

**CURRENCY AND
FINANCE IN TIME OF
WAR; A LECTURE**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649279142

Currency and Finance in Time of War; A Lecture by F. Y. Edgeworth

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd.
Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

F. Y. EDGEWORTH

**CURRENCY AND
FINANCE IN TIME OF
WAR; A LECTURE**

CURRENCY AND FINANCE

IN TIME OF WAR

A LECTURE

BY

F. Y. EDGEWORTH, M.A.

FELLOW OF ALL SOULS

PROFESSOR OF POLITICAL ECONOMY IN THE UNIVERSITY OF OXFORD

UNIV. OF
CALIFORNIA

OXFORD

AT THE CLARENDON PRESS

LONDON EDINBURGH GLASGOW NEW YORK

TORONTO MELBOURNE CAPE TOWN BOMBAY

OXFORD UNIVERSITY PRESS

HUMPHREY MILFORD

1917

HQ 939

E3

ANALYSIS OF CONTENTS

- I. Function of economic theory in time of war (pp. 3-4).
- II. The quantity theory of money in the abstract (pp. 4-10).
- III. The theory applied to present conditions. Is the existence of inflation proved? (pp. 10-18).
- IV. Loans a cause of inflation. Taxes *versus* Loans (pp. 18-20).
- V. Some aspects of Taxation (pp. 20-4).
- VI. Import duties imposed for purposes other than revenue. Restrictions of trade as a sanction of regulations for the maintenance of Peace (pp. 24-7).

TO VITAL
ARCHIVE

CP.

UNIV. OF
CALIFORNIA

CURRENCY AND FINANCE IN TIME OF WAR

I. The obligation attached to the Chair of Political Economy, to 'deliver from time to time a public lecture', seems onerous to the present occupant of the chair. To one who has principally been employed in cultivating the more abstract portions of the science it is not easy to gather from that field fruits ready for consumption by those who are generally more interested about results than methods.

The difficulty is increased in time of war, partly because more is then expected of the economist. In quiet times the Art of Political Economy consists largely in abnegating art; playing the rôle of the wise physician who when consulted by one who has nothing much the matter with him has the courage to advise doing nothing. But in the fever of war time the easy course of *laissez faire* is evidently inadmissible.

In one respect, indeed, theory shows to advantage in times of disturbance. It is prepared for occurrences which appear paradoxical to the practical man. For example, theorists had contemplated the possibility that, if gold were extruded by the abundance of paper-money in different countries, gold might fall below the level of notes in some countries; as is now the case in Sweden.

But if in this respect theory comes to the front in

troublesome times, in another respect it is at a disadvantage. A great part, perhaps the most useful part, of economic truth requires time for its verification. It is true only 'in the long run'. It is not available in periods of emergency and crisis. Accordingly in such times our study is more than usually below the ideal standard of a deductive science. We have more than usually to resort to mental processes which, as Aristotle would say, do not involve general reasoning so much as acquired insight and shrewd judgment.

But even if the practical syllogism were applicable in all its perfection, it could not be applied by the academic student, for this simple reason that he lacks the minor premisses. The Government do not publish the relevant particulars. For instance, the nature of the transactions through which Treasury notes pass out of the hands of the Government is not, I believe, known outside official circles.

Altogether I cannot hope to realize the model of a public lecture, at once interesting and instructive, set by some of my colleagues. Perhaps the principal outcome of the following observations will be to strengthen the presumption that economic theory is a necessary (though not a sufficient) qualification for the direction of economic policy. With this somewhat humble hope I proceed to consider certain parts of the economic system which are prominent in war time, namely *money*, those sinews of war which become strained and swollen in the course of a severe struggle, and the much required nutriment of those sinews—*loans* and *taxes*.

II. What is money? To answer this question Sidgwick would employ the Platonic method of searching for a definition. One important result of the investigation is to bring out the distinction between money in

a general sense, including cheques and other instruments of credit, and the species which is not only a medium of exchange, but also has the property of finality in the discharge of debts. 'Money proper' this pre-eminent species may be called.

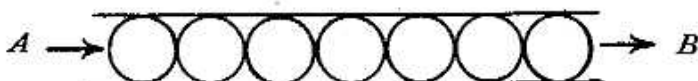
On the definition of money depends the significance of the celebrated theory which connects the quantity of money with the level of prices. This so-called 'quantity theory' is almost a truism if money is used in the widest sense possible; it is not always true if the term is used in its narrowest sense.

Let us follow Professor Irving Fisher in stating the theory in the form of an equation:

$$P = \frac{MV + M'V'}{T}$$

In this equation M and M' denote respectively the quantity of 'money proper' in circulation and the amount of credit money in existence, say with sufficient accuracy, at least with respect to this country and America, 'deposits' in banks—that huge volume of ideal money which is as it were circulated and made to effect payments by means of cheques. The interpretation of the other symbols in the equation is not so simple. V and V' denote respectively the velocity of money proper and that of credit money. But what does the velocity of money mean? The two highest authorities on the subject, J. S. Mill and Professor Irving Fisher, differ as to the definition of this term. Following the latter, I define velocity of money as the number of exchanges effected by a unit of money—a particular dollar or pound—in a unit of time, a week for instance. The velocity of money is thus equivalent to the rate of its *turnover*. We say a merchant turns over his stock in a week when he parts with and replenishes his stock in that time. If

on an average he has constantly seven bales of any commodity in stock, while one is sold every day, he turns over his stock in seven days. The expression is applicable to any other kind of *steady flow*. The length *AB* may equally well represent a refreshment bar at which there are constantly seven customers refreshing themselves. If (on an average) one enters at *A* and one issues at *B* every five minutes, the personnel of the customers will be entirely changed every thirty-five minutes. The bar *AB* need not be a straight line; it may be curved in suchwise that the entrance *A* coincides with the exit *B*. But indeed the customers are not confined to one line (straight or curved); they may flit about from table to table and feed in different storeys.



Pascuntur passim, as Virgil says of the bees. But Virgil was mistaken in conceiving that the bees, after going forth in the morning, do not return from their pasture till the evening. They have a much more rapid *turn-over*. Some statistics which I have obtained with respect to an allied species may be used to illustrate this statement. I trust that these entomological illustrations will not appear irrelevant. There is, indeed, precedent for seeking economic edification from the operations of the industrious bee. But I can hardly expect an equally favourable reception for the predatory wasp. The latter species, however, as it happens, furnish a good illustration of the phenomenon now under consideration. The working members of this species present an image of monetary circulation as they issue from their nest and, after having gone through

the operation of foraging, again enter into the nest. For example, one fine morning I sat down before a nest and observed that there was a steady flow outwards of 13·3 per minute—200 per quarter of an hour; and an equal, and equally steady, flow inward. Now the point which I wish to bring out is this: that, though it was impossible to mark each yellow insect as it issued so as to time the return of that individual—any more than you would be able, having earmarked a sovereign, to observe how often after leaving your hands it effected a purchase—still it is within the competence of statistics to determine the average time which an individual takes to perform an operation. In fact, in the example given it was only necessary to ascertain the total number permanently outside the nest, a number kept constant by a steady addition and steady subtraction of about 40 every three minutes, or 13·3 per minute. A rude kind of census showed that number to be 740. Accordingly for the time taken by an individual on a voyage we have 740 divided by 13·3 = 56 minutes nearly. Analogously Professor Irving Fisher requested the members of his class to observe how many dollars each kept on an average in his pockets; and how many he expended in the year. The former number being \$10, the latter \$660, it followed that the turnover of the dollar for the class under observation was effected in the sixty-sixth part of the year, or in less than a week.

That pretty study was only a proluision to Professor Fisher's more important investigations. I need mention only his calculations respecting the *dotted* symbols. He estimates M' , the amount of deposits in American banks, as (the equivalent in dollars of) some £1,300,000,000; a sum comparable with the aggregate deposits in our principal banks before the war, since the outbreak of which