McGILL UNIVERSITY LIBRARY

THEORIES OF MONEY,
VALUE AND TRADE FLUCTUATIONS
SUGGESTED BY
CANADIAN MONETARY AND BANKING
HISTORY

DEPOSITED BY THE FACULTY OF GRADUATE STUDIES AND RESEARCH

MXIM

-1 M96. 1938



UNACC. 1938

Theories of Money, Value and Trade Fluctuations
Suggested by Canadian Monetary and Banking History.

by

Sidney G. Murray

Submitted in partial fulfillment of the requirements for the degree of Master of Arts. May 1938.

ABSTRACT OF CONTENTS

CHAPTER I

Page 1

Abstract Money

Book money, e.g. bank deposits; physical money,
e.g. coins, gold and silver certificates. The
distinction illustrated by Halifax and York
currencies (£ s.d. "currency") contrasted with
coins current (florins, shillings, Spanish
dollars, etc.): the latter a subsidiary money
valued in terms of the former. - The dollardecimal system based on the "currency" system.

CHAPTER II

Implications of Abstract Money

10

Book money is "money of account": a medium whereby all wealth is potentially the basis for money. Money of account the term applied to the abstract unit in which debts are expressed, i.e. the medium of credit. - Every object of value can be expressed in terms of debit and credit; that is to say, mathematically there is no

factor to limit money of account other than the contemporary definition of wealth and the existing scale of value. - Legal and convention restrictions are adventitious; rarely founded on principle.

CHAPTER III

Economic Credit

13

The economic use of credit: the principle of credit, a real limiting factor. Embodiment of that principle in the first Canadian bank charter. -The types of wealth suitable, not suitable, as bases for credit. "The commercial loan" and fiat credit. - The commercial loan, "the prototype of which is the discounted note or bill of exchange with documents of title to goods attached": the credit (new money) potentially offset by new values to be created and added to specific goods; the money to be retired shortly, as in the normal course of trade the goods pass into consumption. The essence of a commercial loan: the use of the funds is restricted by the form of the loan; their use provides means for cancellation of the loan. - Departure from the principle of the commercial loan in the Canadian Bank Act of 1871 and in subsequent revisions of the Act.

CHAPTER IV

Fiat Credit and Business Fluctuations

23

Non-economic credit: "fiat credit". Analysis of types of non-commercial loans authorized: entry of new money into the system; the absence of restriction upon its use; lack of offsetting values; lack of provision for its retirement. - The economic effects of fiat credit: injection of new money into an economic system integrated by price; disturbances to trade occasioned thereby: distortion of profit; distortion of production and consumption; "overproduction". "Inflation" the term applying to these effects, (these effects may or may not be apparent in the price averages).

CHAPTER V

Secular Significance of Fiat Credit

31

Fiat credit and expansion of capital equipment.

"Investment" under fiat credit no criterion

of savings. - Costs of expansion normally

assessed not as result of rising prices, but

as result of shifts in income and property

distribution during boom-depression.
Special incidence of "conversions" and manipulation of interest rate: expropriation of
rentier.

CHAPTER VI

Value under Fiat Credit

37

Gold is not money: prices not "gold prices". Recent monetary experience a demonstration that money of account is the controlling money: the necessity for bank notes, gold, etc. to conform to the exigencies of the money of account: "bank holidays", revaluation, etc. - Functions of gold: reserves, international payments, store of value. -Value under the credit system (on gold or off gold) expressed in money of account: subjective valuations in terms of \$'s, £'s, etc. become objective values through processes of credit creation. - Central bank restrictions on valorization in credit system are quantitative: discount rate, open market operations, etc. - Effects of gold standard and central bank restrictions on value relationships during boom-depression.

CHAPTER VII

Control of Fiat Credit

44

Objectives of central bank control of credit: the preamble of the Bank of Canada Act. Confusion of ideas as to kind of stability sought; inappropriateness of central bank technique to attain economic stability: inadequacy under gold standard and under "managed money" of quantity controls. As physical money is accessory to book money its quantity is subject to control ad lib. The dilemma inherent in non-gold standard methods of control through limitation of interest rate, quantity of investment, price level, etc.: such criteria effect as well as cause. - The necessity for elimination of fiat credit as sine qua non for mitigation of trade fluctuations.

CHAPTER I

Abstract Money

Some two hundred years ago there was devised in Nova Scotia a monetary system called "Halifax currency". Halifax currency was based upon certain root ideas which have governed the subsequent monetary and banking practice in Canada. These ideas in fact illustrate the essential meanings of money, credit and value in the world today. By reference to them questions relating to the reform of money and of banking acquire a special significance.

When Port Royal was captured (1710) and Nova Scotia ceded to Great Britain (1713) the garrison stationed there obtained its military supplies from New England by discounting sterling bills in Boston. In this way the money of New England became familiar to the first British inhabitants of Nova Scotia. The principal coins in circulation in New England were not English coins, but a hodge-podge of Spanish. Mexican and Peruvian silver, the most important of which was the "Spanish dollar". - a coin which was in almost universal circulation throughout the western world. No Spanish dollars were coined at the Royal Mint for use in the colonies; but dollars of average weight and fineness were assayed at the Mint and their value determined to be the equivalent of 4s.6d. In the colonies however the Spanish dollar was assigned a value higher than its mint equivalent. The rate ranged from 6s. to 9s. 4 These colonial valuations were known as "currency" valuations to distinguish them from sterling value. Thus in Massachusettes Bay the Spanish dollar was valued at 6s. Massachusettes (or New England) currency. 5

Massachusettes currency was adopted by the early
British settlers in Nova Scotia. It served as the money of
Nova Scotia until about year 1750. In that year the merchants
of the recently founded city of Halifax devised a money of their
own on the principles of Massachusettes currency. They assigned
a value of 5s. to the dollar. No legislative act gave recognition to this new valuation. It was simply a currency valuation, "Halifax currency" - adopted in commercial transactions. It
was officially recognized by the Governor Cornwallis in a
transaction dated 1750 whereby he "acquired \$2500. Spanish in
exchange for his bill on London at a rate of 5s. per dollar."
Thus before there was any legislature in Nova Scotia the people
of the province had established a money system of their own.

All local business was conducted in "currency". - The units of currency bore the same names, i.e. carried the same symbols, as the units of sterling, viz. £ s. d. But currency was an independent money carefully distinguished from sterling by the merchants in their exchange dealings with the mother country. The outstanding characteristic of this money was that there were no coins corresponding to the money units, i.e. there were no coined sovereigns, shillings or pennies currency. The coins of the system were dollars, reals, etc. 8

The distinction between the descriptions of units of the currency and units of the physical money rendered it obvious to a person using the system that he was in fact dealing with two kinds of money, - (a) a book money in which accounts were kept and debts reckoned, and (b) a physical money (coins, public bills, etc.) which served as means of payment of debts stated in the book money. Physical money clearly was subsidiary to book money; its value that is was not its metallic worth, - the currency values of the various coins were inconsistent with their relative worths established at the Royal Mint - but a value in terms of book money, "currency".

When the first Nova Scotia House of Assembly convened (1758) it attempted to make the Spanish dollar legal tender at 5s. The bill was disallowed, then passed in amended form, and finally (1762) repealed by His Majesty-in-Council on grounds that it contravened the spirit of an Imperial Act of 1708. But this action of the Home Government was ineffectual to destroy the established currency practice of the Province. The people of Nova Scotia continued to use their adopted system of Halifax currency with the dollar 5s.

In much the same way the currency practice of the colonies to the south was introduced to Quebec when that province came under British rule. During the military occupation, 1759 to 1763, traders of New England and New York came to Montreal and Quebec city. The Boston traders introduced the Massachusettes currency, - the Spanish dollar at 6s. - to Quebec; and the New York traders their York currency, - the dollar at 7s.6d., subsequently 8s. - to Montreal. 11 Civil

government was established in the province in 1763, and the Governor-in-Council ordained (1764) that the Spanish dollar and other coins current in trade should be given and received at the rates laid down in the Imperial Act of 1708, i.e. the dollar at 6s., the French crown at 6s.8d., and the British shilling at 1s.4d. Again an official regulation was ineffectual; and, shortly afterwards, when the Quebec Act of 1774 had defined the boundaries of the province and set up a civil law, the Governor-in-Council decreed that Halifax currency be the standard of the province. 13 Although Halifax currency was from this date (1777) the legal currency of the province of Quebec, in Montreal business transactions continued to be carried on for some time in York currency at 8s. to the dollar. With the coming of the Loyalists and the separation of the province into two parts (1791), York currency gained a foothold in Upper Canada, which it retained in large measure, - at least in the countryside - until Confederation. 14

by the government of that country, was brought into the currency system of Quebec, in 1783, as legal tender for 5s. ¹⁵ The Imperial Government had long been dissatisfied with the independent and varying currency systems of the North American colonies; it now became exercised lest the Canadian provinces assimilate their currency to that of the United States. Consequently, when parliament established the single gold standard for the currency of the United Kingdom, an order-in-council was issued making the silver money of the United Kingdom legal tender in the Canadian colonies and rating the Spanish dollar at its then mint value

of 4s.4d. None of the Canadian provinces gave effect to the order; all continued to keep their accounts in "currency" and adhered to their practice of doing cash business in dollars at the accustomed rate, with the lesser coins and merchants' notes serving as fractional parts thereof. The denominations of the first bank notes issued at this time were in dollars.

The British Government, through the Treasury Board, meanwhile was endeavouring to deal with a currency situation which, in the interests of the provinces themselves, required reform. A formal letter from Quebec addressed to the Lords of the Treasury, 1837, said: "The commerce of the Colonies is injured by the deranged state of their Currency to a greater extent than by any other cause.... Although one Money of Account (the Halifax Currency at 5/ to the Dollar) is common to the whole, not two accord in their Currency..., not one agrees with the Currency of the United Kingdom, nor with the United States... In each Province a particular Coin is rated at a nominal value higher than the other coins with reference to their intrinsic values." The letter suggested one of three standards for the money of the provinces, - the dollar-decimal system, the £ s.d. sterling, or Halifax currency. "It would be most politic to allow the Halifax currency to remain the money of account: the silver dollar and half dollar of spain, South America and the United States, legal tender at the rate of 5s. currency to the dollar ... A uniform currency law in the North American Colonies to be enacted whereby the other coins current are rated at their exact intrinsic value in

comparison with the dollar."

The system chosen by the Currency Act of the Province of Canada (1853) was the dollar-decimal system. The cent as a unit of the system had come into use in the United States in 1850, the result of a revaluation of the "real" and other fractional coins (1/8, 1/4 and 1/16 dollar pieces) on a metric system. The Currency Act of 1853 was passed by the legislature of the Canadas after communication with the governments of Nova Scotia and New Brunswick and ascertainment that they too were willing to recommend a similar measure to their legislatures. Under the Act -

- (a) Gold was declared the standard; silver coins to be legal tender for amounts up to \$10.
- (b) Provincial accounts were directed to be kept in \$'s and cents.
- (c) The British gold sovereign was valued at £1-4-4; the rate of sterling exchange became thus \$4.86-2/3:-
 - £ currency = \$4. (\$ = 5s. Halifax)
 - £ sterling = £1-4-4 currency.
 - £ sterling = \$4.+ (13/15 \$1.) = \$4.86-2/3.
- (d) The British sovereign at \$4.86-2/3 and the U.S.

 dollar at \$1. were declared unlimited legal
 tender.

Before recommending royal assent to the act the British Treasury made a last attempt to persuade the government of the Canadas to abandon its intention of adopting the United States monetary system in its entirety. It was proposed that

the decimal denomination of coins should be adopted, but that coins and paper money should be related to a £ s.d. currency system as heretofore, the basic minted coin to be a gold coin called a "Royal", the subsidiary coins to be called shillings, marks, etc. The recommendation was not followed.

It was some time before coins were struck on the new basis. In 1857 an Act was passed requiring that as and from January 1, 1858 accounts rendered to the government should be stated in \$'s without the option of using Halifax currency. 22 The banks and the majority of business houses had been using \$'s exclusively for a number of years. The year 1858 marks the formal adoption of the dollar-decimal system. In the same year the first silver and bronze decimal coins were received in Canada from the Royal Mint.

From 1853 to 1871 the currency system of Nova Scotia diverged from that of the Canadas and New Brunswick. The province of Nova Scotia in 1860 took an initial step in the direction of transforming its money of account to the dollar-decimal system. It was enacted that: "Whenever any sums in currency are mentioned the amounts shall hereafter be computed and taken to represent dollars and cents in the following scale: a pound shall represent four dollars, a shilling twenty-five cents, a penny two cents.... From and after July 1, 1860 all accounts rendered to any public office shall be in dollars and cents, but such accounts may have a second column containing sums in pounds, shillings and pence equivalent. The transition from the old to the new money was not completely effected in Nova Scotia until passage of the Uniform Currency

Act by the Dominion of Canada (1871).

Adoption of the new money involved an alteration in the value of existing money contracts. The transition also required a change in the habits of thought of people similar to that which occurs when one is forced to deal with the currency of a foreign country. In the case of Nova Scotians this has been expressed as follows: "After the merchants of Halifax became acquainted with the American system of dollars and cents and began to use it in their quotations and their accounts, it was a frequent thing for a storekeeper quoting \$1.75 to some old lady to be asked, 'how much is that?', to which he would reply '8s.9d.'; that is he would convert at the old rate for Halifax currency \$4. to the £."

The Uniform Currency Act settled the money system for all Canada. It provided: "On and after July 1, 1871 the currency of the Province of Nova Scotia shall be the same as that of the Provinces of Quebec, Ontario and New Brunswick, in all of which one currency of the uniform value hereinafter mentioned has been and is now used. The denomination of money in the currency of Canada shall be dollars, cents and mills. The currency of Canada shall be such that the British sovereign shall be equal to \$4.86-2/3 of the currency of Canada... Gold coins of the standard of weight and fineness determined by the Province of Canada Act of 1853 shall be a legal tender for the payment of all debts; silver coins shall be a legal tender to the amount of \$10.; copper and bronze coins for 25¢ in one payment."

In conclusion of this historical outline a word may

be added on the method of calculating sterling exchange under the old currency system. Until about the year 1825 the value at the Royal Mint of the Spanish milled dollar, the standard coin of the provinces, was 4s.6. 26 The par of exchange on London was at first expressed as the relation which the value of the Spanish dollar in currency bore to its value at the mint. In Halifax currency the dollar was rated at 5s. Its mint value being 4s.6d., the par of exchange was expressed as \$4.44-4/9 $\frac{($1. \times 20)}{4.5}$. Various recoinages during the early 1800's reduced the weight and fineness of the Spanish dollar. From 1825 the coins in circulation were worth but 4s.2d. at Meanwhile Nova Scotia changed the rating of the the mint. sovereign to make it a legal tender for 25s. currency. of exchange in Nova Scotia then became \$5. But as exchange continued to be quoted as the old par plus a premium par was stated as "+ $12\frac{1}{2}\%$ ".

FOOTNOTES TO CHAPTER I

- See: Documents relating to Currency, Exchange and Finance in Nova Scotia, 1675-1758: Canada Public Archives.

 Shortt (A). 1933 Ottawa Doc. No. 23.
- Ibid., doc. no. 1: "As to what you propose about peeces of 8/8 . . . " - The Spanish dollar was a piece of 8 "reals". See Palgrave, Dictionary of Political Economy, art. Dollar.
- 3 Doc. no. 7.
- 4 Doc. 4.
- 5 Doc. 6.
- 6 Doc. 324(?)
- 7 Doc. nos. 464, 465 et al.
- 8 Doc. 7.
- 9 Doc. 4.
- 10 Acts of N.S., ch. 7, 1758.
- 11 See: Canada and its Provinces. Vol. iv. 1914. Toronto.

 Art. Currency and Banking (A. Shortt).

FOOTNOTES TO CHAPTER I (Continued)

- 12, 13, 14, 15, 16, 17, 18 Ibid.
- 19 Op. cit. Vol. v. Art. Currency and Banking 1840-1867 (A. Shortt).
- 20, 21, 22, 23 Ibid.
- See: Journal Can. Bankers' Assoc., Oct. 1922.

 Art. Halifax Currency.
- 25 Stats. of Canada, 1871.
- 26, 27 Journal Can. Bankers' Assoc., supra.

CHAPTER II

Implications of Abstract Money

For a more thorough understanding of the monetary system of Canada, - in particular for an understanding of credit and questions of banking - it is necessary to consider in further detail the implications of Halifax currency.

In the preceding chapter it has been observed that all that was required for the existence of the book money, currency, was commercial assent to the use of an abstract unit for reckoning values. A basic coin corresponding to the unit of value did not exist. Contracts were entered into, and debt and credit were stated in terms of the abstract money. This was the starting point of our system.

Since early modern times book money has been described as "money of account". Its place as the money of the present system has been recognized by many of the best-known contemporary economists. But the significance of money of account as the medium of valuation and of credit frequently is lost sight of in the formulation of monetary theory. Most theories of money start not with the nature of money of account but with ideas of the gold standard as basis. Such theories provide inadequate explanations of the phenomena of prices and markets in the credit-money economy of the present day.

Value in present-day economy represents quantitative

relationships expressed in units of abstract money of account. There is no common measure of value in the sense of a kind or amount of goods in which comparisons of value are made. People carry only the unit of value in their minds, just as one carries the idea of a foot or a pound. Those who think of prices as gold prices fail to distinguish the dollar as unit of value from a coin called the dollar. The dollar bears to a gold dollar that relationship which the bushel bears to a bushel of wheat. To understand market value it is necessary to observe how money of account is used in the process of valuation and credit creation. It is utilized of course through the mechanism of the banking system.

Prior to a consideration of the Canadian banking system one further characteristic of money of account should be observed. In mechanical details money of account bears close relationship to the principles of bookkeeping (accountancy), and but little relationship to any material substance such as gold or silver. In essence the underlying accounting principles governing money of account are comprised in the simple rule that for every credit there must be a debit. Credit has two aspects, - positive as credit, negative as debt. The unit of money is an abstract measure, and mathematically speaking there is nothing to limit the quantity of money other than restrictions placed upon types of assets considered suitable as bases for credit. There is no limit to quantity of credit because there is no natural limitation to the quantity of money of account. This fact is of fundamental importance to an understanding of the credit system. It follows that any

restrictions which may be placed upon credit are external to the nature of the medium itself. The money which emanates from the credit system is a function of the operation of the system through the banking mechanism.

FOOTNOTES TO CHAPTER II

- 1 See Palgrave, Dictionary of Political Economy, Art. Money.
- E.g. J. M. Keynes: "Money-of-account is the primary concept of a theory of money." Treatise on Money, vol. i, p. 1, 1930. New York. R. G. Hawtrey: "The basis of monetary theory should be the money of account." Currency and Credit. 2nd ed. p. 2. 1923. London.
- 3 Cf. current periodical articles on currency problems by leading economists during the last several years.
- F. J. Esquerre, Applied Theory of Accounts. 1914. New York.

 "The system (of accounting) is based on the doctrine of equilibrium, that is to say that tendency supposed to be inherent in the nature of things which makes them seek to maintain a harmonious balance among their sundry elements. The system of double-entry bookkeeping may be compared to a balancing scale provided with two weighing disks, one for the positive (debit) facts, the other for the negative (credit) facts. p. 69.

CHAPTER III

Economic Credit

In the preceding chapter it has been observed that money of account, as medium of credit, is not self-limiting. What principles, if any, limit the monetization of assets in the credit system? The history of banking in Canada provides materials for observation on this point.

The first bank charter granted in Canada, - that to "The President, Directors and Company of the Bank of Montreal" (1822) - authorized the making of loans by:

- (a) Discount of customers' promissory notes or purchase of merchants' bills of exchange;
- (b) Issue of promissory bank notes payable on demand in specie.

Practically all other forms of loans were prohibited, and specifically, the power to take and hold mortgages or real property by way of additional security for debts contracted to the bank in the course of authorized dealings was coupled with a prohibition against lending upon mortgage or hypothèque or upon land or other fixed property.

At that time land was the most typical and widely held asset. Relative to total assets of the community land held the position now occupied by bonds and stocks. Why was the loan on land prohibited?

Considered as security for a loan, land has obvious disqualifications. It is not of uniform quality. Its value, therefore, is not a market value in the sense in which the values of wheat, cotton, copper and other commodities subject to grading are market values. Moreover sales of particular parcels of land take place at infrequent intervals. But security concerns the bank primarily; secondarily its depositors. The question of the effect on the economy as a whole of a particular type of loan is another matter.

There are reasons, unconnected with security, which render real property an unsuitable basis for bank credit. These reasons derive from the fiat money character of bank credit. When a bank grants a loan it creates normally new (i.e. additional) money of account. There are two possibilities .the bank can either transfer existing money of account or set up additional money of account. If the loan is set off against the deposit (in the literal sense) of an equivalent sum of physical money (gold, silver or Dominion notes) not previously withdrawn from another bank, then the loan represents simply the transference of existing means of payment. But since the total of physical money in possession of the banks is a small fraction of their deposits outstanding (cf. the chart at the end of this chapter) the majority of bank loans cannot be so set off. If one enumerates the ways in which deposits arise, viz. by customers' depositing cash or cheques or banks' granting loans or purchasing securities - and considers the effects of these on the debits and credits of the banking system as a whole, it becomes apparent that normally when banks

extend loans or make investments they create new means of payment rather than transfer existing means. 2 Those views which deny the truth of this statement confuse credit in the strict sense with credit in the broad sense.3 Such views represent circular reasoning, denying that bank credit is fiat money because the assets upon which the credit is extended are assumed to be proper bases for money. This is the question at issue. The assets upon which bank money is based, the uses to which it is put, the means by which it is retired are of primary importance to an understanding of the role of banking in the economy. The effects of fiat money on the economy will be discussed in the following chapter. The principles which underlie economically sound bank credit will be considered here. For purposes of this enquiry it is sufficient to recognize that creation of bank credit will be followed by the same results as follow the printing of fiat money unless there is something in the terms, form or basis of the bank loan which so restricts expenditure of the bank credit that it falls in a different category.

what restrictions upon the use of bank credit have been imposed in law and practice? To return to consideration of the reasons for prohibition of the loan on real property: the conventional form which such a loan normally would take (viz. the form of mortgage) would in no way restrict use of the funds to a purpose connected with the production of additional values in goods or services to offset the additional money. The funds might be used to finance exchange of the land without affecting production; or to finance exchange of

capital equipment for use on the land without leading to additional production in the reasonably near future; or for the purchase of consumable goods or capital goods having no relation to use of the land whatever. Were the funds to be used for the purchase of such things as "seed grain, fertilizer, binder twine" their use would lead "normally to the production of saleable commodities within the period of the crop season". This case will be touched upon later.

On the other hand the loan by way of purchase of bills of exchange or discount of promissory notes, which was authorized by the first Canadian bank charter, already had acquired a form which met the objections (at least in part) to bank credit as fiat money. What this form was is indicated in the terms of the first general banking legislation passed in the Province of Canada. By "An Act to Grant Additional Credit Facilities in Commercial Transactions" (1859) it was provided that a bank might obtain title to goods through bills of lading and warehouse receipts if these documents were pledged by certain classes of business men like common carriers, warehousemen and millers. This provision was gradually extended by successive Bank Acts of the Dominion of Canada until by the Act of 1890 a bank was authorized to make loans to a "wholesale manufacturer of any goods upon the security of merchandise manufactured by him or procured for manufacture; to any wholesale purchaser or shipper of the products of agriculture, the forest, mines, likes, rivers, sea, or of live or dead stock, on the security of these, such security to be given in prescribed form and the banks to acquire the same rights as under a bill of

lading or warehouse receipt". In similar terms the Finance Act of 1914 empowered the Department of Finance to make advances of Dominion notes to banks on the security of "promissory notes and bills of exchange secured by documentary title to wheat and other commodities, or of notes and bills issued or drawn for agricultural, industrial or commercial purposes and which have been used or are to be used for such purposes."

The following typical "Contract with Customers
Representing Warehouse Receipts or Bills of Lading" reveals
the essential connection between the form of such a loan and
the purpose for which the credit is extended:-

"In consideration of the advances made by the Bank to the undersigned upon the security of warehouse receipts or bills of lading, the undersigned agrees with the Bank as follows:

The Bank may itself or by any agent... enter into and occupy and use all or any of the premises, buildings, plant and undertaking of the undersigned and possess and use all or any of the tools, machinery and equipment of the undersigned, any of which may be used by the undersigned in any manner in connection with any property covered by such warehouse receipt, bill of lading or security which may be given to the Bank by the undersigned, for the following purposes:

(2) To take and keep possession of such

property until the same is realized by sale:

(b) To complete the manufacture of such property or any process which, in the opinion of the Bank, will enable such property to be more advantageously realized;
(c) To manufacture or process any raw materials or other such property which in the opinion of the Bank will enable such property to be more advantageously realized;
(d) To sell, pack, ship or otherwise deal with such property in such manner as the Bank may think proper to enable such property to be realized."

To the banker such power over the security is a means of making the loan "safe"; to the credit analyst it signifies a method of relating the credit to the processing and distribution of the underlying goods. The theory of such loans to manufacturers, common carriers and merchants is that the funds are used to finance the manufacture and distribution of the current supply of raw materials up to the point of sale of the finished product by the final retailer. When credit is limited to loans of this type, the volume of fiat money is directly related to the volume of goods in course of manufacture and distribution to the market. Or, in other words, the volume of bank credit bears a direct relationship to what may be described as the barter total of the country. The new money also is at least partially offset by new form and place values added

by manufacture and distribution. And if each banker strictly limits his loans to normal inventory of the borrower, and insists on payment according to the normal course of the trade (i.e. within the normal period required for manufacture or transportation) the volume of bank credit outstanding can expand only in step with expansion in the current output of marketable goods and services. It is a corollary of the true commercial loan that expansion of capital equipment is to be financed not by bank credit but by savings, i.e. by the sum of existing money actually saved and earmarked for investment.

If it be accepted that the commercial loan is economically sound and a proper field for bank credit, while, for the same reasons, the loan on real property is unsound and wisely prohibited, it is pertinent to inquire whether the Bank Acts of the Dominion of Canada have applied the principle involved to other types of loans. The first Bank Act of the Dominion (1871) embodied the prohibition against loans on real property (contained in the original bank charter) in the following terms: "The bank shall not lend directly or indirectly upon the security of any mortgage or hypothecation of any lands; or of any ships, vessels, or of any goods, wares and merchandise, except as authorized by the Act."8 The inclusion of property in general with land in the prohibition was consistent with the principle outlined above. Ordinarily goods, wares and merchandise may be evaluated accurately and may be readily sold; but the objection to loans thereon, in the absence of a guarantee that the funds will be used for short-term productive purposes, applies equally. Although "liquid", such loans are

not "self-liquidating", i.e. there is no assurance that in the near-term future goods and services will be produced and sold, (a) to extinguish the credit, and (b) to provide meanwhile potential marketable values to offset the additional creditmoney.

Unfortunately the framers of the Act of 1871 did not, consistently with the above prohibition, limit the authorization to loans by way of discount or purchase of promissory notes and bills of exchange. The Act authorized loans on "the security of stocks, bonds and debentures of municipal and other corporations, and on public securities. An examination of this type of loan will reveal that the same economic objection applies. Perhaps the legislators and bankers were beguiled by the apparent liquidity of the security. It has been observed that such a test of bank loans is germane to the safety of the banks and depositors only; it does not touch the essential matter of the effect of the creation, expenditure and subsequent extinction of bank credit upon the economy as a whole. From the latter point of view, - to repeat - the test is: what relation, if any, exists between the form of the loan and the underlying security, and the use to which the funds will be put?

The trend of legislation as shown in revisions of the Bank Act since 1871 has been towards further neglect of this principle. The primary consideration of legislators has been the safety of the banks and the convenience of borrowers rather than the effects of bank credit on the economic system. In the most recent revision of the Act (1934) provisions were

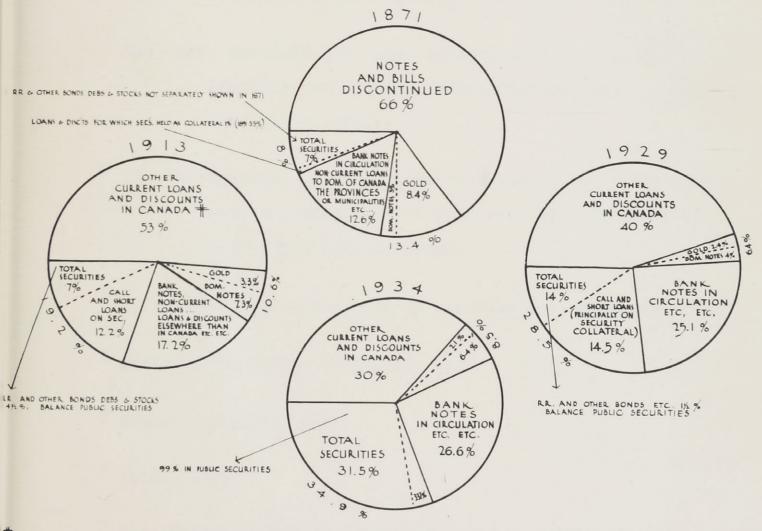
inserted authorizing loans "on standing timber or the licenses held by persons to cut such timber": loans to "a receiver under any Winding Up Act or the Bankruptcy Act on such security as may be authorized by any court of competent jurisdiction"; "advances for the building of vessels", etc. In framing bank legislation along such lines, the Parliament of Canada has been following the trend of legislation elsewhere. The League of Nations' "Report on Commercial Banks, 1925-1933" notes a trend away from legislation which "tends to encourage the use of short-term credit instruments, the prototype of which is the trade discount or commercial bill... Commercial bills (the Report continued) are largely based upon goods in process of production, and the expectation is that, as the goods move to a further stage of production, they will, in the normal economic process, be sold and thus permit repayment of the bank loan."

To complete the analysis of bank credit it might be desirable to consider the proper type of loan for financing by public authorities; the economic justification, if any, for seed loans, loans on live stock, etc. 12 It might be found that the only proper type of loan (or investment) in "public securities" is the temporary accommodation loan on Treasury bills in anticipation of tax collections or refunding in the savings market. The distinction between commercial banking and savings or investment banking is so clear-cut it seems unnecessary to pursue the matter in further detail. The more controversial issue is the effects of bank credit, in its character of fiat money, on the business system, - its

part as principal or contributing cause of the trade cycle.
This matter will be pursued in the following chapter.

CHART1

CANADA, IN RELATION TO GOLD AND DOMINION NOTE HOLDINGS, AND THE GROWTH OF NON-COMMERCIAL LOANS AND INVESTMENTS, AS A PROPORTION OF THE WHOLE



This classification, Notes and Bills Discounted, was changed after 1871, to include other loan items. Other Current Loans & Discounts therefore is not homogeneous with commercial loans

N.B. TOTALS ARE COMPILED FROM TABLES CONTAINED IN STATISTICAL CONTRIBUTIONS TO CANADIAN ECONOMIC HISTORY, VOL. 1. THE PERCENTAGES ARE APPROXIMATE *Curtis...C.A. Published under auspices Queen's University

FOOTNOTES TO CHAPTER III

- See the original Royal Charter in the Bank of Montreal, Head Office, Montreal, Canada.
- See: Amn. Economic Rev. Dec. 1934(?) Art. Speculation, Bank Liquidity and Prices, where the analysis is carried through in detail.
- ³ Cf. the speeches of bankers as reported in the daily press, and the statements of bank executive officers at the annual bank meetings.
- 3a A type of loan authorized by the Bank Act of Canada (1934).
- 4 Stats of the Prov. of Canada, 1859.
- 5 Stats of Canada, 1890.
- 6 Ibid., 1914.
- 7 See: Canadian Banking, Patterson (E.L.S.) 1932. Toronto. p.225.
- 8 Stats of Canada, 1871.
- 9 Ibid.
- 10 Stats of Canada, 1934.

FOOTNOTES TO CHAPTER III (continued)

- ll League of Nations, Report on Commercial Banks, 1925-1933, p. 7.
- 12 As authorized by the Bank Act of Canada (1934).

CHAPTER IV

Fiat Credit and Business Fluctuations

Attention has been directed in the preceding chapter to the fiat money character of bank credit. The compensatory values which arise from the employment of commercial loans and the natural limitation upon expansion which exists in the case of such loans has also been noted. Attention will now be directed to certain aspects of non-commercial loans.

The volume of non-commercial loans depends simply on rules of thumb of the banking system, - on legal or conventional restrictions such as reserve requirements, eligibility of collateral for rediscount, etc. These restrictions, being adventitious, bear no relation whatever to credit principles. The restrictions are varied from time to time according to the exigencies of the existing volume of money of account, i.e. according to the exigencies of the debt structure. For an illustration one has only to refer to the changes which have been made during recent years in reserve requirements and rediscount privileges under the Federal Reserve System of the United States or under terms of the Bank of Canada Act. Details of the changes introduced by the Bank of Canada Act will be discussed in a subsequent chapter.

The chart which follows page 22 depicts the growth of non-commercial loans over a period of years under the Canadian banking system. Investments in Dominion Government

and other public securities is the outstanding item of increase. It is obvious that credit so created bears no relation to the current output of the country, to what has been, - somewhat loosely but perhaps suggestively - described as the barter total at any given time. On the contrary such credit reflects expenditure by public authorities in excess of income. The bonds are evidences of debt; and bank "investment" in them represents pro tanto the creation of fiat money for purposes of meeting government deficits.

This type of fiat money bank loan, i.e. the bank investment in securities, public or otherwise, or the loan on securities, does not differ materially from other types of non-commercial loans. So far as the effects are concerned all types of non-commercial loans can be differentiated from the commercial loan under three headings, -

- (a) The use of the funds is not restricted to a purpose directly connected with the production and distribution of the current output of goods and services;
- (b) The new money is not potentially offset by the goods and services which will issue shortly from current production; and
- (c) The money will not necessarily be retired shortly out of proceeds of such production.

considered in another aspect the bank investment in securities or loan upon securities reveals that in practice the basis for credit creation is simply the definition of assets eligible for loans or bank investment. When bonds are

included: the more debt (i.e. evidence of past or anticipated consumption of wealth) the more good collateral there is for money creation: an endless chain. In the nature of things the only end is infinity. Infinity was almost reached in the post-war German inflation.

But the essence of inflation is not confined to inflation in its extreme manifestations. Meanings must be differentiated. In the literal sense inflation means simply an increase in the quantity of money. More frequently the term is used to denote the effect of such increase. In popular usage, inflation denotes that which is assumed to be the typical effect of an increase in the quantity of money, viz. a general price rise. The frequent assumption that inflation exists only when price indices are rising is the prolific cause of proposals for eliminating monetary influences by stabilizing some one or other of the price averages. 2 Certain of these proposals will be touched upon in a following chapter. In this chapter we are concerned with the effects of fiat money on the economy, whether or not at the time such fiat money is created and spent the quantity of money is increasing or decreasing. The usual condition is that fiat money is being continuously created as the result of private or public borrowing; but when existing credit, i.e. debt owed the bank, is being repaid, - as during a period of so-called deflation the net result in spite of fiat credit creation elsewhere may be a reduction in the quantity of money.

It is usual to think of fiat money as "printing press money" created to finance government expenditure in excess of

income. It is generally assumed that such expenditure will be principally for non-productive purposes. The "inflationary" effects of expenditure of the new money are feared because it is known that, - even if it does not lead to a general rise in prices - it will stimulate the prices and production of certain goods and services and therefore will alter the relationships between the production, consumption, prices and costs of production of the whole series of goods and services. In other words what is feared as the result of fiat money expenditure is the creation of a boom along certain lines so upsetting to the balance of production and consumption in the economy as a whole as to lead eventually to a general depression. It may also be feared that given certain circumstances the expenditure of fiat money will be continued until general confidence in money is destroyed.

expenditure are based upon experience. What is generally not realized is that there is the rational basis for such anticipations and that the implications thereof for the functioning of the economic system as a whole are most important. In an economy based on private property, and division of labour, and free exercise of economic activity, market prices constitute the integrating factor. If there is introduced into the market a money demand emanating from some source other than production of goods and services there will be present an extraneous force to divert prices from what otherwise would be their barter relationships. In affecting market prices flat money demand will also alter the relation of costs of

production to prices, i.e. will change profit margins. Whatever alters the outlook for profits tends to direct the employment of resources. To the extent that expenditure of fiat money has increased the profitability of certain lines, additional resources will be attracted to those lines. If the receipts of producers in the less profitable lines are not sufficient to enable them to acquire their usual amount of the output of the more profitable lines, or if the direction of expenditure of the fiat money shifts, overproduction in the expanded lines ensues. Overproduction means reduced sales or price-cutting; both of which result in reduced profits. If demand at the anticipated price has fallen far short of expectation a condition of no-profit or loss will soon be reached. The upshot will be general curtailment of production.

To recapitulate: - The condition of general overproduction, "depression", is a condition of all-round lack of
profitability at prevailing prices brought about by the expenditure of fiat money. Fiat money induces, first, anticipation of increased profit in those lines in which the money is
spent; second, stimulation of production in those lines; third,
relatively increased costs and narrow profit margins in other
lines; fourth, inability of producers in those other lines to
purchase that amount of the output of the stimulated lines
which they have previously purchased; and lastly, a collapse
in the market for the stimulated lines with the result of
curtailments of production there and of purchases from other
lines interacting on demand, prices and profits throughout
the economy.

It is demonstrable that fiat money is a sufficient cause of such a result. No matter how small the sum spent it will tend to produce this result. According to the circumstances the result will follow in a shorter or a longer time. Two sets of circumstances may be conceived. First, a condition of general depression, i.e. a condition where there is widespread unemployment of resources due to an all-round lack of profitability at the prevailing prices and volume of sales. What will be the effect of the expenditure of fiat money in such circumstances? (a) If inventories in most lines are large in relation to current sales and the primary concern is to reduce inventories the effects will be shown principally in reduction of stock of goods rather than in reemployment of resources. (b) If existing stock of goods is small in relation to demand in certain lines and expenditure of the fiat money is concentrated in those lines the effect will be to create isolated profitability in those lines and an aggravated inability of producers in other lines to obtain their share of that output. (c) If stocks are generally small in relation to current demand the effects on all-round profitability and employment of resources will depend on how much fiat money is expended and how widely its expenditure is distributed. Conceivably enough may be spent widely enough to cause full employment of resources, - unless in the process the special incidence of fiat money in certain markets leads to a shifting of resources and a premature condition of unbalances prices and profits.

The second set of circumstances are those in which resources are fully or almost fully employed in a condition of all-round or nearly all-round profitability. (d) Fiat money expenditure in such circumstances can have only one outcome: as a result of its effects through price changes on the distribution of the available supply of goods and services it will lead rapidly to changes in the costs of production of certain producers and development of the sequence outlined at the beginning of this analysis.

There remain to be considered certain incidental aspects of the injection of fiat money into the system. fiat money does not originate through the employment of labour and the production of goods it is not self-sustaining. Since it does not reproduce something to offset itself, it is in its nature discontinuous. It depends for its continuous creation and expenditure on (a) the prospect for profitable employment of additional funds by individual producers, or (b) the willingness of banks to take a chance by financing unprofitable expenditure such as consumer instalment purchase, or (c) the fiat of the government. In no case is it possible to foretell what channels the expenditure of the fiat money will follow, or whether it will be continued or not, because it springs from no regular economic activity. Regardless of whether it is continued, or whether it is continued at the same rate or at an accelerated or de-accelerated rate, its results are certain: boom more or less widespread followed by depression more or less severe. The timing depends on the

surrounding circumstances, in particular on those circumstances which relate to the conditions of profitability in industry at the given time.

CHAPTER V

Secular Significance of Fiat Credit

If the contention of the preceding chapters is valid and the typical processes of the credit system as it exists today result in the creation of fiat money entailing repeated booms and depressions as a consequence, what is the long term significance of credit for the economic order?

It is obvious that credit results in the valorization of assets, often intangible, which would otherwise have no ready sales value in the market. A single example will suffice:-A business promoter obtains an option to purchase a water power site. He calculates the cost of developing and transmitting the power to an adjacent market. His resources are inadequate to cover either the cost of purchase of the site or the cost of development. But if he canvasses the investment banking firms an "underwriter" may be found who will devise a scheme whereby an issue of bonds will be floated to cover the purchase price of the site, and an issue of stocks to provide funds for equipment and working capital. The investment banker will borrow a percentage of the face value of the bonds from the bank (chartered bank). The promoter will receive the means to make the initial payment for the site, and his "credit" being established he will enter into a contract with an engineering firm for construction of the plant. The underwriter simultaneously will make a public offering of the bonds and stock for "investment". If the issue is a success, i.e. if it is fully or
almost fully "distributed", the bank loan to the underwriter
on the security of the bond issue will be repaid.

In the course of distribution of the securities some of the purchasers will have paid for their bonds or stock outright, others will have obtained a loan for part of the purchase price by pledging their certificates with a bank either directly or through an intermediary bond or stock broker. The percentage of the capital which was provided by outright purchasers and by down payments of margin purchasers does not necessarily represent real savings withdrawn from the total fund of money. Since the process of fiat money creation through the banking system is continuous it is impossible to designate a particular accumulation in the hands of an individual as savings. It may represent savings so far as the income and expenditure of the particular individual is concerned but not savings so far as the community The bank balance which stood in the name of the is concerned. individual investor may have had its origin in the extension of a fiat money loan. It may have reached him as the result of a payment made in the course of expenditure of the proceeds of that fiat money loan. Considered thus, from the long term point of view, fiat credit has deprived the words "saving" and "investment" of their literal significance. Recognition of this fact renders unrealistic those discussions which centre round proposals for mitigating trade fluctuations by equating investment to savings.2

The example just offered of the financing of a new

investment project illustrates what is perhaps the principal long term significance of fiat credit for the economy as a whole. By using credit to mobilize purchasing power it becomes possible in times of general trade profitability to greatly extend capital equipment. The incentive to expand is present and the means are available in the fiat money banking system. But the very process of expansion, involving as it does the use of fiat money, is the process which creates boom and depression. During the boom phase benefits are conferred on certain sections of the community, - in particular on those who directly participate in the increased activity of the industries which are stimulated by the fiat money expenditure. Indeed the whole community, or virtually the whole community, may for a time be somewhat better off. But when the boom breaks and general depression sets in the costs of fiat money expansion are assessed not against the community at large, but against certain individuals and groups within the community in varying "inequitable" degrees. The loss of income to those who benefited least during the period of expanding trade may be greater than the loss incurred by those who benefited most. A special loss amounting in some cases to expropriation is suffered by certain groups of producers and by certain classes of income-receivers. In the conditions of unprofitability which characterize a period of general trade depression it becomes a race against time for many producers, - small business men and large, farmers in debt, etc. - to remain solvent. Bankruptcy deprives insolvent individuals and corporations

not only of immediate income but of the property which provides the means for future subsistence. In these circumstances access to credit is most important. The banks often are induced to support those enterprises in which they are heavily committed by granting further credit to carry inventories, etc.; and the government is often persuaded to provide "relief", easy credit or grant mortatoria for certain groups with political influence. One class, - that traditionally described as the lower middle class, which includes the so-called white collar workers, the petty rentiers, and the less well-to-do professional people - frequently finds itself without access to banking or government support.

Apart from the special hardship suffered by certain groups during the depression, an important long and short term effect of the inflation of money is the shifting of ownership of property which takes place during both boom and depression.

(a) During the expansion phase the increase in money may continue to the point where loss of confidence in money sets in and a general movement to get rid of money and acquire property occurs. In that event the outcome will be, as in postwar Germany, the complete impoverishment of all or virtually all of the so-called middle class, and the relative enrichment of a few only of the "capitalist class" who have managed to retain a share in the ownership of industrial or trading corporations or executive position therein. The position of the agriculturists as a group may not be changed. (b) During the expansion phase, where the increase in money does not continue

to the point of loss of confidence in money a partial shifting of ownership of property occurs as a result of the special benefits conferred on promoters, producers and employees in the lines benefited by the fiat money expenditure.

(c) During the contraction phase, - the phase of liquidation of credit and readjustment of costs and prices to a new basis of profitability - further shifting occurs, the directions and incidence of which depend on a number of factors such as access to credit, cash reserves (which often afford an opportunity to acquire property at bargain prices), the length of the depression, etc., which determine whether debts can be sustained, i.e. interest payments continued, and receivership avoided.

In the effort to sustain debts, governmental and private, devices are often resorted to which in effect amount to partial repudiation. For example the interest rate is manipulated. "Voluntary" conversions are sponsored by the government, eventually also by private debtors, which force creditors to accept a reduction in income. Since the quantity of money is not limited the interest rate is a fiction. It need be no higher than the average rate which will enable the banks to pay their operating expenses. And when the government embarks on banking it need not be anything at all, a bonus in fact may be paid (as in effect has been done in the United States in recent years) to induce borrowers to borrow. Thus the rentier, who incurs a risk of loss as the result of the receivership of debtors during the depression, is also exposed as the result of the exigencies of government finance to the

risk of expropriation.

This generation in Canada has yet to experience the extreme type of inflation which was experienced in certain countries of Europe after the war. Yet the hardships suffered by certain groups and classes in Canada in the last twenty years have been only somewhat less in degree. The costs of inflation usually are assessed not as the result of the rise in prices which attends extreme inflation, but as a consequence of all the shifts and adjustments which occur throughout the entire process. And the important point is that the effects of inflation are cumulative, i.e. they are carried forward from one boom-depression to another.

FOOTNOTES TO CHAPTER V

Thus fiat money shifts the economic and social basis of politics. By undermining the position of the middle classes it removes the principal prop of liberal institutions. The politically organized groups and classes that remain from fascist through socialist to communist become, perhaps inevitably so, totalitarian. Fiat money is thus destructive of democracy, if by democracy is meant a form and practice of government which preserves those individual rights and liberties which are guaranteed by the common law of England and the Constitution of the United States.

CHAPTER VI

Value under Fiat Credit

Up to this point in the analysis of credit no particular reference has been made to the determinants of value under the credit system. Sufficient has been said, however, to indicate that under the system value bears no relation to that which is popularly regarded as the money, viz. gold.

Under a credit system gold is not the money, and prices are not "gold prices". Under a monetary regime governed by the rules of the "gold standard", gold serves a special purpose in the functioning of the credit mechanism. But whether a country is on the gold standard, or off the gold standard, with a fiat money bank credit system values and prices are determined through the agency of credit, and not by reference to the stock of monetary gold.

In the present-day world values are calculated and stated in terms of an abstract unit. That unit is the unit of the money of account. It is immaterial whether it is called "£ currency", dollar, £ sterling, mark or franc. What "dollar" denotes never occurs to the people using it. It is accepted as uncritically as any other device in common usage, (just as uncritically as the number 1, "unity", is accepted for example). In spite of the theoretical basis of gold, the

money in which values are expressed is but unit or units of money of account recorded as a book entry somewhere and given the force and effect of money through the mechanism of the credit system. At the centre of the credit system stand the banks, in the background the financial department of the government, the "treasury", and supporting the whole is the government itself.

It is, then, because of valuations made by individuals in terms of abstract money without reference to the existing stock of gold that value originates. The valuations which are placed upon all sorts of things, tangible and intangible, by business men and traders who have access to credit become the basis for a corresponding issue of money (bank deposits), and as a consequence these individual valuations acquire the character of real values in the market place. The process is, first, abstract valuation by dealers in conformity with the existing or anticipated range or scale of values, and, second, materialization of these valuations through the processes of the credit system, i.e. valorization of the assets concerned by means of bank credit.

To recapitulate: Value is or exists because of numerical valuations placed upon objects by organized producers and dealers; it depends for its existence upon the fact of the particular valuations being recognized as the basis for credit by the bankers of the banking centre of a country or by the officials of a competent department of the government, (such as the Reconstruction Finance Corporation of the United States.) - "The money market has become the centre of values,"

from it there flows "a stream of money-values to infuse, intellectualize and command the stream of goods".

What function, if any, is served by gold in this Under the gold standard all credits theoretically are convertible into gold on demand. Except for the merest fraction, conversion has always been a practical impossibility. The theory that conversion could be guaranteed arose because people normally demanded gold only when by so doing they could effect payment of a debt in foreign currency at a cheaper rate in terms of bank money than was possible by purchasing "foreign exchange" (foreign money) from an exchange dealer. If the balance of foreign payments went strongly against a country the banks (with consent of the government) were "forced" to suspend cash (i.e. gold) payments. Suspension invariably occurred before the gold stock was entirely exhausted. history of the Bank of England is replete with instances. 2 In special circumstances the suspension has been occasioned by a demand for gold which did not originate from the necessity for making foreign payments. The demand occurred because of a lack of confidence in money itself, either that of the country concerned or that of another country. Gold was then sought as a "store of value", because it was known that gold is the one universally acceptable international means of payment. That is to say gold was and is a more acceptable exchange commodity in international trade than wheat or any other commodity of universal use. In the final analysis this is so only because the value of the money (credit money) of any

country depends upon the maintenance of "sound" economic and credit conditions in that country. When these conditions are lacking, gold is preferred to money. The question why gold is universally regarded as a commodity of relatively indestructible value is a question which can be answered only in the same fashion that such questions as, why people use the mathematical system of Descartes, or the physical system of Newton, are answerable. The short answer is: because it suits their purpose best.

While gold serves in international trade as means of payment, it is not a national or international money except in the limited sense defined in Chapter I, i.e. in the sense of a physical money, - like coins - which is subsidiary to the abstract money. The best evidence that gold is not money, evidence which should abuse the mind of the idea once and for all - is that when the structure of credit is built to the point where it cannot, even plausibly, be supported by gold, either the reserve requirements are drastically reduced or the definition of reserves is extended to include other things along with gold, or finally the value of gold itself is increased. How could the value of gold be increased in terms of itself? - Sterilization of gold and desterilization, like devaluation, signify only changes in the regulations regarding the maximum amount of money (credit) which the banking system is authorized to create at any given time.

Although gold is not money, - except in the limited sense explained in Chapter I, - under the gold standard it serves a special function in the credit system. In the last

century gold constituted the principal reserves of the banking The rule of banking which required a minimum reserve against deposits meant in effect that total deposits were limited to a certain multiple of the bank reserve in gold, gold being taken at the valuation in terms of money of account which at that time was placed upon it by the government of the country concerned. This meant that when the expansion of credit had reached the point, or approximately the point, permitted by reserve requirements additional loans or investments had to be refused. As the margin of safety would then be small and might easily be impaired by demands for gold to effect foreign payments or for hoarding purposes, certain devices aimed at improving the ratio of gold deposits were usually resorted to. Where a "central bank" existed the discount rate might be raised, - that is to say the rate of interest, deducted by way of discount, at which approved collateral would be accepted from other banks as a basis for central bank credit would be increased. Or the central bank and/or the other banks might sell "investments" in the open market, i.e. sell securities on the stock exchange and thus redeem deposits from the public. If these devices failed the banks might consider it advisable to call for the repayment of loans. In this manner the depression phase was often precipitated "prematurely" by the limitations which were placed on the expansion of credit by rules of the gold standard. But the gold standard did not prevent inflation of credit, i.e. issue of fiat money, nor therefor was it the cause of depression. Depression would have occurred in any

case as the result of the maladjustments occasioned by the issue of fiat credit, even if it occurred at a later date and after more severe maladjustments had taken place.

While the rules of the gold standard did not touch the essential matter of fiat credit it was a clear advantage of those rules that in placing a maximum limit upon expansion of credit and leading to at least a partial contraction of credit as the maximum was approached, the adjustment of prices and costs in the depression phase was hastened. Whenever the maximum was reached or nearly reached it became impossible to facilitate either (a) further development of the boom by further issue of fiat credit, or (b) prolongation of the depression by providing the means (credit) to enable producers and dealers to hold their stocks of goods off the market. The limited calling of loans which usually supervened when the depression set in tended to encourage the price-cutting and liquidation of inventories which pave the way for a new "adjusted" price range on the basis of which the various goods and services can be exchanged against each other. This encouragement to flexibility of prices likewise tended to induce prompt adjustment of costs to the new price-volume levels. Some producers in each line would increase volume by reducing prices, and being in a position to offer increased employment at lowered wage rates and increased purchases of raw materials at concessions, would, if their offers were accepted, find a new basis of profitability. The movement to reduce costs, gaining momentum, would result shortly in the re-establishment of a condition of profitability for the

majority of producers in every important line. Production and trade would then revive.

But under a non-gold standard the limits to expansion are not inflexible, and pressure to relax them is so great that credit restriction never comes into play except as a result of deliberate "policy". Recent experience has shown that the usual procedure is to relax restriction and encourage expansion of credit as soon as depression sets in. The result is that additional credit is used both to finance the holding of goods off the market, and to provide additional working capital to enable producers to continue production at an uneconomic cost. The idea is encouraged that wages and other long or short term contract costs need not be reduced in accordance with the lower raw material prices and the lower prices for finished goods at which volume sales can be effected. The resultant condition is that described in Chapter IV, page 28, under the headings (a), (b) and (c). Briefly: "management" of credit under the non-gold standard tends to result in prolongation of the depression or to cause abortive temporary revival of the boom followed by deeper depression.

FOOTNOTES TO CHAPTER VI

- Oswald Spengler, Decline of the West, vol. ii. p. 483, 1932. New York.
- 2 See: A. Andréadès, History of the Bank of England. 2nd ed. 1924. London.

CHAPTER VII

Control of Fiat Credit

sidered the position of the Bank of Canada in the credit system of the country and the function of control which is exercised by the Bank over credit. The objectives of credit control which were envisaged for the Bank are set forth in the preamble to the Act of incorporation:- "Whereas it is desirable to establish a central bank in Canada" (a) "to regulate credit and currency in the best interests of the economic life of the nation," (b) "to control and protect the external value of the national monetary unit," and (c) "to mitigate by its influence fluctuations in the general level of production, trade, prices and employment, so far as may be possible within the scope of monetary action, and generally to promote the economic and financial welfare of the Dominion: Therefore, His Majesty by and with.... etc. enacts as follows..."

The means for the control of credit which were made available by the Act are, viz-

First, reserves: the bank shall maintain a reserve consisting of gold coin and bullion to an amount not less than 25% of the note and deposit liabilities of the Bank. At the request of the Bank the government without

the sanction of parliament may suspend this requirement for a period not exceeding one year.

- Second, every chartered bank shall maintain a reserve consisting of Bank of Canada notes and/or a deposit with the Bank to an amount not less than 5% of its deposit liabilities in Canada.
- Third, "for the purpose of its open market operations"

 (see Chapter VI of this paper) the Bank may

 buy and sell from any person inside or outside

 Canada the following types of securities -
 - (1) Bills of exchange and promissory notes endorsed by a chartered bank, issued in connection with the production or marketing of goods, wares and merchandise and having a maturity not exceeding three months.
 - (2) Bills and notes issued in connection with the production and marketing of products of agriculture, the forest, and mine, or the sea, lakes and rivers having a maturity not exceeding six months.
 - (3) Short term securities issued or guaranteed by the Dominion of Canada or any province having a maturity not exceeding two years from the date of acquisition, and short term securities of the United Kingdom, any British Dominion, the United States, or France having a maturity not exceeding six

months from date of acquisition.

- (4) Long term securities of the Dominion of Canada or any province to an amount not exceeding \$15,000,000; and long term securities of the United Kingdom, etc. to an amount not exceeding \$2,500,000.
- (5) Gold and silver, foreign exchange, trade acceptances, bankers' drafts and acceptances, and bills drawn in or on places outside of Canada having a maturity not exceeding three months.

Fourth, the Bank may make loans and grant advances -

- (1) To chartered banks for periods not exceeding six months on the security of any of the above mentioned things or the hypothecation of Canadian municipal securities.
- (2) To Dominion and Provincial governments for periods not exceeding six months on the hypothecation of any of their "readily marketable securities", and unsecured loans for similar periods in specified limited amounts.

Fifth, the Bank may not make loans or otherwise grant advances by -

- (1) Purchasing its own stock or making loans thereon;
- (2) Making loans on the security of real or immovable property;

- (3) Making loans without security, except as specifically authorized;
- (4) Accepting deposits at interest;
- (5) Extending the maturity of bills, notes or similar documents purchased by, or discounted, or pledged to the Bank.²

Two questions immediately arise: (A) Are the powers given to the Bank consistent with the objectives set forth in the preamble? (B) Are the objectives consistent with the general purpose of promoting the economic and financial welfare of the Dominion?

The foregoing powers, and limitations thereof, constitute the same sort of credit creating ability and disability conferred upon the chartered banks by the general banking legislation of Canada. The special technique of control through reserves, open market operations, and the rate of interest at which the discount privileges are made available to the chartered banks, are typical of central banking powers When the gold standard is suspended, i.e. when the privilege of converting deposits into gold on demand is denied, reserve requirements have little significance because in practice the reserves will be so defined that ample margin This point was discussed in detail in the preceding Open market operations and discount privileges also are of little significance so far as any genuine control of the quantity of credit is concerned. This point too was touched upon in the preceding chapter.

Without going into the matter in extenso it may be

observed that the powers of the Bank of Canada, to some extent at least, are consistent with realization of the first objective, viz: the control of the external value of the national monetary unit. But they are not at all consistent with the second objective, i.e. the mitigation of fluctuations in the general level of production, trade, prices and employment. Therefore it may be assumed that the powers are inadequate to the attainment of the general objective of promoting the economic and financial welfare of the Dominion.

The analysis of credit and banking which preceded this chapter tended to establish the proposition that fiat credit is the sufficient cause of fluctuations in production, trade and employment. If this be accepted, then the real question of the effectiveness of Bank of Canada control of credit is the question whether such control tends to eliminate fiat money expenditure from the system. The answer is: the powers and techniques provided are not conducive to that end.

B. From the wording of the preamble to the Bank of Canada Act it is apparent that there exists a certain confusion of ideas as to the criteria of economic stability. It is implied that stability of the general level of prices is, along with other things, a proper criterion. This idea rests on "the assumption that inflation exists only when price indices are rising." But recognition of the fact that fluctuations inter se induced by the expenditure of fiat money may be of more importance to the relationships upon which economic stability depends than fluctuations of the average, deprives

this assumption of any validity. Fluctuations of the average have a special significance with reference to the burden of debts; that special significance however must not be confused with the general significance of the average as an alleged criterion of inflation.

Neither is stability of production nor stability of employment (nor any other partial or particularized stability within the economic order) necessarily a criterion of economic stability. 10 All such ideas are based on an assumption that there is a causal relationship between fluctuations in the quantity of money and fluctuations in various economic series or indices. Apart from the statistical impracticability of demonstrating the relation of cause and effect, the probabilities are on the opposite side. The volume of bank deposits frequently does not vary greatly between the peak of the boom and the trough of the depression. The fact is that the volume of money of a country is like the working capital of a company: in conditions of general unprofitability of trade, while the working capital exists, it is not actively turned over. Turnover of working capital or velocity of money are indices of trade activity; therefore a criterion of credit control which aims at stabilizing trade by stabilizing money times velocity of 12 turnover in any given period is dealing with effects not causes.

But the principal criticism which can be levelled against those schemes for controlling credit which would adjust credit to fluctuations in particular economic series is that they approach the problem of credit from the quantitative point

of view rather than the qualitative point of view. The fiat money character of bank credit renders it essential to approach the question from the qualitative point of view; and the objective must be the elimination, so far as is practical, - to the extent at least of restricting bank credit to the true commercial type of loan - of the disturbing influences occasioned by fiat money expenditure. This is the sine qua non for mitigation of trade fluctuations. Unfortunately the "art of central banking" which appears to have been but rule of thumb has been supplanted by an art of political money management also rule of thumb and equally detached from the real issues of credit.

FOOTNOTES TO CHAPTER VIT

- 1 24-25 Geo. V. Ch. 43.
- ² This summary of powers is not in the exact wording or order of the Act, but it contains the gist of the powers.
- ³ Cf. the Federal Reserve Act of the United States and the traditional procedure of the Bank of England.

 See: Andreades, op. cit.
- 4 Cf. the recent changes in the reserve requirements of the U.S. banking system.
- ⁵ pp. 40, 43 supra.
- 6 p. 41 supra.
- As the Bank has power to purchase foreign exchange and gold bullion it can maintain a reserve to satisfy the demands which are made on the chartered banks for foreign means of payment, and thus adjust the supply to the demand at the rates which it considers desirable. But if the foreign balance of payments goes strongly against Canada and our output of gold does not offset, the power of the Bank to control the external value of the Canadian dollar will be impaired.

FOOTNOTES TO CHAPTER VII (Continued)

- 8 p. 27 supra.
- 9 See p. 2 supra.
- The indices proposed by the stabilizers are legion. cf.

 Keynes' equating of investment to savings, and

 see p. 31 supra.
- 11 E.g. the volume of bank deposits in the U.S. Jan. 1, 1938 compared with the volumes Jan. 1, 1937 or Jan. 1, 1929.
- 12 Irving Fisher's formula has been the cause of more monetary confusion than any other single idea offered by an economist.

BIBLIOGRAPHY

A. Primary Sources.

- Documents relating to Currency, Exchange and Finance in Nova

 Scotia, 1675-1758: Canada Public Archives. Edit: Shortt (A.)

 1933. Ottawa.
- Royal Charter to the President, Directors and Company of the Bank of Montreal (1822) Head Office, Bank of Montreal, Montreal, Que.
- Pamphlets on Money and Banking: Canada Public Archives, Ottawa, Ont.
- Pamphlets on Money and Banking: Provincial Archives, Halifax, N.S.
- Statutes relating to Currency and Banking of Nova Scotia and the Provinces of Canada to 1867.
- The Uniform Currency Act of Canada, 1871.
- The Bank Acts of Canada, 1871 and subsequent revisions. Especially the last revision, 1934.
- The Bank of Canada Act, 1934.
- Statistical Contributions to Canadian Economic History, Vol. I: Statistics of Banking. Curtis (C.A.) 1931. Toronto.

B. Secondary Materials.

- (Items of particular interest are marked with an asterisk, and an explanatory note added.)
- Academy of Political Science, March 1934: Money and Credit in the Recovery Program.
- Allen (R.G.D.), Some Observations on the Theory and Practice of Index Numbers: Review of Economic Studies, October 1935.
- Anderson (B.M.), The Value of Money, 1917, New York.
- * _____, The Chase Economic Bulletin, The Chase National Bank,

 New York City. See index: The best short articles on the

 practice of Banking with theoretical criticisms.
- * Andréadès (A.), History of the Bank of England, 1640 to 1903, 2nd ed. 1924, London -- The standard history of the Bank of England.
- Angell (J.W.) and Ficek (K.F.), The Expansion of Bank Credit, Journal of Political Economy, February and April, 1933.
- Barger, Neutral Money and the Trade Cycle. Economica, 1935.
- Beckhart (B.H.), The Discount Policy of the Federal Reserve System, New York, 1924.
- , The New York Money Market, New York, 1932.
- Bisschop (W.R.), The Rise of the London Money Market. London. 1910.

- Breckenridge (R.M.), History of Banking in Canada. National Monetary Commission. Washington. 1910.
- Canadian Institute of International Affairs: Can. Economy and its Problems. Part II, Central Banking in Canada. Toronto. 1934.
- Cassel (G.), The Crisis in the World's Monetary System. New York. 1932.
- Cheminant (K. Le), Colonial and Foreign Banking Systems, 2nd ed. London. 1931.
- Clark (J.M.), Strategic Factors in Business Cycles. New York. 1934.
- Cobbett (Wm.), Paper against Gold, etc.
- Cole (G.D.H.) et al., What Everybody Wants to Know about Money.

 London. 1933.
- * Colwell (S.), The Ways and Means of Payment. Philadelphia. 1859.-An invaluable treatise on money and credit. Well written.

 Unaccountably out of print. Copy in the library at McGill

 University.
- Currie (1.), The Supply and Control of Money in the United States.

 Cambridge (Mass.) 1935.
- Curtis (C.A.), Canada and the Gold Standard. Queen's Univ. Quarterly, 1931.
- Douglas (P.H.), Controlling Depressions. New York. 1935.

- * Dunkman (W.E.), Qualitative Credit Control. New York. 1933. -An excellent analystical work drawing inspiration from Colwell's
 "Ways and Means".
- Durbin (E.F.M.), Purchasing Power and Trade Depression. London. 1933.

 Edie (L.D.), The Banks and Prosperity. New York. 1913.
- Edwards (D.S.), A Critical Study of Gold Reserves and an Outline of a Proposed Monetary System for the British Empire. London. 1933
- Eitemann, Speculation, Bank Liquidity and Prices. American Economic Review, Dec. 1914.
- Esquerré (F.J.), Applied Theory of Accounts. New York. 1914.
- Falconridge (J.D.), Canada: Law of Banking.
- * Feavearyear (A.E.), The Pound Sterling: a History of English Money. Oxford. 1931. -- The standard history of the pound sterling. A model for historical research.
- Fisher (I.), The Purchasing Power of Money. New York. 1913.
- , Booms and Depressions: Some First Principles. New York. 1932.
- ____, Stable Money: A History of the Movement. New York. 1934.
- Foster (W.T.) and Catchings (W.), Money. New York. 1923.
- ____, Profits, New York. 1925.
- Greidanus, The Value of Money. 1932.

- * Habeler, (G. von), Prosperity and Depression. League of Nations. Geneva. 1937. -- Perhaps the fairest description of the present state of trade cycle theory.
- Hansen (A.H.), Business Cycle Theory: Its Development and Present Status. New York. 1927.
- Hardy (C.O.), Credit Policies of the Federal Reserve System.

 The Brookings Institution. Washington. 1932.
- _____, The Warren-Pearson Price Theory. Do, 1935.
- Harris (S.E.), Twenty Years of Federal Reserve Policy.
 Cambridge (Mass.). 1933.
- Harrod (R.F.), The Expansion of Credit in a Progressive Community.

 Economica, 1935 and 1936.
- Harwood (E.C.), Cause and Control of the Business Cycle. Boston. 1932.
- Hawtrey (R.G.), Currency and Credit. 2nd ed. London. 1923.
- ____, The Art of Central Banking. New York. 1932.
- _____, The Gold Standard in Theory and Practice. 3rd ed., New York,
- , Trade Depression and the Way Out. New York. 1933.
- Hayek (F.A. von), Monetary Theory and the Trade Cycle, New York. 1933.

- Hicks, The Theory of Uncertainty of Profit. Economica, 1931.

 See also Economica, 1935.
- Hobson (J.A.), Gold, Prices and Wages. London, 1913.
- ____, The Economics of Unemployment. London. 1922.
- International Chamber of Commerce: Inter'l. Economic Reconstruction.

 Carnegie Endowment. Paris. 1936.
- Jevons (W.S.), Money and the Mechanism of Exchange. New York. 1903.
- Johnson (F.J.), The Canadian Banking System. National Monetary Commission. Washington.
- Kemmerer (E.W.), Kemmerer on Money, 2nd ed. Philadelphia. 1934.
- Keynes (J.M.), A Treatise on Money. New York. 1930.
- _____, The General Theory of Employment, Interest and Money. New York. 1936.
- Kinder (F.S.), Effects of Changes in Monetary Standards on Distribution of Wealth.
- Kjellstrom (E.T.H.), Managed Money: The Experience of Sweden.

 New York. 1934.
- Knight (F.H.), Risk, Uncertainty and Profit. New York. 1921.
- Kuznets (S.), Cyclical Fluctuations. New York. 1926.
- Laughlin (J.L.), A New Exposition of Money, Credit and Prices.

 Chicago. 1931.

- Lavington (F.), The English Capital Market. London. 1921.
- ____, The Trade Cycle. London. 1922.
- Lawrence (J.S.), The Stabilization of Prices. New York. 1928.
- Layton (Sir W.T.) and Crowther (G.), An introduction to the Study of Prices. London. 1935.
- League of Nations, Economic Intelligence Service: Commercial Banks
 1929-1934. Geneva. 1935.
- Lehfeldt (R.A.), Money.
- MacFie (A.L.), Theories of the Trade Cycle. London. 1934.
- MacGregor (D.H.), Enterprise, Purpose and Profit. Oxford. 1934.
- Marshall (A.), Money, Credit and Prices. London. 1923.
- Mill (J.S.), Principles of Political Economy, Ashley ed., London. 1923.
- Mills (F.C.), The Behavior of Prices. National Bureau of Economic Research. New York. 1927.
- Mises (L. von), The Theory of Money and Credit. New York. 1935.
- Mitchell (W.C.), Business Cycles: The Problem and its Setting.

 Nat. Bureau of Economic Research. New York. 1927.
- Mlynarski (F.), The Functioning of the Gold Standard. League of Nations. Geneva. 1931.

- Moulton (H.G.), Income and Economic Progress. The Brookings Institution. Washington. 1935.
- Palgrave (R.H.I.), Dictionary of Political Economy, London, 1919.
- * Patterson (E.L.S.), Canadian Banking. Toronto 1932. -- A Manual of Canadian Banking practice.
- Paslovsky (L.), Current Monetary Issues. The Brookings Institution.
 Washington. 1933.
- Peake (E.G.), An Academic Study of Some Money Markets and other Statistics. 2nd ed. London. 1926.
- Phillips (C.A.), Bank Credit. New York. 1920.
- Phillips (C.A.) McManus (T.F.) and Nelson (R.W.), Banking and the Business Cycle. New York. 1937.
- Pigou (A.C.), Industrial Fluctuations, 2nd ed. London. 1929.
- ____, The Theory of Unemployment. London. 1933.
- Prendergast (W.A.) and Steiner (W.H.), Credit and Its Uses.

 New York. 1931.
- Reed (H.L.), Federal Reserve Policy, 1921-1930. New York. 1930.
- Riefler (W.W.), Money Rates and Money Markets in the United States.

 New York. 1930.
- * Richards (R.D.), The Barly History of English Banking. -Fundamental to a study of the origins of Banking.

- Robbins (L.), The Nature and Significance of Economic Science.
- ____, The Great Depression. London. 1934.
- Robertson (D.H.), Banking Policy and the Price Level. 3rd ed. London. 1932.
- ____, Money. 2nd ed. New York. 1929.
- Rogers (T.), First Nine Years of the Bank of England.
- Royal Institute of International Affairs: The International Gold Problem. London. 1932.
- Salter (Sir A.), Recovery, The Second Effort. New York. 1932.
- Schluster (W.C.), Credit Analysis. New York. 1925.
- Scott (W.R.), The Financing of Joint-Stock Companies.
- Shaw (W.A.), The Theory and Principles of Central Banking. London. 1930.
- Shortt (A.), Early History of Canadian Banking. Journal of the Can. Bankers' Assoc. 1896-7.
- _____, Canada and its Provinces, vols. 4 & 5: Currency and Banking.
- Slichter (S.), Towards Stability. New York. 1934.
- Spahr (W.E.), The Federal Reserve System and the Control of Credit.

 New York. 1931.
- *Spengler (0.), The Decline of the West. Vol.2. Chap. 13: Money.

 One-volume ed. New York 1932 -- A summation of the

- significance of the work of the German school of historical economists.
- Sprague (0.M.W.), Price Stabilization. American Ecnomic Review, Supplement, March 1929.
- Stamp (Sir J.), Papers on Gold and the Price Level. London. 1931.
- Steiner (W.H.), The Mechanism of Commercial Credit. New York. 1922.
- Strong (B.), Interpretations of Federal Reserve Policy. New York.
 1930.
- St. Clair (0.), The Physiology of Credit and of Money. London. 1919.
- Terbutt (A.R.), The Behavior of Consumption in Depression. Harvard Bureau of Business Research. Boston. 1933.
- Thorton (H.), An Enquiry into the Nature and Effects of the Paper Credit of Great Britain. Scarce and Valuable Tracts on Paper Currency and Banking. London. 1857.
- Tregoe (J.H.), Credit and its Management. New York. 1930.
- Truptil, British Banks and the London Money Market.
- U.S. Library of Congress: Select Bibliography of Books and Periodicals on Money and Banking. 93 pages. Washington. 1908.
- Viner (J.), International Aspects of the Gold Standard. In "Gold and Monetary Stabilization", Chicago, 1932.

- Vreeland (E.G.), Interviews on (Canadian) Banking. U.S. National Monetary Commission. Document No. 584.
- Wagemann (E.), Economic Rhythm. New York. 1930.
- Walker (Sir E.), The Canadian Banking System. Toronto. 1890.
- ____, History of Banking in Canada. Toronto. 1909.
- Warren (G.F.) and Pearson (F.A.), Gold and Prices. New York. 1935.
- Wicksell (K.), Interest and Prices. London. 1936.
- Willis (H.P.) and Beckhart, Foreign Banking Systems (Canada).

 New York. 1929.
- Willis (H.P.) and Edwards (G.W.), Banking and Business. New York. 1925.
- Willis (H.P.) and Steiner (W.H.), Federal Reserve Banking Practice.

 New York. 1926.
- Willis (H.P.) and Bogen (J.I.), Investment Banking. New York. 1929.
- Young (R.), Industrial Credits. New York. 1927.

