

MONTHLY REVIEW

THE BANK OF NOVA SCOTIA

The Question of War Debt

EVERYBODY knows that Canada will enter the post-war world with a national debt much greater than ever before. But few of us are inclined to spend much thought on this rather unpleasant subject, for contemplation is at a discount in the exigencies of the moment. Perhaps the only widely-held opinion concerning the outlook for the national debt is that it will leave us with a large and difficult problem at the close of the war—a problem which will have a decided bearing on the rate of post-war taxation and also on national policies of an economic and social nature.

The purpose of this REVIEW is to examine the main factors which will determine the burden of the war debt and to give some impression of the possible extent of the future debt burden. Although it is out of the question to make any specific forecasts, it is of advantage to clarify and arrange our thinking on this subject in an effort to see the debt problem in broad perspective. For the problem is part and parcel of the larger question—of how the war is financed and of how the post-war readjustment is to be met.

First of all, it is necessary to be quite clear on what is meant by the "burden" of national debt. For the purposes of this discussion, the burden may be described as the degree to which the national income is diverted by the Government to pay interest to the holders of the debt, and it may be measured by the percentage which the interest charges bear to the national income. Since most, if not all, of the new war debt is likely to be held within Canada, we shall in fact be discussing the possible *extent* of the transfer of income from Canadians as taxpayers to Canadians as bondholders. But, owing to lack of material and limitations of space, the *nature* of this transfer or the sort of redistribution of income which the debt may involve cannot be treated here.

Recognizing this limitation in our approach, the burden of debt as defined above is determined by three main factors. The first, of course, is the size of the debt. The second is the rate of interest which, combined with the first, produces the annual carrying charges. The third is the level of prices and production, *i.e.* the national income, against which the interest charges should be viewed.

In the last war, all three of these factors combined to produce a heavy burden of debt. The bulk of our war expenditure, like that of other countries, was financed by loans and the result was a large debt in relation to the scale of the war effort. Moreover, the debt was contracted at what today would be regarded as high interest rates for

Government borrowings—much of it at 5% and more. Added to that was the fact that the debt was accumulated in a period of soaring prices and that the interest had to be paid in the following years when prices had declined sharply.

A picture of what happened is provided by the charts overleaf. It will be seen that the combination of a mounting debt and rising interest rates between the outbreak of war and 1920 produced a very sharp increase in interest charges—from \$10 millions to over \$130 millions per annum. The percentage of Dominion revenues required to meet interest charges rose from a mere 5% to around one-third, and the proportion which interest charges bore to the national income increased from a small fraction of 1% to more than 3%. It is true that as the post-war readjustment passed and as the "new era" brought a higher national income, the burden of interest charges was somewhat reduced. But one only has to glance at the record of wholesale prices to see how greatly the debt burden would have been eased had it proved feasible to curtail the drastic wartime advance in prices and to prevent the violent post-war decline.

To expect such a combination of unfavourable conditions in this second world war would be unduly pessimistic. It is no exaggeration to say that the methods of controlling ~~these~~ conditions, and the will to control them, are much more developed than a quarter century ago and particularly if one thinks in terms of permanent Anglo-American co-operation. It is true that we are accumulating debt more rapidly than in the last war. But in relation to the size of the war effort we are relying less on borrowing and far more on taxation. In the sphere of interest rates, there is a marked contrast. Furthermore, Canada is making a determined attempt to prevent a repetition of the inflationary price rise of the last war and the efforts of the United States in this direction may be expected to increase.

Let us examine in greater detail the factors which will determine the debt problem. First, what are the possibilities with regard to the capital amount of the war debt?

The Size of the War Debt

CANADA entered the war with a Dominion funded debt (including treasury bills) of about \$3,400 millions. By March 31st, 1941, this debt had increased by nearly \$1,000 millions, to \$4,372 millions. About half this increase reflects the budget deficits resulting from our own war expenditures, a good deal is financial aid to Britain, and the

remainder is accounted for by loans to the railways and provinces and also by a moderate increase in current assets. Financial aid to Britain is provided through the raising of Canadian funds to meet Britain's dollar deficit in her current transactions with Canada. It means a corresponding addition to the national debt, except to the degree that it is offset by repatriation of securities. There was a good deal of repatriation in the last two fiscal years but the main way of providing aid to Britain now is to accumulate sterling credits, the financing of which adds to the national debt.

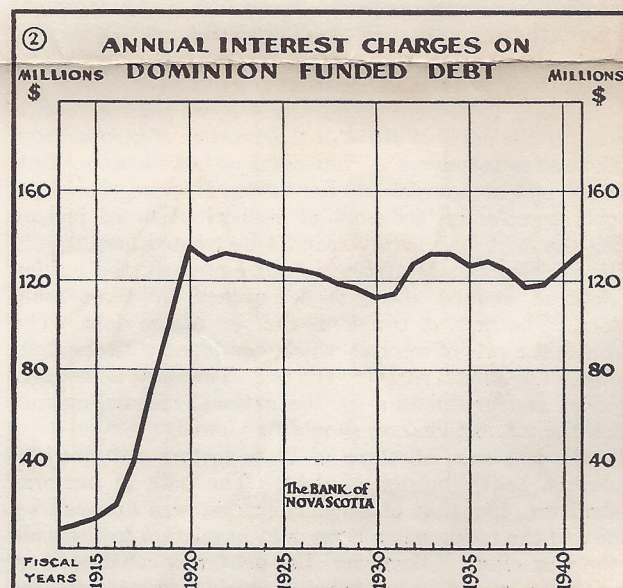
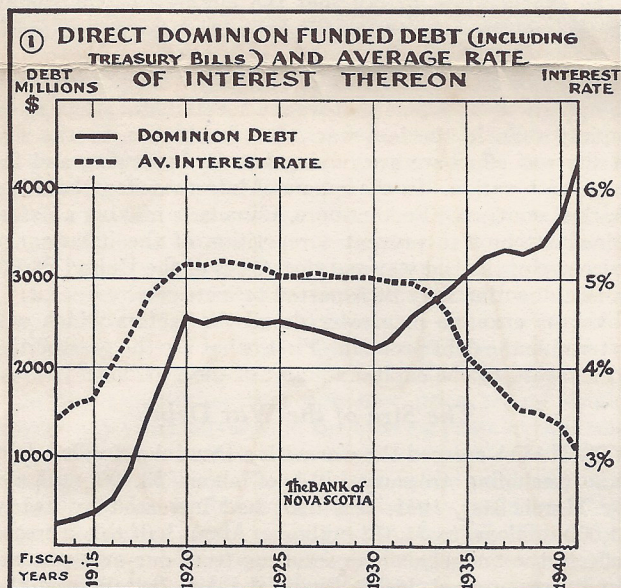
It would appear that at least another \$1,000 millions will be added to the funded debt during the present fiscal year, much of which has already been contracted through the Victory Loan, through sales of War Savings Certificates and through some addition to the Treasury Bill issue. The Dominion's total requirements, including financial aid to Britain, are placed officially in the neighbourhood of \$2,750 millions. Against this may be set estimated revenues of about \$1,450 millions which, incidentally, are more than five times greater than the peak revenues of the last war and nearly three times as large as the highest peacetime figures. This leaves about \$1,300 millions, but not all of this will be added to the funded debt. For example, further repatriation of securities from Britain amounting to around \$175 millions has been carried out and this is an offsetting item.

Adding in the earlier increase of \$1,000 millions, it is clear that the first two and one-half years of war will be responsible for a rise in the national debt of some \$2,000 millions. Looking farther ahead, what increases may be expected? Future additions to the debt depend first on how long the war lasts. They will be determined by the size of the Dominion's financial requirements over and above what is covered by taxation. The Dominion's requirements will in turn depend on the size of the national production and income, and upon the proportion of that income which it is feasible to divert to war purposes. It is obvious that these factors cannot be clearly forecast, and that one of them—the length of the war—is quite unpredictable. But if we wish to gain some insight into the possible nature of the debt burden, we must make assumptions in regard to the future. This it is proposed to do, not because we have been granted any preview of "the shape of things to come," but because in doing so it is possible to give proportion to the main aspects of the debt problem.

Let us begin by making a quite arbitrary assumption—that the war will last for five years, *i.e.* for two and one-half years beyond the close of this fiscal year. Next, it is necessary to make some assumptions in regard to the future trend of the national income. Certainly, a further expansion in the national income may be expected, though the increase is likely to be slower than heretofore because the upper limits of production are being approached and because strong measures are being taken to check the rising level of prices. Accepting such a view, one might imagine a gradual increase in the national income, reaching a peak of around \$8,000 millions per annum by the end of a five-year war. (This would represent an increase in the national production over the pre-war figure of about 50% and a rise in the average level of prices of around 30%.) How much of this rising national income is likely to be diverted toward the war? In the present fiscal year, the Dominion is diverting for all purposes somewhat over 40% of the national income.* Let us assume that this proportion can gradually be raised to something over 50%. This would imply some curtailment in civilian output for current as well as for capital purposes and, of course, a sharp reduction in certain lines. As to the amount of the Government's outlays which may be covered by taxes, it is assumed that tax revenues will rise considerably without any great advance in present rates, as recent tax levies take full effect and as the national income expands.

It is of course not possible to make any accurate estimate of how much the national debt will increase, but if we accept the foregoing general assumptions, the increase in the two and a half fiscal years following the present one might well be as much as \$4,000 millions. Added to the \$2,000 million rise in the first two and a half years, this would produce a total debt increase in the order of \$6,000 millions for a five-year war. In addition the immediate problem of post-war readjustment is likely to involve some further debt creation—how much can only be guessed. But some account must be taken of this factor, and all in all, a debt increase of perhaps as much as \$7,000 millions may be assumed.

**This percentage may give a slightly exaggerated impression of the strain involved since the national income figure only takes account of what is produced in the year concerned. We may now be drawing down stocks of civilian goods and consuming at a higher rate than the current output of such goods would suggest.*



Aid to Britain and the War Debt

IN THIS calculation, however, one factor has been omitted. No deduction has yet been made for additional repatriation of securities and for the heavy sterling balances which are accumulating. If our financial aid to Britain were to be regarded as a strictly commercial transaction, we should have very large assets which would offset a substantial part of the increase in the funded debt. But such financial assistance is not so regarded. It is in fact a part of our war effort—the Canadian brand of “lease-lend.” The goods must be delivered and the question of settlement is very secondary. This being the case, how should we regard our growing sterling credit in relation to the debt problem?

There can be no simple answer to this question but a few relevant considerations may be stated. The first concerns repatriation of British investments in Canada. A large part of the easily negotiated repatriation has already occurred, including most of the Dominion debt held in Britain, a good deal of the Dominion-guaranteed securities, and some readily marketable common and preferred stocks. While the British still have a substantial investment in Canada, which in total might be worth as much as \$2,000 millions,* its repatriation would raise a number of new problems. There is the question of valuation which would be particularly difficult in the case of direct investments, equities and land. There is the related problem of marketing: to what degree could the domestic capital market at this time absorb substantial investments in corporate securities, in direct ownership of businesses, in mortgages, in land, etc., at prices which would be considered reasonable by British holders? If the answer to this question is unsatisfactory, should the Dominion itself acquire such investments leaving the problem of their final absorption to a later date?

Another consideration concerns our trading relations with Great Britain. Even if we could, and wished to, repatriate all British investments in Canada, we are accumulating sterling at such a rate that Britain might well become a net debtor of this country before the end of a five-year war. This is a prospect which cannot be regarded with unqualified enthusiasm, if, indeed, it can be regarded with enthusiasm

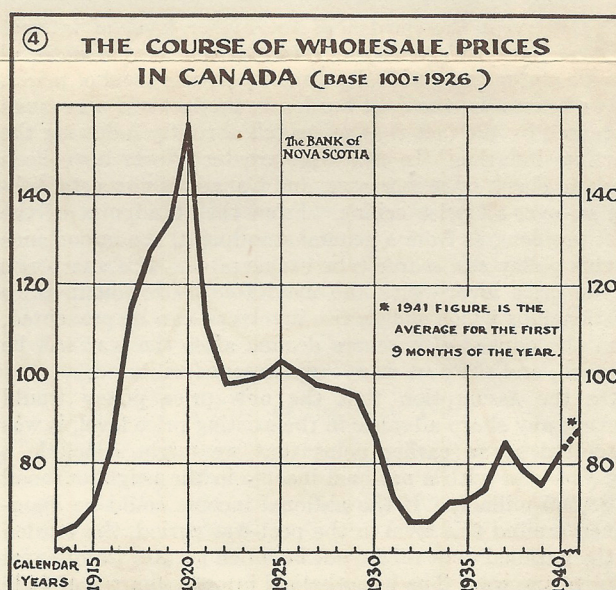
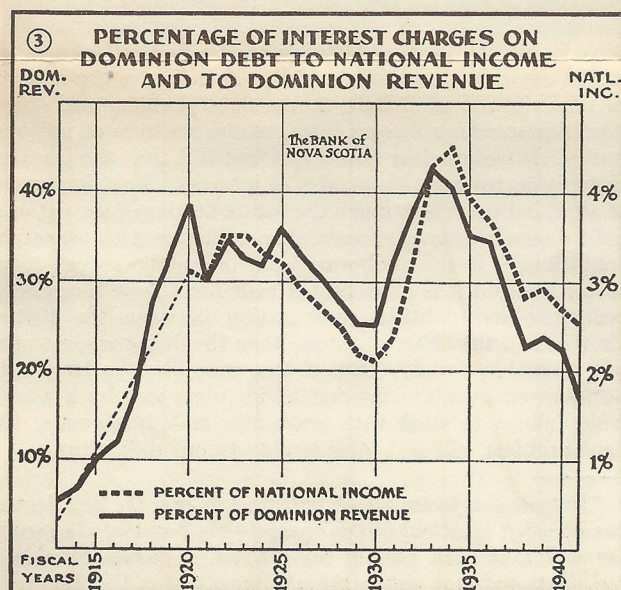
*This statement is based on the official estimate of British investments in Canada for 1937.

at all. The fact is that Britain has for long had a debit balance of trade with Canada, resulting mainly from her large purchases of foodstuffs and other primary products. The full repatriation of British investments in Canada would remove a source of income—amounting to between \$75 millions and \$100 millions annually—which has helped the British to meet their normal deficit in Canadian dollars. When it is remembered that Britain's ability to acquire U.S. dollars may also be lessened as a result of the war, it will be clear that the problem of settling the dollar deficit in British-Canadian trade will not be an easy one. From a Canadian standpoint, the danger lies in the possibility that after the war the financing problem might induce Britain to curtail her usual purchases from Canada and possibly to turn toward countries where financing would be less difficult.

Bearing these considerations in mind and remembering that aid to Britain is an essential part of our war policy, it would not be wise to regard all of our potential accumulation of sterling as an offset to increases in the national debt. Before this factor was taken into account, it was assumed that a five-year war and the immediate period of post-war readjustment might lead to an increase in Dominion debt of as much as \$7,000 millions. For purposes of discussion, let us imagine a net increase of around \$6,000 millions which, added to the pre-war debt, would produce a post-war national debt in the order of \$9,500 millions.

The Rate of Interest

WE HAVE reason to be thankful that this does not appear to be a 5% war, as was the last. For the difference between 5% and 3% on a \$9,500 million debt would be no less than \$190 millions per annum in interest charges. In the last war, the average rate of interest on the national debt rose sharply and by 1920 was over 5%. Around that level it remained until the early 'thirties when “easy money” began to take effect. The effects were truly striking. The decline in the rate of interest meant that the large increase in the national debt, which characterized the depression, was financed with little increase in interest charges. In the fiscal year 1938-39 interest charges were \$119 millions as compared with \$113 millions in 1929-30, though over the nine years the debt had risen by some \$1,100 millions. Even in the past year when the debt was much larger, interest charges were no higher than in 1920.



At the present time, the average rate of interest on the national debt is about 3%, which is just about the prevailing rate on longer-term issues. On part of the debt, of course, the rate is much lower: on Treasury Bills it is under 0.6% and on the last issue of two-and-one-half-year notes it was 1½%. On the other hand, there are still a number of issues outstanding where the rate of interest is 4%, 4½% and 5%. Indeed, if all the contract rates on the national debt corresponded with the existing level of interest rates, the average rate would work out to around 2⅔%, and it follows that if current rates continue to prevail there will be a gradual further reduction in the average rate on the whole debt.

If one were to judge by the experience of the last war, it would be foolish to assume that the average rate of interest will remain at 3% or thereabouts. But in the realm of money, much has changed over the past twenty-five years. That period has seen the development of monetary policy as a major instrument of national policy the world over and nowhere more than in the Anglo-Saxon countries. The "easy money" policy which developed in the United States and Britain and spread to Canada during the depression set a new and lower standard of interest rates, though it should be remembered that the rates of the last war and the 'twenties were unusually high by pre-1914 standards. In the United States the pressure of "easy money" still continues to be felt. In Britain, despite the strain of "total" war and a marked increase in prices, it has proven feasible to maintain the long-term rate of interest at about 3%. And in Canada, too, the rate has been remarkably steady at around the same level. The fact is that the Governments of the Anglo-Saxon countries have a strong vested interest in the maintenance of present rates and are far more able than ever before to keep interest rates from rising.

Now let us add one more to our list of assumptions by supposing that the average rate of interest on the national debt continues at 3%. This would allow for some margin of error since the longer-term rate is around that figure and short-term rates are much lower. If this rate is applied to the hypothetical post-war debt of \$9,500 millions, the annual interest charges would work out to \$285 millions. This figure compares with an interest bill of about \$120 millions in the year preceding the war and thus the net increase would be around \$165 millions per annum.

The National Income and Debt Burden

HOW great the burden of the higher level of interest charges will be depends on the size of the national income and more specifically on the post-war level of prices. As we have seen, the debt burden in the last war was much increased by the fact that prices fell abruptly following the wartime inflation. In this war, greater efforts have been made to check price increases, and Canada is now establishing an over-all price ceiling. From the standpoint of the debt problem, as from a general standpoint, the importance of this policy can scarcely be exaggerated. If a sharp rise in the price level—with the inevitable distortion in price relationships which such a rise involves—can be prevented, then the danger of a severe decline after the war will be lessened, and the post-war readjustment facilitated.

On the assumption that the new price policy would prevent any sharp advance in the existing price level, it was suggested at an earlier point that we might conclude a five-year war with a national income in the neighbourhood of \$8,000 millions. If the national income could be maintained around this level in the post-war period, the burden of the national debt might not be much greater than it was prior to the war. The hypothetical interest charges of \$285

millions would be equivalent to about 3½% of the national income, as against about 3% from 1936 to 1939.

Unfortunately, this encouraging conclusion is subject to a very important "if," i.e. that the national income is maintained close to the peak level reached during the war. But realization of this possibility appears unlikely. The national income at the close of war will represent a great and intense effort by the people of Canada. Even in the most favourable of circumstances following the war, one would expect some reduction in the output of goods and services, especially so when it is remembered that a good deal of the industrial production and most of the military service will no longer be required. It is clear, therefore, that there will be some decline in production after the war, the extent of which will depend on our ability to find employment for soldiers and munition workers in a peacetime economy. It follows that unless prices rise, the post-war national income will be smaller than at the wartime peak.

Consequently, it might be safer to assume a post-war national income of say \$6,000 millions or \$6,500 millions, instead of \$8,000 millions. This in turn would mean that the ratio of debt charges to national income would be more like 4½% than 3½%, or half again as great as the 3% ratio of just prior to the war. There is no cause for alarm in such a prospect. It would imply no more than a moderate increase in the pre-war level of taxation, and it would leave plenty of room for reductions in present tax rates when the war is over. Prior to the war, the Dominion tax structure was diverting approximately 12% of the national income and, if the possibilities described above should prove to be anywhere near the actualities, the increase in the national debt would involve adding another 1½% or at most 2% of the nation's income to this diversion. While this is an appreciable increase, it should be remembered that Dominion taxes are today diverting 23% of the national income.

AS HAS been emphasized, the calculations in this REVIEW are not predictions. They serve to show what would happen under a given set of conditions which may or may not come to pass. One of them—the five-year war—is a purely arbitrary assumption. With regard to the other assumptions, all that can be claimed is that an attempt has been made to preserve a balanced view and to avoid asking too much of an obscure future.* However, the main value of this sort of approach is to bring into perspective the factors which will determine the future debt problem. It demonstrates what must be fairly obvious, that a large increase may be expected in the capital amount of the debt. It indicates the relation of financial aid to Britain to the debt problem and shows how this question merges into broader matters of national policy. It makes clear how important it is that the Government is borrowing at low rates of interest. Most important of all, it indicates how much the future burden of the national debt depends upon a successful re-adjustment to peacetime conditions. If the post-war problem can be solved satisfactorily—and it is clear that it calls for a large measure of economic and political co-operation between the British Empire and the United States—then the debt prospect need not worry us unduly. But if this war, like the last, is to be followed by a violent decline in prices and by a world-wide failure to deal with economic maladjustments, the debt problem will add considerably to our difficulties.

*Indeed, one factor which will tend to ease the debt burden has been left right out of the account—the fact that the income tax will take back part of the interest payments from their recipients and thus reduce the additional cost of the debt.