

Chapter XIX.

Of The Rate Of Interest.

§ 1. The Rate of Interest depends on the Demand and Supply of Loans.

The two topics of Currency and Loans, though in themselves distinct, are so intimately blended in the phenomena of what is called the money market, that it is impossible to understand the one without the other, and in many minds the two subjects are mixed up in the most inextricable confusion.

In the preceding book(285) we defined the relation in which interest stands to profit. We found that the gross profit of capital might be distinguished into three parts, which are respectively the remuneration for risk, for trouble, and for the capital itself, and may be termed insurance, wages of superintendence, and interest. After making compensation for risk, that is, after covering the average losses to which capital is exposed either by the general circumstances of society or by the hazards of the particular employment, there remains a surplus, which partly goes to repay the owner of the capital for his abstinence, and partly the employer of it for his time and trouble. How much goes to the one and how much to the other is shown by the amount of the remuneration which, when the two functions are separated, the owner of capital can obtain from the employer for its use. This is evidently a question of demand and supply. Nor have demand and supply any different meaning or effect in this case from what they have in all others. The rate of interest will be such as to equalize the demand for loans with the supply of them. It will be such that, exactly as much as some people are desirous to borrow at that rate, others shall be willing to lend. If there is more offered than demanded, interest will fall; if more is demanded than offered, it will rise; and in both cases, to the point at which the equation of supply and demand is re-established.

The desire to borrow and the willingness to lend are more or less influenced by every circumstance which affects the state or prospects of industry or commerce, either generally or in any of their branches. The rate of interest, therefore, on good security, which alone we have here to consider (for interest in which considerations of risk bear a part may swell to any amount), is seldom, in the great centers of money transactions, precisely the same for two days together; as is shown by the never-ceasing variations in the quoted prices of the funds and other negotiable securities. Nevertheless, there must be, as in other cases of value, some rate which (in the language of Adam Smith and Ricardo) may be called the natural rate; some rate about which the market rate oscillates, and to which it always tends to return. This rate partly depends on the amount of accumulation going on in the hands of persons who can not themselves attend to the employment of their savings, and partly on the comparative taste existing in the community for the active pursuits of industry, or for the leisure, ease, and independence of an annuitant.

§ 2. Circumstances which Determine the Permanent Demand and Supply of Loans.

In [ordinary] circumstances, the more thriving producers and traders have their capital fully employed, and many are able to transact business to a considerably greater extent than they have capital for. These are naturally borrowers: and the amount which they desire to borrow, and can give security for, constitutes the demand for loans on account of productive employment. To these must be added the loans required by Government, and by land-owners, or other unproductive consumers who have good security to give. This constitutes the mass of loans for which there is an habitual demand.

Now, it is conceivable that there might exist, in the hands of persons disinclined or disqualified for engaging personally in business, (1) a mass of capital equal to, and even exceeding, this demand. In that case there would be an habitual excess of competition on the part of lenders, and the rate of interest would bear a low proportion to the rate of profit. Interest would be forced down to the point which would either tempt borrowers to take a greater amount of loans than they had a reasonable expectation of being able to employ in their business, or would so discourage a portion of the lenders as to make them either forbear to accumulate or

endeavor to increase their income by engaging in business on their own account, and incurring the risks, if not the labors, of industrial employment.

The low rates of interest, rather, tempt people to take some additional risk, and enter into investments which offer a higher rate of dividends; so that a period of low interest is a time when speculative enterprises find victims, and then by bad and worthless investments much of the loanable funds is actually lost; thereby reducing the total quantity of loans more nearly to that demand which will give an ordinary rate of interest.

(2.) On the other hand, the capital owned by persons who prefer lending it at interest, or whose avocations prevent them from personally superintending its employment, may be short of the habitual demand for loans. It may be in great part absorbed by the investments afforded by the public debt and by mortgages, and the remainder may not be sufficient to supply the wants of commerce. If so, the rate of interest will be raised so high as in some way to re-establish the equilibrium. When there is only a small difference between interest and profit, many borrowers may no longer be willing to increase their responsibilities and involve their credit for so small a remuneration: or some, who would otherwise have engaged in business, may prefer leisure, and become lenders instead of borrowers: or others, under the inducement of high interest and easy investment for their capital, may retire from business earlier, and with smaller fortunes, than they otherwise would have done.

Or, lastly, instead of [capital] being afforded by persons not in business, the affording it may itself become a business. A portion of the capital employed in trade may be supplied by a class of professional money-lenders. These money-lenders, however, must have more than a mere interest; they must have the ordinary rate of profit on their capital, risk and all other circumstances being allowed for. [For] it can never answer, to any one who borrows for the purposes of his business, to pay a full profit for capital from which he will only derive a full profit: and money-lending, as an employment, for the regular supply of trade, can not, therefore, be carried on except by persons who, in addition to their own capital, can lend their credit, or, in other words, the capital of other people. A bank which lends its notes lends capital which it borrows from the community, and for which it pays no interest.

Of late years, however, banks are generally not permitted to issue notes on their simple credit. That privilege has been so often abused in this country that now, in the national banking system, a separate part of the resources are set aside for the security of the circulating notes (as is also true of the Bank of England since 1844). It is not generally true, then, that banks now create the means to make loans by issuing notes by which they borrow capital from the community without paying interest. They do, however, depend almost entirely on deposits.

A bank of deposit lends capital which it collects from the community in small parcels, sometimes without paying any interest, and, if it does pay interest, it still pays much less than it receives; for the depositors, who in any other way could mostly obtain for such small balances no interest worth taking any trouble for, are glad to receive even a little. Having this subsidiary resource, bankers are enabled to obtain, by lending at interest, the ordinary rate of profit on their own capital. The disposable capital deposited in banks, together with the funds belonging to those who, either from necessity or preference, live upon the interest of their property, constitute the general loan fund of the country; and the amount of this aggregate fund, when set against the habitual demands of producers and dealers, and those of the Government and of unproductive consumers, determines the permanent or average rate of interest, which must always be such as to adjust these two amounts to one another.(286) But, while the whole of this mass of lent capital takes effect upon the *permanent* rate of interest, the *fluctuations* depend almost entirely upon the portion which is in the hands of bankers; for it is that portion almost exclusively which, being lent for short times only, is continually in the market seeking an investment. The capital of those who live on the interest of their own fortunes has generally sought and found some fixed investment, such as the public funds, mortgages, or the bonds of public companies, which investment, except under peculiar temptations or necessities, is not changed.

§ 3. Circumstances which Determine the Fluctuations.

Fluctuations in the rate of interest arise from variations either in the demand for loans or in the supply. The supply is liable to variation, though less so than the demand. The willingness to lend is greater than usual at the commencement of a period of speculation, and much less than usual during the revulsion which follows. In speculative times, money-lenders as well as other people are inclined to extend their business by stretching their credit; they lend more than usual (just as other classes of dealers and producers employ more than usual) of capital which does not belong to them. Accordingly, these are the times when the rate of interest is low; though for this too (as we shall immediately see) there are other causes. During the revulsion, on the contrary, interest always rises inordinately, because, while there is a most pressing need on the part of many persons to borrow, there is a general disinclination to lend.(287)

This disinclination, when at its extreme point, is called a panic. It occurs when a succession of unexpected failures has created in the mercantile, and sometimes also in the non-mercantile public, a general distrust in each other's solvency; disposing every one not only to refuse fresh credit, except on very onerous terms, but to call in, if possible, all credit which he has already given. Deposits are withdrawn from banks; notes are returned on the issuers in exchange for specie; bankers raise their rate of discount, and withhold their customary advances; merchants refuse to renew mercantile bills. At such times the most calamitous consequences were formerly experienced from the attempt of the law to prevent more than a certain limited rate of interest from being given or taken. Persons who could not borrow at five per cent had to pay, not six or seven, but ten or fifteen per cent, to compensate the lender for risking the penalties of the law; or had to sell securities or goods for ready money at a still greater sacrifice.

The pernicious and hurtful custom exists in various States in this country of making any interest beyond a certain rate illegal. When it is remembered that legitimate business is often largely done on credit--until the proceeds of goods sold on credit are collected--the rate of interest from day to day is very important to trade. So, when there is a sudden demand for loans, a rate higher than the legal one will certainly be paid, and the law violated, if the getting of a loan is absolutely necessary to save the borrower from commercial ruin. The effect of a legal rate is to stop loans at the very time when loans are most essential to the business public. It would be far better to adopt such a sliding scale as exists at great European banks, which allows the rate of interest to rise with the demand. No one, then, with good security, need want loans if he is willing to pay the high rates; and those not really in need will defer their demand until the sudden emergency is past. Already in New York the legal penalty has been removed for loaning at higher than the legal rates when charged upon call-loans; and it has mitigated the extreme fluctuations of the rate in a market when financial necessity is contending against the law.

Except at such periods, the amount of capital disposable on loan is subject to little other variation than that which arises from the gradual process of accumulation; which process, however, in the great commercial countries, is sufficiently rapid to account for the almost periodical recurrence of these fits of speculation; since, when a few years have elapsed without a crisis, and no new and tempting channel for investment has been opened in the mean time, there is always found to have occurred in those few years so large an increase of capital seeking investment as to have lowered considerably the rate of interest, whether indicated by the prices of securities or by the rate of discount on bills; and this diminution of interest tempts the possessors to incur hazards in hopes of a more considerable return.

The demand for loans varies much more largely than the supply, and embraces longer cycles of years in its aberrations. A time of war, for example, is a period of unusual draughts on the loan market. The Government, at such times, generally incurs new loans, and, as these usually succeed each other rapidly as long as the war lasts, the general rate of interest is kept higher in war than in peace, without reference to the rate of profit, and productive industry is stinted of its usual supplies.

The United States during the late war found that it could not borrow at even six or seven per cent. By

receiving depreciated paper at par for its bonds it really agreed to pay six gold dollars on each loan of one hundred dollars in paper (worth, perhaps, at the worst only forty gold dollars), which was equivalent to fifteen per cent. This high rate was largely due to the weakened credit of the Government; but still it remains true that the rate was higher because the United States was in the market as a competitor for large loans. Now the Government can refund its bonds at three per cent.

Nor does the influence of these loans altogether cease when the Government ceases to contract others; for those already contracted continue to afford an investment for a greatly increased amount of the disposable capital of the country, which, if the national debt were paid off, would be added to the mass of capital seeking investment, and (independently of temporary disturbance) could not but, to some extent, permanently lower the rate of interest.

The rapid payment of the public debt by the United States, \$137,823,253 in 1882-1883, and more than \$100,000,000 in 1883-1884, has taken away the former investment for enormous sums of loanable funds, and to the same extent increased the supply in the market. Without doubt this aids in making the present rate of interest a very low one. Whether the rate will remain "permanently lower," however, will depend upon whether the field of investment in the United States is already practically occupied. We believe it is not.

The same effect on interest which is produced by government loans for war expenditure is produced by the sudden opening of any new and generally attractive mode of permanent investment. The only instance of the kind in recent history, on a scale comparable to that of the war loans, is the absorption of capital in the construction of railways. This capital must have been principally drawn from the deposits in banks, or from savings which would have gone into deposit, and which were destined to be ultimately employed in buying securities from persons who would have employed the purchase-money in discounts or other loans at interest: in either case, it was a draft on the general loan fund. It is, in fact, evident that, unless savings were made expressly to be employed in railway adventure, the amount thus employed must have been derived either from the actual capital of persons in business or from capital which would have been lent to persons in business.

§ 4. The Rate of Interest not really Connected with the value of Money, but often confounded with it.

From the preceding considerations it would be seen, even if it were not otherwise evident, how great an error it is to imagine that the rate of interest bears any necessary relation to the quantity or value of the money in circulation. An increase of the currency has in itself no effect, and is incapable of having any effect, on the rate of interest. A paper currency issued by Government in the payment of its ordinary expenses, in however great excess it may be issued, affects the rate of interest in no manner whatever. It diminishes, indeed, the power of money to buy commodities, but not the power of money to buy money. If a hundred dollars will buy a perpetual annuity of four dollars a year, a depreciation which makes the hundred dollars worth only half as much as before has precisely the same effect on the four dollars, and therefore can not alter the relation between the two. Unless, indeed, it is known and reckoned upon that the depreciation will only be temporary; for people certainly might be willing to lend the depreciated currency on cheaper terms if they expected to be repaid in money of full value.

In considering the effect produced by the proceedings of banks in encouraging the excesses of speculation, an immense effect is usually attributed to their issues of notes, but until of late hardly any attention was paid to the management of their deposits, though nothing is more certain than that their imprudent extensions of credit take place more frequently by means of their deposits than of their issues. Says Mr. Tooke: "Supposing all the deposits received by a banker to be in coin, is he not, just as much as the issuing banker, exposed to the importunity of customers, whom it may be impolitic to refuse, for loans or discounts, or to be tempted by a high interest; and may he not be induced to encroach so much upon his deposits as to leave him, under not improbable circumstances, unable to meet the demands of his depositors?"

In truth, the most difficult questions of banking center around the functions of discount and deposit. The separation of the Issue from the Banking Department by the act of 1844, which renewed the charter of the Bank of England, makes this perfectly clear. After entirely removing from their effect on credit all influences due to issues, England has had the same difficulties to encounter as before, which shows that the real question is concerned with the two essential functions of banking--discount and deposit. Since 1844, there have been the commercial disturbances of 1847, 1857, 1866, and 1873. Although no expansion of notes, without a corresponding deposit of specie, is possible.

§ 5. The Rate of Interest determines the price of land and of Securities.

Before quitting the general subject of this chapter, I will make the obvious remark that the rate of interest determines the value and price of all those salable articles which are desired and bought, not for themselves, but for the income which they are capable of yielding. The public funds, shares in joint-stock companies, and all descriptions of securities, are at a high price in proportion as the rate of interest is low. They are sold at the price which will give the market rate of interest on the purchase-money, with allowance for all differences in the risk incurred, or in any circumstance of convenience.

The price of land, mines, and all other fixed sources of income, depends in like manner on the rate of interest. Land usually sells at a higher price, in proportion to the income afforded by it, than the public funds, not only because it is thought, even in [England], to be somewhat more secure, but because ideas of power and dignity are associated with its possession. But these differences are constant, or nearly so; and, in the variations of price, land follows, *ceteris paribus*, the permanent (though, of course, not the daily) variations of the rate of interest. When interest is low, land will naturally be dear; when interest is high, land will be cheap.

A lot of land, which fifty years ago gave an annual return of \$100, if ten per cent was then the common rate of interest, would sell for \$1,000. If the return from the land remains the same (\$100) to-day, and if the usual rate of interest is now five per cent, the same piece of land, therefore, would sell for \$2,000, since \$100 is five per cent of \$2,000.

The price of a bond, it may be said, also varies with the time it has to run. At the same rate of interest, a bond running for a long term of years is better for an investment than one for a short term. The lumberman, who looks at two trees of *equal diameter* at the base, estimates the total value of each according to the *height* of the tree. Then, again, a bond running for a short term may be worth less than one for a long term, even though the first bears a higher rate of interest. That is, to resume the illustration, one tree, not rising very high, although *larger* at the bottom, may not contain so many square feet as another, with perhaps a *less* diameter at the bottom, but which stretches much higher up into the air.