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History of the National-Bank Currency

BY

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HISTORY OF THE NATIONAL-BANK CURRENCY.

By ALEXANDER DANA NOYES.

In discussing the fluctuations of the bank circulation in a modern state, the first consideration is apt to be the influence exerted on the volume of such issues by the requirements of trade. A steady increase in population will, all other things being equal, call for more currency; so will a steady annual expansion of industrial activity, even without a proportionate increase in population. There will remain, after allowing for these fundamental influences, the variation of demand for such currency in the different seasons. The harvest months require more currency than the early springtime, primarily because the hand-to-hand use of currency for paying the wages of the agricultural laborers is at its maximum in the one period and at its minimum in the other.

It is quite beyond dispute that the ideal system of bank-note issues would be that which provides automatically for such varying demands. A currency which is inadequate for harvest uses will result in the sudden pulling down of the reserve money of city banks and the consequent forced reduction of their loan accounts. A currency which is larger than is needed in the period between harvests, and the supply of which can not be reduced through automatic retirement by its issuers, will usually bring about a needless accumulation of reserve money

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in the cities, with one or both of two results—stimulation of unhealthy speculation in the oversupplied city markets, or expulsion of gold with possibly awkward incidental consequences.

These problems have been present throughout the history of our own national-bank note circulation, since its establishment in 1864; but they have been fundamentally influenced, from the start, by another factor in the system, operating quite independently of the fluctuations of trade, interior exchange, or population. Being based by law on the pledge of United States Government bonds by the issuing bank with the Treasury, the national-bank note circulation is bound to be influenced by the amount of such government bonds actually outstanding, their increase or their decrease. In any case, the possible volume of national-bank notes outstanding must be limited by the amount of government bonds in existence at a given time. A heavy decrease in the outstanding public debt would naturally, at some point, cause reduction in the bank-note circulation, independently of other influences. A large increase in the government debt would not necessarily cause increase in the supply of bank notes; but since the present system was adopted in 1864 for the express purpose of providing a market for government bonds, it would be reasonable to suppose that bank notes would in some degree expand in connection with expansion of the public debt. It is the purpose of this paper to study the actual workings of the bank-note system, since its establishment in 1864, the fluctuations of the bank currency itself, and the relations of such fluctuations both to the ordinary

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requirements of trade and to the movement of the public debt.

It should be noticed, to begin with, that the founders of the present national-bank note system frankly recognized and avowed other purposes than the simple purpose of establishing a sound and elastic currency. They had in view two special considerations, each of which was of greater immediate importance in 1864 than elasticity in the currency, but neither of which is of vital importance at the present day. The two foremost problems of the Administration in 1864 were, first, to finance the civil war; second, to provide for the future cementing of the union of the States. This explains why, advocating in his report of 1862 a system of bank-note currency secured by government bonds, the Secretary of the Treasury set forth, as the chief advantages of such a system, that the negotiation of bond issues by the Government would be greatly facilitated; that "it is not easy to appreciate the full advantages of such conditions to a government obliged to borrow;" that it would "reconcile, as far as practicable, the interests of existing institutions with those of the whole people;" and that it would provide "a firm anchorage to the union of the States."

In other words, to use a familiar expression, the national-bank act of 1864 was a "war expedient." But when the results of this particular device are considered with reference to conditions prevalent since the war, and especially to the totally altered position of the United States since 1864 as a commercial or industrial community, the expedient wears some very different aspects. We shall most

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readily discover how the system has worked under these varying influences, and under these changing conditions of the country's trade, by reviewing the history of the national-bank note currency itself, from the time of its establishment up to the present day.

During 1864, the first year of its operation, $58,813,980 national-bank notes were issued. At the end of 1865, the total had risen to $298,588,419. These additions to the currency were offset by reduction in the legal-tender notes, which had not yet fallen under the rigid regulation in regard to the limit of retirement, which was applied to them by act of Congress in January, 1868. It was still the theory of our statesmen and financiers that the bank-note currency would gradually replace the government legal tenders. In December, 1865, the House of Representatives had by resolution indorsed the "necessity of a contraction of the currency," meaning the government notes, and early in 1866 Congress had voted for a plan whereby the legal tenders would be reduced by $4,000,000 per month. Thus it happened that in the fiscal year ending June 30, 1866, while bank circulation increased $135,342,000, United States notes decreased $30,286,000, and this, along with retirement of $122,923,000 of the old state bank notes, actually reduced the total volume of the currency. The same result was achieved in the following fiscal year, when the total currency supply was reduced by $26,000,000, notwithstanding $17,000,000 increase in outstanding bank notes.

When contraction of the legal tenders was stopped by act of Congress at the beginning of 1868, $299,747,569 in

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national-bank circulation was outstanding, and it remained practically stationary during the next three years. With 1871, however, extension of the system, chiefly through organization of new national banks, began to have marked effect on the circulation. In his report at the end of 1870, for instance, the Comptroller of the Currency reported that 37 new national banks, with an aggregate capital of $3,239,000, had been organized within the year. At the end of 1871 he reported for that twelvemonth the organization of 155 new national banks, with an aggregate capital of $15,996,000. There was, however, a special reason for this movement. To what extent it was an automatic response to the growth of the interior communities during the "boom times" which then prevailed in trade may be judged from the fact that out of the 155 newly founded institutions of 1871, all but two were in localities west of the State of Ohio or south of Mason and Dixon's line. Between the end of 1871 and the end of 1874, the number of national banks was further increased by 237. These large additions to national-bank facilities in the interior of the country were as obvious a response to the rapid development of the country as was the railway building of the period. From the 2,979 miles of new track laid in 1869—itself the largest since the panic of 1857—the annual construction rose to 4,615 miles in 1870 and to 7,379 in 1871. This was the preparation for the foundation of new interior communities. Purchases of public lands for settlement doubled and trebled in the same period. It was inevitable, in the development of ordinary business, that banks should grow up along with

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the towns and railways, and since the purpose of these new institutions was also, in great measure, to provide currency as well as credit for the growing interior communities which they served, it was not strange that, despite the restriction of the day as to the circulation to be permitted to any one national bank, the total supply of bank notes should have risen from $306,307,672 at the end of 1871 to $347,267,061 in the middle of 1873, and to $354,128,250 even at the end of 1874.

It would appear, therefore, that from the foundation of the national-banking system up to the panic of 1873 and the end of the following year, movement of national-bank circulation proceeded on lines prescribed by the natural development of the country's population, wealth, and trade. One reason why the machinery operated with so little fricton was that the amount of government bonds outstanding was so large and changed so slowly that there never arose any question as to the ready procuring of the requisite collateral for new national-bank circulation. This factor in the problem was now about to be tested in a striking way, and the real defects of the entire system to be disclosed. In 1871, when the refunding of the national debt began, it has been pointed out by Comptroller Knox that the national banks held more than one-fifth of the government's interest-bearing bonds. A certain displacement of holdings occurred in the enormous conversions of the period; the price of outstanding government bonds rose in such years as 1876 to quite unprecedented heights, and this provoked realizing on such holdings. For this and other causes, United States

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bonds held as security for circulation fell from $391,171,200 at the end of the fiscal year 1874 to $338,713,600 at the end of 1877. The after-panic trade depression doubtless encouraged this surrender of holdings and consequent reduction of circulation, but the cause lay deeper, and a very short time afterward began to display its inevitable workings in a manner which has largely made the subsequent history of the American bank-note currency.

No one has ever contended that a currency built up on the basis of government bond security will respond with automatic elasticity to the changing requirements of trade. At best, government bonds must be purchased to provide for additional circulation, when such circulation appears to be needed by the customers of a bank. In theory at any rate, retirement of that circulation when trade no longer needs it—whether because a year of depression has followed a year of activity, or because a normally inactive season follows one that is normally active—should be accompanied by sale of the bonds used as security for it. But the price of government bonds may be so high as to discourage a bank from risking purchase, or so low as to discourage sales. The result has invariably been that circulation, once taken out by a national bank on government bond security, remains outstanding in entire disregard of the trade requirements of the moment.

This obviously does away with elasticity. But what I wish more particularly to discuss is the fact that, under the present system, bank-note circulation not only does not expand and contract as trade activity increases or

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diminishes, but is extremely apt to move in exactly the opposite direction from such trade requirements. The history of our bank-note issues has repeatedly exemplified this process; let us see just how and why it happens.

A period of great prosperity and trade activity normally calls for increase in the currency, which bank notes theoretically should provide. But such a period also brings a larger public revenue, and, in a country of such enormous trade as ours, a rapidly mounting surplus of public revenue over expenditure. Now the most obvious use of an overflowing public surplus, during the period when taxation has not been reduced or expenditure increased, is in redemption of the public debt, and this was the use that was made of the surplus revenue, notably after 1879. At the close of that fiscal year, the Government's outstanding interest-bearing debt was $1,797,643,700; at the end of the fiscal year 1887 it was $1,021,692,350; at the end of 1892 it was $585,029,330. This reduction was continuous, and part of it occurred in a period of immense industrial expansion, which was in fact the cause of the overflowing revenues.

What, then, happened to the bank-note circulation? At first, through the large conversion operations in the public debt, the national banks were enabled moderately to increase their circulating notes. This process, however, raised the price of the government bonds requisite to secure the notes; the 4 per cents, which had sold at 99 in 1879, got up to 121¾ in 1882. This of itself discouraged purchasers to take out new circulation, and tempted the

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banks to retire their outstanding notes and secure the profit on the released bonds. But that was not all. In 1883 there were on deposit, as security for national bank circulation, some $353,000,000 government bonds, and of these upwards of $200,000,000 were 3 per cent bonds subject to call by the Treasury. The surplus revenue continued large; it was used to pay off these bonds. As a result, the outstanding national bank notes fell from $361,882,000 at the opening of 1883 to $296,572,000 at the close of 1886.

The surplus revenue continuing, and itself upsetting the money markets through the flow of actual cash to Washington, where it was locked up in the vaults of the Treasury, Congress in 1888 authorized the use of that surplus, not only for redemption of government bonds already matured, but for purchase of unmatured bonds at a premium. During the next four years no less than $235,000,000 was expended by the Government in buying back its bonds at the market price, which at one time in 1888, under these bids by the Treasury, rose to 130 on the market. Such a price prevented the buying of government bonds for new bank-note circulation and greatly stimulated the sale of bonds held to support outstanding notes, and by July, 1891, the country's total bank-note circulation was down to $167,577,214.

That is to say, between 1883 and 1891 the country's bank-note currency had actually been reduced 53 per cent. The reduction had been progressive; sometimes, as in 1886 and 1888, it was most rapid in the autumn months, when the harvest requirements for currency are heavy.

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It proceeded, in fact, in all respects without regard to the question of trade activity—a fact sufficiently demonstrated by comparison of the checks drawn on American banks in the years referred to. Such "clearing house exchanges" were $36,079,000,000 in 1883 and $56,636,000,000 in 1891. The use of money for purposes of trade had increased 54 per cent in the very period when the bank-note currency, which should have served that trade, had decreased 53 per cent. This was at least anomalous; but we have seen the reason for it. Through the unfortunate machinery provided for such issues the Government itself was killing the bank circulation and was doing so because it could not help itself.

Nor was this the whole of the story. In 1893 came the panic; in 1894 began a period of prolonged trade reaction and depression. Now, at all events, reduction in bank circulation would fit in normally with the industrial situation. But the machinery which had worked so badly in times of great activity now proceeded to make trouble in exactly the opposite way during dull times in trade. Toward the close of 1892 the surplus revenue disappeared; the Government's bond purchases ceased, and the price of United States bonds fell rapidly. It went much lower in 1893, and, as might have been expected, national banks now began to buy bonds again as a basis for new circulation. In 1894, the gold reserve against legal tenders having been greatly impaired by the revenue deficit, the Government sold $100,000,000 new bonds. In the prevalent financial distrust national banks were the only buyers and, as investment of their deposits in government bonds was not

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considered by them to be a part of the banking business, they used them largely to obtain new note circulation.

More bonds were sold in 1895 and 1896. As a result of these various causes, outstanding bank-note circulation rose from $174,404,000 at the end of 1892, to $206,605,000 at the end of 1894, and to $235,663,000 at the end of 1896. This was in the face of a trade movement in this country at the three periods, reflected by $62,011,000,000 clearing house exchanges in 1892, $45,545,000,000 in 1894, and $57,403,000,000 in 1896. In two years after 1892 trade activity had decreased 26 per cent and yet the bank-note circulation had increased 18 per cent. The system, in other words, after actually depriving a genuinely active and rapidly expanding trade, which could normally absorb more currency, of a good part of the very notes which had previously been in existence, operated afterwards, in a similarly automatic way, to crowd the channels of circulation with new bank notes at a time when trade was in a state of extreme depression, when it did not need and could not use the note circulation which it had possessed already.

This is sufficient illustration of the tendencies of the present system of bond-secured bank-note circulation under conditions which have actually prevailed before and which may prevail again. It is not difficult to picture a chain of circumstances in which the country's bank circulation might be absolutely annihilated, at a time when a full currency supply was needed for business purposes, or in which, on the other hand, it might be indefinitely inflated at a time when the existing supply

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was already superfluous. The first result would certainly occur, regardless of trade conditions, in the conceivable condition of extinction of the national debt. This is a contingency not at present in sight, but it is one which actually arose in 1836, and which seemed in 1888 in a fair way to recur—on both occasions as a direct result of active general trade, which expanded the public surplus at the moment when trade needs for the bank currency were themselves expanding.

The second contingency is a constant possibility. The Panama Canal will call for repeated issues of United States government loans; as the law now stands, these new bonds must be sold at par or higher, and must not bear a higher interest rate than 2 per cent. But these stipulations virtually restrict the market for such bonds to the national banks. Supposing for the sake of argument an indefinite continuance of bond issues for such purposes and under such conditions, the bank-note currency would inevitably expand along with the bond issues, and without any reference whatever to the needs of trade.

It is true that of recent years, the difficulty of 1888, when bank circulation was arbitrarily reduced through use of the public surplus for wholesale redemption of outstanding government bonds, has been mitigated through great increase of public deposits in the national banks. Until ten years ago, it was assumed that such deposits ought not to be increased beyond the amount necessitated by the routine operations of Government. On exceptional occasions they became very large; they reached $279,000,000 during Secretary Sherman's refunding op-

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erations of 1879, and $95,000,000 pending the financing of the Spanish war loans of 1898. But in each of these cases the deposits were cut down to relatively small figures when the particular operation requiring their temporary increase had been completed; total deposits falling at one time in 1880 as low as $9,750,000. Their increase to $61,500,000 in 1888 caused very widespread criticism. Beginning with 1900, however, a different policy was pursued; in November, 1903, government bank deposits rose to $168,047,000; in the panic of 1907, they rose to $256,920,000, nearly paralleling Secretary Sherman's maximum, though for a very different reason.

The use of government bonds as collateral for this greatly increased trust fund restrained the tendency toward unnecessary expansion in bank-note circulation; but it none the less continued the artificial situation. So long as government bonds alone were accepted as collateral against public deposits, and in large measure after other collateral had been declared lawful, the available supply of such bonds for bank-circulation purposes was restricted almost as severely as when the Government bought up its own bonds in 1888. On the other hand, whenever the government bank deposit fund was reduced—as it would be, necessarily, in case of deficit in public revenue, and as it was to the extent of $100,000,000 between December, 1903, and July, 1905—the necessary result was to set free a proportionate amount of the bond collateral for which virtually no market would exist at the prevalent artificial prices, except among banks which could be induced to add to their circulation. The resultant increase

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in bank-note issues might occur at a time when additional currency was required for an expanding trade; but there was not the least assurance that this would be the case. Like all other influences exerted on the bank circulation by the supply of government bonds, the indirect influence of the bond-secured government deposits has been purely arbitrary, and was quite as likely to operate against the legitimate interests of trade as in favor of them.

We have seen how awkwardly the movement of national-bank circulation operated in the period prior to 1896. Shortly after that year there began the great industrial revival which continued throughout nearly all of the ensuing decade. It was plain from the start that, with the unprecedented expansion of trade and industry, the need for circulating medium at the seasons of particular business activity would be proportionately great. The country approached this chapter of its development with the bank-note currency in perhaps the most rigid condition in its history. From $51,300,000,000 in 1896, exchange of checks at the country's clearing houses rose to $68,900,000,000 in 1898—a new high record in our history—and to $94,100,000,000 in 1899. They were destined to reach the enormous figure of $160,000,000,000 in 1906. That is to say, the country's business activity, as measured by this exchange of checks, was about to treble itself within a decade.

Yet, so far as could be seen in 1896, proper facilities for automatic response by bank circulation to the resultant requirements were altogether lacking. Accident helped out the situation to some extent; the Spanish war of 1898

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added $200,000,000 to the government debt, and thus to the supply of bonds available as a basis for new circulation. Legislation also did its part. In connection with the gold standard act of March 14, 1900, provisions were made whereby United States bonds could be bought for that purpose without the risks involved in such high premiums as had prevailed on the 4 per cents in 1882 and 1888. The greater part of the public debt outstandin at higher rates of interest was converted into a thirty-year 2 per cent loan, the purpose being, first, through the low nterest yield, to throw the bulk of such bonds into the banking field, where special inducements for holding them existed; second, to narrow the range of possible fluctuations in the price; and, third, through the relatively lower price which the 2 per cents would command, to reduce the capital which had to be locked up in a purchase of bonds as collateral for bank notes. In addition, the law now permitted issue of circulation up to the par value of the bond collateral, instead of 90 per cent, as previously, and the tax on notes thus secured was reduced from 1 per cent to one-half of 1 per cent.

In response to these various influences, outstanding bank-note circulation, which had actually decreased during the rapid trade recovery in the last half of 1897 and the first half of 1898, and which was stationary throughout 1899, increased from $246,277,223 at the end of the last-named year to $340,141,871 at the end of 1900, and to $360,289,726 at the end of 1901. It was in January, 1901, that the national-bank notes, for the first time in our history, ran beyond the $346,681,016 United States notes

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During the subsequent years of intense financial and industrial activity, the organization of new national banks and increase of circulation by older institutions caused an absorption of the government bonds into the hands of the banks such as had never before existed. It became increasingly difficult to obtain these bonds for purposes of new circulation—not less so when the increase in public deposits secured by government bonds threw an increased burden on the existing supply of bonds. The outstanding principal of the interest-bearing United States debt at the end of the fiscal year 1907 was $894,834,280, as against $987,141,040 at the end of 1901, and within the same period the amount of national-bank notes outstanding had increased from $353,742,187 to $603,788,690. This increase, moreover, went on with practically no relation whatever to the incidental ebb and flow of trade. In the first three or four months of 1902, and again in the same months of 1903, outstanding circulation was reduced by three or four millions, but in the subsequent four years there was not one month which showed a reduction from the month preceding.

The immediate sequel to the panic of 1907 was even more impressive. That national bank circulation should have increased, during the money-hoarding and currency-famine episodes of November and December, 1907, was entirely normal; it expanded $46,237,729 in the one month and $33,912,699 in the other. But the equally normal event, when the hoarded currency rushed suddenly back to the channels of circulation during January, 1908, would have been not only retirement of all the addi-

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tional bank notes put out during that money-hoarding period, but further and very drastic reduction in the bank circulation as it existed before the panic; for, in the trade stagnation of the first half of 1908, actual volume of trade in our principal industries fell for a time to one-half or one-third of what it had been the year before. During March, 1908, the country's clearing house exchanges decreased 33 per cent from 1907. During the three months ending with March, the shrinkage was 28 per cent. This happened while other currency than bank notes was heaping up at such a rate in city depositories that the specie and legal tender reserve of the New York Associated Banks alone, at the opening of April, 1908, was $65,000,000 greater than a year before. The May reports of the national banks of the whole United States showed an increase in reserves, as compared with the same month in 1907, of $170,000,000. Here was assuredly every economic reason for retirement, on an extensive scale, of outstanding bank note circulation. The currency was manifestly oversupplied.

Yet so clumsy and inelastic did the apparatus again turn out to be, that at the end of May, 1908, the outstanding bank notes actually showed an increase of $8,318,612 from the unprecedented total reached at the end of December, 1907, and exceeded by no less than $96,508,967 the figure reported at the end of May, 1907, when trade activity had been fairly at its maximum. Even with the slow and irregular contraction of bank circulation during the subsequent months of idle trade, the total stood, in May of the present year, $87,000,000

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above the highest level ever reached in that month during any year prior to 1908.

The sum of the whole matter is that under the existing system of bank notes based upon government bonds, normal and automatic expansion and contraction of the currency, in response to needs of trade, is flatly impossible. The currency supply may be greatly enlarged in the dull midsummer months and suddenly contracted when the active autumn business season begins. It may increase rapidly at a time when trade reaction has reduced to a minimum the necessities for even the existing bank note supply, or it may be as rapidly reduced when large harvests, full employment of labor, and active hand-to-hand use of currency, most need a larger circulating medium. That there is no remedy for this abnormal situation, except the substitution of some other system for that which prescribes the United States Government bond as a basis for bank note issues, every economist at all familiar with the question agrees. It is only when discussion converges on the system which is to be substituted, that difference of opinion is encountered.

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