Richard Cantillon

Essay on the Nature of Commerce in General 1755

Part Two

Chapter Three Of the Circulation of Money

It is the general opinion in England that a farmer must make three rents. (1) The principal and true rent which he pays to the proprietor, supposed equal in value to the produce of one third of his farm, a second rent for his maintenance and that of the men and horses he employs to cultivate the farm, and a third which ought to remain with him to make his undertaking profitable.

The same idea obtains generally in the other countries of Europe, though in some, like the Milanese state, the farmer gives the landlord half the produce instead of a third, and many landlords in all countries try to let their farms at the highest rent they can; but when this is above a third of the produce the farmers are generally very poor. I doubt not that the Chinese landowner extracts from his farmer more than three fourths of the produce.

However when a farmer has some capital to carry on the management of this farm the proprietor who lets him the farm for a third of the produce will be sure of payment and will be better off by such a bargain than if he let his land at a higher rate to a beggarly farmer at the risk of losing all his rent. The larger the farm the better off the farmer will be. This is seen in England where the farmers are generally more prosperous than in other countries where the farms are small.

The assumption I shall make in this enquiry as to the circulation of money is that farmers earn three rents and spend the third rent on living more comfortably instead of saving it. It is in fact the case with the greatest number of farmers in all countries.

All the produce of the country comes directly or indirectly from the hands of the farmers as well as all the materials from which commodities are made. It is the land which produces everything but fish, and even then the fishermen who catch the fish must be maintained on the produce of the land.

The three rents of the farmer must therefore be considered as the principal sources or so to speak the mainspring of circulation in the state. The first rent must be paid to the landowner in ready money: for the second and third rents ready money is needed for the iron, tin, copper, salt, sugar, cloth and generally all the merchandise of the city consumed in the country; but all that hardly exceeds the sixth part of the total or three rents. As for the food and drink of the country folk ready money is not necessarily to obtain it.

The farmer may brew his beer or make his wine without spending cash, he can make his bread, kill the oxen, sheep, pigs, etc. that are eaten in the country: he can **pay in corn, meat and drink most of his assistants** -- not only labourers but country artisans, valuing the produce at the prices of the nearest markets and labour at the ordinary price of the locality.

The things necessary to life are food, cloths, and lodging. There is no need of cash to obtain food in the country, as I have just explained. If coarse linen and cloths are made there, if houses are built there, as is often done, the labour

for all this may be paid in barter by valuation without cash being needed.

The only cash needed in the country is that for the principal rent of the landlord and for the manufactures which the country necessarily draws from the city, such as knives, scissors, pins, needles, cloths for some farmers or other well-to-do people, the kitchen utensils, plates, and generally all that is got from the city. I have already observed that it is reckoned that half the inhabitants of a state live in the cities, and consequently the citizens spend more than half the produce of the land. Cash is therefore necessary, not only for the rent of the landlord, corresponding to one third of the produce, but also for the city merchandise consumed in the country, which may amount to something more than one sixth of the produce of the soil. But one third and one sixth amount to half the produce. The cash circulating in the country must therefore be equal to at least one half the produce of the land, by which means the other half or somewhat less may be consumed in the country without need of cash.

The circulation of this money takes place when the landlords spend in detail in the city the rents which the farmers have paid them in lump sums, and when the undertakers of the cities, butchers, bakers, brewers, etc. collect little by little this same money to buy from the farmers in lump sums cattle, wheat, barley, etc. In this way all the large sums of money are distributed in small amounts, and all the small amounts are then collected to make payments in large amounts, directly or indirectly, to the farmers, and this money large or small always passes in return for services.

When I stated that for the country circulation there is needed a quantity of money often equal in value to half the produce of the land, this is the minimum; and in order that the country circulation should be easily conducted I will suppose that the ready cash which conducts the circulation of the three rents, is equal in value to two of these rents, or two thirds of the produce of the land. It will be seen later that this supposition is not far from the truth.

Let us now imagine that the money which conducts the whole circulation of a little state is equal to 10,000 ounces of silver, and that all the payments made with this money, country to city, and city to country, are made once a year; and that these 10,000 ounces of silver are equal in value to two of the rents of the farmers or two thirds of the produce of the land. The rents of the landlords will correspond to 5000 ounces, and the whole circulation of the remaining silver between the country people and the citizens, made by annual payments, will correspond also to 5000 ounces.

But if the landlords stipulate with their farmers for half yearly instead of yearly payments, and if the debtors of the two other rents also make their payments every six months, this will alter the rapidity of circulation: and whereas 10,000 ounces were needed to make the annual payments, only 5000 will now be required, since 5000 ounces paid twice over will have the same effect as 10,000 ounces paid once.

Further if the landlords stipulate with their farmers for **quarterly payments**, or if they are satisfied to receive their rents from the farmers according as the four seasons of the year enable them to sell their produce, and if all other payments are made quarterly, **only 2500 ounces will be needed** for the same circulation which would have been conducted by 10,000 ounces paid once a year. Therefore, supposing all payments made quarterly in the little state in question, the proportion of the value of the money needed for the circulation is to the annual produce of the soil (or the three rents), as 2500 livres is to 15,000 livres, or as 1 to 6, so that the money would correspond to the sixth part of the annual produce.

But seeing that each branch of the circulation in the cities is carried out by undertakers, that the consumption of food is met by daily, weekly or monthly payments, and that payment for the clothing purchased once or twice a year by M = 10,000V = 1

If V = 2

The M = 5,000

If V = 4

M = 2.500

families is made at different times by different people; and whereas the expenditure on drink is usually made daily, that on small beer, coal, and a thousand other articles of consumption is very prompt, it would seem that the proportion we have established for quarterly payments would be too high and that the circulation of a land produce of 15,000 ounces of silver in value could be conducted with much less than 2500 ounces of silver in ready money.

As however the farmers have to make large payments to the landlords at least every quarter and the taxes which the prince or the state collects upon consumption are accumulated by the collectors to make large payments to the Receivers-General, there must be enough ready cash in circulation to make these large payments without difficulty, without hindering the circulation of currency for the food and clothing of the people.

It will be seen from this that the proportion of the amount of money needed for circulation in a state is not incomprehensible, and that this amount may be greater or less in a state according to the mode of living and the rapidity of payments. But it is very difficult to lay down anything definite as regards this quantity in general, as the proportion may differ in different countries, and it is only conjectural when I say that "the real cash or money necessary to carry on the circulation and exchange in a state is about equal in value to one third of all the annual rents of the proprietors of the said state."

Supposing the money in circulation equal to the third of all the rents of the landowners and these rents equal to the third of the annual produce of the land, it follows that "the money circulating in a state is equal in value to the ninth part of all the annual produce of the soil."

Sir William Petty, in a manuscript of 1685, supposes frequently that the money in circulation is equal to one tenth of the produce of the soil. He gives no reason. I suppose it is an opinion which he formed from experience and from his practical knowledge both of the money circulating in **Ireland** (a great part of the land of which country he had measured as a surveyor) and of the produce which he estimated roughly from observation. I am not far removed from his conclusion to the landlords' rents which are ordinarily paid in money and easily ascertainable by a uniform land tax, rather than to the products of the soil, the prices of which vary daily in the markets, and a large part of which is consumed without entering into the market. In the next chapter I shall give several reasons, supported by examples, to confirm my conclusion. I think it useful, even if not mathematically exact in each country. It is enough if it is near the truth and if it prevents the governors of states from forming extravagant ideas of the amount of money in circulation. There is no branch of knowledge in which one is more subject to error than statistics when they are left to imagination, and none more demonstrable when they are based upon detailed facts.

Some cities and states which have no land belonging to them subsist by exchanging their labour or manufactures for the produce of the land of others. Such are Hamburg, Dantzig, several other cities of the Empire, and even part of Holland. In these states it seems more difficult to estimate the circulation. But if we could estimate the amount of foreign land which furnishes their subsistence, the calculation would probably not differ from that I have made for the other states which live chiefly on their own produce and are the subject of this essay.

As to the **cash needed to carry on foreign trade** it seems that **no more is required than what is in circulation in the state when the balance of foreign trade is equal**, that is when the products and merchandise sent abroad are equal in value to those imported.

If France sends cloth to Holland and receives from her spices, of equal value, the landowner who consumes these spices pays the value of them to the

Petty

Statistics

grocer, who pays the same amount to the clothmaker, to whom it is due in Holland for the cloth he has sent there. This is done by bills of exchange which will be explained later. These two money payments take place in France apart from the rent of the landowner, and no money leaves France on that account. All other classes of society who consume Dutch spices, similarly pay the grocer, viz. those who live on the first rent, that is the landowners, pay from this rent, and those who live on the other two rents in country or in city pay the grocer directly or indirectly out of the money which conducts the circulation of these rents. The grocer again pays this money to the manufacturer for his bill upon Holland, and no increase of money is needed for circulation in the state because of foreign trade when the balance is equal. But if it is not equal, if more merchandise is sold to Holland than is bought back, or vice versa, money is needed for the surplus which Holland must send to France or France to Holland. This will increase or diminish the amount of money circulating in France.

It may even occur that when the balance with the foreigner is equal to the trade with him may retard the circulation of ready money and therefore require a greater quantity of money by reason of this commerce.

For example, if the French ladies who wear French stuffs wish to wear Dutch velvets, which are paid for by the cloth sent to Holland, they will pay for these velvets to the merchants who imported them from Holland, and these merchants will pay the manufacturers of cloth. The money thus passes through more hands than if these ladies took their money to the manufacturers of cloth and contented themselves with the fabrics of France. When the same money passes through the hands of several undertakers the rapidity of circulation is slowed down. But it is difficult to make an exact estimate of this sort of delay which depends upon various circumstances. Thus, in our present example, if the ladies pay the merchant for the velvet today, and the merchant pay the manufacturer tomorrow for his bill on Holland, if the manufacturer pay the wool merchant the next day and this last pay the farmer the day after, it is possible that the farmer will keep the money in hand more than two months to make up the quarter's rent which he must pay his landlord. This money might in two months have circulated through the hands of a hundred undertakers without locking up the circulating medium needed by the state.

After all, the principle rent of the landowner must be considered to be the most necessary and considerable branch of the money in regard to circulation. If he lives in the city and the farmer sells in the same city all his produce and buys there all the merchandise necessary for country use, the ready money may always remain in the city. The farmer will sell there produce exceeding half the output of his farm; he will pay his landlord in the same city the money value of one third of his produce and the rest to merchants or undertakers for merchandise to be consumed in the country. Even here, however, as the farmer sells his produce for lump sums, which are subsequently distributed in retail purchases, and are again collected to serve for lump payments to the farmers, the circulation has always the same effect (subject to its rapidity) as if the farmer took to the country the money received for his produce and sent it back again to the city.

The circulation consists always of this, that the large sums which the farmer receives on the sale of his produce are split up in detail and then brought together again to make large payments. Whether this money go partly out of the city or remain there entirely it may be regarded as the circulating medium between city and country. All the circulation takes place between the inhabitants of the state, and they are all fed and maintained in every way from the produce of the soil and raw materials of the country.

It is true that the wool, for example, which is brought from the country, when made up into cloth in the city is worth four times its former value. But

this increase of value, which is the price of the labour of the workmen and manufactures in the city, is exchanged for the country produce which serves for their maintenance.

Chapter Four Further Reflection on the Rapidity or Slowness of the Circulation of Money in Exchange

Let us suppose that the farmer pays 1300 ounces of silver a quarter to his landlord, who pays out of it every week 100 ounces to the baker, butcher, etc. and that these every week pay the farmer these hundred ounces, so that the farmer collects every week as much money as the landlord spends. In this case there will be only 100 ounces in constant circulation, the other 1200 ounces will remain in hand partly with the landlord and partly with the farmer.

But it rarely happens that the landlords spend their rents in a fixed and regular proportion. In London as soon as a landlord receives his rent he puts most of it into the hands of a goldsmith or banker, who lends it at interest, so that this part is in circulation. Or else the landlord spends a good part of it upon various things needful for his household, and before he gets his next quarter's rent he will perhaps borrow money. Thus the money of the first quarter's rent will circulate in a thousand ways before it can be brought together again and replaced in the hands of the farmer to serve to pay his second quarter.

When the time for paying this second quarter has come the farmer will sell his produce in large amounts, and those who buy his cattle, corn, hay, etc. will already have collected in detail the price of them. The money of the first quarter will thus have circulated in the rivulets of small traffic for nearly three months, before being collected by the retail dealers, and these will give it to the farmer who will pay his second quarter therewith. It would seem from this that less ready money than we have supposed would suffice for the circulation of a state.

Barters made by evaluation do not all call for much ready cash. If a brewer supplies a clothier with the beer for his family, and if the clothier in turn supplies the brewer with the clothes he needs, both at the market price current on the day of delivery, the only ready money needed between these two traders is the amount of the difference between the two transactions.

If a merchant in a market town sends to a correspondent in the city country produce for sale, and if the latter sends back to the former the city merchandise consumed in the country, the business lasting the whole year between these two dealers, and mutual confidence leading them to place to their accounts their produce and merchandise at their respective market prices, the only real money needed for this commerce will be the balance which one owes to the other at the end of the year. Even then this balance may be carried forward to the next year, without the actual payment of any money. All the undertakers of a city, who have continually business with each other, may practise this method. And these exchanges by valuation seem to economise much cash in circulation, or at least to accelerate its movement by making it unnecessary in several hands through which it would need to pass without this confidence and this method of exchange by valuation. It is not without reason that it is commonly said commercial credit makes money less scarce.

The goldsmiths and public bankers, whose notes pass current in payment like ready money, contribute also to the speed of circulation, which would be retarded if money were needed in all the payments for which these notes suffice: and although these goldsmiths and bankers always keep in hand a good part of the actual money they have received for their notes, they

Commercial credit means less Money needed

Bankers speed up circulation

also put into circulation a considerable amount of this actual money as I shall explain later in dealing with public banks.

All these reflections seem to prove that the circulation of a state could be conducted with much less actual money than I have supposed necessary; but the following inductions appear to counterbalance them and to contribute to the slowing down of the circulation.

I will first observe that all country produce is furnished by labour which may possibly, as already often suggested, be carried on with little or no actual money. But all merchandise is made in cities or market towns by the labour of men who must be paid in actual money. If a house has cost 100,000 ounces of silver to build, all this sum or the greatest part of it, must have been paid every week in small amounts to the brickmaker, masons, carpenters, etc. directly or indirectly. The expense of the humble families, who are always the most in number in a city, is necessarily made with actual money. In these small exchanges credit, book debts, and bills cannot have a place. The merchants or retailers demand cash for the things they supply: or if they give credit to a family for a few days or months they require a substantial money payment. A carriage builder who sells a carriage for 400 ounces of silver in notes, will have to change them into actual money to pay for all the materials and the men who have worked on his carriage if they have worked on credit, or, if he has paid them already, to start a new one. The sale of the carriage will leave his profit and he will spend this to maintain his family. He could not be satisfied with notes unless he can put something aside or lay it out at interest.

The consumption of the inhabitants of a state is, in a sense, entirely for food. Lodging, clothing, furniture, etc. correspond to the food of the men who have worked upon them; and in the cities all drink and food are of necessity paid for in hard cash. In the families of landowners in the city food is paid for every day or every week: wine in their families is paid for every week or every month; hats, stockings, shoes, etc. are ordinarily paid for in actual money, at least the payments correspond to cash for the men who have worked upon them. All the sums which serve to pay large amounts are divided, distributed, and spread in small payments corresponding to the maintenance of the workmen, manservants, etc. and all these sums are necessarily collected and reunited by the undertakers and retailers who are employed on the subsistence of the inhabitants to make large payments when they buy the products of the farmers. An alehouse keeper collects by sols and livres the sums he pays to the brewer, who uses them to pay for all the grain and materials he buys from the country. One cannot imagine anything is bought for ready money in a state, like furniture, merchandise, etc. the value of which does not correspond to the maintenance of those who have worked upon it.

Circulation in the cities is carried out by undertakers and always corresponds directly or indirectly to the subsistence of the menservants, workmen, etc. It is not conceivable that it can be effected in small detail without cash. Notes may serve as counters in large payments for a certain time; but when the large sums come to be distributed and spread into small transactions, as is always the case sooner or later in the course of circulation in a city, notes cannot serve the purpose and cash is needed.

All this being presupposed, all the classes in a state who practice some economy, save and keep out of circulation small amounts of cash till they have enough to invest at interest or profit. Many miserly and timid people bury and hoard cash for considerable periods.

Many landowners, undertakers and others, always **keep some cash in their pockets or safes against unforeseen emergencies and not to be run out of money**. If a gentleman makes it his remark that he never had less than 20 louis in his pocket throughout the whole year, it may be said that this pocket has kept 20 louis out of circulation for a year. One does not like to spend up to

Precautionary demand for cash

the last sou, one is glad not be completely denuded, and to receive a new instalment before paying even a debt with the money one has.

The capital of minors and of suitors is often deposited in cash and kept out of circulation.

Beside the large payments which pass through the hands of the farmers in the quarterly terms of the year there are many others from one undertaker to another in the same terms, and others at different times from borrowers to lenders of money. All these sums are collected in retail trade, are spread abroad anew and come back sooner or later to the farmer: but they seem to require a more considerable amount of cash for circulation than if these large payments were made in different times from those when the farmers are paid for their produce.

In fine there is so great a variety in the different orders of the inhabitants of the state and in the corresponding circulation of actual money, that it seems impossible to lay down anything precise or exact as to the proportion of money sufficient for the circulation. I have adduced so many examples and inductions only to make it clear that I am not far out of the truth in my conclusion "that the actual money necessary for the circulation of the state corresponds nearly to the value of the third of all the annual rents of the landlords." When the landlords have a rent which amounts to half the produce or more than a third, a greater quantity of actual money is needed for circulation, other things being equal. When there is great confidence in the banks and in book credits less money will suffice, as also when the rapidity of circulation is accelerated in any other way. But I shall show later that public banks do not afford so many advantages as is usually supposed.

Chapter Five Of the Inequality of the circulation of hard money in a state

The city always supplies various merchandises to the country, and the landowners who reside in the city should always receive there about a third of the produce of their land. The country thus owes to the city more than half the produce of the land. This debt would always exceed one half if all landowners lived in the city, but as several of the least important live in the country I suppose that the balance or **debt which continually returns from the country to the city is equal to half the produce of the land and is paid in the city by half the products of the country transported to it and sold to pay this debt.**

But all the countryside of a state or kingdom owes a constant balance to the capital, as well for the rents of the more considerable landowners who reside there as for the taxes of the state or crown, most of which are spent in the capital. All the provincial cities owe a constant balance to the capital, either for the state, upon houses or consumption, or for the different commodities which they draw from the capital. It happens also that several individuals and landowners who live in the provincial cities go to spend some time in the capital, for pleasure, or for the judgment of their lawsuits in final appeal, or because they send their children thither for a fashionable education. Consequently all these expenses incurred in the capital are drawn from the provincial cities.

It may therefore be said that all the countryside and all the cities of a state owe regularly and annually a balance or debt to the capital. But as it is all paid in money it is evident that the provinces always owe considerable sums to the capital; for the products and commodities which the provinces send to the capital are sold there for money, and with this money the debt or balance in question is paid.

Suppose now that the circulation of money in the provinces and in the capital is equal both in **quantity of money and speed of circulation**. The

balance will be first sent to the capital in cash and this will diminish the quantity of money in the provinces and increase it in the capital, and consequently the raw material and commodities will be dearer in the capital than in the provinces, on account of the greater abundance of money in the capital. The difference of prices in the capital and in the provinces must pay for the costs and risks of transport, otherwise cash will be sent to the capital to pay the balance and this will go on till the prices in the capital and the provinces come to the level of these costs and risks. Then the merchants or undertakers of the market towns will buy at a low price the products of the villages and will have them carried to the capital to be sold there at a higher price: and this difference of price will necessarily pay for the upkeep of the horses and menservants and the profit of the undertaker, or else he would cease his enterprise.

It will follow from this that the price of raw produce of equal quality will always be higher in the country places which are nearest the capital than in those more distant in proportion to the costs and risks of transport; and that the countries adjacent to seas and rivers flowing into the capital will get a better price for their produce in proportion than those which are distant (other things being equal) because water transport is less expensive than land transport. On the other hand the products and small wares which cannot be consumed in the capital, because they are not suitable or cannot be sent thither on account of their bulk, or because they would be spoiled on the way, will be infinitely cheaper in the country and distant provinces than in the capital, owing to the amount of money circulating for them which is much smaller in the distant provinces.

So it is that new laid eggs, game, fresh butter, wood fuel, etc. will generally be much cheaper in the district of Poitou, whilst corn, cattle and horses will be dearer at Paris only by the difference of the cost and risk of carriage and the dues for entering the city.

It would be easy to make an infinite number of inductions of the same kind to justify by experience the **necessity of an inequality in the circulation of money in the different provinces of a great state or kingdom**, and to show that this inequality is always relative to the balance or debt which belongs to the capital.

If we suppose that the balance due to the capital amounts to one fourth of the produce of the land of all the provinces of the state the best use that can be made of the land would be to employ the country bordering on the capital to produce the kinds of produce which could not be drawn from distant provinces without much expense or deterioration. This is in fact what always takes place. The market prices of the capital serving as a standard for the farmers to employ the land for such or such a purpose they use the nearest, when suitable, for market gardens, pasture, etc.

So far as possible manufactures of cloth, linen, lace, etc. ought to be set up in the remote provinces; and, in the neighbourhood of coal mines or forest, which are useless by their distance, manufactures of tools of iron, tin, copper, etc. In this way finished manufactures could be sent to the capital with much less cost of carriage than the raw materials to be worked up in the capital and the subsistence of the artisans who would work upon them there. This would save a quantity of horses and waggoners who would be better employed for the benefit of the state. The land would serve to maintain on the spot workmen and useful mechanics; and a multitude of horses would be saved who serve only upon unnecessary transport. In this way the distant lands would yield higher rents to the proprietors and the inequality of the circulation of the provinces and the capital would be better proportioned and less considerable.

Nevertheless to set up manufactures in this way would need not only much encouragement and capital but also some way to ensure a regular and

constant demand, either in the capital itself or in foreign countries, whose exports in return may be of service to the capital, to pay for the merchandise which it draws from these foreign countries or for the return of silver in kind.

When these manufactures are set up perfection is not at once attained. If some other province have them better or cheaper or owing to the vicinity of the capital or the convenience of a sea or river communication have their transport considerably facilitated, the manufactures in question will have no success. All these circumstances have to be considered in setting up a manufactory. I have not proposed to treat of them in this essay, but only to suggest that so far as practicable manufactures should be set up in provinces distant from the capital, to render them more considerable and to bring about there a circulation of money less disproportionate to that of the capital.

For when a distant province has no manufactory and produces only ordinary raw materials without water communication with the capital or the ocean, it is astonishing how scarce money is there compared with that which circulates in the capital and how little the best lands produce to the prince and to the proprietors who reside in the capital.

The wines of Provence and of Languedoc sent to the north round the Straits of Gibraltar by long and difficult navigation, after having passed through the hands of several dealers yield very little to the Paris owners of the land.

It is however necessary that these distant provinces should send their produce, in spite of all the drawbacks of transport and distance to the capital or elsewhere either in the state or in foreign countries in order that the returns should provide for payment of the balance due to the capital. But these products would be mostly consumed on the spot if there were works or factories to pay this balance, in which case the number of inhabitants would be much larger.

When the province pays the balance only with its produce which yields so little in the capital having regard to the expenses of distance, it is evident that the proprietor living in the capital pays the produce of much land in the country to receive little in the capital. This arises from the inequality of money, and this inequality is owing to the constant balance due from the province to the capital.

At present if a state or kingdom which supplies all foreign countries with work of its own manufacture does so much of this commerce that it draws every year a constant balance of money from abroad, the circulation will become more considerable there than in foreign countries, money will be more plentiful there, and consequently land and labour will gradually become dearer there. It will follow that in all the branches of commerce the state in question will exchange a smaller amount of land and labour with the foreigner for a larger amount, so long as these circumstances continue.

But if some foreigner reside in the state in question he will be in about the same situation and circumstances as the proprietor at Paris who has his land in distant provinces.

France, since the erection in 1646 of manufactories of cloth and other works since set up, appeared to trade, at least in part, in the way described. Since the decay of France, England has taken possession of this trade; and all states appear flourishing only by the larger or smaller part they have in it. The inequality of the circulation of money in the different states constitutes the inequality of their respective power, other things being equal; and this inequality of circulation is always respective to the balance of foreign trade.

It is easy to judge from what has been said in this chapter that the assessment by taxes of the royal tithe, made by Mr de Vauban, would be neither advantageous nor practicable. If the taxes on land were levied in money proportionable to the rents of the proprietors, it would be fairer. But I must not

wander from my subject to show the inconvenience and impossibility of Mr de Vauban's proposal.

Chapter Six Of the increase and decrease in the quantity of hard money in a State

If **mines of gold or silver** be found in a state and considerable quantities of minerals drawn from them, the proprietors of these mines, the undertaker, and all those who work there, will not fail to increase their expenses in proportion to the wealth and profit they make: they will also lend at interest the sums of money which they have over and above what they need to spend.

All this money, whether lent or spent, will enter into circulation and will not fail to raise the price of products and merchandise in all the channels of circulation which it enters. Increased money will bring about increased expenditure and this will cause an increase of market prices in the highest years of exchange and gradually in the lowest.

Everybody agrees that the abundance of money or its increase in exchange, raises the price of everything. The quantity of money brought from American to Europe for the last two centuries justifies this truth by experience.

Mr Locke lays it down as a fundamental maxim that the quantity of produce and merchandise in proportion to the quantity of money serves as the regulator of market price. I have tried to elucidate his idea in the preceding chapters: he has clearly seen that the abundance of money makes everything dear, but he has not considered how it does so. The great difficulty of this question consists in knowing in what way and in what proportion the increase of money raises prices.

I have already remarked that an acceleration or greater rapidity in circulation of money in exchange, is equivalent to an increase of actual money up to a point. I have also observed that the increase or decrease of prices in a distant market, home or foreign, influences the actual market prices. On the other hand money flows in detail through so many channels that it seems impossible not to lose sight of it seeing that having been amassed to make large sums it is distributed in little rills of exchange, and then gradually accumulated again to make large payments. For these operations it is constantly necessary to change coins of gold, silver and copper according to the activity of exchange. It is also usually the case that the increase or decrease of actual money in a state is not perceived because it flow abroad, or is brought into the state, by such imperceptible means and proportions that it is impossible to know exactly the quantity which enters or leaves the state.

However all these operations pass under our eyes and everybody takes part in them. I may therefore venture to offer a few observations on the subject, even though I may not be able to give an account which is exact and precise.

I consider in general that an increase of actual money causes in a state a corresponding increase of consumption which gradually brings about increased prices.

If the increase of actual money comes from mines of gold or silver in the state the owner of these mines, the adventurers, the smelters, refiners, and all the other workers will increase their expenses in proportion to their gains. They will consume in their households more meat, wine, or beer than before, will accustom themselves to wear better cloths, finer linen, to have better furnished houses and other choicer commodities. They will consequently give employment to several mechanics who had not so much to do before and who for the same reason will increase their expenses: all this increase of expense in meat, wine, wool, etc. diminishes of necessity the share of the other

Locke has not explained "how"

Increase in money means Increase in consumption means Increase in prices

Increase from mines.....

inhabitants of the state who do not participate at first in the wealth of the mines in question. The altercations of the market, or the demand for meat, wine, wool, etc. being more intense than usual, will not fail to raise their prices. These high prices will determine the farmers to employ more land to produce them in another year: these same farmers will profit by this rise of prices and will increase the expenditure of their families like the others. Those then who will suffer from this dearness and increased consumption will be first of all the landowners, during the term of their leases, then their domestic servants and all the workmen or fixed wage-earners who support their families on their wages. All these must diminish their expenditure in proportion to the new consumption, which will compel a large number of them to emigrate to seek a living elsewhere. The landowners will dismiss many of them, and the rest will demand an increase of wages to enable them to live as before. It is thus, approximately, that a considerable increase of money from the mines increases consumption, and by diminishing the number of inhabitants entails a greater expense among those who remain.

If more money continues to be drawn from the mines all prices will owing to this abundance rise to such a point that not only will the landowners raise their rents considerably when the leases expire and resume their old style of living, increasing proportionably the wages their servants, but the mechanics and workmen will raise the prices of their articles so high that there will be a considerable profit in buying them from the foreigner who makes them much more cheaply. This will naturally induce several people to import many articles made in foreign countries, where found very cheap: this will gradually ruin the mechanics and manufacturers of the state who will not be maintain themselves there by working at such low owing to the dearness of living.

When the excessive has diminished the inhabitants of a state, those who remain to a too large expenditure, raised produce of the land and the labour of workmen to excessive prices, ruined the manufactures of the state by use of foreign productions on the part of landlords and mine workers, **the money produced by the mines will necessarily go abroad to pay for the imports**: this will gradually impoverish the state and render it in some sort dependent on the Foreigner to whom it is obliged to send money every year as it is drawn from the mines. The great circulation of money, which was general at the beginning, ceases: poverty and misery follow and the labour of the mines appears to be only to the advantage of those employed upon them and the Foreigners who profit thereby.

This is approximately what has happened to Spain since the discovery of the Indies. As to the Portuguese, since the discovery of the gold mines of Brazil, they have nearly always made use of foreign articles and manufactures; and it seems that they work at the mines only for the account and advantage of foreigners. All the gold and silver which these two states extract from the mines does not supply them in circulation with more precious metal than others. England and France have even more as a rule.

Now if the increase of money in the state proceeds from a balance of foreign trade (i.e. from sending abroad articles and manufactures in greater value and quantity than is imported and consequently receiving the surplus in money) this annual increase of money will enrich a great number of merchants and Undertakers in the state, and will give employment to numerous mechanics and workmen who furnish the commodities sent to the foreigner from whom the money is drawn. This will increase gradually the consumption of these industrial inhabitants and will raise the price of land and labour. But the industrious who are eager to acquire property will not at first increase their expense: they will wait till they have accumulated a good sum from which they can draw an assured interest, independently of their

If prices rise too high then Increase in imports

If imports exceed exports then Money flows out of country

Increase in money from trade....

trade. When a large number of the inhabitants have acquired considerable fortunes from this money, which enters the state regularly and annually, they will, without fail, **increase their consumption and raise the price of everything.** Though this dearness involves them in a greater expense than they at first contemplated they will for the most part continue so long as their capital lasts; for nothing is easier or more agreeable than to increase the family expenses, nothing more difficult or disagreeable than to retrench them.

If an annual and continuous balance has brought about in a state a considerable increase of money it will not fail to increase consumption, to raise the price of evening and even to diminish the number of inhabitants unless additional produce is drawn from abroad proportionable to the increased consumption. Moreover it is usual in states which have acquired a considerable abundance of money to draw many things from neighbouring countries where money is rare and consequently everything is cheap: but **as money must be sent for this the balance of trade will become smaller**. The cheapness of land and labour in the foreign countries where money is rare will naturally cause the erection of manufactories and works similar to those of the state, but which will not at first be so perfect nor so highly valued.

In this situation the state may subsist in abundance of money, consume all its own produce and also much foreign produce and over and above all this **maintain a small balance of trade against the foreigner or at least keep the balance level for many years**, that is import in exchange for its work and manufactures as much money from these foreign countries as it has to send them for the commodities or products of the land it takes from them. If the state is a maritime state the facility and cheapness of its shipping for the transport of its work and manufactures into foreign countries may compensate in some sort the high price of labour caused by the too great abundance of money; so that the work and manufactures of this state, dear though they be, will sell in foreign countries cheaper sometimes than the manufactures of another state where labour is less highly paid.

The cost of transport increases a good deal the prices of things sent to distant countries; but these costs are very moderate in maritime states, where there is regular shipping to all foreign ports so that Ships are nearly always found there ready to sail which take on board all cargoes confided to them at a very reasonable freight.

It is not so in states where navigation does not Nourish. There it is necessary to build ships expressly for the carrying trade and this sometimes absorbs all the profit; and navigation there is always very expensive, which entirely discourages trade.

England today consumes not only the greatest part of its own small produce but also much foreign produce, such as Silks, Wines, Fruit, Linen in great quantity, etc. while she sends abroad only the produce of her mines, her work and manufactures for the most part, and dear though labour be owing to the abundance of money, she does not fail to sell her articles in distant countries, owing to the advantage of her shipping, at prices as reasonable as in France where these same articles are much cheaper.

The increased quantity of money in circulation in a state may also be caused, without balance of trade, by subsidies paid to this state by foreign powers, by the expenses of several ambassadors, or of travellers whom political reasons or curiosity or pleasure may induce to reside there for some time, by the transfer of the property and fortune of some Families who from motives of religious liberty or other causes quit their own country to settle down in this state. In all these cases the sums which come into the state always cause an increased expense and consumption there and consequently raise the prices of all things in the channels of exchange into which money enters.

Increase in money from tribute...

Suppose a quarter of the inhabitants of the state consume daily meat, wine, beer, etc. and supply themselves frequency with cloths, linen, etc. before the increase in money, but that after the increase a third or half of the inhabitants consume these same things, the prices of them will not fail to rise, and the dearness of meat will induce several of those who formed a quarter of the state to consume less of it than usual. A man who eats three pounds of meat a day will manage with two pounds, but he feels the reduction, while the other half of the inhabitants who ate hardly any meat will not feel the reduction. Bread will in truth go up gradually because of this increased consumption, as I have often suggested, but it will be less dear in proportion than meat. The increased price of meat causes diminished consumption on the part of a small section of the people, and so is felt; but the of a small section of the people, and so is felt; but the increased price of bread diminishes the share of all the inhabitants, and so is less felt. If 100,000 extra people come to live in a state of 10 millions of inhabitants, their extra consumption of bread will amount to only pound in 100 which must be subtracted from the old inhabitants; but when a man instead of 100 pounds of bread consumes 99 for his subsistence he hardly feels this reduction.

When the consumption of meat increases the farmers add to their pastures to get more meat, and this diminishes the arable land and consequently the amount of corn. But what generally causes meat to become dearer in proportion than Bread is that ordinarily the free import of foreign corn is permitted while the import of Cattle is absolutely forbidden, as in England, or heavy import duties are imposed as in other states. This is the reason why the rents of meadows and pastures go up in England, in the abundance of money, to three times more than the rents of arable land.

There is no doubt that Ambassadors, Travellers, and Families who come to settle in the state, increase consumption there and that prices rise in all the channels of exchange where money is introduced.

As to subsidies which the state has received from foreign powers, either they are hoarded for state necessities or are put into circulation. If we suppose them hoarded they do not concern my argument for I am considering only money in circulation. Hoarded money, plate, Church treasures, etc. are wealth which the state turns to service in extremity, but are of no present utility. If the state puts into circulation the subsidies in question it can only be by spending them and this ill very certainly increase consumption and send up all prices. Whoever receives this money will set it in motion in the principal affair of life, which is the food, either of himself or of some other, since to this everything corresponds directly or indirectly.

Chapter Seven Continuation of the same subject

As gold, silver, and copper have an intrinsic value proportionable to the land and labour which enter into their production at the mines added to the cost of their importation or introduction into states which have no mines, the quantity of money, as of all other commodities, determines its value in the bargaining of the market against other things.

If England begins for the first time to make use of gold, silver, and copper in exchanges money will be valued according to the quantity of it in circulation proportionably to its power of exchange against all other merchandise and produce, and their value will be arrived at roughly by the altercations of the markets. On the footing of this estimation the landowners and Undertakers will fix the wages of their Domestic Servants and Workmen at so much a day or a year, so that they and their families may be able to live on the wages they receive.

Suppose now that the residence of Ambassadors and foreign travellers in England have introduced as much money into the circulation there as there was before; this money will at first pass into the hands of various mechanics, Domestic Servants, Undertakers and others who have had a share in providing the equipages, amusements, etc. of these Foreigners; the manufacturers, farmers, and other Undertakers will feel the effect of this increase of money which will habituate a great number of people to a larger expense than before, and this will in consequence send up market prices. Even the children of these Undertakers and mechanics will embark upon new expense: in this abundance of money their Fathers will give them a little money for their petty pleasures, and with this they will buy cakes and patties, and this new quantity of money will spread itself in such a way that many who lived without handling money will now have some. Many purchases which used to be made on credit will now be made for cash, and there will therefore be greater rapidity in the circulation of money in England than there was before.

From all this I conclude that by doubling the quantity of money in a state the prices of products and merchandise are not always doubled. A River which runs and winds about in its bed will not flow with double the speed when the amount of its water is doubled.

The proportion of the dearness which the increased quantity of money brings about in the state will depend on the turn which this money will impart to consumption and circulation. Through whatever hands the money which is introduced may pass it will naturally increase the consumption; but this consumption will be more or less great according to circumstances. It will be directed more or less to certain kinds of products or merchandise according to the idea of those who acquire the money. Market prices will rise more for certain things than for others however abundant the money may be. In England the price of meat might be tripled while the price of corn went up only one fourth.

In England it is always permitted to bring in corn from foreign countries, but not cattle. For this reason however great the increase of hard money may be in England the price of corn can only be raised above the price in other countries where money is scarce by the cost and risks of importing corn from these foreign countries.

It is not the same with the price of Cattle, which will necessarily be proportioned to the quantity of money offered for meat in proportion to the quantity of meat and the number of Cattle bred there.

An ox weighing 800 pounds sells in Poland and Hungary for two or three ounces of silver, but commonly sells in the London market for more than 40. Yet the bushel of flour does not sell in London for double the price in Poland and Hungary.

Increase of money only increases the price of products and merchandise by the difference of the cost of transport, when this transport is allowed. But in many cases the carriage would cost more than the thing is worth, and so timber is useless in many places. This cost of carriage is the reason why milk, fresh butter, salads, game, etc. are almost given away in the provinces distant from the capital.

I conclude that an increase of money circulating in a state always causes there an increase of consumption and a higher standard of expense. But the dearness caused by this money does not affect equally all the kinds of products and merchandise, proportionably to the quantity of money, unless what is added continues in the same circulation as the money before, that is to say unless those who offer in the market one ounce of silver be the same and only ones who now offer two ounces when the amount of money in circulation is doubled in quantity, and that is hardly ever the case. **I conceive that when a large surplus of money is brought into a state the new money gives a new**

Increase in money from foreigners.....

2X money not always = 2X prices

Impact depends on "how"

turn to consumption and even a new speed to circulation. But it is not possible to say exactly to what extent.

Chapter Eight Further Reflections on the same subject

We have seen that the quantity of money circulating in a state may be increased by working the mines which are found in it, by subsidies from foreign powers, by the immigration of Families of foreigners, by the residence of Ambassadors and Travellers, but above all by a **regular and annual** balance of trade from supplying merchandise to Foreigners and drawing from them at least part of the price in gold and silver. It is by this last means that a state grows most substantially, especially when its trade is accompanied and supported by ample navigation and by a considerable raw produce at home supplying the material necessary for the goods and manufactures sent abroad.

As however the continuation of this Commerce gradually introduces a great abundance of money and little by little increases consumption, and as to meet this much Foreign produce must be brought in, part of the annual balance goes out to pay for it. On the other hand the habit of spending increasing the employment of labourers the prices of manufactured goods always go up. Without fail some foreign countries endeavour to set up for themselves the same kinds of manufactures, and so cease to buy those of the state in question; and though these new establishments of crafts and manufactures be not at first perfect they slacken and even prevent the exportation of those of the neighbouring state into their own country where they can be got cheaper.

Thus it is that the **state begins to lose some branches of its profitable trade**: and many of its workmen and mechanics who see labour Fallen off leave the state to find more work in the countries with the new manufacture. In spite of this diminution in the balance of trade the custom of importing various products will continue. The articles and manufactures of the state having a great reputation, and the facility of navigation affording the means of sending them at little cost into distant countries, the state will for many years keep the upper hand over the new manufactures of which we have spoken and will still maintain a small Balance of trade, or at least will keep it even. If however some other maritime state tries to perfect the same articles and its navigation at the same time it will owing to the cheapness of its manufactures take away several branches of trade from the state in question. **In consequence this state will begin to lose its balance of trade** and will be forced to send every year a part of its money abroad to pay for its importations.

Moreover, even if the state in question could keep a balance of trade in its greater abundance of money it is reasonable to suppose that this abundance will not arrive without many wealthy individuals springing up who will plunge into luxury. They will buy pictures and gems from the foreigner, will procure their silks and rare objects, and set such an example of luxury in the state that in spite of the advantage of its ordinary trade its money will flow abroad annually to pay for this luxury. This will gradually impoverish the state and cause it to pass from great power into great weakness.

When a state has arrived at the highest point of wealth (I assume always that the comparative wealth of states consists principally in the respective quantities of money which they possess) it will inevitably fall into poverty by the ordinary course of things. The too great abundance of money, which so long as it lasts forms the power of states, throws them back imperceptibly but naturally into poverty. Thus it would seem that when a state expands by trade and the abundance of money raises the price of land and labour,

X>M means money in, prices up, M up, money out

the Prince or the Legislator ought to withdraw money from circulation, keep it for emergencies, and try to retard its circulation by every means except compulsion and bad faith, so as to forestall the too great dearness of its articles and prevent the drawbacks of luxury.

But as it is not easy to discover the time opportune for this, nor to know when money has become more abundant than it ought to be for the good and preservation of the advantages of the state, the Princes and Heads of Republics, who do not concern themselves much with this sort of knowledge, attach themselves only to make use of the facility which they find through the abundance of their state revenues, to extend their power and to insult other countries on the most frivolous pretexts. And all things considered they do not perhaps so badly in working to perpetuate the glory of their reigns and administrations, and to leave monuments of their power and wealth; for since, according to the natural course of humanity, the state must collapse of itself they do but accelerate its fall a little. Nevertheless it seems that they ought to endeavour to make their power last all the time of their own administration.

It does not need a great many years to raise abundance to the highest point in a state, still fewer are needed to bring it to poverty for lack of commerce and manufactures. Not to speak of the power and fall of the Republic of Venice, the Hanseatic Towns, Flanders and Brabant, the Dutch Republic, etc. who have succeeded each other in the profitable branches of trade, one may say that the power of France has been on the increase only from 1646 (when manufactures of cloths were set up there, which were until then imported) to 1684 when a number of Protestant Undertakers and artisans were driven out of it, and that kingdom has done nothing but recede since this last date.

To judge of the abundance and scarcity of money in circulation. I know no better measure than the leases and rents of landowners. When land is let at high rents it is a sign that there is plenty of money in the state; but when land has to be let much lower it shows, other things being equal, that money is scarce. I have read in an *Etat de la France* that the acre of vineyard which was let in 1660 near Mantes, and therefore not far from the capital of France, for 200 livres tournois in money of full weight, only let in 1700 for 100 livres tournois in lighter money, though the silver brought from the West Indies in the interval should naturally have sent up the price of land in Europe.

The author [of the *Etat*] attributes this fall in rent to defective consumption. And it seems that he had in fact observed that the consumption of Wine had diminished. But I think he has mistaken the effect for the cause. The cause was a greater rarity of money in France, and the effect of this was naturally a falling off in consumption. In this Essay I have always suggested, on the contrary, that abundant money naturally increases consumption and contributes above everything to the cultivation of land. When abundant money raises produce to respectable prices the inhabitants make haste to work to acquire it; but they are not in the same hurry to acquire produce or merchandise beyond what is needed for their maintenance.

It is clear that every state which has more money in circulation than its neighbours has an advantage over them so long as it maintains this abundance of money.

In the first place in all branches of trade it gives less land and labour than it receives: the price of land and labour being everywhere reckoned in money is higher in the state where money is most abundant. Thus the state in question receives sometimes the produce of two acres of land in exchange for that of one acre, and the work of two men for that of only one. It is because of this abundance of money in circulation in London that the work of one English embroiderer costs more than that of 10 Chinese embroiderers, though the Chinese embroider much better and turn out more work in a day. In Europe one

Withdraw money into hoard

Measure money supply by rents

is astonished how these Indians can live, working so cheap, and how the admirable stuffs which they send us cost so little.

In the second place, the revenues of the state where money abounds, are raised more easily and in comparatively much larger amount. This gives the state, in case of war or dispute, the means to gain all sorts of advantages over its adversaries with whom money is scarce.

If of two Princes who war upon each other for the sovereignty or conquest of a state one have much money and the other little money but many estates which may be worth twice as much as all the money of his enemy, the first will be better able to attach to himself Generals and Officers by gifts of money than the second will be by giving twice the value in lands and estates. Grants of land are subject to challenge and revocation and cannot be relied upon so well as the money which is received. With money munitions of war and food are bought even from the enemies of the state. Money can be given without witnesses for secret service. Lands, Produce, merchandise would not serve for these purposes, not even jewels or diamonds, because they are easily recognised. After all it seems to me that the comparative power and wealth of states consist, other things being equal, in the greater or less abundance of money circulating in them hic et nunc.

It remains to mention two other methods of increasing the amount of money in active circulation in a state The first is when Undertakers and private individual borrow money from their foreign correspondents a interest, or individuals abroad send their money into the state to buy shares or government stocks there. This often amounts to very considerable sums upon which the state must annually **pay interest to these foreigners** These methods of increasing the money in the state make it more abundant there and diminish the rate of interest. By means of this money the Undertakers in the state find it possible to borrow more cheaply to set people on work and to establish manufactories in the hope of profit. The Artisans and all those through whose hands this money passes, consume more than they would have done if they had not been employed by means of this money, which consequently increases **prices** just as if it belonged to the state, and through the increased consumption or expense thus caused the public revenues derived from taxes on consumption are augmented. Sums lent to the state in this way bring with them many present advantages, but the end of them is always burdensome and harmful. The state must pay the interest to the foreigners every year, and besides this is at the mercy of the foreigners who can always put it into difficulty when they take it into their heads to withdraw their capital. It will certainly arrive that they will want to withdraw it at the moment when the state has most need of it, as when preparations for war are in hand and a hitch is feared. The interest paid to the foreigner is always much more considerable than the increase of pubic revenue which his money occasions. These loans of money are often seen to pass from one country to another according to the confidence of investors in the states to which they are sent. But to tell the truth it most commonly happens that states loaded with these loans, who have paid heavy interest on them for many years, fall at length by bankruptcy into inability to pay the capital. As soon as distrust is awakened the shares or public stocks fall, the foreign shareholders do not like to realise them at a loss and prefer to content themselves with the interest, hoping that confidence will revive. But sometimes it never revives. In states which decline into decay the principal object of ministers is usually to restore confidence and so attract foreign money by loans of this kind. For unless the ministry fails to keep faith and to observe its engagements the money of the subjects will circulate without interruption. It is the money of the foreigners which has the power of increasing the circulating currency in the state.

Increase of money by borrowing...

But the resource of these borrowings which gives a present ease comes

to a bad end and is a fire of straw. To revive a state it is needful to have a care to bring about the influx of an annual, a constant and a real balance of trade, to make flourishing by Navigation the articles and manufactures which can always be sent abroad cheaper when the state is in a low condition and has a shortage of money. Merchants are first to begin to make their fortunes, then the lawyers may get part of it, the Prince and the farmers of the revenue get a share at the expense of these, and distribute their graces as they please. When money becomes too plentiful in the state, luxury will instal itself and the state will fall into decay.

Such is approximately the circle which may be run by a considerable state which has both capital and industrious inhabitants. An able minister is always able to make it recommence this round. Not many years are needed to see it tried and succeed, at least at the beginning which is its most interesting position. The increased quantity of money in circulation will be perceived in several ways which my argument does not allow me to examine now.

As for states which have not much capital and can only increase by accidents and conjuncture it is difficult to find means to make them flourish by trade. No ministers can restore the Republics of Venice and Holland to the brilliant situation from which they have fallen. But as to Italy, Spain, France, and England, however low they may be fallen, they are always capable of being raised by good administration to a high degree of power by trade alone, provided it be undertaken separately, for if all these states were equally well administered they would be great only in proportion to their respective capital and to the greater or less industry of their people.

The last method I can think of to increase the quantity of money actually circulating in a state is by violence and arms and this is often blended with the others, since in all Treaties of Peace it is generally provided to retain the trading rights and privileges which it has been possible to derive from them. When a state exacts contributions or makes several other states tributary to it, this is a very sure method of obtaining their money. I will not undertake to examine the methods of putting this device into practice, but will content myself with saying that all the nations who have flourished in this way have not failed to decline, like states who have nourished through their trade. The ancient Romans were more powerful in this wise than all the other peoples we know of. Yet these same Romans before losing an inch of the land of their vast states fell into decline by luxury and brought themselves low by the diminution of the money which had circulated among them, but which luxury caused to pass from their great Empire into oriental countries.

So long as the luxury of the Romans (which did not begin till after the defeat of Antiochus, King of Asia about A.U.C. 564) was confined to the produce of the land and labour of all the vast estates of their dominion, the circulation of money increased instead of diminishing. The public was in possession of all the mines of gold, silver, and copper in the Empire. They had the gold mines of Asia, Macedonia, Aquilaea and the rich mines both of gold and silver of Spain and other countries. They had several mints where gold, silver and copper coins were struck. The consumption at Rome of all the articles and merchandise which they drew from their vast Provinces did not diminish the circulation of the currency, any more than pictures, statues and jewels which they drew from them. Though the patricians laid out excessive amounts for their feasts and paid 15,000 ounces of silver for a single fish, all that did not diminish the quantity of money circulating in Rome, seeing that the tribute of the Provinces regularly brought it back, to say nothing of what Praetors and Governors brought thither by their extortions. The amounts annually extracted from the mines merely increased the circulation at Rome during the whole reign of Augustus. Luxury was however already on a very

Increase of money from violence and conquest.....

great scale, and there was much eagerness not only for curiosities produced in the Empire but also for jewels from India, pepper and spices, and all the rarities of Arabia, and the silks which were not made with raw materials of the Empire began to be in demand there. The money drawn from the mines still exceeded however the sums sent out of the Empire to buy all these things. Nevertheless under Tiberius a scarcity of money was felt. That Emperor had shut up in his Treasury 2 milliards and 700 millions of sesterces. To restore abundance of circulation he had only to borrow 300 millions on the mortgage of his estates. Caligula in less than one year spent all this treasure of Tibetius after his death, and it was then that the abundance of money in circulation was at its highest in Rome. The fury of luxury kept on increasing. In the time of Pliny, the historian, there was exported from the Empire, as he estimated, at least 100 millions of sesterces annually. This was more than was drawn from the mines. Under Trajan the price of land had fallen by one-third or more, according to the younger Pliny, and money continued to decrease until the time of the Emperor Septimus Severus. It was then so scarce at Rome that the Emperor made enormous granaries, being unable to collect large treasure for his enterprises. Thus the Roman Empire fell into decline through the loss of its money before losing any of its estates. Behold what luxury brought about and what it always will bring about in similar circumstances.