text{before}) + H_n \frac{X_n(\text{bef})}{(A_n)} + H_n \frac{Y_n(\text{bef})}{(B_n)}$$

where

$$H_n = \frac{a_n \frac{Y_n^{\text{bef}}}{X_n^{\text{bef}}} - b_n}{E_n}$$

Finally, if the composite stock "AB" is not on the market either then instead of the market price " $E_n$ " of the A shares there may be set fixed price in dollars " $D_n$ " for the A shares which will be used in our formula in place of a market price " $E_n$ ".

*payment of the  
nth dividend*

June 1, 1953

*2*

The public discussion of the issue which faces the world today is so unsatisfactory, because in it we can discern only two kinds of voices. <sup>*A First*</sup> The voices of those who more or less represent <sup>*or rather*</sup> government policy, <sup>*three secretaries*</sup> and <sup>*to the public*</sup> one of three sections of state since the end of the last war failed to present anything that deserved the name of policy. <sup>*also present*</sup> What they <sup>*wanted*</sup> described to us was not a policy at all, but a pattern of behavior <sup>*confirmation to follow*</sup> to which they made the United States Government, and for which they sought public support. <sup>*those*</sup> Their voices contributed nothing to the clarification of the issues and only increased the existing confusion. Nothing they said made any sense, <sup>*as policy*</sup> and one often wondered how anybody conversant with history can say the things they said. <sup>*A Second*</sup> On the other hand, one <sup>*can*</sup> could discern, even though rather feebly, the voices of those who <sup>*try*</sup> tried to give the public <sup>*eyes*</sup> insight into the situation in which the United States finds itself. Such men, to name Lipman, <sup>*Keenan above all*</sup> Cannon, <sup>*even a little*</sup> Morgenthau among them, knew the history, and perhaps they <sup>*know*</sup> knew the history too well. <sup>*where*</sup> I could often agree with them, <sup>*It is necessary to*</sup> as to what the government policies made no sense <sup>*than this as that*</sup> and also agree with them on the next few steps that need to be taken, yet they <sup>*often is unacknowledged or unpressible if desirable*</sup> seem to miss the fact that something unprecedented has taken place in the world and because this has happened, <sup>*more men of our policy*</sup> a good foreign policy for which they pleaded, while necessary will not be capable of solving our problem.

<sup>*subtle*</sup> A good foreign policy can do no more than reduce the possibility of war, <sup>*are not voluntary*</sup> which under a bad foreign policy <sup>*with*</sup> will most certain to a few percent per annum. But if this is all we can do, and if we are are not aware of the need to use the <sup>*within*</sup> <sup>*the next ten years*</sup> problem which a good foreign policy might provide to eliminate the possibility of war ~~altogether~~ altogether, then nothing really was worthwhile. For at the rate at which the destruction of atomic bomb increases is such that if we know there will be another world war, we must pray for an early war rather than a late one. And if we cannot go beyond establishing a good foreign policy, then it is not only likely that there will be another world war, but in the long run, it is an absolute certainty.

Page 2

It is necessary to emphasize this for what terms of a settlement that will end the cold war between Russia and the United States, it is necessary to keep in mind that we must have a settlement which on the one hand gives us a reasonable assurance that there will be no world war within the next 25 years, and on the other hand lays the groundwork for the unprecedented steps for which we have to press during the next 25 years in order to reduce the ~~danger-of-war~~ probability of war for a few percent per annum to zero in these next 25 years.

July 18, 1958

To : Richard Feynman  
Harrison Brown  
Lee DuBridge  
Eugene Rabinowitch  
H. C. Urey  
H. J. Muller  
Louis Ridenour

From: Leo Szilard

Enclosed is a collection of documents which, I believe, will interest you. I should appreciate getting such comments from you as you care to make at this time.

This is an informal and unofficial query that I am making personally. Any more official approach to you would come to you through Col. Leghorn who functions as our "official" line of communication with the Academy of Sciences of the Soviet Union.

*copy to: Col. R.S. Leghorn*