Money/Space

Geographies of monetary transformation

Andrew Leyshon and Nigel Thrift

ROUTLEDGE

MONEY/SPACE

Bringing together in one volume the most important writings of Andrew Leyshon and Nigel Thrift on money and finance, including the unpublished classic, 'Sexy Greedy', this collection examines the economic, social and cultural manifestations that go to make up a multiple vision of money.

Since the mid-1980s, attention to the role played by money and finance in the processes of social and economic change has become pervasive across the social sciences. The documentation of monetary and financial matters reflects growing concern with the 'power of money' and the ways in which this power has the force to influence the conduct of social and economic life across a range of geographical scales. *Money/Space* describes the economy of international money, linking it with the distribution of social power. It looks at some of the ways in which this world of money, exemplified by finance capital and financial markets, is discursively constituted through particular social-cultural practices and shows how the world of money is constructed at a number of spatial scales.

Andrew Leyshon is Reader in Geography and **Nigel Thrift** is Professor of Geography, both at the University of Bristol.

MONEY/SPACE

Geographies of Monetary Transformation

ANDREW LEYSHON
and
NIGEL THRIFT

LONDON AND NEW YORK

First published 1997
by Routledge
11 New Fetter Lane, London EC4P 4EE

This edition published in the Taylor & Francis e-Library, 2005.

"To purchase your own copy of this or any of Taylor & Francis or Routledge's collection of thousands of eBooks please go to www.eBookstore.tandf.co.uk."

Simultaneously published in the USA and Canada
by Routledge
29 West 35th Street, New York, NY 10001

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging in Publication Data
Leyshon, Andrew.
Money/space : geographies of monetary transformation /Andrew Leyshon and Nigel Thrift.
p. cm. — (International library of sociology)
Includes bibliographical references and index.
ISBN 0-415-13981-3 (hb). —ISBN 0-415-03835-9 (pb)
1. Money. 2. International economic relations. 3. Power (Social sciences). I. Thrift, N.J. II. Title. III. Series.
HG220.A2L49 1996
332.4–dc20 96–18262

ISBN 0-203-99243-1 Master e-book ISBN

…money is like love, she thought at once. Once you have some, it can go on multiplying, each part dividing itself, doubling and doubling like the cells of an embryo.

H.Mantel (1989:181)

That money talks
I'll not deny
I heard it once:
It said 'Goodbye'.

Richard Armour (cited in Dunkling and Room (1990:130))

Suppose someone is too poor to visit her sister in Bristol…as far as her freedom is concerned, that is equivalent to 'trip to Bristol' not being written on someone's ticket in…[an]…imagined non-monetary economy. The woman has the capacity to go to Bristol. She can board the underground and approach the barrier she must cross to reach the train. But she will be physically prevented from passing through it…the only way you won't be prevented from getting and using things is to offer money for them.

G.A.Cohen (cited in M.Roberts (1995:21))

CONTENTS

FIGURES

TABLES

PREFACE

Towards the end of *Loyalties,* one of Raymond Williams's last novels, a besieged South Wales mining community awaits its nemesis in the miners' strike of 1984. One of the miners, Dic, with his blood up, shouts defiance, 'let the buggers come, we'll see in the end of it'. But Gwyn, a more cosmopolitan character, offers a warning in response: 'they don't have to come, Dic. They can do it from where they are. This is a world of paper and money. It's taken priority over coal, people, anything else that's real and alive' (Williams 1985:341).

This is a book about this world of paper and money. Williams was surely right to stress the importance of this world, and its ubiquity. But he was wrong to characterise it as an impersonal force. If there is one message that we want to impart more than any other in this book, it is that money is a social process.

In exploring the conundrum of money, this book's chief aims are therefore fourfold. The first aim is simply *to describe the economy of international money*. In carrying out this aim, we intend to make a contribution to a number of literatures but most especially the literature on the new international political economy with its emphasis on the interconnectedness of international economics, international politics, national economics and national politics. A second aim is *to link the economy of international money with the distribution of social power*. Here we see our chief contribution being to the burgeoning area of economic sociology and most especially to the work on the social and cultural embeddedness of finance capital and financial markets. Our third aim is *to show some of the ways in which this world of money is discursively constituted* through particular social—cultural practices. Here we conceive of money as information circulating in specific, separate but overlapping actor-networks, made up of actors, texts and machines, which think and practise money in separate but overlapping ways. Then, finally, our fourth aim is *to show how the world of money is constructed out of and through geography,* and at a number of different spatial frames. In particular, this book operates within four such frames: the global monetary economy, the national space of Britain, the regional space of the south of England, and the concentrated urban space of the City of London. Our intention here is to contribute, in particular, to the debates on the global and the local.

This book has been a long time in the writing. It represents the fruits of a collaborative writing project on the geographies of money and finance that now spans a decade. We first began writing together in 1986, brought together by an Economic and Social

Research Council (ESRC) funded research project which was based in the Department of Geography, Saint David's University College, Lampeter. Andrew Leyshon was employed as the project's researcher while Nigel Thrift was one of the principal investigators (along with Peter Daniels, then in the Department of Geography, University of Liverpool). In the years that followed, we have continued to work together, off and on, and have explored a wide range of issues surrounding money and finance, both individually and collectively.

Although our collaborations date from the mid-1980s, a concern with matters monetary and financial predates our joint writings. Thus, Nigel Thrift's interest in these issues dates from the early 1980s, and was the result of three stimuli. This first of these was some early direct empirical work on money and financial institutions carried out mainly in Australia and the Pacific Basin (see especially Taylor and Thrift 1982; Hirst *et al.* 1982; Thrift 1986a). Not only did this work show many silences in our knowledge of the geography of money, but it also showed up yawning gaps in how to study this geography. The second stimulus was the issue of social equity. It seemed obvious that the operation of money and the monetary system was bound up with problems of poverty but the connections were sometimes opaque (Thrift 1979). The third stimulus was theoretical. In particular, it was the magnificent Marxian account of money offered by David Harvey in Chapters 9 and 10 of *The Limits to Capital* which proved to be both an inspiration and, at the same time, something of a puzzle (Harvey 1982). Harvey both outlined and expanded on a number of Marxian concepts of money (like fictitious capital) but he also left too little room for the myriad of everyday practices which propelled the whole system forward and which, in his scheme of things, were too often treated like incidentals to the real business of theory (Thrift 1983).

Andrew Leyshon arrived in Lampeter in early 1986 to work on a research project on the geography of 'professional' producer service firms. The project, undertaken with Peter Daniels, was intended in part to respond to the first research stimulus outlined above, to deliver theoretically informed empirical research on the geography of money and finance. The project generated a range of publications on industries associated with the financial system (Daniels *et al.* 1988a, b; Daniels *et al.* 1989; Leyshon *et al.* 1990), and was the catalyst for a series of studies undertaken at a range of geographical scales, from the local to the global. We began to investigate the rise of particular local financial spaces, such as provincial financial centres. We also began to consider the rise and fall of 'financial regions' through an analysis of the south east of England. At a still higher level of spatial aggregation we turned our attention to different national financial systems, such as those of Britain and Japan, and have considered the possibilities of creating a distinctive European financial space within the EC. Finally, we have looked at more general processes of financial restructuring, from the less developed countries' debt crisis and the rise of a 'new international financial system', to more fundamental transformations in the regulation of the global financial system.

The reply to the second research stimulus mentioned above has been to undertake research on the impacts of financial crisis and subsequent restructuring upon poorer communities and especially to focus upon the withdrawal of formal monetary systems from these communities. Initially we pursued this work through a study of the international debt crisis. More recently, our attention has been focused, again with the aid of an ESRC grant, on the impacts of financial infastructure withdrawal on poorer communities in Britain and the United States (Leyshon and Thrift 1994a).

In all this work, we have been concerned to respond to the third research stimulus, that of theory. We have sought to maintain a balance between theoretical elaboration and empirical detail, and as we have done so, our theoretical account of money, which started out as Marxian, with a dash of Simmel, has changed. It first mutated as we attempted to bring in social and cultural factors to leaven the economic determinisms of the Marxian account. Latterly, we have thrown away many of the Marxian traces and our theoretical account of money is now much more concerned with what we call at various points in this book a discursive approach, which emphasises the role of culture in both defining what does and does not count as money, and in elevating specific monetary practices to the forefront of study. In other words, we have come to be suspicious of accounts that try to make a clear distinction between the economic sphere (to which money is often confined) and other spheres (onto which the economic sphere is too often unproblematically mapped), on the grounds that such a distinction itself presumes cultural norms which may indeed be constitutive but by no means need to be regarded as inevitable. Most particularly, we see money as based in particular, overlapping social networks which provide the ground through which money obtains meaning and is practised as specific monetary forms. This kind of anthropological approach questions the apparent ascendancy of commodity relationships which are so central to the Marxian account and gives equal weight to the actual or perceived bond of trust central to many monetary transactions. Such an approach is able to bring understanding to even the least propitious of situations (see e.g. Mars 1982; Zelizer 1994; Carrier 1995) because

> commodity logic is not some residual propensity to truck and barter that finds expression when it is liberated from social constraint. Rather it is a social value that binds and obligates potential transactors to each other. It is a way that people maintain personal identities that reflect as much adherence to a set of moral values… as they do the desire to maintain personal repute or secure the economic means of survival.
>
> (Carrier 1995:91)

In all of the work we have done, one space has been pre-eminent. That space has been the City of London (Chapters 4, 5, 9 and 10). When we first became interested in this space, there was remarkably little contemporary academic writing to draw on, apart from the work of Dunning and Morgan (1971), Coakley and Harris (1983) and Ingham (1984). In geography, the situation was even worse, with only the pioneering work of Goddard on offices and communications in the City to act as a signpost (Goddard 1968a, b). Over the years since our initial explorations (e.g. Thrift 1985a, b) we have explored this subtle, understated and yet extraordinarily powerful location in more detail, and have found that the City exerts power in ways that are quite different from those which are imagined by

those who are still weighed down by a heavy baggage of old cultural prejudices (e.g. see Hutton 1995). Moreover, we like to think that we have had a hand in stimulating the growing body of work in geography on the City of London now being published (for reviews, see Leyshon (1995, 1996a)).

This book, then, is the record of a journey which has certainly not ended yet. Along the way, we have encountered a number of fellow travellers to whom we want to extend our thanks. There is, first of all, the small but growing band of geographers and sociologists who are interested in matters monetary and financial: these include Gordon Clark, Stuart Corbridge, Nigel Dodd, Geoffrey Ingham, Mike Pryke, Mike Taylor and Adam Tickell. We are particularly grateful to Adam for allowing us to use the material included in Chapter 8, which he co-wrote. We would also like to acknowledge the contribution of Peter Daniels, who worked with us in the early days of this project. We are also grateful for the contributions made by John Allen, Alan Cochrane, Chris Hamnett, Nick Henry, Doreen Massey, Linda McDowell and Phil Sarre, who, under the auspices of an Open University research project on the south east of England, involved us in many useful discussions and provided provocative and useful criticisms of our work as it developed.

Finally, we want to thank John Urry who, as series editor of the *International Library of Sociology,* has continued to encourage us, even when the nearly completed manuscript of a book called *Making Money* fell at the final hurdle.

A book of this kind relies on the labour of others. In particular, we want to thank Sarah Howell, Kit Kelly, Liz Humphries, Anna Pazkowicz and Hanne Page, who produced a clean manuscript, and Simon Godden, Paul McSherry and Keith Scurr, who drew all the maps and diagrams.

Thornbury and Bath
September 1995

ACKNOWLEDGEMENTS

The authors gratefully acknowledge permission to reproduce the following copyright material:

Chapter 2 is a revised version of 'The transformation of regulatory order: regulation in the global economy and environment', by Andrew Leyshon, first published in *Geoforum,* Vol. 23, pp. 249–67, 1992, and is published here with permission from Elsevier Science Ltd, Pergamon Imprint, The Boulevard, Langford Lane, Kidlington, OX5 1GB, UK; Chapter 3 is reprinted from 'Liberalization and consolidation: the Single European Market and the re-making of European financial capital', by Andrew Leyshon and Nigel Thrift, first published in *Environment and Planning A,* Vol. 24, pp. 49–81, 1992, and is published here with permission of Pion Ltd; Chapter 4 first appeared in 1987 as a Producer Service Working Paper in a series produced by the University of Liverpool and Saint David's University College, Lampeter; Chapter 5 is reprinted from 'In the wake of money: the City of London and the accumulation of value', by Nigel Thrift and Andrew Leyshon, in L.Budd and S.Whimster (eds) *Global Finance and Urban Living: A Study of Metropolitan Change,* Routledge, London, pp. 282–311, 1992; Chapter 6 is reprinted from 'The restructuring of the UK financial services industry in the 1990s: a reversal of fortune?', by Andrew Leyshon and Nigel Thrift, first published in *The Journal of Rural Studies,* Vol. 9, pp. 223–41, 1993, and is published here with permission from Elsevier Science Ltd, Pergamon Imprint, The Boulevard, Langford Lane, Kidlington, OX5 1GB, UK; Chapter 7 is reprinted from 'Geographies of financial exclusion: financial abandonment in Britain and the United States', by Andrew Leyshon and Nigel Thrift, first published in *Transactions of the Institute of British Geographers,* New Series, Vol. 20, pp. 312–41, 1995, and is published here with permission from the Royal Geographical Society— Institute of British Geographers; Chapter 8 is reprinted from 'Money order?: The discursive construction of Bretton Woods and the making and breaking of regulatory space', by Andrew Leyshon and Adam Tickell, first published in *Environment and Planning A,* Vol. 13, pp. 299–327, 1994, and is published here with permission from Pion Ltd; Chapter 9, 'A phantom state? the de-traditionalisation of money, the international financial system and international financial centres', by Nigel Thrift and Andrew Leyshon, first published in *Political Geography,* 13, pp. 299–327, 1994, is published here with permission from Butterworth-Heinemann, The Boulevard, Langford Lane, Kidlington, OX5 1GB, UK; Chapter 10, 'New urban eras and old technological fears: reconfiguring the goodwill of

electronic things', by Nigel Thrift, first published in *Urban Studies,* vol. 33, 1996, is pubished here with permission from Carfax Publishing Company.

CHAPTER 1
INTRODUCTION

Money, it seems, is the great god of our age, so it is entirely appropriate to write about it. But money is not so easy to write about, because it is a multiple vision. Money is an economy. It is often described as the 'central nervous system' of capital but like the central nervous system it is easier to see than to understand. Money is a sociology. In capitalism, according to some, it provides the 'real community' (Marx 1973:225), a community in which rational calculation is mixed with a quasi-religious faith in the power of its bonds. Money is an anthropology. Its meanings are multiple. They deeply affect and are deeply affected by culture (Parry and Bloch 1989; Zelizer 1989, 1994). Finally, money is a geography, and a curious geography too. It is, apparently, 'everywhere but nowhere in particular' (Harvey 1989a: 167). How, then, to grasp the conundrum of money? This book represents our attempt to do precisely that, and to do it in a way which attempts to give equal weight to money's economic, social and cultural manifestations.

This task can no doubt be completed in a number of ways. For example, one might experiment with an idiom that might be called 'postmodern'. Money could be depicted as a kind of supernatural deity which, through the power of commodification, is gradually fracturing subjects into fragments of symbolic delirium, commodities into aesthetics, and consumption into a spectacle of simulated desire. One could then stir into this heady brew the shock of a new round of time-space compression, being sure to remember to scatter references to Baudelaire and Benjamin liberally through the text. We would not advise travelling down this path. Writing in this idiom seems to us to be a kind of flummery, a way for academics to take on a 'prophetic role' (Bourdieu 1988), a way for them to 'spectacularise' themselves (Friedman 1987). We have taken another path, one that leads away from the undoubted attractions of *homo academicus gallicus* and also from his or her American gothic cousin. The path that we have chosen in our writings on money is different in four ways. First, we have tried to take the particularities of histories seriously. We do not believe that histories can be reduced to theory: we believe that histories provide the grounds in which theory must operate. It is symptomatic of a number of current intellectual tendencies in social science that we feel we have to restate such a basic premise. Second, we have attempted to take the particularities of geography seriously. Again, we do not believe that geography can be reduced to theory: geographies provide the grounds in which theory must operate. The implication of both these preceding strictures is that theory always has to be tied to particular local contexts in ways which have important *theoretical* connotations (Birmingham 1989; Probyn 1991). But this is not, we should hasten to add, just that old cry to respect difference which is heard so often nowadays. We believe that too often this call is being used simply to avoid theorising the very things that need to be theorised. As Eagleton (1989:406) puts it, 'one might agree that it is some postmodernists who are the true levellers and homogenisers in this respect, for all their cult of the heterogeneous'. Third, we believe that theories of epochal transition from one form of economy, society, culture or geography to another one are unhelpful unless they are extremely carefully phrased. For example, what is striking about the case of Britain, which we examine at some length in the chapters that follow, is that economic, social, cultural and geographical continuity is as important as novelty. Theories of transition also need to be carefully phrased because otherwise they become overly normative (Thrift 1989a). Histories and geographies are judged against a theoretical role model which only reveals the modern world's selfimage of its own distinctiveness and, inevitably, in the face of this hubris, an 'aesthetic of disappointment' (Pfeil 1990) sets in which is both seductive and debilitating. Fourth, and finally, there is a question of style which is also a question of content. We reject the stylistic overtones of too much writing which claims to be in a postmodern vein in which

> teachers…are generating increasingly parasitical forms of metaphors and are themselves subject to a tyrannical pressure not only to have absorbed all the latest products of the theory industry but if possible to have got the better of them: to be in a position to have the cleverest last say on them, or even better the most pointedly ironical last laugh.
>
> (Soper 1990:19)

The position that Soper describes seems to us to be untenable when studying money and money making. The world of money may sometimes seem to have only a tenuous connection to people's everyday lives but its effects on these lives are often devastating and cannot be skated over. There are general moral principles at stake here concerning justice, power and equity and there are also more specific issues of culpability which must be exposed.

This is not, of course, to say that we have not tried to come to terms with some of the issues raised by postmodernism or poststructuralism. For example, we take discourse seriously and below we argue that discourses about money form a vital element of their constitution as money. To quote Soper (1990:11) once more:

> It is a question, in short, of preserving a certain dialectic between the material and the linguistic, the verbal and the non-verbal: a complex dialectic which it is difficult to specify since it is true, as the poststructuralist critique has rendered clearer to us, that the relationship here is not simply one of representation between word and thing…. I can share with discourse theory the insight that the role of discourse in the construction of existence does not operate as a semiotic level of which another 'truer' and more 'material' level finds expression, but what I cannot accept is that

> discourse is exhaustive of reality, or that there are no relations of necessary dependence between what is sayable at any time and the ways the world happens to be materially organised.

Indeed, we would want to resist actively any attempt to understand money, as Parsons, and post-Parsonians (like Habermas and Luhmann) and, interestingly, a number of postmodernist authors (in so far as they say anything about money at all) have, as just a medium of communication, through an analogy with language. Ganßmann (1988:312) explains why:

> I find it more plausible to follow Marx in the opinion that, to a decisive extent, money has turned into or is available as a substitute for power, influence, commitment, etc. '(I)n place of brightly coloured cohesive means of humanity' (Marx, 1954:874), we now find the 'silent force of economic relations'. It is expressed with money. Ask those who don't have any.

By way of an introduction to the geographies of money, this chapter recounts some of the ways in which the world has become saturated with the practices and symbols of money. Its first section is concerned with the transformation of monetary forms. This history of the instruments and institutions of finance points to five different forms of money, namely: 'primitive' or premodern money; commodity money; money of account; state money; and virtual money. The second section considers the way in which space has made a difference to this history of money. Money does not just have a geography; *money is itself a geography.* The third section considers the symbolic dimension of money through an analysis of some of the dominant leitmotifs in discourses about money. In each case, we have restricted ourselves to primarily western examples (and especially the case of England) to illustrate our arguments, but it is important to acknowledge here the diversity of monetary experiences around the world which do not, and never can, add up to one single story (see Angell 1930).

MONEY

Five chief forms of monetary practice can be distinguished in the historical record. None of these forms of monetary practice are destroyed by the succeeding form. Rather, they join with the preceding forms to produce new hybrid combinations. Each form can be thought of as consisting of a particular set of formal *instruments* of money, a particular set of financial *institutions and practices,* and a broadly conceived set of *interpretations* of what money is and what it does. It is true to say that theoretical understanding of these different forms of money has usually run behind their actual use. As Cencini (1988:3) puts it, 'Apart from the rare moments of high theory, when analysis was playing a leading role, economists have mostly tried to catch up with the practical historical development of money.' That said, these rare moments of high theory do crystallise out some of the chief features of each form of money, and the accounts of Marx, Keynes and Cencini loom large in what follows, although it is also important to bear in mind Dodd's (1994: xv) observation that, 'most definitions of money tend to reveal as much about the interests of the theorists who formulate theory as they do about money itself.

Before we embark upon this evaluation of different monetary forms and practices, we need to answer a rather important question: what exactly is money? While this may seem to be an apparently straightforward question, coming up with a satisfactory answer to it proves more difficult. Most conventional interpretations see money as evolving in parallel to and then supplanting barter systems of exchange. But it is important to note that the process by which money supplemented barter has not led to its complete eradication; it survives in certain contexts to this day. Rather, the emergence of money provided an additional means of engaging in exchange, just as subsequent developments in monetary forms and practices have complemented those that already existed, without ever completely overwhelming them.

Nevertheless, each development has occurred because new monetary forms and practices contain distinctive advantages over prevailing systems. Thus, the advantages of money over barter are legion:

> Monetary exchange is more convenient than barter. It saves on the time and effort needed to search for potential co-transactors and to compromise or extend the relationship when the requirements of each transactor do not match. In barter, the key requirement of transactors is for information. This mostly concerns the location and trustworthiness of potential co-transactors. Money paid or received can be handed on elsewhere at a later date. Once money is received as payment for something, the relationship between transactors can be concluded rather than extended into the future by promises or other obligations. The process of search and compromise necessary in barter is effectively performed by money rather than by transactors themselves. Crucially, money does not carry or transmit the information required in barter but replaces it with information of its own: that it can be re-used in the future, that it will be accepted by other members of a society or social group, and that it truly represents its face-value and will continue to do so over time.
>
> (Dodd 1994: xxii-xxiii)

So far, so good, but we still have not answered our initial question: what *is* money? In theory and in practice money can be, and has been, a wide range of physical objects, from shells to porpoise teeth, from precious metal to stones (Angell 1930; Davies 1994; Einzig 1966; Galbraith 1975). But it is not the materiality of money that matters so much as the ability of money to perform two key roles in the process of economic exchange, namely to act as both a medium of exchange and as a store of value. In performing these roles, money necessarily takes on two additional roles, as a unit of account and as a means of payment. The utility of money is that it therefore acts both as a lubricant of exchange and as an independent expression of value. But this duality of money, while advantageous in many ways, has also served to introduce an important dynamic into monetary forms and practices. Thus, as Dodd has pointed out, the ability of different types of money to perform the functions of a medium of exchange *and* of a store of value tends to be 'inversely proportional' (1994: xviii), so that money forms which perform admirably in the capacity of the former, tend to perform less well in the capacity of the latter:

> For example, legal-tender notes tend to lose value over time as a result of inflation, and so are best used chiefly for exchange and payment purposes. Assets which store value stably over time or even appreciate in value, on the other hand, are linked to securities or other investments which make them difficult to convert into a form suitable for payment or exchange, perhaps losing value on conversion or carrying a time constraint delaying conversion.
>
> (Dodd 1994: xviii)

It is the differential performance of each and every type of monetary form in this regard which has introduced a dynamic element within the evolution of money, so that the monetary system is characterised by a range of alternative and complementary forms of money, examples of which will be considered below.

This is not the only implication of money's dual role as both a medium of exchange and a store of value. In certain circumstances these roles may be seen as contradictory, for if the value of money begins to fall while acting as a lubricant of exchange, money may be withdrawn from circulation owing to its ability to exist independently as a store of value. It is precisely this contradiction that led commentators such as Marx, Keynes and others to link crises in the monetary system to more general economic crises (Altvater 1993). We will explore the connections between monetary uncertainty and economic crisis at more length later in this book. But now we wish to return to the embodiment of money itself, and outline five key monetary forms.

Premodern money

Before money, exchange revolved around barter. The advantages of money over barter have already been laid out, but there is a general consensus amongst historians and anthropologists that money did not arise in the first instance in order to circumvent the 'cumbersome awkwardness' of barter (Davies 1994:9). Rather, the origins of money are cultural, inasmuch as the use of money arose in processes of exchange that were firmly non-economic in their orientation. According to Davies, the economic use of money occurred almost as an accidental oversight, as a social discovery that followed on from well-established cultural practices:

> The most common non-economic forces which gave rise to primitive money may be grouped together thus: bride-money and blood-money; ornamental and ceremonial; religious and political. Objects originally accepted for one purpose were often found to be useful for other non-economic purposes, just as they later, because of their growing acceptability, began to be used for general trading also.
>
> (Davies 1994:23–4)

In other words, money evolved from relatively narrow, culturally specific uses, to take on later a much broader range of social and economic functions commonly associated with money.

This evolutionary interpretation of money is closely associated with the work of Karl Polanyi who distinguished between 'primitive' and 'modern' money on the basis of the range of functions each type of money performs (Polanyi 1968). For Polanyi, modern money is 'all-purpose money', so called because it performs equally well all the key functions ascribed to money: that is, means of exchange; store of value; unit of account; and means of payment. Premodern money, meanwhile, tends to perform some, but not all, of the functions associated with modern money. Premodern moneys, therefore, are described as 'special-' or 'limited-purpose' moneys:

> In primitive economies—i.e. small-scale economies not integrated by market exchange—different uses of money can be instituted separately in different monetary objects to carry out reciprocal and redistributive functions…the items which perform non-commercial money uses need not be full-time money, so to speak; they have uses and characteristics apart from their ability to serve as a special kind of money.
>
> (Dalton 1965:48)

This distinction between general-purpose and special-purpose money is analytically useful, inasmuch as it draws attention to the ways in which money objects have their origins in quite specific cultural practices that are distinctive from the process of market-based exchange. These non-commercial monetary exchanges may be relatively infrequent, and may involve the use of different types of 'money' for each type of exchange (Dalton 1965).

However, there are also problems with drawing a distinction between premodern and modern moneys on the basis of the range of functions that each perform. This is not so much because primitive moneys are seen as 'special-' or 'limited-purpose' moneys; rather, the difficulty arises because of the premise that modern money is somehow 'all-' or 'general-purpose', 'which as a single currency, unburdened by ritual or social controls, can function effectively as a universal medium of exchange' (Zelizer 1994:22). For example, according to Dodd (1994: xviii):

> The idea that modern money is general-purpose, fulfilling all the possible monetary tasks, is simply incorrect. There exists no form of money which serves all such tasks simultaneously. Legal tender notes are rarely used to store value in practice. Notes and coins represent standard units of value without literally embodying them; indeed, if they did so they would be worth considerably more than their legal-tender equivalent. Cheques, credit cards and bank drafts serve only as means of payment. It is absurd to regard these monetary forms as general purpose.

Zelizer (1989, 1994) has also argued that the links between premodern and modern moneys are more tangible than most people suspect. Thus, while 'multiple moneys in the modern world may not be as visibly identifiable as the shells, coins, brass rods, or stones of primitive communities…their invisible boundaries work just as well' (Zelizer 1994: 24). 'How else', Zelizer argues, 'do we distinguish a bribe from a tribute or an allowance, a wage from an honorarium, or an allowance from a salary? How do we identify ransoms, bonuses, tips, damages, or premiums?' (ibid.).

Given the weight of such criticisms, the notion that single-purpose primitive moneys surrendered in the face of incursions by an all-purpose modern money form needs to be treated with care. Davies (1994:24) treads an advisably cautious line in his description of the decline of single-purpose premodern moneys, arguing that 'primitive moneys originating from one source or from one use came to be used for similar kinds of payments elsewhere spreading gradually without necessarily becoming generalised'. In other words, it is possible to trace a line from a multiplicity of premodern moneys to a more limited number of modern monetary forms, but without surrendering to the view commonly held by classical social theorists who, 'impressed by the fungible, impersonal characteristics of money…[have] emphasised its instrumental rationality and apparently unlimited capacity to transform products, relationships, and sometimes even emotions into an abstract and objective numerical equivalent' (Zelizer 1989:347).

Indeed, there is growing archaeological evidence to refute the view that the march of modern money brought with it an irrevocable transformation of social practices. Rather it seems that modern monetary systems could be subverted and money put to use in non-economic social practices. For example, in a review of the archaeological literature on coin hoards in Roman Britain, Aitchison (1988) dismisses the widely held view that all such hoards were deposited in response to economic motives. According to this view such hoards, of which around 1,500 have been discovered, were either laid down in order to safeguard monetary wealth during times of uncertainty, or merely dumped and discarded when the coins, for some reason or another (e.g. inflation), lost their economic value. However, while such economic motives may be the cause of some of the deposits, they cannot explain all of them. Many hoards seem to have been laid down as votive offerings to gods and deities. Aitchison argues that, despite the introduction to Britain of a monetary system based on the circulation of Roman coins, these coins were also used for other purposes reminiscent of the uses of premodern moneys. In other words, coins which were produced to circulate within a modern monetary system sometimes moved beyond this system into 'an "alternative economy" within which coins circulated which cannot be distinguished from social and ritual practices of the Iron Age or of those lands beyond the Imperial frontiers' (Aitchison 1988:279).

The range of objects and materials that have been used as premodern money is extremely large (e.g. see Einzig 1966). The movement towards a more generalised money form which, literally, gained a wider currency beyond the very specific social and cultural conditions that gave it birth is generally argued to be linked to the use of metallic-based premodern moneys. These were often made of a precious metal, such as silver, which had a culturally determined economic value, which made them particularly suited to serving as a medium of exchange. These premodern moneys existed initially merely as lumps of silver, uneven in size and form, which readily served as the raw material for the manufacture of a whole series of metal artefacts. Thus, these metallic moneys had a use value as well as an exchange value. The first tentative steps towards the creation of modern money came with efforts to standardise the appearance of premodern moneys (Dalton 1965). This process of standardisation led to the eventual creation of coinage:

> The most obvious and direct route to coinage was…through the improvements in quality and authority of the kind of large silver blobs or 'dumps' such as those in use in Knossos in the Second millennium. These Minoan pre-coins were…not very uniform and required either a state seal or a punched impression to help their still hesitant circulation. However such metal quasi-coins gradually became more plentiful in Greece, including the Greek islands and the eastern Mediterranean, during the first half of the first millennium BC, during which the final stages in the inventive process took place quite rapidly. In retrospect we can see that this invention meant that a new monetary era had definitely begun.
>
> (Davies 1994:61)

The significance of this development cannot be overestimated for, as Davies (1994:64) observes, ever since, 'the financial history of the world has undergone a series of revolutionary changes around the central, relatively unchanging core of coinage, which has meant that for most people, most of the time, money has simply meant coins'.

Commodity money

The development of coins led to the development of a set of monetary practices that revolved around the notion of *commodity money*. In a system of commodity money, money functions as a medium of exchange and as a store of wealth and the value of coins therefore emanates from their embodiment of the value of the precious metals that they are made from. The key institution of the commodity money system, then, is the mint that transforms the precious metals into coins.

Not surprisingly, the direct link between money and precious metals brought about a search for reserves, followed in short order by large-scale mining wherever they were found. For example, by the middle of the first millennium BC, thousands of slaves were at work extracting silver from the mines that fed the Mediterranean city states of Athens, Aegina and Corinth (Davies 1994:70), each of which had their own coinage systems.

As the coins from these rival systems came into contact with one another through trade, trade which was in part made possible through the economic wealth commodity money systems engendered, so there emerged a need for a whole new set of skills and competencies associated with the exchange of one type of coin into another, 'creating a persistently powerful and widespread demand for "bankers" who could find their way through the money maze' (Davies 1994:72). However, despite the use of accounting *systems* at this time, there was no real development of money beyond its commodity form, which left commodity money-based economies and societies highly exposed if they were cut off from the mines which fed their systems of coin production.[1]

Despite such attendant threats and the dangers of debasement, the coin became the world's dominant monetary form, due in large part to the later expansion of the Roman Empire and its propagation of commodity money. According to Davies (1994:110)

> in the thousand years between 600 BC and AD 400 the whole of the [western] world had become accustomed to coinage as the basis of its monetary systems. At one time or another, between 1,500 and 2,000 mints were busy turning out the coins required in the non-Chinese and non-Indian areas of the…world.
>
> (Davies 1994:110)

But as the Roman Empire collapsed in the middle of the second millennium AD, so did the dominance of the commodity money form, which disappeared altogether for hundreds of years in some of parts of Europe, including Britain (Spufford 1988).

However, by the second millennium, the situation had recovered somewhat, so that by the eleventh century even the lowliest members of a number of communities in Europe might have expected to use coin, however periodically. By the thirteenth century cash rents were common in the countryside and by the beginning of the fourteenth century, peasants in some communities had begun to amass savings in coin. The switch to money rents and the evidence of saving are symptomatic of new interpretations of money, and of a 'whole revolution in attitudes to money' (Spufford 1988:245). For example, cultivable land came to be regarded as a source of money and not just a use value. Other resources were regarded in a similar manner. The new outlook soon spread. Richer peasants bought tenancies and parts of tenancies from their neighbours, so changing patterns of landownership.

The revival of the commodity money form was due in large part to the rise of the European monarchical state, the rulers of which promoted the use of a standardised monetary unit in order to further their military and economic ambitions. Rulers of such states began to exert a growing influence over money, which in turn led to the production of increasingly distinctive financial territories, characterised by monetary systems based on different types of commodity money.

The development of a consistent system of coinage had distinct economic advantages for the rulers of these territories. For the most part, these advantages stemmed from assurances over the value and worth of tributes and taxation extracted from the populations they ruled over (Davies 1994; Dodd 1994; Giddens 1985). To guarantee the value of the returns realised through what was effectively an emerging fiscal policy, it paid rulers to attempt to 'regulate' the quality of the money in circulation in the territories they controlled. For example, from the tenth century onwards English monarchs expressed a close interest in the quality of money through their efforts to oversee the production of coins in circulation. Control was achieved by establishing a network of official mints, by watching over the issue of dies and by strictly regulating the moneymakers. The result was that it was possible to produce 'a coinage of uniform type and standard'

(Davies 1994:130). The reasons for such surveillance and control were fairly straightforward, to do with the way in which commodity money was seen to 'embody' economic value. Regulating the production of commodity money was a way of ensuring the value of the revenue received by the monarch in the form of tribute and taxation. The forging of a bond between fiscal objectives and the development of authoritative control over money accelerated in eleventh-century England in the wake of the Norman invasion. The Doomsday survey was a central component of a strategy designed to create a national system of taxation. In order to be sure of the value of the taxes and tributes it was clearly necessary for the monarch to be assured of the quality of the money flowing into the state's coffers, particularly when extracting large sums to fund extraordinary expenses. The dilemmas are outlined by Davies (1994: 136–7):

> The King's finances were derived mainly from five sources: first, directly from the proceeds of his own estates, the 'Crown lands'; secondly, from regular customary and therefore normally fixed payments made by the shires and boroughs; thirdly, from the fines and other fluctuating profits resulting from the maintenance of justice; fourthly, the mostly arbitrary profits from issuing the King's dies and minting the King's coins; and fifthly, in order to meet exceptional expenditures, a general tax on the land, the 'geld'.... It follows that the greater the yield of the first four sources, the fewer and the less heavy would be the exceptional gelds. Despite his improved administration, William found it necessary to levy five gelds during his 21-year reign. Because the gelds were usually very heavy and were paid in cash, they had a close relationship with the demand for coinage. Furthermore, it becomes clear that only an efficient tax-gathering system could guarantee that the quality of English coinage would be maintained.

Exercising no control over the commodity money in circulation left the system of taxation and tribute open to abuse and exploitation by the monarch's subjects. Maintaining absolute control over the production and distribution of coinage meant that rulers were able to gather to themselves the ability to extract value through the exploitation of coinage and the arbitrary profits derived from minting referred to above. These profits could be realised by means of regular and almost imperceptible rounds of debasement. Episodes of 'recoinage' would involve the recall of all existing coins which, if taken to the network of official mints scattered across the territory,[2] could be exchanged for coins of an identical face value but which might be slightly smaller in size and/or made up of a reduced volume of precious metal (Davies 1994:131). In this way, monarchical rulers could extract economic profits from altering the physical make-up of money, while prohibiting their subjects from doing the same.[3]

The economic benefits derived from control over the monetary system were closely linked to military imperatives of the monarchical state, because the economic gains helped fund the cost of military campaigns. Yet, despite this imperative, the military ambitions of such states would often come up against the limits of a monetary system that relied upon a direct link between precious metal and coinage. Despite the periodic episodes of recoinage, there was only so much money to go around. This constraint was instrumental in bringing into being a new monetary form which, unlike commodity money, was more an expression than an embodiment of value.

Money of account

Beginning in the eleventh century and increasing in importance in the twelfth and thirteenth centuries, money began to take on a new form: *money of account*. This new monetary practice derived its name from its function. It is a measure of value used almost exclusively for accounting purposes.

The origins of this new form of money lay in the problems that monarchical rulers were facing in raising funds in a medieval monetary system based on commodity money. Under such a system the supply of money was ultimately constrained by the European supply of silver and gold. Money of account emerged as a way of boosting the supply of money 'beyond the limits of minting' (Davies 1994:149). The emergence of money of account is linked to the growth of *credit money,* and its roots can be traced back to the focus on fiscal and monetary policies within the medieval monarchical state, as discussed earlier.

For example, in the case of medieval England the interrelated nature of these two functions was expressed in the fact that the institutions responsible for their administration, the Royal Treasury and the Royal Mint, were located in close proximity to each other in the royal household. However, the growing complexity of money flows caused by the imposition of taxation required a more specialised range of accounting skills. Thus, the Treasury became 'the first section of the Royal household to be organised as a separate department of state clearly distinguishable from, although inevitably still very closely associated with, the management of the royal household' (Davies 1994:147). The move towards increased specialisation was critically important in the history of money for it led to the eventual creation of a new financial instrument that was in a credit-based monetary system:

> As early as the Middle of the twelfth century [the Royal Treasury's] increasing workload caused it to become divided into two sections, one specialising in the receipt, storage and expenditure of cash and other payments, and the other into recording, registering and auditing the accounts. The first section, the Exchequer of Receipt, was also known as the Lower Exchequer, while the second section, the Exchequer of Account, was called the Upper Exchequer. For ease in reckoning and 'checking' the cash payments, the Exchequer tables ten feet by five, were covered with a chequered cloth, either black-lined with white, or green with red-lined squares, which custom gave its name not only to the institution but also subsequently to the cheque or, as still in America, the 'check'. The Exchequer of Receipt made increasing use of an ancient form of providing evidence of payment by issuing 'tallies', and developed this system so much that the history of the Treasury is inseparably connected with that of the tally.

(Davies 1994:147)

The tally was nothing more than a wooden stick upon which grooves, cuts and notches could be scored to record payment of differing amounts and which served as durable receipts. However, in time the tally began to be used by the Treasury as a way round the limit set on the supply of money imposed by a commodity-based monetary system. The tally was transformed into money of account:

> The first stage in this process was the 'assignment', by which a debt owed by the king, shown physically by the tally stock held in the exchequer, could be used by the king to pay someone else, by transferring to this third person the tally stock. Thus, the king's creditor could then collect payment from the king's original debtor. Alternatively this new creditor might decide to hold the tally to pay his share of taxes required in a subsequent tax season…what soon became clear from as early as the twelfth century onward, was that 'the exchequer of receipt was tending to become more and more of a clearing house for writs and tallies of assignment and less and less the scene of cash transactions'. The resulting economy in the use of coinage and the relief of pressures on minting were again of obvious importance…. A considerable increase in the flow of tallies, and therefore a corresponding increase in credit, occurred when royalty began habitually to issue tallies in anticipation of tax receipts.
>
> (Davies 1994:150)

The circulation of tallies signalled the rise of a form of credit money. The value of the tally was its embodiment of a claim to a specified volume of commodity money held elsewhere, which was realisable on the physical presentation of the tally to the counterparty. However, the circulation of these tallies led to severe problems of time-space co-ordination. Those who were issued tallies by the Exchequer might find that in order to take delivery of commodity money they had to travel the length and breadth of the country to find the counterparty to the tally they were holding. It was in order to overcome such problems of time-space co-ordination that an embryonic private finance market developed where it was possible to sell the tallies at a discounted price. The centre of the market was in London, for it was there that the tallies were issued. Merchants offered the holders of tallies the opportunity effectively to move forward in time by taking immediate delivery of commodity money, thus avoiding the delay and expenses that would be incurred in tracking down the counterparties to each individual tally. In return, the owners would forgo part of the full value of the tally, which the merchant took as payment for the service offered (Davies 1994:150).

The initial development of a private capital market in medieval England and elsewhere in Europe was of immense importance because it signalled that a major social economic transformation was under way, a transformation which involved a major shift in power and which, in part, helped bring the medieval period to a close. As Davies (1994:168) puts it, 'Medieval money was above all monarchical money', but the development of private capital markets saw the control of money shift away from the absolute control of the rulers of feudal states, so that the development of credit money 'helps distinguish modern from medieval times' (ibid.).

The major force driving the later development of money of account was the increasing complexity of commercial trade. The 'commercial revolution' brought with it a considerable increase in the volume of international trade. But international trade was no easy matter. Partly this was because of the large number of extant currencies; a monetary map of late medieval Europe (Figure 1.1) resembles a monetary map of the world today in its scope and complexity. More particularly, the physical transport of coin or ingot was both difficult and dangerous. In order to surmount these difficulties, new monetary instruments came into existence, fostered by new monetary institutions. In international trade, the most important instrument was the *bill of exchange* and the most important institution was *merchant banking* (focused on Tuscany) (Figure 1.2). By the first half of the fourteenth century, the Italian innovation of the bill of exchange had become a normal way of making commercial payments, enormously expanding the supply of money available for international transactions between the main cities of Europe. Initially, bills of exchange were used only by merchants but the convenience that they offered, cancelling the need to barter, clear books face to face, or make payments in coin or ingot, meant that they soon spread to other members of the population. Merchant banking evolved out of the invention of the permanent partnership (rather than one lasting a single voyage) and the effects of the bill of exchange on trade in goods. 'As the bill of exchange developed it became possible for the merchant to sell or buy in one direction only, against bills of exchange. Before long, trade in goods became less interesting for some, and a number of merchants developed into dealers in bills of exchange or into bankers' (Kindleberger 1984:35). This prototypical international monetary system had a strong geographical structure, based to begin with on the financial centres of Italy, and on firms which over the course of time became cemented in place (Centre for Medieval and Renaissance Studies 1979). Changes in local banking and practices were also important. Most particularly, there was the development of transfer of accounts within the same bank, and then the transfer of accounts between different banks. By the fourteenth century, written instruments or *cheques* had become common, as had current accounts and overdrafts. International and local banking amalgamated when bills of exchange were able to be debited from bank accounts.

Once certain levels of monetary activity were reached, quantitative changes in the money supply led on to qualitative changes in the nature of bank money. In particular, there were radical changes in the practices and interpretations of credit as the discovery was made 'that for many purposes the acknowledgements of debt are themselves a serviceable substitute for money proper in the settlement of transactions' (Keynes 1930:5).

The credit economy grew rapidly in size with the advent of the bill of exchange. Credit was effectively given even when the request was ostensibly for payment at sight simply because the mails of the day took time to reach correspondents. Bills of exchange were soon joined by simple finance bills, effectively bills drawn by an individual without any underlying trade transactions (Kindleberger 1984). Thus bills of exchange began to have

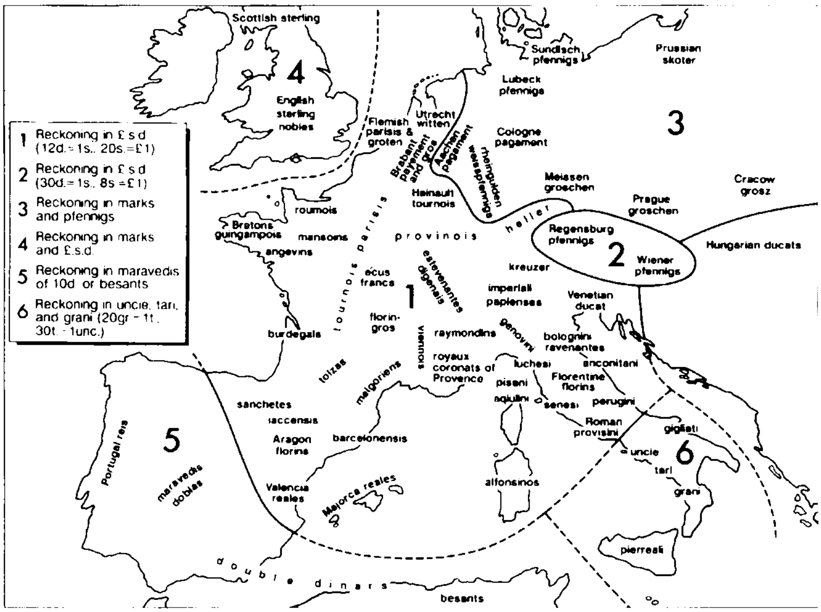

Figure 1.1 Principal currencies of late medieval Europe

Source: Spufford (1988)

less and less correspondence with particular consignments of commodities, or indeed with commodities at all. In time, then, 'bank money' developed to the point at which acknowledgements of debt could be substituted for commodities as such in the settlement of transactions. Thus separate acknowledgement of debt could be issued by any bank and represented through bank money.

As the move to a new bank money, increasingly independent of trade in commodities and with its own rules and rhythms, developed, so four further dramatic changes occurred. Most important of these changes was the formation of an *international capital market*. This market formed in the seventeenth and eighteenth centuries as a result of three chief determinants (Neal 1990): the advent of highly profitable long-distance voyages which created incentives to mobilise large sums, for long periods, amongst principals separated by greater distances than before; the scattering of influential but persecuted religious minorities, especially Huguenots and Jews, whose movements and kin networks created a web of reliable business contacts in major cities like London, Amsterdam and Hamburg; and the increasingly voracious fiscal requests of states with increasingly voracious imperial ambitions. By the eighteenth century, large and established capital markets existed in London, Amsterdam and Hamburg.

A second, important change consisted of the creation of new financial instruments and organisations that would support the burgeoning credit economy. Thus, the bill of exchange became more sophisticated. The transferable perpetual share was invented (in

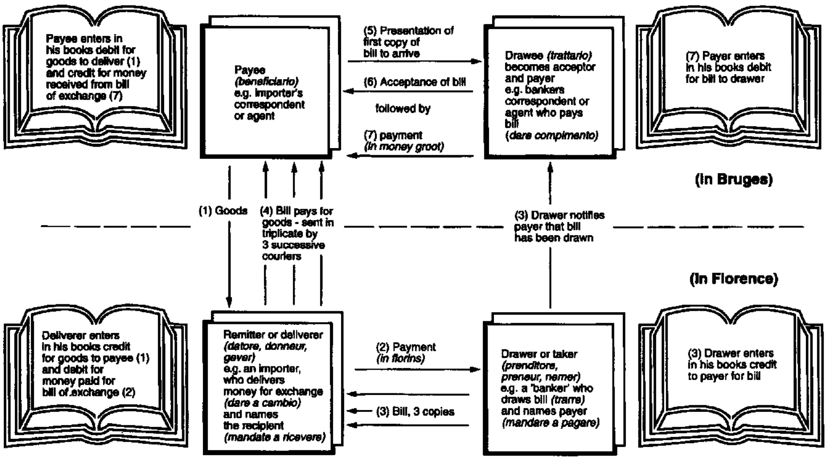

Figure 1.2 The parties to a normal bill of exchange (e.g. one to enable an importer in Florence to pay his or her correspondent in Bruges)

Source: Spufford (1988)

the sixteenth century). Markets for these bills and shares developed although the discounting of bills was at first hampered by usury laws. As an example of this process, by the end of the seventeenth century London was already offering the first regular price quotations for actively traded securities and a wide range of financial intermediaries had grown up as Tudor money scriveners were replaced by bill brokers while specialist dealers in stock were replaced by brokers and jobbers (Morgan and Thomas 1962; King 1972). In turn, these new or improved financial instruments and markets relied on organisational developments, most especially joint stock companies (which originated in the sixteenth century), and a range of different kinds of banks (in Britain, private banks, country banks and merchant banks, for example) which in turn were to lead on to the formation of joint stock banks in the early nineteenth century.

A third major change was the increasing frequency of financially led crises, usually the result of excessive speculation around all manner of objects, based in the expanded ability to obtain credit, coupled with the increasing dematerialisation of money. Increasingly, money was being transformed into *fictitious capital,* most especially through the development of new ways of buying ahead, sometimes to lay off risks, which themselves became tradable instruments. Thus, by the late seventeenth century, the London capital market was using time bargains and dealing in options.

But London was put into the shade by the Amsterdam capital market which earlier in the century had already developed many sophisticated techniques for trading, including short selling, puts and calls (options to buy or sell stocks at a stipulated price over a stipulated period of time), and futures trading in commodities. The status of some of these techniques is well described by the Dutch description of options trading—*windhandel-* or trading in air. Certainly it is no surprise that insurance began to be used as a way of reducing risk: for example, the first insurance company in England started in 1680 with a considerable expansion taking place in 1720 (Kindleberger 1984) but, again, the Dutch were effectively first in the field. However, overshadowing each of these three changes was a fourth and that was the increased involvement of the nation state in the financial system. This was to bring into being a new set of monetary forms, institutions and practices.

The rise of money of account also brought with it changing attitudes to and interpretations of money as the 'old incumber'd villainy' of the monarchical state and landed aristocrats was challenged by new centres of power, including especially the merchant classes. These changing attitudes to and interpretations of money are clearly complex but the example of England shows some of the kind of changes that occurred in many of the countries of the west. In England, these changes were fourfold. First, 'credit' becomes a key figure in the imaginary, a figure of anxiety which is all the more pronounced because of money's increasingly paper form, and which changed decisively the ways in which people thought and wrote about themselves and the world:

> The power of the imaginary [of credit] was becoming a moving force in secular material transformations of human relationships and circumstance. If biblical faith could move mountains then business confidence, through systems of credit, would sail ships and drive an economy. As faith is increasingly placed in paper forms pledging invisible futures for the sale of returns which may or may not materialise, the medium of change, money itself (but now not even metal specie, but paper notes of credit), and not the goods that money supposedly exists to circulate, increasingly signified the substance of wealth.... Defoe brings into the light of Day the issues being raised. 'Is it a true story', he asks, 'that nations should grow rich by War?... Why do *East India* Company's Stock rise when Ships are taken? Mine adventures raise Annuities when Stocks fall; lose their Vein of Oar in the Mine, and yet find it in the Shares; let no man wonder at the Paradoxes, since such strange things are practised every Day among us? If any Man requires an answer to such things as these, they may find it in this Ejaculation. Great is the Power of Imagination.'
>
> (Nicholson 1994:46)

'Inconstant' credit was seen to bring into existence new forms of personality, was seen to refashion natural desire as fevered acquisition, and was seen to challenge traditional hierarchies. Most commonly, when writers cast around for a figure with which to embody credit, it was presented as a self-willed but persuadable woman.[4] In other words, 'the rhetoric of Eve as fateful temptress survives in altered usage' (Nicholson 1994: xi).

Second, and coincident with the importance of credit, there is the spectre of debt which also vexed writers of the time.[5] The possibility of imprisonment for debt in debtors prisons like the Fleet sketched in books like *The Cry of the Oppressed,* the later plates of *The Rake's Progress* and plays like Goldsmith's *The Good-Natured Man,* shows the concern with which debt was handled, a concern buttressed by Christian injunctions against getting into debt at all (Barty-King 1991). Third, the subject of money opened up a space for public discourse, a space which was strengthened by the Lockean idea of a 'contract'[6] as being as or more important than ancient custom, and the growing realisation by writers that they were themselves a part of the sphere of commerce, reliant on agents, publishers, painters, and the like. Finally, there was an increasing development of the notion of risk as something that could be set apart from mere gambling. Gambling was a 'passion' which eroded self-control, erased past commitments and threatened future duties (Hirschman 1977). In seeking out risk, gamblers lost all sight of their social obligation. But now types of financial instruments (like insurance) were able to break the link between gambling and risk and refigure risk as a quantifiable estate of uncertainty which was morally tenable (Knights and Vurdubakis 1993).

State credit money

The rise of money of account and the growth of bank credit money had led to a falling away of the influence of the state over money. The state still remained important, of course, particularly in the creation and validation of commodity money which, despite the growth of money of account, was still widely perceived as the ultimate source of value within the monetary system. However, beyond this, responsibility for regulating the financial system fell to the growing band of private merchants and bankers who effectively oversaw and supervised the circulation of money and credit, often through informal but closely knit networks for the exchange of business and information.

For example, Quinn (1995) has shown how in the seventeenth century a network of goldsmith-bankers in the City of London used their reserves of gold to develop markets in short-term debt. The possession of a receipt or note from a goldsmith 'was evidence of ability to pay; of money in the bank' (Davies 1994:251). In this way, these early banking institutions facilitated the growth of credit money instruments such as bank notes and cheques, helping them become established as readily acceptable means of payment.

But these privatised financial instruments and the institutions that issued them were never entirely free of the influence of the state. For example, many of London's goldsmith-bankers came to grief in the 1670s when, in the face of their refusal to increase their loans to the Crown in order to fund a further round of naval expansion, Charles II prohibited the payment of royal debt.[7] And, during the eighteenth century, the state's influence over the finance system began to reassert itself. There were three main reasons for this. The first of these was the creation of national debts (chiefly, it should be noted, through the need to finance wars). State means of financing debts had often been haphazard so that 'the total picture prior to 1700 was best described as chaotic' (Kindelberger 1984: 76). However, after 1700, markets for debt both broadened and deepened and, as a result, government debt was consolidated and extended. States became borrowers on a large scale. For example, as late as 1824 the paid-up capital of all the domestic companies trading on the London Stock Exchange was £34 million. This compared with a public debt of over £800 million (Neal 1990). The second reason for increasing state involvement was the creation of limited monarchies. Once absolutist states were overthrown, the risk of arbitrary seizure of assets was much reduced and lending to states became a more sober and reliable business. Finally, there was the creation of national banks which in time took on a range of regulatory functions. Public banks had been founded in Europe from an early date. The first state deposit bank had been established in Geneva in 1407 and further such banks followed in Spain and Sicily. Increasing sophistication came with the founding of the Bank of Amsterdam in 1608 and the first true state central bank, the Swedish Riksbank, established in 1656 and taken over by the Swedish state in 1668. However, it is still generally reckoned that it is the founding of the Bank of England in 1694 that signalled the most important innovation in state finance (Fay 1988). The Bank was founded to market the national debt but ended up managing it and regulating the British financial system to boot. Yet the history of the Bank of England is a history of only grudging acceptance of a role as the focus of the British financial system, a role forced on it by various financial crises. Most importantly of all, under the Bank Act of 1844, the Bank became a lender of last resort. By 1890 the Bank was acting as a full lender of last resort, arranging to guarantee the liabilities of Barings in a way that it would not have done in previous years (Roberts and Kynaston 1995).

The idea of a central state bank acting as lender of last resort then spread to the rest of the world. In doing so, it produced a new kind of money, what Keynes called *state credit money,* in which the state becomes the guarantor of public debts, using its ability to issue money. What distinguishes bank credit money from state credit money 'is the fact that the former defines a private debt whereas the latter does not. Thus the determining factor is not the private or public character of the institution which is getting spontaneously indebted but the nature of its debt' (Cencini 1988:46). State credit money reached its apotheosis in the years after the Second World War. At that time, an international system of state money seemed to be coming into existence, as a result of the Bretton Woods agreement of 1944 and the subsequent postwar settlement. The function of lender of last resort between nations was a role discharged by the World Bank and the International Monetary Fund (IMF), as well as by the central bank swaps which grew up outside the IMF.

However, the ascendancy of state credit money was always contested. Even at its height, the state was never unambiguously in charge of money. The internationalisation of money, the growth of the power of banks and the increase in private commercial lending, as opposed to state lending, provided countervailing forces. Even in 1906, one London commentator, with a degree of prescience if not accuracy, could write that 'Lombard Street has been more under the control of the Japanese banks than of the Bank of England' (cited in King 1972:283). State banks were able to fend off countervailing forces through more active banking strategies and the Bretton Woods agreement seemed to signal the final success of state credit money. But in the late 1960s and early 1970s, the strength of countervailing forces was significantly boosted. Most especially, much of the international capital market moved outside of state control through the growth of the Eurocurrency and other markets. Other woes piled up thick and fast: the opportunities to create and distribute fictitious capital became much greater because of the invention of new financial instruments (some of which were precisely designed to avoid state regulation); state regulation of national financial systems tended to become less rigid if not less extensive (Helleiner 1994, 1995); as a result of successive bouts of reregulation financial service companies began to move across established regulatory boundaries; systems of monetary transmission and clearing went electronic, becoming harder to track. The result was that it was no longer possible, as it had still been in the early 1970s, to use the weight of government in the gross national product to control or even direct the private sector (Minsky 1982).

The interpretations that were current in the period when state credit money reigned are again complex in their genealogy and contradictory in their effects. As the case of England shows, to an extent the concerns of the previous period were still prevalent. For example, credit and debt remained critical sites of the imagination, especially for the many women for whom, at least at the beginning of the period, 'the world of credit with its ever-present threat of prison for unpaid bills was directly in…experience' (Copeland 1995:4). Again, the public sphere expanded, and one of its chief concerns became money and how to get and manage it. For example, Copeland (1995:7) notes that money, like the weather, 'is one topic on which every novel has an opinion'.

But there were also some important changes and each of these can be traced to the growth in influence of the state. The first was the growth of state action upon the monetary front which significantly affected the lives of many ordinary people. Most particularly, in 1869 imprisonment for debt was abolished. Then there was the growth of insurance which, although not state controlled, was certainly sponsored by the state.[8] And, finally, and most importantly, there was the growth of the welfare state. Second, there was the growth of a 'domestic attitude' to money. Management of money was to be modelled on a domestic budget (Copeland 1995), which arose from the new discourse of family responsibility being promoted by Hannah Moore, Samuel Smiles and the like and from a direct comparison between the accounts of states and households.[9] 'Prudence requires that we pitch our scale of living a degree below our means rather than up to them, but this can only be done by carrying out faithfully a plan of living by which both ends may be made to meet' (Smiles 1859). As a result, after 1800,

> money finds a far less anxious place in the women's novel. Women's fiction abandons bit by bit, its narrative of economic victimisation to embrace a narrative of economic empowerment, a fictional world in which women assertively participate in the economy as managers of the domestic budget.
>
> (Copeland 1995:61)

Virtual money

It is now possible to talk about a new kind of money coming into existence: *virtual money* (or book entry money) (Cencini 1988). This is money reduced to a numeraire— Walras in action. Money becomes an activated double book entry, a spontaneous acknowledgement of debt that is no longer a commodity. This new system of fleeting *instants* is based on quasi-private institutions and on the full range of instruments of fictitious capital (Hart 1986). 'Money is accepted on the belief that whoever offered it will make it good *in the future*. Money is to that extent partly a fiction, the stuff that dreams are made of (Desai 1988: xiii).

It is possible to make virtual money seem as though it is insubstantial, what Poster (1990) calls a 'messagerie' constantly circulating intentions in an electronic space. In some accounts, often following Baudrillard, virtual money achieves lift-off from the real world:

> only signs, representations and simulations of the real circulate. In fact this is the reality of 'Wall Street'. Go back to the floor of the Stock Exchange, and re-examine the green computer screens of the young bankers.... Numbers flashing across screens, numbers which can be erased with a touch of the finger, or a loud voice. Numbers which point to imaginary properties of imaginary things. Companies with made-up names whose productivity is measured by imaginary accounts. Money attached to nothing by imaginary numbers attached to made up accounts, built on who can best manipulate this imaginary political economy of signs.
>
> (Denzin 1991:40)

But it has to be understood that virtual money cannot be reduced to this romance of the unrepresentable. *It consists of a set of social practices just like any other*. It is not just a ghost in the machine.

Further, this new set of practices will continue in combination with other older forms of monetary practice in new combinations. For example, although the use of cash payments has declined in Britain, cash seems likely to remain important for many years yet, and not just because of the underground economy. In 1994, for example, according to Bank of England figures, 16 million out of 26 million recorded monetary transactions in Britain were in cash (Coyle 1995). And in 1995 the use of cash-intensive services, a boom in tourism, and even a heat wave in July and August (which increased spending on cash items like drinking and ices) boosted the use of cash. Further, electronic developments often *seem* more extraordinary than they are. Certainly it is possible to point to the remarkable spread of automated transactions machines (ATMs), often functioning on an intercontinental scale (Thrift 1995). The use of these machines has grown rapidly, in Britain up from 8,625 in 1986 to 14,096 in 1994, as has the number of transactions involving them (496 million in 1986, 1.3 billion in 1994). Similarly, there is the increasing use of debit cards, launched in Britain in 1988. And yet, what are these innovations mostly used for? In the case of the ATM, to withdraw *cash*. And in the case of the debit card, one of the reasons for its success in Britain has been the offering of 'cash-back' facilities.[10]

Virtual money also has its characteristic interpretations. In some senses, these interpretations might be regarded as a 'return' to those of the era of money of account. In England, for example, the increasingly rapid circulation of increasingly virtual money seems to have produced the same degree of suspicion of money's chimerical qualities, allied to a suspicion of the City of London as the centre of this virtual world, which is to be found in Addison or Pope or Gay or Swift, a point made clear by Churchill's (1987) play *Serious Money* which is prefaced by a scene from Thomas Shadwell's 1692 play, *The Volunteers, or the Stockjobbers* (1692).

But there have also been many changes. Of these, the most important is clearly the growth of a more accommodating attitude to the existence of credit and debt over the whole population which is, roughly speaking, based on the principle that 'everyone should be free to obtain as much credit as he (sic) could get, on the terms available to the market. But that was not to say that people had a right to it, that they were entitled to it' (Barty-King 1991:171). But, even here, there are traces of older attitudes, attitudes that certainly go back to the era of money of account, and earlier.

> There is a very clear dichotomy in the British attitude to credit/debt. At its most basic assumption, credit is when you can afford the loan and debt is when you cannot, but I suspect that a lot of the ambivalence goes back to the medieval Christian theory of the Just Price and the medieval Christian view that usury was a sin. Certainly approximately 70 per cent of the population disapprove of debt, and 70 per cent of the British population are in debt. There is disapproval in principle and approval in practice, or is it hating the sin and loving the sinner?
>
> (Cunningham, cited in Barty-King 1991: vi)

Certain things immediately become clear from this short history of the transformation of money. The first of these is that this is a history of what Marx and others called the *dematerialisation* of money. Money is no longer a commodity which is transported hither and thither. It no longer even consists of paper, in the main. Increasingly, money is a set of double entries briefly etched in computer memories. The second thing that emerges is the crucially important role of *space*. Space is wrapped up with the history of the transformation of money because money is a means of linking what are often widely scattered interchanges, connecting credit and liability. As Giddens (1990:24) puts it:

> Money is a means of bracketing time and so of lifting transactions out of particular milieu of exchange. More accurately put...money is a means of time-space distanciation. Money provides for the enactment of transactions between agents widely separated in time and space.

MONEY AND SPACE

The importance of space is worth expanding on, because the history of money and credit has been a geography too, and that geography has been and is constitutive of what money and credit now are. However, the importance of geography in the evolution of money has not always been recognised. In particular, there has been a failure to be suitably sensitive to the interplay between money, space and place, to see that monetary forms, practices and institutions are contingent in both space and time, and that money has often evolved in order to solve more general problems of time-space co-ordination; that is, money allows social relationships to be extended across space and time. To understand money, then, we must consider its historical geography. Each monetary form has its own geography, and the transformation from one monetary form to another has important geographical implications. It is, therefore, possible to identify different geographies of money.

Mapping the geography of *'premodern money'* would reveal a patchwork of discrete monetary systems scattered widely over space and through time, each system reflective of specific social and cultural conditions. If the incidence of such systems were mapped over time, then one would find that the systems that survived longest, in many cases well into the modern period, were a part of societies and cultures which maintained some degree of isolation from economies which used modern money forms. It is in this sense highly appropriate that the second chapter of Einzig's (1966) influential book on premodern money is entitled, 'Is primitive money still Terra Incognita?'. Einzig was making reference to the level of knowledge amassed by western academics on the subject, but the term has a deeper meaning than Einzig intended. For the survival of premodern money is inversely related to the degree of contact between the societies in which it circulates and western culture. It is no coincidence then that it was in Oceania and parts of Africa that premodern money systems appear to have survived longest (Einzig 1966), or long enough at least to have them documented by western anthropologists (although such acts of documentation often also sounded the death-knell for many premodern money systems, signalling as they did a greater degree of contact between such societies and a more powerful cultural form which used modern money (Gewertz and Errington 1995)).

Dodd (1994) appears to suggest that these initial acts of documentation and revelation have ensured that the possibilities of writing a systematic historical geography of premodern moneys are not propitious. Most of our knowledge of premodern money systems has been amassed by anthropologists but, according to Dodd at least, this knowledge is flawed, tainted by the idiographic biases of anthropological enquiry:

> The empirical study of pre-modern money has been misled by a preoccupation with the physical and symbolic properties of monetary objects. This precludes examination of the social and cultural conditions which enable monetary transaction, using any object whatsoever, to take place. To focus on the features of monetary objects can obviously be informative. But it is also too specific, providing no exhaustive guide to understanding the preconditions for establishing money as a social institution within a particular society or social group, however limited its use and functions might be.
>
> (Dodd 1994: xxi)

Such limitations would indeed make the writing of a convincing geography based on such anthropological accounts rather difficult. But the more interesting issue, from a geographical perspective at least, is not the empirical mapping of a constellation of premodern money forms, but the documentation of episodes of monetary incursion of exogenous monetary forms, practices and institutions and interpretations. As Dalton (1965:66) has astutely observed, 'cases of monetary incursion deserve examination for reasons that are of interest to students of community economic development as well as economic anthropology'. Dalton is specifically concerned with the effects of 'western' money on 'traditional social organisations and cultural practices' in less developed countries, among the most important of which is the fusion of non-commercial obligations and commercial payments. However, the lessons of historical episodes of monetary incursion may also be of value to those interested in the possibilities of creating 'alternative' financial institutions in the 'west', such as local exchange and trading systems (LETS) (Lee 1995; Williams 1995), which, at a pinch, may be interpreted as the reassertion of premodern moneys in the midst of modern monetary systems.

The history of these monetary incursions really begins with the development of *commodity money*. The early history of commodity money is in large part one of incursion and invasion, for the development of coinage made it far easier to mobilise military action at a distance. As Davies (1994: 108) describes it, 'Coins followed—indeed accompanied—the sword', so that 'payment for troops and for their large armies of camp-followers was generally the cause of minting'. The Greek and Roman armies were paid in coin and well paid too in order to maintain their loyalty. It has been estimated that it would require 1, 500,000 silver denarii per annum to support a single Roman legion, so that the majority of the silver flowing into Rome from the mines scattered throughout the empire was transformed into coins to support the Roman army (Davies 1994:88).

At the same time, as the armies went on their military campaigns they became vehicles of monetary expansion and incursion, for they took their coins with them, which subsequently became used as money in the territories they appropriated. The effect of these actions was to bring about a degree of financial homogenisation over space. One way in which this came about, of course, was through direct force, as more powerful states imposed their money on weak states, thereby easing economic integration and eliminating the uncertainties associated with monetary exchange. Just such an episode occurred in Greece in the middle of the first millennium BC:

> In 456 BC Athens forced Aegina to take Athenian 'owls' and to cease minting their own 'turtle' coinage. In 449 BC Athens in furtherance of greater uniformity issued an edict ordering all 'foreign' coins to be handed in to the Athenian mint and compelling all her allies to use the Attic standard of weight, measures and money.
> (Davies 1994:76)

Here is an example of financial homogenisation occurring across spaces already dominated by commodity money. But of more importance to the argument being pursued here was the extension of commodity money networks into spaces previously dominated by exchange based on premodern moneys. However, while such incursions were undoubtedly important in extending the geographical influence of modern money, to recall the instance of Roman Britain discussed earlier, the degree to which early monetary networks extended beyond the key cities of the empire into the vast territories that surrounded then is still the subject of much debate (Aitchison 1988:277–8).

In many cases, the 'infilling' of commodity money into the spaces that surrounded these nodal centres did not occur until much later with the rise of the fiscal policies of the early monarchical states, a process that was facilitated by the construction of an extensive network of official mints. At the same time, there occurred a marked increase in the level of trade, often across large geographical distances, despite the inherent inconveniences of conducting exchange at long distance using heavy coinage, with the result that until about the fifteenth century the history of money includes often heroic efforts to transport commodity money over long distances. However, during the fifteenth century a new monetary era hove into view, due in large part to a series of social innovations which caused a radical shift in the time-space co-ordinates of the financial system:

> The modern monetary age…began with the geographic discoveries, with the full fruition of the Renaissance, with Columbus and El Dorado, with Leonardo da Vinci, Luther and Caxton; in short with improvements in communications, minting and printing. A vast increase in money, minted and printed, occurred in parallel with an unprecedented expansion in physical and mental resources. The invention of new machines for minting and printing were in fact closely linked in a manner highly significant for the future of finance. At first the increase in coinage was to exceed, and then just to keep pace with the increase in paper money; but eventually and inexorably paper was to displace silver and gold, and thereby to release money from its metallic chains and anchors.
>
> (Davies, 1994:174)

The advent of credit money served to reshape the geography of the financial system. The clearest sign of the birth of this new monetary era was the increasing use of the bill of exchange. When the first bills of exchange appeared, presenting the first means of distanciating credit, distance was, not surprisingly, the crucial factor in calculating the maturity of a bill. Thus the 'usuance' or 'usance' of a bill, the period between its creation and maturity, was simply an acknowledgement of distance:

> Mails…took time. Bills were payable at sight, at 'usuance', or sometimes half-usuance or double-usuance. Usuance was the standard credit period for a given trade. From Geneva at the beginning of the sixteenth century it ran five days for Pisa, six for Milan, fifteen for Ancona, twenty for Barcelona, thirty for Valencia and Montpellier, two months for Bruges and three for London. From London, usuance was one month to Antwerp, two to Hamburg and three to the northern Italian cities. It was seldom changed: the one month between London and Antwerp lasted from the fourteenth century to 1789.
>
> (Kindleberger 1984:39)

As money and capital markets became more extensive, so geography was again crucial. There are numerous examples of the constitutive role of space in the development of money. As noted above, the need to finance highly profitable but also risky long-distance voyages led to the invention of perpetual transferable shares. More important even than the invention of such new financial instruments was the way in which the constraints of space were overcome, so as to make these instruments tradable over greater and greater distances, through the marrying of improvements in transport and communications to specific market nodes, usually large urban centres, so as to produce an increasingly compressed financial space (Castells 1989; Harvey 1989b). It is worth dwelling on this point by considering the example of the circulation of financial documents. Financial practices have always generated large amounts of records and communications. For example, when one sixteenth-century merchant of Prato died he left 150,000 letters, 500 account books and ledgers, 500 deeds of partnership and several thousand bills and checks. Again, at the end of the eighteenth century, the clerk of one Hamburg banker wrote 200 letters a day and when the ice broke up in 1795 and thirteen English posts came in at once, it took the banker concerned three days to read them all (Kindleberger 1984).

The way in which systems of financial communication and transmission came about as specific articulations of space is perhaps best illustrated through the historical geography of the development of bank clearing in England and Wales (Kindleberger 1984). By the seventeenth century London had already become the major clearing centre for national payments. The London banks issued a few bank notes of their own. They settled balances with each other, on their own accounts and the accounts of their correspondents, in Bank of England notes. The banks kept running accounts with one another which enabled them to cancel out off-setting claims. This activity was soon transferred to a public house and then in 1773 to a rented building in Lombard Street which was dubbed as the clearing house. Not all of the City of London banks joined this institution and, as if to demonstrate the importance of even small distances, none of the banks in the West End of London became members. Private banks continued to dominate London clearing even after joint stock banks were formed after the Bank Acts of 1826 and 1833. The new joint stock banks were only finally admitted to the London clearing in 1854.

Clearing was clearly slow to form in London but in time it became an institution, based on a tightly regulated micro-space of specific distances (only offices within one-half a mile of the clearing house were allowed in the system) and specific times (the afternoon settlement deadline), integrated by the 'walks' of messengers and couriers around the offices picking up drafts and cheques to take to the clearing house for settlement. However, if clearing was slow to form in London—and spatially specific even there–it was slower still in the provinces. There, the system was regional in emphasis. A system of exchanging bank notes on a friendly basis was developed by Scottish banks as early as 1752. In England, before that date, there were, in any case, few banks, perhaps a dozen in all. But after that date the number of 'country banks' grew almost exponentially and the need for some system of clearing became pressing (Presnell 1956). For example, by the 1780s eight country banks in Newcastle were exchanging notes at regular intervals. By the early nineteenth century banks in the north were coming together at weekly or even biweekly intervals using Bank of England notes, then cheques, to settle any outstanding balances. After the Bank Act of 1826, Bank of England branches spread out over the country (Black

1989). These branches became the natural foci for settlement, and by the later nineteenth century all principal cities had their own clearing houses.

However, if *intra-regional* settlement was now proceeding on national lines, *inter-regional* settlement was still something of a problem. Indeed, bills of exchange were still being used well into the nineteenth century. The domestic bill of exchange only finally declined for a number of reasons, chief amongst which were the rise of the telegraphic transfer, wide circulation of Bank of England notes, the rapid growth of bank depositors and bank deposits and, most important of all, the rise of joint stock banks with extensive branch networks which meant that inter-regional clearing moved from the inter to the intra-organisational domain (King 1972). As a result, clearing through London gradually became the norm. For example,

> in 1858 the National Provincial Bank thought it preposterous for a bank in Manchester to collect a cheque on Newcastle-upon-Tyne by way of London.... By 1866, however, it was ready to give up the note issue privilege, start a London banking office, and settle for its system through the regular London clearing.
>
> (Kindleberger 1984:79)

This brief example shows a financial system progressively coalescing at different spatial scales from the inter-regional to the national. It also illustrates the ways in which more or less uniform national financial spaces are formed based upon state money, brought into being through the regulation of money by the state:

> The creation of what can be described as 'national financial space' was part and parcel of the evolution of the state system between the sixteenth and eighteenth century, upon which the capitalist system was grounded. Along with the development of a centralised legal order and taxation system, the emergence of national monetary systems organised and policed by state authorities was central to the emergence of what later became the nation-state (Giddens, 1985). National financial spaces were predicated upon the circulation of 'state' or 'fiduciary money'; that is, money that has no inherent value of itself, such as commodity money, but is guaranteed
>
> through the state's supervision and surveillance of the national financial system (Giddens, 1985, page 155). In seeking to maintain the worth of fiduciary money, the state is forced to sanction those economic institutions that, through 'improper' financial practice, are seen to be undermining faith in fiduciary money as the medium of exchange and the measure of value in exchange. Through the social practice of regulation (Marden, 1992), the state seeks to control the institutions within a financial system, ushering in 'safe and sound' financial practice, while at the same time crowding out alternatives to fiduciary money within the national financial space.
>
> (Leyshon 1996a: 76)