REPORT OF THE SUBCOMMITTEE ON FINANCE（March，1945）
Part II：THE MONETARY SYSTEM IN UNIVERSAL USE

## 6．VELOCITY OF CIRCULATION

It is generally assumed that the purchasing power of money is increased or decreased by its＂velocity of circulation＂However， this theory will not bear examination in the light of the facts regard－ ing the issue and withdrawal of money under the established system．

For purposes of analysis the following simple illustration of the velocity of circulation theory will suffice：

A wage－earner A．uses a $\$ 10$ bill of his income to buy two pairs of shoes from a shoe merchant $B_{0}$ ，who immediately goes into the adjoining store and spends the $\$ 10$ to purchase some shirts from Coi $C$ in turn immediately goes across the street to grocer $\mathrm{D}_{0}$ and buys some provisions costing $\$ 10 ;$ grocer $D$ 。 then takes the $\$ 10$ bill across to the local garage E．，to buy some gasoline and oill．

The contention is that the $\$ 10$ bill provided purchasing power to the extent of $\$ 40$ during the day by virtue of its pyelocity of circulation ${ }^{\prime \prime}$ in enabling $\$ 40$ worth of goods to be purchased by consumers． On the face of it this would appear to be the case，but on examination it will be found to be complete fallacy．

Because all money issued creates a debt of the corresponding amount at its source of issue，for all practical purposes merchants $B_{0}, C_{0,} D_{0}$ ，and $E$ ，can be assumed to be operating on credit loans from their banks with some＂savings＂invested in their stock．

The proceeds of every sale they make can be divided into three paxts：（1）repayment of a bank loan before a new Iine of credit can be obtained to replace stock，（2）payment of operating costs，and （3）net profit－－i．e．，personal income for services．Suppose that in each case $B_{0}$ ．C．，D．，and $E$ ．work on a $15 \%$ net profit，From each purchase amounting to $\$ 10$ they would be obliged to set aside，say， $\$ 8.50$ repayment of their bank loans for replacement of stock and over－ head costs，and only $\$ 1.50$ as personal income．

This is likewise true of $C$ ．and $D$ ．Therefore，by spending the $\$ 10$ both of them created a liability against their future purchas－ ing power．

When A．obtained the $\$ 0$ in wages there was agatnst it a corresponding costin the prices of goods coming on the market．This liability must be kept in mind．

On buying the two pairs of shoes from Bo，A．surrendered his right to $\$ 10$ purchasing power and $B_{\text {e }}$ acquixed the roight to $\$ 1.50$ of this，the balance going fox the repayment of his bank loan and cancella－ tion of the money as shown previously．（If he was operating on his own capital it would make no difference，for the $\$ 8.50$ would have to go to the replacement of working capital with the same resulto）

If $B$ ．does not repay his bank loan，but spends the whole $\$ 10$ ， he will have a liability of $\$ 8.50$ outstanding which will constitute a debt against future purchasing power．In other words he will have to sell over $\$ 50$ worth of goods without getting any portion of it for his own use in order to make good the deficit．

Thus while it is true that in the example quoted the $\$ 10$ bill resulted in $\$ 40$ worth of goods reaching consumers，there was created a trail of debts against their future purchasing power amounting to $\$ 10$（the liability against the original issue of the money）plus $\$ 8.50$（ $\mathrm{B} .{ }^{\text {i }}$ s undischarged liability）plus $\$ 8.50$（ C 。＇s undischarged liability）plus $\$ 8.50$（ $\mathrm{D}_{0}^{\prime}$＇s undischarged liability），making a total of $\$ 35.50$ ．Suppose E，now meets his obligations of $\$ 8,50$ ，he retains $\$ 1.50$ as his net profit－－i．e．，as purchasing power。

It will be evident that the effect is exactly the same as if $A$ ．bought gasoline，etc．，from E．，and $B_{0}, C_{\%}$ ，and $D_{s}$ had obtained goods from each other＂on time＂，pledging theix future purchasing power．

The so－called＂velocity of circulation＂did not increase purchasing power at all．The fallacy of the theory Hes in the incorrect assumption that money＂circulates＂．whereas actually it is issued against production，and withdrawn as purchasing power as the goods are bought for consumption．

## APPENDIX A

The following analysis of the financing of a long texm production cycle presents a simple and convenient formal proof of Major C. H. Douglas' Social Credit A \& B Theorem, Neither the premises nor the reasoning have ever been refuted, although critics of the Theory have repeatedly been challenged to attempt to do so.

## FINANCING OF A LONG-TERM PRODUCTION CYCLE

Let $N_{1}=$ average length of the credit cycle in years
$=$ bank deposits $X 2 / b a n k$ clearings per annum $+L-K$
where $K$ is the value of "Second Hand Transactions". ("Second hand transactions" are those which do not cancel a cost.)

Then $N_{1}=$ average period of circulation of $A$ payments $4 L$
$L=$ internal (non-clearing bank) transactions
Let $N_{2}=$ average length in years of the production cycle at any selected pexiod
$=$ (process time $X$ number of processes)

+ (100/depreciation \% + obsolescence \% + consumption \%)
$N_{2}=$ average period of time cost production and destruction.
Costs are generated in production and cancelled in consumption.
Therefore $\mathrm{N}_{2}=$ average period of cost cycle。
$\mathrm{N}_{1}$ is the order of 2 months; $\mathrm{N}_{2}$ is the order of 20 years.
Let $n_{1}=1 / N_{1}=$ number of circulations per year, say 6.
Let $n_{2}=1 / N_{2}=$ number of circulations per year, say $1 / 20$.
Let $A=a l l$ disbursements by a manufacturer which create costs = wages and salaries.

Let $B=a l l$ disbursements by a manufacturer which transfer costs
= payments to other axganisations.
The manufacturer pays $f$ per annum into the $\mathrm{N}_{1}$ system, and EB per annum into the $\mathrm{N}_{2}$ system.

Disregarding profit, the price of production is $\mathcal{f}(A+B)$ per annum.
But to purchase (i.e., to cancel the allocated cost of) $\boldsymbol{x}(A+B)$, there is present in the hands of the consumer:

$$
\frac{\varepsilon\left(A n_{1}+B n_{2}\right)}{n_{1}}=E\left(A+\frac{B n_{2}}{n_{1}}\right)
$$

Consequently, the rate of production of price walues exceeds the rate at which they can be cancelled by the purchasing power in the hands of the consumex by an amount proportional to $B\left(\begin{array}{rl}1 & -n_{2} \\ n_{1}\end{array}\right)$
= approx. B.
This deficit may be made up (in the orthodox system of economics) by the export of goods on exedit, by writing down of goods below cost, by bankruptcies, and by money distributed for public works and charged to debt. But in the main, it is represented by mounting debt.

