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**MONEY AND BANKS IN TRANSITION ECONOMIES: THE CASE OF
UZBEKISTAN**

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Department of Economics

By

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Abstract

Using the Post Keynesian approach, this study investigates the evolution of money and banks in transition economies in general, and in Uzbekistan in particular. By emphasising the role and importance of institutions in the economic process, the study argues that the evolution of money and banks during transition is a necessarily complex and time-consuming process. By analysing functional differences of money and banks and their evolutionary path in a market economy and in a centrally planned economy, the study suggests that, to reach necessary maturity and to become effective financial intermediaries and creators of new credit, transition banks have to go through several evolutionary phases. This is explained by the historical distinction between cash money and non-cash money, underdeveloped banking habits of the general public, slow and inefficient payments system inherited from the past, and more importantly hyperinflation during the early years of transition.

Taking Uzbekistan as a case study, we also argue that the speed of this evolution can vary from country to country depending upon a number of important factors such as the number of years spent under central planning, the degree of centralisation of the economy, the starting date of reforms and their consistency, proximity to large and dynamically functioning market economies, and more importantly entry of foreign banks. Uzbekistan was very slow in reforming its economy and therefore is still far from developing into a market economy. In spite of some positive changes undertaken during the transition period such as establishment of a two-tier banking sector, formal abolition of the distinction between cash money and non-cash money, modernisation of the payments system, controlling inflation, and the establishment of the deposit insurance fund, the banking sector failed to

regain the general public's confidence. We argue that weak development of money and banking in Uzbekistan is largely explained by the current structural organisation of the economy and some sector-specific issues associated with it. The implication of these arguments is that, in order to capture the objective reality of the situation, theories must be developed in particular ways in the context of history, institutional factors, and policy frameworks.

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Introduction

Persistent macroeconomic imbalances that cost huge output loss in post-communist economies during the years of transition have proven that reform packages designed in the framework of mainstream economic theories were a failure. After so many years only very few post-soviet transition countries have reached their pre-transition income levels. With hindsight, now we can tell that this failure was the result of an ahistorical approach, which ignored the time needed for the evolution and further development of true market institutions. Transition countries' economies had been analysed using the standard method to assess market economies, meaning more than 70 years of central planning experience was not properly taken into account.

It was most naively expected that market institutions would spring up as soon as central planning was abolished. Indeed, ignorance of previous experience and neglect of the necessary time for the evolution of market institutions proved to be costly. The newly created banking sector failed to fill the gap left by the monobank system. The result was a credit crunch, massive output loss and the development of inefficient money surrogates.

The reason for the failure to duly recognise the role of institutions and the necessary time needed for their evolution during transition is implicitly embedded in the chosen methodology of orthodox theory. Economic variables are divided between the real and monetary sides, the latter of which does not play any active role in the economic process. In particular, money and banks are depicted as a veil and seen as neutral. Interestingly enough, if one agrees with this opinion, then there is no need to study the evolution, and the role and importance of money and banks during transition.

The fact, however, is that, in the real world, institutions, including money and banks, play an important role in the economic process. The importance of institutions and conventions is explained by the fact that they are developed to 'lull our disquietude' about the uncertain future. The serious shortcoming of the orthodox approach in not addressing this reality necessitates adoption of a different approach: an approach that takes into account realities of the past and uncertainties about the future and gives enough weight to the historical process of evolution of the institutions. For these and other reasons, we chose to employ an alternative approach to analyse the process of economic transition, drastically different from the orthodox one. Hence, the main arguments of this work are built on the Post Keynesian approach, which emphasises the role of institutions, particularly of money and banks, in the economic process.

This study investigates the evolution of money and banks in Uzbekistan during transition. The arguments of the study are rather simple, but fundamental. The role and importance attached to money and banks differ radically in a market economy and in a centralised planned economy. Therefore, we argue that in order to understand the true nature of development of money and banks during transition, one must analyse functional differences of these institutions and their evolutionary path in two different systems. In other words, we have to know how money and banks evolved through time and what are the reasons for their functional differences. This will be of paramount importance in understanding the complex nature of transition and assessing the possible evolutionary path for institutional developments during transition. Moreover, we also argue that the speed of institutional developments varies from country to country depending upon a number of important factors such as the degree of institutional distortions inherited from the past, fundamental structural

reforms that promote the general public's confidence in money and banks, the current structure of the economy and system-specific issues associated with it, and the way institutional and technological developments are adopted. The implication of these arguments is that in order to capture the objective reality of the situation, theories must be developed in particular ways in the context of history, institutional factors, and policy frameworks.

In this sense, based on these arguments that, we will analyse the current state of development of money and banks, and their evolutionary path in Uzbekistan. The Uzbek case is of particular interest for research purposes because in the context of neoliberal reforms Uzbekistan is considered to be among the worst reformers, yet paradoxically it turns out to be among the best performers in terms of both achieving better macroeconomic results and maintaining a better social safety net. Reflecting upon this extraordinary performance, which is known as the 'Uzbek puzzle' in the literature, we will show the importance of policy frameworks and institutional factors in understanding both the economic performance, and the current state and the evolutionary path of money and banks during transition.

Hence, the study is organised as follows. Starting our analysis with a market economy, in Chapter 1 and Chapter 2 we will explore the role and importance of money and banks in the economic process. We will investigate in more detail such issues as what constitutes money in a market (monetary) economy, what characteristics it possesses, its changing nature, its functions, and motives for holding it. Since the entire financial superstructure of the contemporary advanced market economies is built on the issue of having trust in money, these issues are of paramount importance for our analysis. We will also consider how money is created

endogenously by the private sector in a market economy, given there is a strong trust in outside money.

In Chapter 3, we will look at the special role of banks in the economic process and analyse the evolutionary nature of institutional development. We will address issues such as why banks are special, how they can finance investment before saving takes place, and more importantly how banks develop through time. Particular attention will also be given to the critical review of the literature on finance and economic development.

In Chapter 4, we will examine the same issues, but now in the context of centrally planned economies. The purpose behind this exercise is to juxtapose the said phenomena in two different economic systems and to make necessary inferences for our case study. In Chapter 5, we will look at the reform choice, the transition path, and the current structure and performance of the Uzbek economy during transition. This exercise will be helpful in analysing macroeconomic problems and obstacles that inhibit banking sector development in Uzbekistan. In Chapter 6, we will analyse generalised pattern of development of money and banks during transition. Chick's stages of banking development framework will be employed to assess the nature of banking development in transition countries.

Given this, in Chapter 7, we will investigate in detail the evolution of money and banking in Uzbekistan. Using all the arguments put forward in earlier chapters, we look at the issue of institutional development, i.e. what kind of financial system Uzbekistan has inherited from the past, how it went about reforming it, and what is the current state of development. In addition, the issue of cash money and non-cash money, their nature, role and necessity for retaining such a distinction during the

years of transition will also be discussed. Finally, in Chapter 8 we will briefly summarise main findings and conclusions of the study.

In short, we can say that the organisational structure of this thesis has not come into view spontaneously; rather it has emerged as a natural outcome of the chosen methodology.

1. The Role of Money in Capitalist Economies. A Post Keynesian Perspective

1.1 Introduction

As was outlined in the general introduction to this study, the main purpose of the first three chapters is to analyse the role and importance of money, banks and the banking sector in the working of a mature capitalist economy. This chapter commences our investigation into the nature of money and its peculiar role in the economic process. We will look at issues such as what makes money special, and why money plays peculiar role in the economic process in a capitalist economy. We will show that the very organisational structure of a capitalist economy explains why money plays a facilitating as well as a constraining role in the economic process.

In short, the chapter is organised as follows. In Section 1.2 methodological issues concerning the monetary analysis of the working of a capitalist economy will be explored; the specification and importance of uncertainty and time in understanding money will be examined. Non-neutrality of money in the economic process will be discussed in Section 1.3. This will be shown using Keynes's argument about the working of a co-operative economy, a neutral entrepreneur economy and an entrepreneur economy. In Section 1.4 we will argue that a monetary economy as such develops only in property based societies.¹ Finally, in Section 1.5 we will cover essential properties of money and motives for holding it. Also in this section we will start our detailed discussion of the notion of liquidity preference. The concept of endogenous money and

¹ Here and hereafter by property based economy/society we mean *private* property based economy/society unless we expressly state otherwise.

importance of liquidity preference in endogenous money analysis, then, will be continued in the next chapter.

1.2 Money, Uncertainty and Time in Post Keynesian Analysis

Neoclassical macroeconomic theory distinguishes between the real and monetary sides of the economy. Indeed a real exchange economy of the neoclassical world is modelled as a barter economy operating under conditions of certainty. ‘There is no provision for a monetary system interacting with the real sector of the economy’ (Rousseas, 1992: 19). Money is ‘dropped’ into the model ‘either in the form of manna from Heaven or,...[as a technical input] from a helicopter’ (ibid). In such an economy only the medium of exchange aspect of money is emphasised (Davidson, 1978: 141). Introduction of money into the barter society eliminates the hassle of ‘double coincidence of wants’ thus reducing search and transaction costs, speeds up the pace of trade, and also enhances trade opportunities and causes specialisation in production. Indeed, Drake (1980) emphasised the last channel to be the most important in bringing economic efficiency. Once it is introduced, however, money becomes ‘neutral’. In the long run money affects only the price level, leaving other *real* variables unaffected.

The neoclassical method of approaching the economic system is based on dualism (Chick, 2003: 323). Dualism then is the central feature of Cartesian/Euclidean mode of thought (Dow, 1996a: 16). According to this tradition knowledge is represented by information. Facts about the events are classified as either known or unknown. Further, even unknown facts about the future are knowable, at least probabilistically. Herein

comes the classification of uncertainty as something quantifiable by means of frequency distribution (ibid: 18).

In a dualistic mode of thought the absence of *perfect* knowledge is interpreted as *no* knowledge (Dow, 1993: 18). In the theory of expectations, for example, ‘dualism emerges in the contrast between known and not-known; there is no room for “expected to be likely, with a low degree of confidence”’ (ibid: 12). This approach in its turn leads to another fallacious conclusion. Since information regarding the uncertain events of the future is available, individuals are rational in the sense that they make perfect use of it. Therefore, ‘behaviour which is irrational in relation to known information, according to the orthodox economic sense of rationality..., is the province of the psychiatrist, not the economist’ (Dow, 1996a: 18). In this way, true understanding of the working of the economic system requires thinking beyond dualism. In the real world time necessarily leads to uncertainty and uncertainty to partial knowledge (Chick, 2002: 9). Hence, when perfect knowledge pertaining to the future is unobtainable, partial knowledge does matter.

In neoclassical economic theory ‘*probabilistic risk and uncertainty are synonymous*’ (Davidson, 1991: 129, emphasis in the original). Probabilistic risk, however, ‘pertains to what is in principle insurable – it can be described by a probability distribution – and uncertainty is whatever falls outside such a description’ (Knight, 1937, in Chick, 1983: 214). Hence, while risk in principle can be classified as measurable, uncertainty cannot. It follows that true uncertainty is non-quantifiable, non-measurable (Knight, 1935: 20). ‘[T]rue uncertainty by definition cannot be modelled deterministically; herein lies its significance for decision making. It refers to an absence

of knowledge, a lack of confidence in one's predictions' (Dow, 1993: 16). Because the future cannot be known, 'it involves a dialectic that is open-ended and *a priori* indeterminate' (Rousseas, 1992: 18). About uncertain future events 'there is no scientific basis on which to form any calculable probability whatever. We simply do not know' (Keynes, 1937a: 214). In this sense, Davidson (1978, 1982-3, 1991) makes the distinction between *ergodic* and *non-ergodic* processes. By *ergodic* process he means the situation in which 'the probability distribution of the relevant variable calculated from any past realization tends to converge with the probability function governing the current events *and* with the probability function that will govern future outcomes' (Davidson, 1987 in Lawson, 1988: 51.) He associates uncertainty with a non-ergodic process, which can be characterized only as one of numerically immeasurable probability (Lawson, 1988: 51).

From the other point of view, the static method adopted in neoclassical analysis assumes away historical time as such (Chick, 2003). As a corollary, information about 'the dark forces of time and ignorance which envelop our future' (Keynes, 1970: 155) can be guessed with certainty in advance and therefore uncertainty can be reduced to a calculable risk. Hence capital markets are assumed to be perfect: lenders and borrowers accept the ongoing market interest rate without any fear of capital loss. Indeed, timelessness of the system is the result of the assumption of perfect knowledge held with certainty (Chick, 2003). This method jeopardises the proximity of the model to the real world and consequently makes it irrelevant.

Notions of expectation formation and intertemporal choice do involve time. But because of the assumption of perfect knowledge under certainty, time refers only to

logical rather than historical time (Dow, 1993: 16). Therefore, ‘within logical time, a deterministic model requires that expectations also be deterministically formed’ (ibid: 18). Logical time operating under the general equilibrium analysis framework can ‘flow backwards as well as forward’ (Rousseas, 1992: 16). This framework eliminates the time consuming price setting process, which involves uncertainty, and allows the auctioneer to establish ‘the prices by *tâtonnement*, with recontracting wiping out false trades’ (Dow, 1993: 15). In contrast historical time is irreversible. Within historical time production and other economic events also take place in an irreversible fashion so that false trades cannot be recontracted (Dow, 1993: 18, and Rousseas, 1992: 13). In this environment ‘[s]ome experiments are crucial in Shackle’s terms; in other words, acting on a particular expectation itself changes the environment for the next set of observations, so that no sample can be compiled on which to base quantitative probability estimates’ (Dow, 1993: 18).

All the above arguments indicate the dangers of oversimplification of modelling of the working of the economic system. As Keynes put it elegantly:

It may well be that the [neo]classical theory represents the way in which *we should like our Economy to behave*. But to *assume* that it actually does so is to *assume* our difficulties away.
(Keynes, 1970: 34, emphasis added)

Understanding the core of the problem, Keynes changes the framework of the analysis of the working of the economic system. Keynes’s approach is completely different from the neoclassical one. He uses a different method and mode of thought and thus produces different theory (Chick, 1983 and 2003). The atomism and dualism of the

Cartesian/Euclidean mode of thought, central in neoclassical analysis, is replaced by organicism and a move beyond dualism² of the Babylonian mode of thought. Hence, the neoclassical dichotomy between monetary and real variables is rejected 'in favour of a vision of the economy in which the influence of money is pervasive' (Chick, 2003: 315). The static method, then, with its corollary of certainty and perfect knowledge, is replaced by historical time, uncertainty and partial knowledge. As a result, the monetary theory of production is developed. This theory '*is built on the unique properties of money, on expectations formation under uncertainty, and on historical rather than logical time, each of which necessarily implies the other two; any analysis which involves only one or two of the factors is both logically incomplete and irrelevant to a monetary economy*' (Dow, 1993: 6, emphasis added).

When making decisions about future investment plans, agents take into account their productive capacities inherited from the past and expectations about the future. The latter account means that they necessarily face an uncertain future and act upon partial knowledge at hand. However, this in no way means that they act upon the 'weighted average of quantitative benefits multiplied by quantitative probabilities' (Keynes, 1970: 161). Indeed, some of the decisions are made based just on 'spontaneous optimism' and thus are the 'result of animal spirits – of a spontaneous urge to action rather than inaction' (ibid).

In the real world not only decisions made in the realm of time and uncertainty but also expectations regarding the future can affect the level of output, investment and employment (Rousseas, 1992:18). Therefore, Keynes in his *General Theory*, argued that 'as soon as we pass to the problem of what determines output and employment as a

² Chick (2003) notes that using the term non-dualism itself would again represent dualism.

whole, we require the complete theory of a Monetary Economy' (Keynes, 1970: 293). He then defines the monetary economy as 'essentially one in which changing views about the future are capable of influencing the quantity of employment and not merely its direction' (ibid: vii).

In a monetary economy money becomes *central in analysing the working of the economic system*. Money comes into this system in 'an essential and peculiar manner' as 'a subtle device linking the present to the future' (ibid: 294). 'One important argument in favour of incorporating money is that it is the outlet for expression of uncertainty in a monetary economy' (Dow, 1993:19). As was noted earlier already, in neoclassical theory money as a means of exchange facilitates exchange. Fortunately, money's role does not end with this. If it were the only reason why money mattered, then no one would hoard money beyond a certain amount only because it minimised transaction costs (Amadeo, 1995: 98).

In a neoclassical world where other assets yield some positive return, and money is 'barren' in this respect, '[w]hy should anyone outside a lunatic asylum wish to use money as a store of wealth?' (Keynes, 1937a: 215-16). In a monetary economy when expectations regarding future economic activities are weak, money enables individuals to keep their purchasing power over other assets for later periods. In this sense, money can create a constraint on economic activity. Moreover, because contracts and debt instruments are denominated and discharged in money, money also plays facilitating role in the economic process. All in all, money becomes 'non-neutral' in all senses.

Hence, in Post Keynesian thought the role of money in a market economy is seen as an essential one. Money is capable of affecting the level of investment, employment and

total production. It is an integral and inseparable part of capitalist economic production 'existing in historical time and facing an uncertain future' (Cottrell, 1994: 598). Thus in a market economy 'it is the very *existence* of money that is 'non-neutral', rather than simply variations in its quantity: an economy with actual money works quite differently from a barter economy with an arbitrarily selected numeraire labelled 'money'' (ibid: 590, emphasis in the original). Nevertheless, it is ironic that even 'the best developed [neoclassical] model of the economy cannot find room for it' (Hahn, 1982: 1).

1.3 Keynes's Co-operative and Entrepreneur Economies and a Monetary Analysis

As a theoretical thinker Keynes was unhappy with the classical 'real' and 'monetary' dichotomy. Even though his *Treatise on Money* was an early attempt to analyse the role and importance of money in the economic process, Keynes was already dissatisfied with the *Treatise* even at the time of its publication (Rotheim, 1981: 572). In the preface to the *General Theory* he admits that he 'made some progress towards pushing monetary theory back to becoming a theory of output as a whole' (Keynes, 1970: vi) after the *Treatise* had been published. Hence, for Keynes the *General Theory* in principle was a *monetary* analysis. Keynes's fundamental idea behind analysing the economy as a whole in monetary terms was to refute 'the second postulate of the classical doctrine and to work out the behaviour of a system in which involuntary unemployment in the strict sense is possible' (Keynes, 1970: 17). He wanted to prove that the fluctuations in effective demand were unavoidable in a real world monetary economy. Keynes's

posthumously published works clearly revealed how his ideas about monetary analysis were developed between his *Treatise on Money* and *General Theory*.

For Keynes the economy as a whole could not be analysed except in monetary terms. Therefore, it is not a coincidence that the first 1933 draft table of contents of *the General Theory* shows that initially Keynes named his new book, the *General Theory*, as *The Monetary Theory of Employment* (Keynes, 1979: 62). Furthermore, the last (1933) draft table of contents of the *General Theory* (Keynes, 1973: 421) indicates that at the beginning Keynes intended to include two chapters, namely *The Distinction between a Co-operative and an Entrepreneur Economy*, and *The Characteristics of an Entrepreneur Economy*, in his book that would clearly distinguish his theory from that of the neoclassical school. However, in the final version of the book these two chapters were replaced by *The Postulates of the Classical Economics* and *The Principles of Effective Demand* (Torr, 1980: 429).³

As will be discussed below, these two chapters, which were dropped from the final version of the *General Theory*, would have better explained Keynes's method of analysis of the monetary economy. In fact, Dillard (1963), Torr (1980 and 1988) and Rotheim (1981) suggest that the *General Theory* would have been more successful had Keynes included these early chapters in the final version of the book. We quote from Rotheim:

Had Keynes retained the earlier part of his 1933 outline concerning the methodology of a monetary economy, much of the criticism heaped on the *General Theory* could have been

³ According to Rotheim (1981: 572) Keynes made changes to this work taking into account the comments of his critics. However, Torr (1988: 26) suggests that the reason why Keynes never published these chapters could be that Keynes might have been afraid of being accused of plagiarism because D. H. Robertson had already been working in a similar direction.

avoided. How we think about economic problems would have been different. (Rotheim, 1981: 571)

In the 1933 draft of the *General Theory* (i.e. in the chapter entitled *The Distinction between a Co-operative Economy and an Entrepreneur Economy*) Keynes makes the distinction between three types of economy: co-operative (or real wage) economy, neutral entrepreneur economy, and entrepreneur (or money wage) economy (Keynes, 1979: 77-8). In a co-operative or real wage economy 'the factors of production are rewarded by dividing up in agreed proportions the actual output of their co-operative efforts' (ibid: 77). In a neutral entrepreneur economy 'the factors are hired by entrepreneurs for money but where there is a mechanism of some kind to ensure that the exchange value of the money incomes of the factors is always equal in the aggregate to the proportion of current output which would have been the factor's share in a co-operative economy' (ibid: 78). In contrast, in an entrepreneur economy 'the entrepreneurs hire the factors for money but without such a mechanism as the above' (ibid). The role of money in this, real world, economy is seen as such that it is not only a convenient means to facilitate life, but also 'capable of influencing' the level of employment, investment and thus output as a whole.

As we have noted above, Keynes's main goal was to refute the second postulate of the 'classical doctrine', according to which 'the marginal utility of output is equal to the marginal disutility of effort' (Keynes, 1979: 101). Acceptance of the validity of this postulate, Keynes believed, would necessarily mean the possibility of perpetual full employment (Rotheim, 1981: 575). Therefore, his main effort is directed to attacking the classical analysis of the real world economy on its own grounds, where 'an entrepreneur economy [is] made to behave in the same manner as a co-operative economy' (Keynes,

1979: 79). To accomplish this task he starts his analysis with a hypothetical 'pure barter' society, compares it to a neutral entrepreneur economy and only then develops his entrepreneur economy, which cannot be analysed except in monetary terms.

To avoid complexity he starts his argument by explaining the functioning of a pure barter economy in which output is created by 'co-operative efforts'. In a pure barter economy, *where goods are exchanged for goods*, there would not be effective demand failures as long as the 'price' ratios were perfectly flexible (Dow and Earl, 1982: 107-8). In this society uncertainty would be dealt with 'by holding on to one type of *producible* good as a store of value, before deciding when and how to exchange it for other goods' (Dow, 1993: 19, emphasis added). Any change in the relative 'price' of a particular good would make the production of that good more profitable and thus would attract more employment. As a consequence, the value of the wage would automatically adjust with the market value of the current product. Any unemployment would be temporary due to time lags (Keynes, 1979: 102) and therefore persistent unemployment would not result (Dow, 1993: 17). Hence in this type of economy *perpetual* full employment is obtainable: 'only miscalculation or stupid obstinacy can stand in the way of production, if the value of the expected real product exceeds real costs' (Keynes, 1979: 67).

In the next step, using this line of reasoning, he shows that continuous full employment is also obtainable in an entrepreneur economy, if it is 'made to behave in the same manner as a co-operative economy' (Keynes, 1979: 79). As we noted earlier, Keynes calls this economy a neutral entrepreneur economy where 'the starting up of productive processes largely depends on *a class of entrepreneurs* who hire the factors of production for money and look to their recoupment from selling the output for *money*'

(Keynes, 1979: 77, emphasis added). So far the description of this economy complies with the real world economy, where the concept of *recoument in terms of money* is of crucial importance. Keynes argues that this economy is made to work as a co-operative economy by assuming that ‘the whole of the current incomes of the factors of production are necessarily spent, directly or indirectly on purchasing their own current output from the entrepreneurs’ (Keynes, 1979: 77). Like in a co-operative economy, in a neutral entrepreneur economy unemployment would only be temporary due to time lags in the adjustment of demand in different sectors of the economy *as long as everything that was earned was spent*: there could not be ‘general’ unemployment (Rotheim, 1981: 576). Traces of this argument can be found in the *General Theory* too.

As a corollary of the same doctrine [i.e. supply creates its own demand], it has been supposed that any individual act of abstaining from consumption necessarily leads to, and amounts to the same thing as, causing the labour and commodities thus released from supplying consumption to be invested in the production of capital wealth. ... The doctrine is never stated to-day in this crude form. Nevertheless it still underlies the whole classical theory, which would collapse without it. (Keynes, 1970: 19)

Hence in this economy the role of money is limited to facilitating exchange only and indeed money can be seen as a ‘veil’.

A co-operative economy and a neutral entrepreneur economy employ two completely different modes of production. In the former economy the production process is accomplished by ‘*co-operative efforts*’, i.e. this is just a hypothetical or conceptual communal barter society, while in the latter economy the production process depends

upon capitalists and entrepreneurs, as well as propertyless free workers.⁴ The clear difference between these two modes of production lies in the existence of private property rights in an entrepreneur economy. As will be discussed in more detail later in this section, this notion is of central importance in strengthening our understanding of the emergence of the need for money as such in property-based economies. For the time being, before reverting to our main discussion, we note that Keynes was aware of this fact, although it is only implicit in his analysis.

In a nutshell, despite fundamental differences in the chosen mode of production, a neutral entrepreneur economy and a co-operative economy act in the same way: unemployment will not result; *perpetual full employment is possible* and thus the second postulate of the classical doctrine is satisfied. This can be observed more easily in the former economy than in the latter one. The latter economy works as the former does *if* the role of money is limited to facilitating exchange and all of the current monetary income is spent on purchasing current output. When this is shown it becomes easy to perceive that a co-operative economy and a neutral entrepreneur economy are, in principle, *barter-like* economies.

Because we will be using the term '*barter-like economy*' in this broader sense throughout our analysis, perhaps it is time to distinguish it from '*a pure barter economy*' where basically goods are exchanged for goods. Our use of the term *barter-like economy* implies that money is employed in the economic process but is treated as being in some sense *neutral*. In this economy everything that is earned is necessarily spent and money 'is regarded as a mere link between cloth and wheat, or between the day's labour spent

⁴ In the sense that workers do not own the means of production and they are not held liable to the risk of any material loss in the process of production.

building the canoe and the day's labour spent on harvesting the crop. *[Money] is not supposed to affect the essential nature of the transaction from being, in the minds of those making it, one between real things, or to modify the motives and decisions of the parties to it'* (Keynes, 1973a: 408, emphasis added). Thus it becomes clear that in a barter-like economy there is no room for fluctuation in effective demand, no room for chronic unemployment. In this sense through the examples of 'a pure barter' (or co-operative) economy and a neutral entrepreneur economy, Keynes was able to demonstrate that the classical analysis of the economy was essentially dealing with a barter economy. In Chapter 4 we will show that centrally planned economies fit the description of a barter-like economy.

Once Keynes shows that the second postulate can hold only in a co-operative economy and a neutral economy, he starts depicting the special features of an entrepreneur economy in which 'we actually live to-day' (Keynes, 1979: 78). An entrepreneur economy is a money-wage economy for the factors of production are hired for money and thus the notion of recoupment in terms of *money* is important. In this economy, unlike in a neutral entrepreneur economy, however, money's role is *not* limited to facilitating exchange only and thus money is *not* held just for 'temporary convenience'. Rather, in an entrepreneur economy 'money plays a part of its own and affects *motives and decisions* and is, in short, one of the *operative factors* in the situation, *so that the course of events cannot be predicted*, either in the long period or in the short, without a knowledge of the *behaviour of money* between the first state and the last' (Keynes, 1973a: 408-9, emphasis added). Hence, because money becomes *non-neutral*

in a *non-neutral* entrepreneur economy, in which ‘we actually live to-day’, the working of this economy cannot be analysed but in monetary terms.

In an entrepreneur economy the process of production ‘will not be started up, unless the money proceeds expected from the sale of the output are at least equal to the money costs which could be avoided by not starting up the process’ (Keynes, 1979: 78). The object of an entrepreneur in starting up production, then, is nothing but to end up with more money than s/he started with. This concept, according to Keynes, is an ‘essential characteristic of an entrepreneur economy’ (ibid: 89) or in general it can be described as a ‘law of production in an entrepreneur economy’ (ibid: 78). Keynes acknowledges that these notions are similar to ‘a pregnant observation made by Karl Marx’ (ibid: 81). Keynes agrees with Marx that the concept of exchanging commodity for commodity in order to obtain another commodity, i.e. C-M-C’, is not ‘the nature of production in the actual world’ (ibid). Rather, according to Keynes, this concept may reflect ‘the standpoint of the private consumer’ (ibid). For Keynes this type of economic organisation at most can be likened to a *neutral entrepreneur economy* (Rotheim, 1981: 576). The production process in an entrepreneur economy then requires ‘the attitude of *business*, which is a case of M-C-M’, i.e. of parting with money for commodity (or effort) in order to obtain more money’ (Keynes, 1979: 81, emphasis in the original). It is in this economy that the second postulate of the ‘classical’ doctrine is not satisfied (ibid: 78).

These observations, however, do not yet clearly expose Keynes’s refutation of the second postulate. This task is accomplished in the discussion of the fluctuations in effective demand. Description of the essential features of the entrepreneur economy lays

the foundations for showing how *effective demand* can fluctuate in the real world economy. Unlike in a neutral economy, in an entrepreneur economy ‘the volume of employment, the marginal disutility of which is equal to the utility of its marginal product, may be ‘unprofitable’ in terms of money’ (Keynes, 1979: 79). The reason is that in an entrepreneur economy some part of the current income may not necessarily be spent and thus a part of the production might remain unsold. In this economy an entrepreneur is not interested in ‘the amount of the product, but in the amount of *money* which will fall to his share’ (ibid: 82, emphasis in the original). Furthermore,

there is a further feature of our actual monetary system which makes a deficiency of effective demand a more frequent danger than the opposite; namely the fact that the money in terms of which the factors of production are remunerated will ‘keep’ more readily than the output which they are being remunerated to produce, so that *the need of entrepreneurs to sell, if they are to avoid a running loss, is more pressing than the need of recipients of income to spend*. This is the case because it is a characteristic of finished goods, which are *neither consumed nor used but carried in stock*, that they incur substantial carrying charges for storage, risk and deterioration, so that they are yielding a negative return for so long as they are held; whereas such expenses are reduced to a minimum approaching zero in the case of money. (ibid: 86, emphasis added)

Thus the instability of effective demand is a monetary phenomenon. ‘Money,’ emphasises Keynes, ‘is *par excellence* the means of remuneration in an entrepreneur economy which lends itself to fluctuations in effective demand’ (Keynes, 1979: 86, emphasis in the original). In this type of economy agents do not necessarily spend their entire current incomes on current output. Rather during a period of low confidence regarding the uncertain future they can prefer to hold money. Therefore, only in a

monetary economy, 'a decision not to have dinner to-day... does *not* necessitate a decision to have dinner or to buy a pair of boots a week hence or a year hence or to consume any specific thing at any specific date. Thus it depresses the business of preparing to-day's dinner without stimulating the business of making ready for some future act of consumption. It is not a substitution of future consumption-demand for present consumption-demand, - it is a net diminution of such demand' (Keynes, 1970: 210, emphasis in the original).

'[T]he classical theory,' concludes Keynes, 'fails us at both ends, so to speak, if we try to apply it to an entrepreneur economy. For it is not true that the entrepreneur's demand for labour depends on the share of the product which will fall to the entrepreneur; and it is not true that the supply of labour depends on the share of the product which will fall to labour' (Keynes, 1979: 83). Therefore the classical way of reasoning that does not take into account the peculiar role money plays in the economic process leads to a wrong conclusion that rules 'out altogether the possibility of *chronic* unemployment as distinct from *temporary* unemployment *due to time lags*' (ibid: 102, emphasis added) which is an inherent feature of a monetary economy.

1.4 Money and Property Rights

It is obvious that Keynes's monetary analysis and Post Keynesian debate concerning this issue refers to the capitalist society in its 'mature' stage of development. In this respect, the mode of production - the relationship between the owners of the capital, the middlemen class – entrepreneurs, and the 'propertyless' free workers and several other

aspects of the institutional framework of capitalist society are taken for granted. Of course, Keynes, as we noted earlier, was aware of the importance of these phenomena in explaining the need for monetary analysis. For instance, in the chapter entitled *The Characteristics of an Entrepreneur Economy* in an earlier draft of *the General Theory*, Keynes makes several references to the dependence of the process of production upon the relationship between entrepreneur firms, capitalists and workers (Keynes, 1979: 91-2). However, Keynes's conclusion in favour of a monetary analysis of the working of the economic system can be further strengthened if we try to make *explicit* the idea of why money matters in property-based societies. The notion of property rights, in its full meaning, is the cornerstone of the capitalistic mode of production.

To accomplish this task first we have to go back to Keynes's *Treatise on Money* where Keynes makes explicit the distinction between a *money of account* and a *money thing/proper* (Keynes, 1970: 3-4). A money of account is a *description* or a *title*, whereas money proper is a *thing*. For the purpose of clarity we may state that a *title* could be any particular name for a *money of account* in general, i.e. dollar, pound, rouble etc., whereas examples of money *things* could be reserves and currency, demand deposits and private bank notes etc. (Wray, 2001: 1). For Keynes, in the *Treatise on Money*, it is a *money of account* that is of crucial importance and it 'is the primary concept of a theory of money' (Keynes, 1970: 3). Keynes's *money of account*, then, 'comes into existence along with *debts*, which are *contracts for deferred payments*, and *price lists*, which are *offers of contracts for sale or purchase*' (ibid, emphasis added). Contracts in turn, be they for deferred payments or for sale or purchase, become important only in a property-based economy.

Since the concept of the origins of money is not within the scope of our research we will limit our analysis to the importance money acquires with the development of private property rights during the evolution of capitalism from feudalism.

Heinsohn and Steiger (2000: 68) distinguish three types of mode of production. They are associated with: the customary or tribal society; the command or feudal society; and the property based society. In the first society the economic process is regulated by reciprocity or by putatively altruistic transactions and thus it is of the type of a co-operative economy where 'collective efforts' dominate the economic process.

In the second type of society the economic process is regulated by coercive redistribution. If in a feudal society 'coercive redistribution' is done by ruling castes or aristocracies, in a command economy 'the nobility is replaced by a proletarian *avant-garde* which maintains the loyalty of unfree peasants and workers by guaranteeing them a permanent share of the planned production' (ibid). The implication of the term 'coercive redistribution' needs further attention because, as a result of the very method of redistribution, property rights are severely weakened in feudal economies, while they are non-existent in command economies. Indeed, in one way or another the functioning of this society is a mixture of Keynes's co-operative economy (in which 'co-operative efforts' dominate) and a neutral entrepreneur economy (in which everything that is earned is spent).

The third type of society is dominated by free individuals, in the sense that the traditional rules of reciprocity and command are abolished. Heinsohn and Steiger (2000: 68) argue that it is in this society that the role of various *contracts* and hence *money* become predominant factors.

Heinsohn and Steiger (1984: 52) liken the origins of ‘individualistic capitalism’ to that of ‘private property’. They argue that creditor-debtor contracts become important only in property-based societies. These various types of contact are crucial in explaining the emergence of money as a ‘*money of account*’ initially and as a ‘*thing*’ afterwards. According to the same authors early traces of a monetary economy can be found in pre-feudal property-based societies.

The abolition of *collective* security provided by tribe and estate forces the private proprietor, who now suffers from an *individualized* existential risk – *i.e.* one essential to his very survival as an isolated proprietor – to work more and harder so that – in a way as his own debtor – he obtains an individual security or *liquidity* stock, a collection of assets in kind which will protect him, when unforeseeable large emergencies occur, from indebting himself to other private proprietors. At the same time this stock can be lent as *credit*. ... Thus, at the very beginning of this new economic system the essential elements of a *monetary economy* are embedded – in particular *money as liquidity and the rate of interest as “liquidity premium”* (Keynes) and completely independent from the fact that creditor-debtor operations at this stage are still made *in kind*. (Heinsohn and Steiger, 1984: 52-3, emphasis in the original)

With the fall of pre-feudal property-based economies and the emergence of a new social order, feudalism, ‘the coercive redistribution’ mode of production became dominant for more than a thousand years in Europe (Heinsohn and Steiger, 1984: 57). During this period property rights as such were weakened and consequently the need for *mass-scale* debtor-creditor relations diminished. As a result, the importance of a money of account weakened too. Wray (1990: 8) goes one step further and explains the disappearance of banks around the third century A.D. by the same phenomenon. Another

reason why money became less essential in a feudal economy is that, because of the same ‘coercive redistribution’ method of production, most of the production was not marketed. Wray (op. cit.) admits that although most of the production was *for own use*, and responsibilities were shared by communal organisations, money did not completely disappear from a feudal economy:

Even though exchange occurred in feudal society, a monetary economy did not re-emerge until feudal society began to disintegrate in the late fourteenth century, when private property (and free, but landless, laborers) reappeared. ... In the absence of private property, money as a unit of account is unnecessary because the community (or at least a portion of the community) is responsible for the well-being of individuals. *Exchange may occur* (e.g. the ceremonial exchanges of tribes), *and payments may occur* (e.g. the payment of a portion of the peasant’s produce to the lord), *but these societies have no need for money.* (Wray, 1990: 8, emphasis added)

Both Heinsohn and Steiger (1985) and Wray (1990) argue that the importance of money as such *re-emerged* with the development of private property rights and a class of propertyless workers during the evolution of the capitalist mode of production. Heinsohn and Steiger (1985: 91) call the re-emergence of the importance of money in capitalist economies ‘*the modern monetary economy.*’

The *modern monetary economy*, however, emerging in XIVth century English agrarian capitalism with *free wage-labour*, allowed the heavily indebted private proprietors, or those thus threatened, to maintain their freedom. Thus, the number of private owners of labour was not reduced as in antiquity. Bankruptcy then merely implied a new start, with the pressure to find

some other source of income as a property owner. (Heinsohn and Steiger, 1985:91, emphasis in the original)

Wray (1990: 6-7) argues that the earliest money actually was not created to facilitate exchange but was created as part of a *forward contract* after the development of *private property*. According to Heinsohn and Steiger (1989) money and interest were developed at the same time – when private property and futures contracts were developed. It follows that, in line with Keynes’s argument in the *Treatise on Money*, for both Wray and Heinsohn and Steiger, a *money of account* (not a *money proper*) is of *paramount* importance in understanding the essence of money in a modern economy. Money of account in terms of which contracts, price lists, and debt obligations are expressed becomes essential in property-based economies.

Thus, money as an anonymized title to property can be created only in property-based societies. It is issued in a credit contract in which the creditor establishes a money of account as a standard of measurement and valuation. Money proper owes its very existence to the money of account. It has to be kept in mind that this contractual money of account has nothing to do with the neoclassical unit of account or *numeraire*, which refers to a good as the standard. (Heinsohn and Steiger, 2000: 97)

Heinsohn and Steiger, and Wray’s argument regarding the emergence of the need for money in a property-based mode of production indeed strengthens our understanding of the essence of money in the economic process. However, there is still room for a caveat in this argument. Below we argue that the term ‘*monetary economy*’ in Heinsohn and Steiger’s use does not necessarily imply Keynes’s representation of this term and that

the existence of property rights is a *necessary* but not a *sufficient* condition for the development of a monetary economy in Keynes's sense.

As became evident Heinsohn and Steiger's, and Wray's argument is concentrated mostly on the role of money as a *money of account*, which becomes paramount only in property-based societies. The implication of this argument then is that *property-based societies are monetary economies*. This is very interesting point because Keynes himself in his earlier analysis of this phenomenon seems to be supporting Heinsohn and Steiger's, and Wray's line of reasoning. In the *Treatise on Money* Keynes states that '*the age of money had succeeded to the age of barter as soon as men had adopted a money of account*' (Keynes, 1971: 4, emphasis added).

However, these authors do not account for the fact that by emphasising only a *money of account* function of money they are necessarily acknowledging the role of money merely as a *convenient tool* that would facilitate life in a broader sense. In fact, if this is the only reason why money matters, then, indeed money can be seen as a 'veil'. This point is made clear in Keynes's later works. In one of his articles, while defending the *General Theory*, Keynes makes clear that *with all its importance a money of account cannot expose the reason why money matters in the real world*:

Money, it is well known, serves two principal purposes. By acting as a *money of account*, it *facilitates exchanges without its being necessary that it should ever itself come into the picture as a substantive object*. In this respect it is a *convenience* which is *devoid of significance or real influence*. In the second place, it is a store of wealth. So we are told, without a smile on the face. But in the world of the classical economy, what an insane use to which to put it! For it is a recognized characteristic of money as a store of wealth that it is barren; whereas practically every other form of storing wealth yields some interest or profit. Why should anyone outside a

lunatic asylum wish to use money as a store of wealth? (Keynes, 1937a: 215-16, emphasis added)

It is clear that at this stage Keynes employs the term ‘money of account’ in a much broader sense. Being used as a *thing* on the spot it directly facilitates exchange of goods, and being used as a *title* in contracts, price lists, and debt obligations it facilitates economic life in general. Yet, this still implies that even in its broader sense a money of account is only ‘a *convenience which is devoid of significance or real influence*’. Now, to paraphrase Keynes, if money of account is the only reason why money matters in our lives then ‘we have scarcely emerged from the stage of barter.’

Although the *Treatise on Money* was a groundwork for the development of Keynes’s later monetary theory of production, as we already noted at the beginning of the section, it was far from perfect; Keynes himself was already dissatisfied with it. The *Treatise on Money* better explains the question of how and why money acquires its importance in a capitalist mode of production. It is very interesting to see how Keynes’s ideas regarding the theory of monetary production developed after the *Treatise on Money*, when Keynes’s concern was concentrated more on the question of ‘why money mattered’ in a capitalist economy:

An economy, which uses money but uses it merely as a neutral link between transactions in real things and real assets and does not allow it to enter into *motives or decisions*, might be called – for want of a better name – a *real-exchange economy*. The theory which I desiderate would deal, in contradistinction to this, with an economy in which money plays *a part of its own* and *affects motives and decisions* and is, in short, *one of the operative factors* in the situation, so that the course of events cannot be predicted, either in the long period or in the short, without a

knowledge of the behaviour of money between the first state and the last. And it is this which we ought to mean when we speak of a *monetary economy*. (Keynes, 1973a: 408-9, emphasis added)

In Keynes's monetary economy the role of money is *not* limited only to facilitating economic activity. Money as such becomes a time machine that connects the necessarily *uncertain* future to the present so that it becomes a source of trust, a means of security to preserve one's purchasing power during a period of economic instability and low confidence. *If as a means of convenience it facilitates economic activity, as a means of securing purchasing power over time it may actually constrain economic activity* (Chick, 1983: 293). Money affects the decisions and motives of agents and becomes an integral, inseparable part in the economic process so that it 'plays a part of its own' as one of 'the operative factors in the situation.'

In this sense Keynes monetary theory of production refers to a fully *commercialised* economy. The term *commercialisation* implies that agents produce *for* the market so that they are not merely '*interested in*' but rather '*dependent on*' selling their product *in the market* (Chandavarkar, 1977: 668). In this respect developed countries are fully commercialised and thus are fully *monetised* (in the sense that the transactions that do not include the use of money are of marginal significance).

However, this is not the case in less developed countries (although property rights might be well in place in these economies). In the subsistence sector of many industrially backward modern day dual economies individuals receive a sizeable part of their income in kind and *production for own consumption is dominant*. Ghosh (1986a; 1986b) argues that the savings behaviour in the subsistence sector of the economy is completely different from that in a monetised economy. In this sector farmers save, if they can, in

kind rather than in cash. In this sense, Borpujari (1980: 93) argues that the concepts developed to analyse highly monetised economies are not applicable to the analysis of the working of the subsistence sector.

Hence at this point it becomes clear that Heinsohn and Steiger, and Wray's line of reasoning does not deal well with the central question of *why money matters* in the capitalist mode of production. However, it explains well the need for the emergence of money as such in a capitalist economy. If we take into account the fact that the twentieth century capitalism was the 'playground' for Keynes's monetary analysis then we can easily perceive that the *peculiarity* of money in Keynes's sense is partly due to the existence of the well-functioning (not necessarily stable) financial infrastructure in a mature capitalist mode of production. This in turn means that money as an institution went through its own stages of development.

1.5 Functions of Money, Its Essential Properties and Motives for Holding It

In the previous sections we have discussed the issue of why money matters in a real world economy from a more general perspective. In particular, we emphasised three essential characteristics of a monetary entrepreneur economy, namely, the future is unknowable and thus *uncertain* in a Knightian sense; the production process takes place in an *irreversible historical time*; and 'money and contracts are intimately and inevitably related' (Arestis, 1988: 42). In this section we will have a closer look at such general notions as the functions of money, its essential properties and motives for holding it.

1.5.1 Functions and Essential Properties of Money

Despite the fact that money is one of the few economic categories most heavily written on, its definition still remains disputed. Perhaps the continuing dispute is due to the changing nature of money as an institution. There seems to be some consensus, however, in defining money according to its functions (Chick, 1992: 144). As a famous quote from Hicks states ‘Money is defined by its functions: anything is money which is used as money: “money is what money does”’ (Hicks, 1967: 1).

Jevons in his classical work *Money and the Mechanism of Exchange* (1875: 13-18) counts four functions of money. They are a medium of exchange, a common measure of value, a standard of value and a store of value. In fact, the second and the third functions can be united into a broader function, which Keynes called *a money of account*, and thus these four functions are reduced into three basic textbook functions.

Nonetheless, even in this approach some difficulties arise. Although none of the functions of money is less important, different authors emphasise different functions of money. For instance, Hawkins (2003: 26) emphasises the unit of account and store of value functions. For her ‘the medium of exchange is the least important function of money’ (ibid). Of course, as we already discussed in previous sections, the unit of account and store of value functions are of great importance in a property-based monetary economy in which uncertainty is an inherent feature. However, it would be misleading to state that a means of exchange/payment function (or any other function of money) is of least importance. For as a generally acceptable means of payment, money, due to its impersonal nature, reduces transaction costs and creates favourable conditions

to broaden multilateral trade and thus specialisation in labour (Chick, 1992: 155), all of which in turn brings economic efficiency.

Another example is a famous debate between Clower and Shackle. Clower (1971) emphasises the medium of exchange function of money and thus advocates to include trade credit in the definition of money. Shackle (1971: 32), commenting on Clower's suggestion, insists on a means of payment function of money:

If we are allowed to take the meaning of *payment* as known we can, for example, define money as the means of payment. Then the quantity of money existing at some moment, the stock of money, can be defined as the means of *strictly simultaneous* payment. ... Simultaneity must be insisted on here, lest we mix up quantity and velocity. A single coin circulating fast enough can carry a payments flow of unlimited size. (Shackle, 1971: 32, emphasis in the original)

In this sense Shackle rejects Clower's suggestion. He argues that trade credit can be a medium of exchange but not a means of payment. For when trade credit is extended the transaction is not yet completed. There should be another transaction by which the credit is to be discharged. Hence, trade credit *does not complete* the transaction, rather it *postpones* the payment for a later period. In Shackle's analysis the emphasis is on the time horizon (Chick, 1992: 146). Because time is not involved, *exchange* is instantaneous in the case of money. Meanwhile credit involves time; *payment* is delayed and the transaction is not fully completed.

The instantaneity characteristic of money in exchange can be helpful in determining the stock of money at a particular point in time. However, if we emphasise merely the instantaneity feature, then we can note that money reduces uncertainty over the

transactions across *space* only. In this regard, this approach fails to capture the finance feature of money (not necessarily of credit), which necessitates the involvement of time. The finance feature of money allows postponement of *purchase* until the disquietude surrounding a particular transaction is faded away; as a 'time machine' money preserves the purchasing power for a later period, thus reducing uncertainty across *time* and *space* (Dow, 1993: 20). Moreover, as Chick (1992: 130) puts it, 'It is in the financial sphere that Keynes differs from the quantitative theory, and for a purpose – to refute Say's law.'

Leaving different emphasis aside we will opt for a broader definition of money. We define as *perfectly liquid* any asset that has a *stable value* and is readily *exchangeable* for all goods as money (Dow, 1998:9). In fact, this approach does not contradict the approach of defining money according to its functions. For an asset is a good store of value only if it has a stable value. And if it has a stable value, and thus is a good store of value, then it follows that it is also a good unit of account and thus it is accepted as a generally accepted means of payment (ibid: 10).

Once money is defined by one way or another there is a further need to clarify what item can serve as money, i.e. what kind of qualities it must possess. For instance, Jevons (1875: 31) reckons that money must have the following qualities: utility and value, portability, indestructibility (durability in modern terminology), homogeneity, divisibility, stability of value, and cognisability. According to Chick (1992: 147) this list of qualities (along with the relative inelasticity of supply and the like, as will be discussed later in this section) is the 'only non-circular approach' to predicting which asset will ultimately be chosen as money. Of course, some of these qualities have technical, while others have theoretical and fundamental importance. Since the utility and value, and

stability of value characteristics of money have a direct relevance to the notions of liquidity preference and endogenous money supply we would like to devote some time to exploring them in more detail.

Let's start with the utility and value characteristics. Jevons believed that any substance that does not have its own utility and value could not serve as money. He also did not believe in government's role of 'writing the dictionary'.

The essential point is that people should be induced to receive money, and pass it on freely at steady ratios of exchange for other objects; but there must always be some sufficient reason first inducing people to accept the money. The force of habit, convention, or legal enactment may do much to maintain money in circulation when once it is afloat, but it is doubtful whether the most powerful government could oblige its subjects to accept and circulate as money a worthless substance which they had no other motive for receiving. (Jevons, 1875: 32)

To make our counter-argument clear, perhaps, it is necessary to distinguish between the Metalist and Chartalist approaches to money at this point. In line with Goodhart's definition (see Wray, 2000b) let us refer to Metalist approach as the M-form approach and to the Chartalist approach as the C-form approach. In a nutshell, according to the M-form approach money was invented to facilitate exchange. The natural search for a unique specie – difficult to produce and easy to carry – that would serve as money, eventually led the precious metals, and later representative paper money, to be chosen as a generally acceptable means of payment. The further distinction of this approach is that at the initial stage money's value was determined by the value of the metal it was made from. Even paper money, introduced later, was backed by some sort of precious metals or

other valuables. 'It is only much later that evil governments came along and duped the public into accepting a fiat money with no backing' (Wray, 2000b: 1).

The C-form approach⁵ emphasises the role of government in the evolution of money. To put it succinctly, according to this approach the State determines what thing should serve as money, i.e. in Keynes's terminology the State not only 'writes the dictionary' but also may decide to 're-edit' it from time to time. How can the historical existence of full-bodied money be explained? Wouldn't the kingdoms of earlier times be better off in choosing the cheapest possible metal, abundant in supply and easiest to produce, as money? Goodhart (1975: 10-11) explains the issue as follows. If the supply of the metal used in the production of money was plentiful and the techniques for stamping the emblem of power of the state on currency were crude and easy, then to prevent forgers from counterfeiting coins it would be necessary to raise measures of punishment. Since in earlier times the power of kingdoms was weak geographically, the task of continuous high vigilance to catch forgers across the entire country was far from attainable. As a corollary, in these circumstances money 'created' in this way would fail to become a generally acceptable means of payment.

The evidence for Goodhart's argument can be found in one of the most ancient analytical works in human history - the *Arthaśāstra* of Kautilya. Debasement and counterfeiting of coins is perhaps as old as metal coins themselves. Shastri (1999: 495), based on the *Arthaśāstra*, reports that until the Kautilyan state (circa third-second century BC) was sufficiently strong, the fraudulent activities of counterfeiters of coins remained unchecked. It was only after 'the establishment of a major empire covering a

⁵ The term is used in a broader sense here and includes the neo-Chartalism (or nC-form) as discussed in Wray (2000b).

large portion of the Indian sub-continent brought about a great change in the outlook of political economists who naturally saw a great danger in the activities of economic criminals and took necessary steps to counter them, forgers of coins being one such' (Shastri, 1999: 495).

Hence, the use of gold or other precious metals in earlier times can only explain how the general acceptability of money might have been 'established prior to the development of the well-organised sovereign national states of modern times' (Lerner, 1947: 313). It is in this sense that Keynes (1971: 4) argues that today 'all civilised money is, beyond the possibility of dispute, chartalist' and thus the right to create money 'is claimed by all modern States and has been so claimed for some four thousand years at least.'

All that we have said so far on the C-form approach means that the central argument is built upon the notion of legal tender laws. However, as Lerner clarifies, this is not sufficient:

It is true that a simple declaration that such and such is money will not do, even if backed by the most convincing constitutional evidence of the state's absolute sovereignty. But if the state is willing to accept the proposed money in payment of taxes and other obligations to itself the trick is done. (Lerner, 1947: 313)

Hence, the fact is that the state not only announces what the legal tender is, but also requires that the levies, fees, fines and taxes imposed be paid in the legal tender it declares. As the power of the state increases the share of these payments in total income is also expected to increase. As a consequence, it becomes 'a reason for employing the

same money in private transactions' (Goodhart, 1975: 11). In this respect Lerner (1947: 314) argues that before the tax-collecting function of the state was strong, the best it could do was to tie its currency to gold or other precious metals, which had their own stable value.

It is obvious that in this approach the value of money is not related to the substance it is made from. As Keynes puts it, 'money is the measure of value, but to regard it as having value itself is a relic of the view that the value of money is regulated by the value of the substance of which it is made, and is like confusing a theatre ticket with the performance' (Keynes, 1983: 402). The theatre ticket is valuable because it entitles the holder to watch the performance, not because it is made from a precious substance. The same logic applies to a modern money.

To put it briefly the 'tax-driven money' paradigm is the central feature of the C-form approach.⁶ However, this approach has its shortcomings too. For example, Davidson (2000) notes that if trust in the ability of the government to enforce contracts falls then agents accept the 'state' money only to pay taxes. Other stable currencies or even barter exchange may be used for private transactions. Another case that weakens this argument to a considerable extent is the example the Scottish Monetary-Banking System, the evolution of which did not require any substantial involvement from the State. Last but not least, the currency of local exchange trading systems, first developed in Canada and now widely used in many countries, performs the functions of money but is not used to pay taxes and levies. (See Dow, 1998: 13.)

⁶ Although Wray (2000b: 4) notes that the modern Post Keynesian view on money is actually based on this approach, many representatives of this school would not necessarily agree with him. For example, please see Davidson (2000) and Dow (1998).

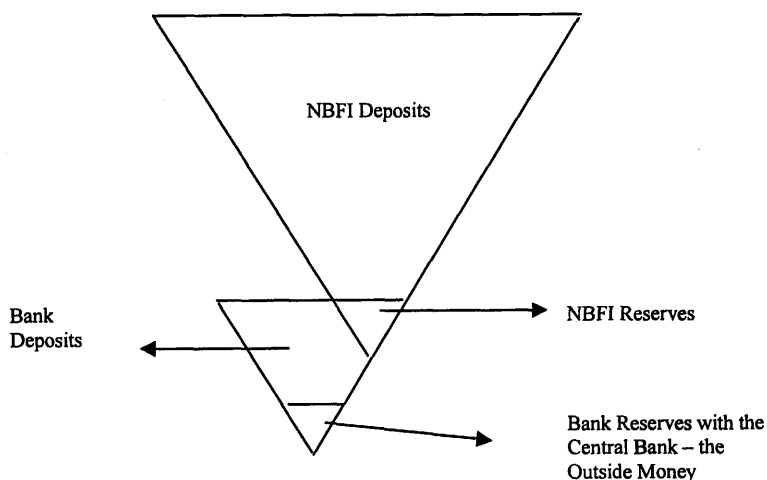
It is also important to note that the 'tax-driven money' approach partly explains the emergence of industrial barter 'woes' in the post-soviet economy of Russia. Sutela (2001: 4) states that in the late 1990s about half of the industrial production in Russian economy was based on barter. He argues that this highly pathological phenomenon is partly due to the inability of the government to collect taxes in monetary form. (The regional and local governments sometimes collect taxes in kind.) Therefore, he suggests that the government cannot overcome the situation unless it declines to accept anything but money in tax collection.

While the certain characteristics, which we discussed above, explain well why a particular asset becomes widely acceptable as money, there is still one more characteristic, no less important than any other, yet to be mentioned. It is confidence. As Chick (1992: 146) puts it, 'Money relies on confidence – confidence in its continued acceptability by virtually everyone in the economy.' The value of money, among other things, partly depends on the general public's confidence in it. In fact the entire financial system is built upon the notion of confidence. Dow (1998: 22) elegantly shows that the whole financial system can be seen as an inverted pyramid (Figure 1.5.1 below), built upon the confidence in outside money, held as reserves in the central bank by commercial banks.

The distinction between outside and inside money, originally made by Gurley and Shaw (1970: 72-73), is as follows. Inside money is both an asset and liability of the private sector, whereas outside money is only an asset for it. Outside money may be a pure assets (such as gold) or an asset that is the liability of the government (Dow, 1998:

23). For instance, while the fiat money of the central bank and gold can be classified as outside money, bank deposits can be classified as inside money.

Figure 1.5.1. Outside Money and the Financial Superstructure



As a rule, commercial banks hold their reserves with the central bank, whereas the non-bank financial intermediaries (NBFIs) hold their reserves with the commercial banks. The expansion of the pyramid in Figure 1.5.1 can be understood as financial development. As the advancement of the financial sector continues inside money starts performing the role of money; more liabilities of the NBFIs will be treated as money (Dow, 1998: 23). Loss of trust in outside money may put the general public's confidence in the whole financial sector in jeopardy.

Now, once we realise that both a commodity money system and a paper money system are built upon the notion of confidence in the value of a particular item that serves as money, it is easy to conceive why its value must be stable. However, we should also

bear in mind that the concept of *stability of value* of paper money or even the ‘invariability of the value of the precious metals’, the concept central in Ricardo’s analysis (Dobb, 1973: 77), is a *relative* notion. The truth is that money’s value *may* fluctuate but still prices are *more* stable in terms of money than in terms of any other producible asset (Keynes, 1970).

In the *General Theory* Keynes (1970: 230-232) argued that whatever that is used as money must have the following characteristics. First, and foremost, it must have a *zero* (or a very small) *elasticity of production* both in the long period and in the short period. A zero elasticity of production means that when demand for money increases, additional *labour* cannot be employed to increase its supply. At the same time, Keynes also warned that ‘even though the quantity of money cannot be increased by *diverting labour into producing it*, nevertheless an assumption that its effective supply is *rigidly fixed* would be inaccurate’ (Keynes, 1970: 233, emphasis added).

While discussing the same characteristic, Davidson (1972: 109) further clarified that the private sector *can create* money endogenously, i.e. creation of bank liabilities, provided that (i) these liabilities are denominated in terms of the monetary unit, (ii) there exists developed clearing arrangements and (iii) assurance that liabilities are converted into the enforceable medium of exchange at a known parity. Davidson (*ibid*) also stresses that since this process does not require the use of real resources, it does not directly increase employment of labour.⁷ Depending upon ‘what the increment in bank money is used for’ (*ibid*: 112), newly created ‘bank money’ can affect employment only *indirectly*.

⁷ As was noted by Chick (1983: 299) the process ‘does not contribute to aggregate income, except to the extent of the services of the engravers, printers and merchant bankers, the latter of which market the “product”’ (Chick, 1983: 299).

It will create jobs only if 'it moves ... into the "industrial circulation" where it will be used to accept offer contracts for new production' (ibid).

Now, assuming that 'the ability of the private sector to create bank money' refers to endogenous money creation by the private sector, we can suggest that the concept of low elasticity of production of money, which emphasises the stability of the value of the currency, and the concept of money supply endogeneity have different meanings, but do not necessarily contradict to each other. Bearing this distinction in mind, when we discuss the degree of money supply endogeneity in the next chapter, we will refer to the ability of the private sector to create money endogenously under different conditions.

Second, money must have *a zero* (or nearly zero) *elasticity of substitution* for liquidity purposes between liquid assets and producible goods (See also Davidson, 1994: 94-95). It means that as the price of money relative to other goods rises (due to higher demand for it as a store of value) individuals do not use other producible assets as a substitute for money to store their wealth. The third characteristic of money, noted by Davidson (1978: 145), is that 'the cost of transferring money from the medium of exchange function to the store of value function or vice versa must be zero (or negligible)' (ibid).

In describing money's special features and distinguishing it from other assets Keynes also uses the portfolio choice for holding money. Indeed, this approach helps to explain money's 'relative desirability compared to other assets' (Hawkins, 2003: 29) and thus assists to expose its 'peculiarity'. The natural start in portfolio analysis is the identification of the rates of return agents expect from holding money or any other particular asset. The net benefit to be received from holding an asset can be identified

through analysis of three main elements (Keynes, 1970: 225-227). i) An asset can produce a *yield*, q . It can be either in the form of a flow of income to be received from the sale of its product or in the form of direct satisfaction an individual enjoys from its services. ii) Irrespective of the fact whether they are used for productive purposes or not, the original quality of most assets deteriorates through the mere passage of time. Therefore, the maintenance and preservation of their quality involve some *carrying costs*, c . iii) Furthermore, the power of disposal over an asset may offer individuals ‘a potential convenience and security’ (ibid). The amount individuals are willing to pay for ‘the power of disposal’ of an asset Keynes calls a *liquidity premium*, l .

Liquidity premium refers to the marketability of an asset (Chick, 1983: 298), ‘the ease with which an asset can be exchanged for other assets’ (Dow, 1998: 10). The ease of marketability or exchangeability of an asset, then, depends upon the degree of market organisation. The higher is the degree of market organisation for a particular asset, the more liquid it gets. However, institutional arrangements are not the only criterion in determining the degree of liquidity of an asset, the notion of ‘perceived risk of capital loss’ (ibid) also plays an important role.

Thus in a nutshell, the total benefit expected from owning an asset over some specified period can be written as

$$q-c+l.$$

Since q , c and l are in terms of ‘own rates,’ there is a need for a common standard of measurement to convert these ‘own-rates’ into a comparable unit. If money is used as a standard of account in this connection, then, the factor a indicates expected appreciation

(or depreciation) of an asset in terms of money. ‘The reason money seems a *natural* choice as a numeraire is also the source of an aspect of liquidity not exhibited by other assets, deriving from money’s function as the medium of exchange’ (Chick, 1983: 305, emphasis in the original). Thus *a+l* gives us ‘the more common definition of liquidity: the ease of conversion into *money* without loss’ (ibid: 298, emphasis added).

Consumer goods or capital assets may yield some positive return in terms of the services they render or marketable output they produce. As described above, the maintenance and upkeep of these assets does involve some carrying costs but, in general, the return they yield usually exceeds the carrying cost they incur. The issue of the liquidity of an asset is a different matter. An asset’s liquidity varies depending on the nature of the asset and the degree of market organisation for it.

As to money, it is ‘barren’; it yields no explicit return. However, money’s carrying costs are negligible and it is the most liquid of all assets. Money’s liquidity premium exceeds its carrying costs and thus ‘*it is only in having the former high relatively to the latter that peculiarity of “money” consists*’ (Keynes, 1970: 239, emphasis added). Even though money cannot compete with other assets in terms of the explicit yield it earns, individuals still hold it simply because of its liquidity, exchangeability for other goods. However, the concept of liquidity is a probabilistic matter. Since prices of goods in terms of money vary, the exchange value of money also varies. Thus we cannot talk of money as an absolutely liquid asset (Chick, 1983: 302). Keynes (1970: 240), too, acknowledges that the scale of liquidity may change from time to time depending upon social practices and institutions.

Thus the most liquid of all assets is money, which serves as a unit of account, a means of payment and a store of value. A particular form of money remains important in the economic process as long as confidence in it is maintained (Hawkins, 2003: 25). Therefore, during a period of low confidence regarding the uncertain future, people *hold* the most liquid asset, which as we have seen by definition is money.

1.5.2 Motives for Holding Money

Keynes in the *General Theory* (1970) considers three motives for holding money, namely, transactions, precautionary and speculative motives. According to Hicks (1967) this 'triad' explains 'why money is required' and it 'fits together' with the second 'triad', i.e. three functions of money.

The transaction motive is associated with 'the need of cash for the current transactions of personal and business exchanges' (Keynes, 1970: 170). Households and businesses make some of their money spending on a regular basis within their income period. These expenditures range from contractual payments to basic spending on food and other goods of primary necessity. Because of the routine nature of these expenditures, the transaction demand for money is highly predictable. Moreover, since transaction balances are held 'to bridge the interval between the receipt of income and its disbursement' (ibid: 195), the agents can 'be described as willing to run [their] transactions balances down to zero *by the end of the income period*' (Chick, 1983: 195, emphasis added). Chick (ibid) also notes that even though transactions balances are held idle for a short period of time within the income period, they are not counted as savings.

This line of reasoning then implies that the transaction motive has no particular connection with uncertainty (Runde, 1994).

The precautionary demand for cash is associated with optimistic expectations regarding the possible future 'bargains', as well as pessimistic expectations concerning unpredictable contingencies. Precautionary balances are held 'to provide for contingencies requiring sudden expenditure and for unforeseen opportunities of advantageous purchases' (Keynes, 1970: 196). One of the distinguishing features of these balances from transactions balances is that they are *not* spent in the same income period in which they are accumulated and thus can be classified as 'saving' when they are accumulated and 'dissaving' when they are spent (Chick, 1983: 195-6). As to the speculative motive, the reason for agents to hold speculative balances, Keynes explains, is to secure 'profit from knowing better than the market what the future will bring forth' (Keynes, 1970: 170).

Uncertainty about the course of future events is a necessary condition for both the precautionary motive and the speculative motive. However, this condition ought to be explained two different ways (Runde, 1994 and Dow, 1996b).

The decision to hold or not to hold money on speculative grounds requires certainty equivalence (Dow, 1996b: 39). In other words, 'speculators do not choose particular levels of speculative balances *because* they are uncertain about future price movements. They do so because they regard future price movements in one direction as more probable than in the other' (Runde, 1994: 134). For example, speculative demand for money rises when speculators act as if they know for sure that the return on alternative assets, discounted by risk, will be low. Speculators' decision to hold money reflects their

belief that expected return on alternative assets, discounted for risk, is low, not that money's liquidity premium is high (Dow, 1996b).

In the meantime, the desire to hold precautionary balances is the direct consequence of having low confidence in expectations about the future. In other words, agents are *uncertain* about the direction of future price movements. Therefore, in order to avoid any capital losses, agents hold their wealth in money. The reason for holding precautionary balances, then, is explained by the fact that the liquidity premium offered by money exceeds the expected return offered by alternative assets, discounted for risk. This in turn means that 'it is precautionary demand, rather than speculative demand, which is the barometer of the degree of uncertainty' Dow (1996b: 39).

In his post-*General Theory* writings Keynes (1937a, 1937b, and 1937c) develops the fourth motive for holding money, namely, the finance motive. Unfortunately, the introduction of this motive becomes the centre of further controversy among the academics. Davidson in several instances (1965, 1978, 1994, etc.) argues that the finance motive is the further development of the transactions motive, which, according to him, was misspecified in the *General Theory*. Chick (1983: 198) argues that it is not necessarily so, and the finance motive represents the fourth motive for holding money. She states that there was a communication failure between him and his critics. For while Keynes, in his writings, had in mind the demand *to hold money*, Ohlin meant demand for *credit*. According to Chick the finance motive is different from other motives 'in that it is not a motive for retaining income and holding it in the form of cash (which if held for more than an income period is a kind of 'saving') but for money to hold temporarily in anticipation of exceptional spending' (Chick, 1983: 199).

It was also suggested that while the transaction motive refers to *holding* money, the finance motive refers to *borrowing* money (Hawkins, 2003: 28). The fact is that the demand for additional finance arises only when the investment activity is optimistically increased and therefore should be seen only as a temporary phenomenon (Bibow, 1995: 664). In this respect, banks become essential in providing the necessary liquidity for entrepreneurs to carry on with their investment plans. ‘This means that, in general, the banks hold the key position in the transition from a lower to a higher scale of activity’ (Keynes, 1937c: 668).

However, the question of whether banks always choose ‘to make finance available’ (Keynes, 1937b: 248) is a different issue. Keynes noted that the finance motive, as a temporary demand for money, puts upward pressure on the interest rate *provided that* the state of liquidity preference of the banking system remains unchanged (Keynes, 1937c: 667).

1.6 Conclusion

In this chapter we examined several important issues that are of paramount importance for our future analysis. We discussed methodological and theoretical issues concerning the monetary analysis of a market economy. A property-based market economy is an incentive-driven, decentralised system in which production takes time and the future is uncertain. Uncertainty and historical time in turn explain not only the importance of money but also its peculiar character in the economic process.

The functioning of a market economy depends upon successful operation of institutions and social conventions, which enable millions of autonomous agents to cooperate in equal terms. Time consuming nature of production implies that in order to protect themselves against uncertainty, agents need to have an agreement of cooperation that secures their rights. In this sense, labour contracts, debt instruments, and price lists introduce an element of certainty to an uncertain environment and thus facilitate the functioning of a market economy. In other words, social institutions are essential in reducing uncertainty and establishing an attractive environment for mutually-beneficial cooperation amongst millions of autonomous entrepreneurs and households.

What is more important is that money and these institutions are necessarily and inevitably related. It is because contracts and price lists are specified and obligations and exchanges are discharged in money. This shows why money is an important and integral part of the economic process in a market economy, which Keynes calls a monetary production economy. We also showed that this type of economic organisation takes shape only in societies where private property rights are well defined and protected.

The characteristic of facilitating economic activity is not the only reason why money is peculiar in a market economy. Money offers liquidity that no other asset can do; it has stable value and is immediately exchangeable for all tradable goods and services. As a result, agents use money as a convenient tool to deal with their concern and disquietude regarding the uncertain future. Analysis of the motives for holding money showed that fluctuation of effective demand during the time of increased uncertainty is most likely to occur due to the precautionary demand for money. As uncertainty increases, agents use money as a means of transferring purchasing power

over time, which translates into lower demand for goods and services. This shows that money can also play a constraining role in the economic process by causing fluctuations in effective demand. The implication of this conclusion is that the real world monetary economies are inherently unstable.

When reaching these conclusions, however, we did not pay any particular attention to the institutional development of a market economy. The fact is that in an advanced market economy with a mature banking sector, banks can create credit endogenously. In other words, in modern-day market economies the supply of money is endogenous. Now, the question of whether money and liquidity preference associated with it can retain constraining tendency under the conditions of endogenous money creation will be discussed in the next chapter. In addition, when discussing the possibility of fluctuations in effective demand in the current chapter, we did not explain the transmission mechanism of the process in detail. This issue will also be discussed in the next chapter.

2. Endogenous Money, the Rate of Interest and Liquidity Preference

2.1 Introduction

In the previous chapter we discussed the role and importance of money in a modern market economy, which can also be seen as a property-based decentralised system. The importance of money in the economic process is explained by the fact that the successful functioning of this system depends upon labour contracts, price lists, and debt instruments, which are denominated in money. This means that as a unit of account money facilitates the economic process. At the same time, the discussion of the nature and characteristics of money revealed that as a generally acceptable asset and a good store of value, money can offer its holder liquidity that no other asset can match. Surprisingly enough, the very same quality of money explains why effective demand is prone to fluctuations. That is to say, during the times of increased uncertainty agents hold money and postpone their spending decisions. As a result, effective demand goes down and this negatively affects output and employment prospects.

Now, to avoid unnecessary complexity, in Chapter 1 we did not make any explicit reference to the way money was created in a market economy. The fact is that in modern market economies money is created endogenously in response to changes in demand. Hence, this chapter can be seen as the natural extension of the previous chapter in that it deals with the issue of endogenous money creation by the private sector, the banking sector being the core of the analysis. By complementing the analysis of the previous chapter, the discussion of this chapter gives us an opportunity to evaluate differences in the nature and characteristics of money and the process of

money creation in two different economic systems, i.e. a market economy and a centrally planned economy. This will be very important in understanding the complex nature of transition process.

The chapter is organised as follows. In Section 2.2 we will briefly discuss the main arguments of two alternative Post Keynesian views on the degree of credit endogeneity. In Section 2.3 we will address the question of whether the theory of liquidity preference is valid under the conditions of endogenous money creation. In addition, we will show that the supply of credit is not always fully accommodating. In Section 2.4 we will discuss importance of liquidity preference in determining the rate of interest and thus setting the pace of investment. We will also look at the interactions of the money and credit markets and give more detailed analysis of the process of credit creation. Finally, in Section 2.5 we will summarise main findings of the chapter.

2.2 The Concept of Endogenous Money in Post Keynesian Thought

The orthodox neoclassical school treats, sometimes explicitly and sometimes implicitly, the supply of money as exogenously determined by the authorities. Although the modern orthodoxy recognises some degree of endogeneity in money supply (e.g. variations of money supply within the range of the multiplier due to portfolio decisions of the private sector, etc., see Cottrell, 1994), they retain, in general, the idea that the monetary authorities are capable of exogenously changing the supply of money if and when they wish to do so. Thus the textbook vertical money supply curve is seen as a simplified approximation of this view.

In contrast to the neoclassical orthodoxy, Post Keynesians argue that the supply of money is endogenously demand determined. As the Post Keynesian literature on monetary economics developed, the concept of endogenous money creation became known as the trademark of this school of thought. In this view the concept of endogeneity of the money supply has a much broader meaning. Demand pressures for finance emerging endogenously within the private sector are seen as the essential determinants of fluctuations in the money supply and thus the availability of credit (Pollin, 1991: 366).

Initially inspired by Keynes, Post Keynesians stress that a modern capitalist economy is a monetary entrepreneur economy, not a cooperative or neutral economy where money is seen just as a neutral link between transactions and thus has no significance of its own. Therefore, Post Keynesians believe that a new, fundamentally different, approach, ‘not just an amendment, no matter how drastic, of orthodox economics’ (Carvalho, 1995: 18), is necessary to understand the working of a monetary economy. Hence, the Post Keynesian school employs a different approach, a different method and mode of thought to analyse the working of the real world economic process and consequently draws different conclusions. As these methodological issues were already discussed to some extent in Chapter 1, here we would like to note two fundamental issues that have direct relevance to the notions of liquidity preference and endogenous money. The first point, put forward by Minsky (1982), is that the capitalist mode of production is inherently unstable and thus the assumption of private sector stability, upon which orthodox theory is built, is in fact flawed (Dow, 1993: 28). The second point, a natural extension of the first, is that *cyclical* movement rather than *stability* is seen as a *norm* for a monetary economy; ‘there is no need therefore to identify any one cause of stability’ (ibid.: 38). As will

be discussed later in our analysis, these two concepts play an important role in understanding of the working of modern economies.

Although the issue of non-neutrality of money in the economic process is widely accepted within the Post Keynesian literature, there is a disagreement with regard to the degree of the endogeneity of the money supply. Usually two different approaches are distinguished – the accommodationist view and the structuralist view (Pollin, 1991). Sometimes these approaches are labelled as the horizontalist view and the endogenous liquidity preference view respectively. (See Moore, 1988, and Hawkins, 2003.) While Kaldor (1986), Moore (1988) and Lavoie (1984) are considered to be the major contributors of the former approach, Dow and Dow (1989), Dow (1996c, 1997, 1998), Chick and Dow (2002), Davidson (1978), Wray (1990), Rousseas (1992) are seen to be the influential contributors to the latter approach.

As was noted above, there is no dispute between these approaches on general notions. Both approaches share the concept of ‘loans make deposits and deposits make money’. Thus, in general, the Post Keynesian approach emphasises the finance feature of money creation. These two approaches also share the view that the supply of credit is endogenously determined by private sector financial institutions in response to demand pressures and that ‘in the real world banks extend credit, creating deposits in the process, and look for the reserves later’ (Holmes, 1969 in Pollin, 1991: 367).

The disagreement, however, seems to arise concerning the *degree* of endogeneity of the money supply. The horizontalists (e.g. Kaldor, 1986 and Moore, 1988) accept complete endogeneity of the supply of money. Kaldor and Moore’s argument is built upon the following notions (Dow, 1996c: 498). First, the modern

banking sector is capable of innovating new financial instruments. It can be so much so that, as captured in Goodhart's Law, if the monetary authorities attempt to control any particular monetary aggregate, the banking sector creates new financial instruments or starts using the existing ones more efficiently than before in response to this policy. As a result, the monetary authorities cannot establish full control over the supply of money. This makes monetary targeting an ineffective policy tool.

Second, the successful working of the entire financial system depends on how much trust people put in the banking system. Since the NBFIs keep their reserves with the commercial banks, banks play a special role in the financial system; the loss of confidence in the banking system automatically spills over to the NBFIs sector and thus the entire inverted pyramid of the financial system collapses. 'Precisely because the monetary authorities cannot afford the disastrous consequences of a collapse of the banking system' (Kaldor, 1986: 47), the central bank, as a lender of last resort, supplies confidence to the system by pumping in reserves when needed. Third, because of the very nature of the overdraft system and lines of credit, banks themselves may not be in a position to control the supply of credit.

Furthermore, another distinguishing feature of this view is that while the authorities cannot control the supply of money, what they can control is the rate of interest. No market force plays a role in the determination of the base interest rate; it is determined bureaucratically (Lavoie, 1996: 278). The horizontalists retain Keynes's interest rate transmission mechanism. However, since they view the supply of money as fully accommodating and the rate of interest exogenously determined by the authorities, they declare the liquidity preference theory of interest rate determination as irrelevant to the modern financial system. As Kaldor put it, 'once we realise that the supply of money is endogenous (it varies automatically with the

demand, at a given rate of interest), ‘liquidity preference’ ... ceases to be important’ (Kaldor, 1986: xvii.). From the other point of view, they suggest that the concept of low elasticity of money supply refers to commodity money, not to credit-money and thus should also be abandoned (Moore, 1988: 8). While we may leave the discussion of the compatibility of liquidity preference and bank-created money to the next section, below we will show that the concept of low elasticity of money supply is not alien to the environment of endogenous money creation.

First of all, despite its innovative ability to create credit on demand, the private sector can expand the supply of money endogenously only during an economic boom. But the problem is that ‘the incentive, the profitability of expanding money and credit or creating new financial institutions, is absent in a slump, when it is most needed’ (ibid.: 308). Thus, the notion of perfect elasticity, rather than low elasticity, of money supply seems to be improperly specified.

Second, the central banks’ ability to maintain the most liquid characteristic of money is the most important factor in understanding why it still remains desirable to hold money under conditions of endogenous credit creation (Hawkins, 2003: 32). The reason why the liquidity status of money is not affected (at least not sharply), even when the financial institutions have ‘the incentive’ and thus willingness to create credit during the upswing, is that the expansion of the supply of money during this period occurs in response to the needs of investment, employment and thus output growth. Therefore, the credit created endogenously in response to effective demand does not cause the problem of *sharp*¹ depreciation of the value of the national currency.

¹ The absolute invariability of the value of money is not a question we are emphasising here. Rather the emphasis is on the *relativity* of the depreciation of the value of the currency. Indeed, as Minsky (1982) showed the banking system will not always expand credit to finance productive investment projects,

In fact, arguments put forward by horizontalists do not necessarily imply a perfectly elastic money supply curve (Dow, 1996c: 498). Representation of their view as a horizontal supply curve is rather a rough approximation and thus the direct consequence of a dualistic approach inherited from the neoclassical school (Chick and Dow, 2002: 588). In this regard the conditional endogeneity view² takes a middle ground. In this view both the central bank's accommodative functions as a lender of last resort and the commercial banks' innovative capabilities are duly recognised. Moreover, the proponents of this approach agree that the base rate may be determined by the monetary authorities (at least in the short run) and the mark-up over the base rate is the business left for the commercial banks to decide. Their opinion diverges from that of the horizontalists with regard to the *fluctuations* of the mark-up over the base rate. The conditional endogeneity approach stresses the liquidity preference of the entire financial system. Thus they argue that since the liquidity preference of the banking sector, as well as the other economic groups, is not stable, neither is the mark-up over the base rate. They suggest that since the changes in the state of the liquidity preference of the banking sector are counter-cyclical, so must be the mark-up over the base rate. Indeed, Rousseas's (1992: 57-59) empirical observation of the US economy covering the period starting from 1955 to 1990 confirms that the mark-up over the base rate changes counter-cyclically. Hence the opponents of the conditional endogeneity view argue that the money supply curve might be horizontal to start with but as the liquidity preference of the banking system increases, reflecting the

rather at times bank credit extended to the private sector based on euphoria or overoptimism might in fact be used for speculative purposes.

² Since the critique of all existing views within the Post Keynesian literature is not the task of this research, we will use the term conditional endogeneity in a much broader sense to include structuralist view (as in Pollin, 1991) and liquidity preference view (as in Hawkins, 2003). Furthermore, as more emphasis will be put on the notion of liquidity preference, starting from the next section the terms conditional endogeneity view and liquidity preference view will be used interchangeably.

increased perceived risk of lenders, the shape of the supply curve might become steeper and steeper and at its extremity may even become vertical (Dow, 1995 and Hawkins, 2003).

In another version of conditional endogeneity (Arestis and Howells, 1996) the graphical representation of the concept of endogeneity is criticised. According to this view the endogenous approach differs from the exogenous one in that it treats money as a *flow*, rather than a *stock*, concept in its analysis. Therefore, the graphical tools designed for stock analysis are inappropriate to flow analysis of the endogenous approach. They argue that the money supply curve should be understood as a curve sloping upwards but moving rightwards as time passes. The problem with this view, however, is that eventually, in the long run, '[t]his path approximates horizontal money supply curve' (Chick and Dow, 2002: 588).

In our analysis we will emphasise the liquidity preference endogenous money approach (liquidity preference view for short), which views the degree of endogeneity of money supply as conditioned upon the state of the liquidity preference of the economic system as a whole in general and of the banking system in particular.

2.3 Liquidity Preference in the Endogenous Money Approach

At the beginning of this chapter we addressed the issue of how the horizontalists view the process of interest rate determination under the conditions of money supply endogeneity. In this section we will argue that the concepts of bank-created money and liquidity preference are compatible with each other and these factors, as well as the monetary authorities, play a crucial role in the process of interest rate determination. This in turn shows that the liquidity preference approach to money

supply endogeneity is in line with Keynes's theory of liquidity preference. Indeed, as will become evident from our discussion below, this approach is a further development of Keynes's theory.

We will begin our analysis from the basics, i.e. the treatment of money in Post Keynesian thought. At the beginning of this chapter we already mentioned that the Post Keynesian analysis of money supply endogeneity was based on 'credit-generated money'. Since the terms credit and credit-generated money are sometimes conflated in many Post Keynesian writings we need to make the distinction between these two terms clear. In general, the Post Keynesian school treats money in a much broader sense than notes and coins issued by the central bank. Money in this school of thought refers to notes, coins as well as bank liabilities, i.e. deposits. Since in this school the notions of general acceptability and unit of account for debt contracts are closely related, these features are seen as the distinguishing characteristics of money in this broader sense.

As we know, while the term credit refers to the asset side of the bank balance sheet, the term deposits necessarily represent the liability side of it. This conventional wisdom in turn helps us to understand why the terms 'credit' and 'credit-generated money' represent necessarily different concepts. Moreover, apart from being distinct from deposits representing the asset side of balance sheet, credit does not possess the quality of multilateral acceptability. Chick (2000) puts this argument in a few words as follows:

I may not speak for all Post Keynesians, but in my view, the feature which distinguishes money from credit is the general acceptability of deposits, as against the personal quality of credit. The central mystery of modern banking is that expenditure against a bank credit agreement gives rise to deposits, which transforms a bilateral contract into a liquid,

multilaterally accepted, asset. In Post Keynesian thinking, the status of money is given to banks' liabilities, not their assets. This does not diminish the importance of credit, but while the circuit and Schmitt schools aver that credit *is* money, the Post Keynesian school argues that it is the proximate *cause* of money. (Chick, 2000: 131, emphasis in the original)

Thus, when agents utilise credit created by banks, it will return to the banking system as deposits, which by definition is money in Post Keynesian terminology. It is in this sense that we can talk of credit as 'the proximate cause' of generally acceptable money.

Although the proponents of the horizontalist view agree that money in their analysis refers to bank liabilities, they fail to make any explicit distinction between credit and credit-generated money, i.e. deposits. As a corollary, in the analysis of the horizontalist school money and credit markets are conflated. However, as we have shown, the proponents of conditional endogeneity view treat credit and credit-generated money as methodologically distinct notions and therefore look at both sides of the bank balance sheet in their analysis. This in turn implies that in the conditional endogeneity approach the money market and the credit market are examined as different but mutually-concurrent markets. Moreover, in this approach the role of liquidity preference in determining the shape of the money supply curve and thus the rate of interest is emphasised. Therefore, we will first discuss the issue of why this approach stresses the concept of liquidity preference and then will continue our discussion with the analysis of the money market and the credit market in Section 2.4.2.

As we have been arguing so far, the concept of liquidity preference is the cornerstone around which Keynes's monetary economy is built. Keynes argued that the state of liquidity preference and the quantity of money at times can become a

constraining tendency in determining the level of investment, employment and output. In a monetary economy investment decisions can be brought to a premature halt even well before the economy reaches the full employment level. To put this in Shackle's words 'If we sought to condense Keynes's whole thesis concerning employment into a single sentence, we might say that he ascribes the possibility of involuntary general unemployment to the existence of a liquid asset in a world of uncertainty' (Shackle, 1973 in Dow and Dow, 1989: 149). Unfortunately, the horizontalist view to endogeneity not only states that the quantity of money is no more a constraint but also rejects the importance of liquidity preference in the economic process.

Keynes's liquidity preference is re-emphasised in the writings of Davidson (1978, 1994, etc.), Chick (1979, 1983, 1992), Wray (1990, 1998), Rouseas (1992 to some extent), Dow and Earl (1982), Dow and Dow (1989), Dow (1996c, 1997, 1998), Mott (1985-86), Wells (1983), Carvalho (1995), Chick and Dow (2002), and others. The instability of the financial system and thus the entire monetary economy was emphasised by Minsky (1975, 1982). In fact, these Post Keynesians extended Keynes's theory of liquidity preference a step further. To generalise this extended view and, to put it in Mott's words, the Post Keynesian theory of 'liquidity preference is a theory of the desire to hold short- versus long-term assets' (Mott, 1985-86: 230).

Thus, in the conditional endogeneity view of the Post Keynesian school, liquidity preference or demand for *hoards* is treated as a demand for *cash as well as short-term liquid assets*. In this regard, from the perspective of this approach, in its broadest sense liquidity preference can be expressed as 'a preference for a liquid asset over any illiquid asset' (Dow and Dow, 1989: 148-9). Dow and Dow (1989) examined the issue thoroughly by looking individually at consumers' liquidity preference, firms' liquidity preference, the role of financial structure, banks' risk

assessment of firms, liquidity preference of financial institutions, and international sources of credit and liquidity. Thus since the concept of liquidity preference is the core of our overall analysis, here we will bring forth the three most important aspects of liquidity preference from Dow and Dow (ibid.); namely, the liquidity preference of consumers, firms and banks.

Consumers' liquidity preference. It is generally believed that a rise in consumers' liquidity preference as a consequence of lack of confidence in expectations regarding the future is associated with a fall in their propensity to spend. Dow and Dow (ibid.) connect this phenomenon with the profitability and retained earnings of firms. When consumer demand falls, to reflect the increased state of liquidity preference of the public, the situation leads to a fall in retained earnings of firms. Consequently, the profitability of business decreases, resulting in unplanned increase in stocks. As a corollary, firms' demand for credit to finance working capital goes up. As a result of a weaker consumer demand the marginal efficiency of investment goes down and thus the demand for credit to finance new investment decisions also shrinks.

Firms' liquidity preference. Let us assume that consumers' liquidity preference remains intact, but rather liquidity preference of the firms changes to reflect their pessimistic expectations. What happens next is that firms start positioning their portfolios in more liquid form. This option in turn translates into lower demand for new illiquid capital goods. As a consequence, again, the demand for credit to finance new investment projects will diminish.

Banks' liquidity preference. In the above two instances we took the liquidity preference of banks for granted, i.e. in our analysis we assumed that it remained invariable. As an intermediary between borrowers and lenders banks' activity can be

generalised as borrowing short and lending long. In other words, banks' assets are less liquid than their liabilities. That is to say in order to stay successful in their business in their portfolio choice, banks have to aim at profitability and liquidity simultaneously (Carvalho, 1995: 27). Therefore, banks are very sensitive to the notion of risk attached to a particular investment project they are considering to finance. During the downswing in the business cycle when the liquidity preference of different economic groups is high, liquidity preference of banks also increases and thus they will reposition their credit portfolios. They reconsider their assessment of risk. Risk assessment, in turn, involves valuation of collateral as well as the expected return on or the profitability of the project. During the economic downturn the value of the collateral and the expected profitability or 'credit-worthiness' of the project will likely be assessed downwards. As a corollary, 'projects that would previously have been judged to be creditworthy are now rejected and so supply of credit is not forthcoming' (Hawkins, 2003: 40). That is to say, 'while a high assessment of risk theoretically generates a credit offer with a correspondingly high risk premium, in practice credit may simply be refused' (Dow and Dow, 1989: 154). Or in the best scenario, credit may be rationed, only the most established and financially sound firms being given access to credit. Thus, banks' liquidity preference is the most important one of all. 'This means that, in general, the banks hold the key position in the transition from a lower to a higher scale of activity' (Keynes, 1937c: 668).

In a nutshell, the analysis of the liquidity preference of the individual groups in economy shows that the supply of money is not fully accommodating. This in turn indicates that, as in Keynes's analysis, even in an environment of endogenous money creation, liquidity preference and quantity of money can become a constraining factors in determining the level of new investment. Thus Keynes's (1937c: 669)

‘fundamental conclusion’ that the investment market ‘can never become congested through a shortage of saving’, rather it ‘can become congested through a shortage of cash’ holds in the environment of endogenous money creation by the private sector. The matter of conditional endogeneity of the money supply hopefully will be clearer in the following sections.

2.4 The Rate of Interest and the Interaction of the Money and Credit Markets in the Conditional Endogeneity View

2.4.1 Keynes, Classics, Neo-classics and the Rate of Interest

The rate of interest is the transmission channel through which investment decisions and thus the level of employment and output are affected. In general, most schools of thought accept this transmission mechanism in one way or another. However, opinions diverge with regard to the central question of how the rate of interest is set, what factors play a crucial role in its determination, and also the details of the transmission mechanism.

In the analysis of the classical school, the rate of interest was seen as a factor equilibrating the level of saving to that of investment (Keynes, 1970: 175-85). Investment decisions represented demand for investable resources and the saving decisions the supply of them. The rate of interest was seen as a ‘price’ at which saving was at a par with investment. Interest was a reward for waiting, i.e. for abstaining from consuming; it was not a reward for ‘not-hoarding’ (ibid.: 182). Moreover, the rate of interest was understood to be a ‘*real*’, not a *monetary*,

phenomenon. The classical economists confused it with the marginal efficiency of capital. They believed that the rate of interest ‘was determined by the potential productivity of investment, which determined the demand for funds, and the thriftiness of the population, which determined their supply’ (Chick, 1983: 207). Furthermore, another distinguishing feature of this school of thought was that saving always preceded investment.

The ‘neoclassical’ approach, without much success, attempted to bring ‘monetary matters’ into the analysis. The loanable funds theory of this approach emphasised the sources and uses of investable resources (Chick, 1983: 178). In this analysis the main issues, such as the process of interest rate determination, its role in equilibrating saving and investment, and the concept of precedence of saving over investment remained unchallenged; rather they were taken for granted from the classical school. The proponents of the loanable funds theory made the distinction between the ‘saving proper’ – that is loanable funds, and hoards or the ‘forced saving’ – that is non-loanable funds. Hence, their conclusion was that saving might, *but not necessarily*, be equal to investment. Ironically, Keynes preferred the classical view on this issue (Keynes, 1970: 183). He borrowed the idea of equality of saving and investment from the classical school in his analysis. The loanable funds theory considers ‘hoarding’ as a temporary phenomenon. Thus as long as the supply of money is fixed, this method approximates the classical approach (Chick, 1983: 185). Indeed, the loanable funds theory is based on the following assumptions: perfect information, fixed money supply, constant prices, and full employment (Howells and Bain, 1998: 47).

Interestingly, in the contemporary orthodox literature the classical view of the equality of saving and investment prevails. Furthermore, the priority of saving over

investment is still stressed. In this respect, modern macroeconomics textbooks do well in explaining why saving must be equal to investment, and how it must precede investment. To depict the picture vividly we are asked to imagine the Robinson Crusoe household in the uninhabited island of Juan Fernandez. Crusoe decides not to consume seed-corn this season so that he can sow it next season; this is exactly equivalent to his saving to be invested next year. It is as simple as that: saving is not only equal but also prior to investment.

In sharp contrast with the loanable funds theory of the classical/neoclassical school Keynes developed a new - liquidity preference - theory of interest rate determination. Keynes refuted two of the three conclusions of this approach - namely, the belief that saving was prior to investment and the rate of interest was determined by the interaction of these two factors. Keynes disagreed that the interest rate was a reward for waiting as such, the sole purpose of which being to equilibrate the demand for and the supply of investable resources. He also disagreed that saving was prior to investment.

However, Keynes accepted the conclusion of the classical school that investment was equal to saving. He not only accepted this belief but also emphasised that they were in fact identical. He argued that '[t]he supply curve of savings and demand curve for investments [had] *no determinate point of intersection, since they [lay] along one another* in all conditions throughout the whole of their length' (Keynes, 1973: 552, emphasis added). Keynes's acceptance of the classical conclusion that saving was equal to investment generated a heated debate among academics before final agreement was reached: although saving and investment decisions are made by different agents, they are always equal *ex post* (Chick, 1983:

180 and 2000: 133; and also Sawyer, 1996: 50). The *ex ante* magnitudes of saving and investment may not be equal unless by accident (Chick, 1983: 180).

Since Keynes borrowed the concept of *ex post* equality of saving and investment from the classical school, this notion was *not* a novelty he was putting forward:

The novelty in my treatment of saving and investment consists, not in my maintaining their necessary aggregate equality, but *in the proposition that it is*, not the rate of interest, but *the level of incomes which (in conjunction with certain other factors) ensures this equality.* (Keynes, 1937b: 249, emphasis added)

Thus, Keynes argued that the level of saving was not determined by the rate of interest, *rather it was determined by the level of investment through changes in income* (Wray, 1990: 157-8). This argument in turn means that causation runs from investment to saving, not from saving to investment. Unlike in the analysis of the loanable funds theory, in Keynes's analysis saving and investment is brought into equality by income, not by the rate of interest (Chick, 1983: 183).

As to the saving-interest rate relationship in the loanable funds theory, Keynes makes two basic arguments to reject the idea that saving is a positive function of the rate of interest (Chick, 1983: 182). The first argument is that a change in the rate of interest has both a substitution effect and wealth effect. While the former effect alters the relative incentive to consume now or in the future, the latter is reflected in the change in the value of most capital assets. Since these two effects operate in opposite directions, the final outcome is ambiguous.

The second argument is rather simple, yet strong. Keynes argues that agents *can* save even though the rate of interest is zero or negligible if their income exceeds

the subsistence level. After all, people can hoard, accumulating wealth in coins and notes, and *may* decide not to lend regardless of how high the rate of interest is. Under these circumstances the role of the interest rate in determining the level of saving would likely be very negligible. Thus, to put it in other words, it follows that the rate of interest can be high or low depending on the ‘mood’ of the public to lend (in other words, to buy assets – banks deposits and securities for instance), not on the stock of the available saving. Saving ‘may not depend on the rate of interest but lending likely does’ (Howells and Bain, 1998: 51). However, this is not the end of the story. Keynes calls this line of reasoning just a ‘firm and intelligible ground from which to proceed’ (Keynes, 1937b: 250). He shows that the rate of interest reflects the degree of agents’ willingness to part with liquidity *now* in return for some kind of pecuniary premium in the *future*. The rate of interest is in no way a reward for waiting or abstaining from consuming as such. Rather it is a reward for running a risk of uncertainty, parting with liquidity or the power of disposal (Keynes, 1970). This he puts simply as follows:

The liquidity-preference theory of the rate of interest ... makes the rate of interest to depend on the *present supply of money* and the demand schedule for a *present claim on money* in terms of a *deferred claim on money*. (Keynes, 1937b: 241, emphasis added)

Thus, according to the liquidity preference theory of interest rate determination the rate of interest is purely a monetary phenomenon. It has nothing to do with the level of saving or the marginal efficiency of capital.

Now, once it is shown that the rate of interest is a monetary phenomenon, not a ‘real’ one, it is also necessary to demonstrate how the rate of interest can affect the level of investment, employment and thus output. Keynes’s marginal efficiency

schedule relates the rate of interest negatively to investment (see Keynes, 1970: 182 and Chick, 1983: 183). However, in explaining how the level of investment can be affected he goes a step further. Since he makes the distinction between the rate of interest and the marginal efficiency of capital, he argues that '*the rate of interest on money* plays a peculiar part in setting a limit to the level of employment, since it sets a standard to which the marginal efficiency of a capital-asset must attain if it is to be newly produced' (Keynes, 1970: 222, emphasis in the original). Keynes shows that the new investment decision will be carried out as long as the rate of interest is lower than the marginal efficiency of capital. Only when the rate of interest is equal to the marginal efficiency of capital, will there then be no profit incentives for businesses to continue new investment activities. This condition, of course, is satisfied when the economy reaches the level of full employment.

However, Keynes (1970: 236) goes on to argue that in a monetary economy it is possible that the condition of the convergence of the rate of interest and the marginal efficiency of capital can occur even well *before* the full employment level is reached. As is well known, Keynes in his liquidity preference theory of interest did not accept the full employment assumption of the loanable funds theory. By doing so he was able to show that in the actual, real world income was prone to large fluctuations. As was already shown in the previous chapter, money is the most liquid of all assets. As the return on other producible assets in terms of money falls, agents hold money for its liquidity (Dow and Earl, 1982: 105). Thus, unlike the return on other producible assets, the return or rate of interest on money falls slowest due to money's non-reproducibility characteristic. Therefore, in a monetary economy it is possible that the rate of return on producible assets (or marginal efficiency of capital in Keynes's terminology) can fall below the rate of interest on money. As a consequence

investment decisions and thus output growth can come to a premature halt well before the economy reaches the level of full employment (see Keynes, 1970: 236 and Hawkins, 2003: 32).

Another distinctive facet of the liquidity preference theory of interest is that in this analysis investment is prior to saving, not the other way around. This argument was implicit in Keynes's analysis. To prove the argument that in fact investment precedes saving, one must first abandon the 'Robinson Crusoe seed-corn' paradigm of the loanable funds theory. The issue of why we should abandon the seed-corn paradigm and what approach instead we should take was elegantly explained by Chick (1983:184-91) as follows. Indeed, this line of reasoning is in compliance with the argument we made in Chapter 1 concerning the emergence of a monetary economy in a property-based society.

In the feudal mode of production based on agriculture, property rights were weak and so were lending and borrowing relations. Therefore, although the notions of saving and investment were not contrastingly different from each other, in this society saving decisions are a precondition to any act of investment as in the seed-corn paradigm.

With the evolution of capitalism, especially after the industrial revolution, economic relations started changing gradually: property rights strengthened, the monetary economy started taking shape. As a corollary, saving and investment became separate acts. However, at this stage these conditions still were not sufficient for investment to precede saving. The emergence of intermediaries (what later became banks and securities markets) between lenders and borrowers did speed the pace of investment, but saving was still prior to investment.

The only non-circular approach to explaining the concept of precedence of investment over saving is to look at the stages of banking development from a historical perspective. This perspective also shows the special role of the banks in the economic process. Although we will come back to this issue once again in the next chapter and devote considerable time to its discussion, here we will note the importance of this approach in a few words. In the early stages of their development the working of banks was not very well organised and established as a system. The size of the banks was small, the number of them was too many and their liabilities were not yet well recognized as a generally accepted means of payment. Indeed, at this stage the credit activity of banks was constrained by the availability of saving they could attract from the general public. Organisation of the fractional reserve requirements and interbank lending operations enabled the banks to work as a united, established system. Only at this stage we could talk about the precedence of investment over saving. At this stage of their development banks were already in a position to create credit in excess of saving to a considerable extent so that ultimately investment decisions were no longer constrained by the saving decisions. As Chick concludes, ‘The accuracy of the proposition that investment precedes saving thus *depends on the stage of development reached by the banks*’ (Chick, 1983: 190, emphasis in the original).

Now, we can put our argument in a few words. Because of the special role banks could play after a certain stage of banking development, they were able to finance new investment independent of saving. Thus bank lending could cause investment and money income to increase by the same amount, the resulting increase in money balances constituting *ex-post* saving (Chick, 2000: 133). Hence since ‘[t]he

banks of the 1930s could finance investment independently of saving' (Chick, 1983: 191), no wonder that Keynes was able to capture this moment in his theory.

2.4.2 The Rate of Interest in the Conditional Endogeneity View and the Analysis of the Money Market and the Credit Market

In Keynes's analysis the quantity of money and the state of liquidity preference determine the rate of interest. Although Keynes's *Treatise on Money* shows that Keynes was well aware of the extent of credit creation by the banking sector (see Moore, 1988 and Wray, 1990), in the analysis of *the General Theory* he took the supply of money as *given*. Dow (1997) convincingly argues that by taking the supply of money as given Keynes never meant that it was an exogenous variable in the more general system. Our argument about Keynes's theory of liquidity preference in Section 2.4.1 also shows that he had a good reason to take the supply of money as given, i.e. to convince his critics, by putting more emphasis on liquidity preference to refute the philosophy of loanable funds theory. Indeed, by doing so 'Keynes rendered his argument about liquidity preference more palatable' (Dow, 1997: 64).

Thus in *the General Theory* it is liquidity preference that 'rules the roost'. Higher liquidity preference raises the rate of interest and lowers the propensity to spend. In Keynes's words 'an increased propensity to hoard raises the rate of interest, and thereby lowers the prices of capital assets other than cash' (Keynes, 1937b: 251). However, a change in the state of liquidity preference does not affect prices directly, rather any effects on prices are 'produced by the repercussion as an ultimate consequence of a change in the rate of interest' (Keynes, 1937a: 216). The lower

demand for consumer goods, then, spills over to capital goods sector as well. This hampers the retained earnings of firms and hinders their profit expectations. Thus the initial increase in the state of liquidity preference raises the rate of interest and through the marginal efficiency of capital negatively affects investment.

In a letter to Hicks, Keynes indicated that the concept of liquidity preference was a centre around which his monetary theory was built (Hicks, 1967: 30, f.n.3). The main purpose of the story of liquidity preference, then, was to emphasise the instability of liquidity preference (Chick and Dow, 2002: 594). By doing so Keynes was able to show that in a monetary economy effective demand was prone to large fluctuations and thus inherently unstable.

The liquidity preference approach to money endogeneity has been developed in, and retains the spirit of, Keynes's theory of liquidity preference. The approach takes into account the evolution and behaviour of the entire financial system since the time *the General Theory* was published. Therefore, in this analysis the concept of liquidity preference has a broader meaning and implications; it represents a preference to hold short- against long-term assets. Generally speaking, the process of interest rate determination, too, is pretty much the same as in Keynes's analysis. The Post Keynesian analysis only clarifies the details of the process taking into account institutional and structural changes that naturally occurs in the economy through mere passage of time.

As we noted earlier, the liquidity preference view examines both sides of the bank balance sheet in the analysis of the endogenous money creation. Thus reverting to this issue in this section we look at the interaction of the money and credit markets and consequently study the process of determination of the rate of interest, this time from the viewpoint of the liquidity preference approach. Our analysis, based mainly

on Dow (1997: 70-78 and 1998: 48-51), will hopefully clarify two main issues at stake: first, the extent of the limits to the elasticity of money supply; and second, the determination of the rate of interest.

In the previous sections we already distinguished between money and credit. Here we will discuss the credit market and the money market as distinct but mutually-interrelated markets. We will refer to Figure 2.4.1 on the next page as an analytical tool used in this analysis. Since in the Post Keynesian view credit makes deposits, not the other way around, the starting point of the analysis is the credit market. The model is built on the notions of endogenous money creation, decision-making under uncertainty and liquidity preference. The further distinctive feature of the model is that the emphasis in the analysis is not on the market equilibrating points or states of rest, rather on the process of interactive movements in the credit market and the money market respectively.

The credit market. Since central banks as a lender of resort provide liquidity to the banking sector when it is needed, in the contemporary world banks are no longer constrained by reserve requirements. Rather because commercial banks now have to observe capital adequacy requirements, their credit activity is constrained by the availability and thus cost of outside funds. The oligopolistic nature of the banking business implies that interest rates on loans are determined as a mark-up over the marginal cost of funds.

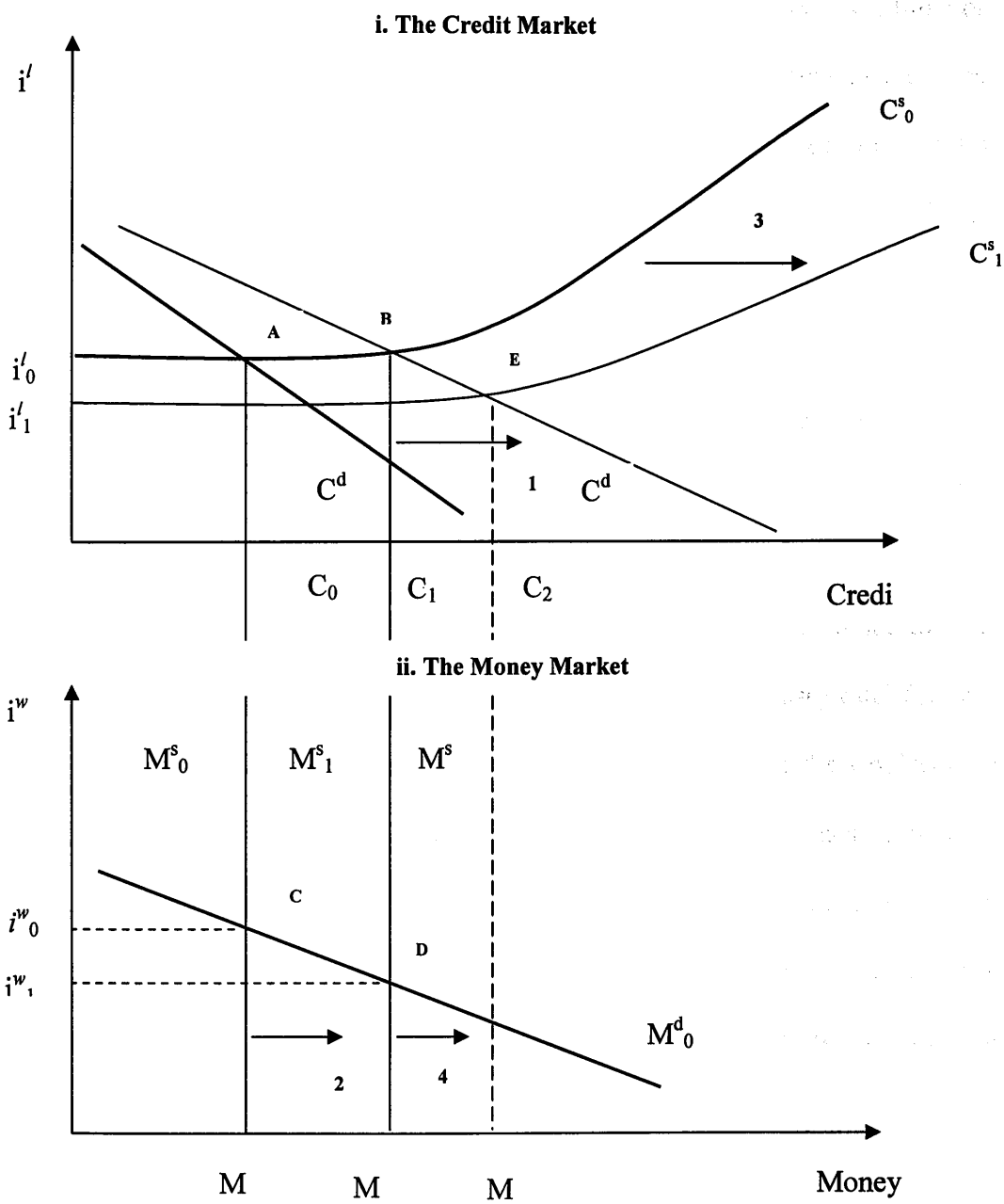


Figure 2.4.1 Interaction between the Credit Market and the Money Market

The interest rate on loans, i' , reflects this idea. Graphically the credit supply curve can be drawn as initially horizontal but after a certain time sloping upward. This is explained by the fact that as the volume of credit increases the perceived risk

of the lenders also increases and thus the credit supply curve becomes less and less responsive to demand. The downward sloping credit demand curve is a function of expected return on investment and liquidity preference. Willingness of the firms to take a less liquid position, i.e. going into debt to finance long-term investment projects, determines the state of liquidity preference of the business sector. Thus the slope of the credit demand curve depends on the notions of liquidity preference and perceived risk of borrowers.

The money market. While the finance motive enters the credit market as a demand for credit, the preference to hold assets in liquid form, i.e. liquidity preference, enters the money market analysis as a demand for money. In the money market the wholesale rate of interest, i^w , is seen as a marginal cost of funds for banks. 'It is assumed that the wholesale rate is tied to the repo (repurchase) rate' (Hawkins, 2003: 38). In this analysis the rate on loans, i^l , is a mark-up over the wholesale rate, i^w . Therefore, this linkage is seen as a channel through which changes in the money market affect the credit market, and *vice versa*. Since in the endogenous money analysis loans make deposits, the money market and the credit market can be seen as a balance sheet identity. Hence the amount of credit determined by the supply of and demand for credit in point A of the credit market diagram is exactly equal to the amount of money in point C in the money market diagram, which is determined by the interaction of the demand for and the supply of money. Money demand is drawn in a conventional way as a downward sloping curve. The money supply curve is vertical. However, this shape in no way represents the idea that the money supply is an exogenous variable in the model. Rather in this analysis the vertical representation implies that money supply is 'given'. That is to say 'the stock of money is exogenous

to the money market as a subsystem, but is endogenous to the credit market as a subsystem' (Dow, 1998: 50).

To analyse the interaction between the credit market and the money market let us initially consider the period of economic upswing in business cycle. In the upturn when the borrowers' perceived risk is low and their expectation regarding the future prospective yield on investment is high, their demand for credit, the finance motive for demanding money, naturally rises. Consequently the credit demand curve shifts to the right from C^d_0 to C^d_1 . The credit demand curve does not simply shift to a new position, but also its slope becomes flatter. In general, during the upswing in business cycle the slope of the both curves - the demand for and supply of credit curves – gets flatter, representing lower liquidity preference and perceived risk of the banks as well as the firms.

The effect of this change on the rate of interest, as Keynes (1937b) noted, depends on the state of liquidity preference of the banking sector, i.e. the willingness of the banks to accommodate the new demand for credit. It is fair to assume that during the expansion banks also share the optimistic view of the business firms and readily accommodate the new demand at the ongoing rate of interest. This is shown as a point B in the diagram. As the credit is newly created the supply of credit increases from C_0 to C_1 . Since banks decide to meet the credit demand at the ongoing rate of interest, the credit supply curve does not shift. Rather the new level of credit supply is seen as a movement *along* the initial supply curve.

As soon as the new credit is created, creation of deposits, i.e. money, automatically follows suit and thus the supply of money shifts from M_0 to M_1 . Provided that the liquidity preference of the wealth-holders remains intact, the increased supply of money puts downward pressure on the wholesale rate and reduces

it to i^w_1 , the point D in the money market diagram. The lower marginal cost of funds for banks, *ceteris paribus*, enables the banks to meet the increased credit demand at a lower loan rate. As a result, the supply of credit shifts from C^s_0 to C^s_1 . Because during the expansion banks' perceived risk and liquidity preference tend to fall, the slope of the new credit supply curve, C^s_1 , is flatter than the slope of the C^s_0 one. As long as the liquidity preference of the wealth-holders, firms and banks does not rise (or at least does not change) the process of credit creation can proceed in this scenario until the business cycle matures and thus uncertainty increases. Hence, if we may generalise, during the upturn in business cycle the credit supply is highly demand elastic.

Now let us consider the opposite scenario, i.e. the slump, and see whether credit supply is highly elastic in economic downturn. To make our example even more distinct from the previous one let us suppose that this time changes originate from the money market. As the business cycle matures uncertainty regarding the future yield on prospective investment is likely to rise putting upward pressure on the liquidity preferences of the different groups of economic agents. For the time being let us suppose that the liquidity preference of the wealth-holders change first. When the uncertainty about the future asset prices rises, the liquidity preference of the wealth-holders also rises (represented as an increased inducement to hold higher precautionary liquid stocks). As a corollary, the higher demand for money at a given stock of money puts upward pressure on the wholesale rate. This automatically spills over to the credit market pushing up the cost of funds for banks. Hence, the lending rate goes up and the credit supply curve shifts upward. It is likely that now banks also share the pessimistic view of the wealth-holders. The higher perceived risk and the increased liquidity preference of the banks will be reflected in the slope of the credit

supply curve - it becomes steeper. The lower credit supply consequently shrinks the stock of money even further. Hence the wholesale rate and through it the loan rate and thus again the credit availability will be affected.

In the downswing the liquidity preference of all economic agents is most likely to rise. The lower income of households implies that their consumption expenditures and thus their demand for money for transaction purposes are likely to fall. At the same time, however, the households are more than likely to want to increase their precautionary liquid stocks. Furthermore, as the rate of interest starts rising, speculators are also likely to raise their speculative demand for money expecting lower future price for financial assets. On the other hand, lower consumption demand, accompanied with the pessimistic mood of the business sector, makes the new investment projects unpromising. Therefore, it is more probable that in the slump not only the banks are unwilling to extend long-term credit for investment projects, but also firms themselves are not asking for bank credit to finance their investment decisions. Firms may only demand credit to finance working capital or to re-shape their liquidity positions.

Thus in a nutshell, our analysis once again shows that although in the upturn in business cycle the supply of credit *might* become highly responsive to the credit demand, in the downturn this is not the case. Rather in the downswing the supply of credit becomes highly inelastic. Therefore, to claim that the credit supply is fully accommodating would be highly inaccurate. Hence, contrary to the horizontalists' claim, the notion of liquidity preference around which the whole idea of Keynes's monetary economy is built is *not* irrelevant to the analysis of money supply endogeneity. Indeed, the liquidity preference of the various economic groups in

general and of the banking sector in particular plays a *crucial* role in determining the degree of the elasticity of the credit supply in modern monetary economies.

2.5 Conclusion

In this chapter we extended our analysis of a monetary economy to the environment of endogenous money creation. It is true that in modern advanced capitalist economies the supply of credit (and thus the supply of money) is responsive to the credit demand of the private sector. However, there *are* limits to the extent of demand responsiveness, or elasticity of the supply, of credit. Banks and the central bank are not passive players in the market creating whatever amount of credit the private sector wishes. In fact, the elasticity of credit supply depends mostly on the ‘mood’ or the liquidity preference of the banking sector. During the boom banks’ liquidity preference tends to fall and they actively increase the supply of money by extending credit to finance mostly investment activities of the private sector.

However, since there is no way to predict when the cycle matures, banks may fail to note it and thus may continue extending credit to the private sector based on their past euphoric expectations. When real investment expectations are not thriving, the private sector may use these credit resources for speculative activities. As a corollary, the entire financial system may become fragile. Once the banking sector realises that the cycle is already ripe, banks’ liquidity preference will rise and thus the supply of credit will be sharply contracted increasing the volatility of the financial system even further. Contraction of the credit supply in no way means that the demand for credit will fall. In fact, cash-strapped firms’ demand for credit to finance their working capital is likely to be higher than usual times. However, at this point

the supply of credit is not responsive to the credit demand of the private business sector. Rather the banking sector determines not only the price of credit but also the quantity of it.

Hence, even in the environment of endogenous money creation, money's 'low elasticity of production' feature still holds. It means that as long as there exists a non-reproducible liquid asset, and as long as sundry groups of economic agents can hold it as an abode of purchasing power when their expectations regarding the uncertain future is low, the quantity of money and liquidity preference will retain their constraining potential in the economic process. Consequently, effective demand in such economy remains to be prone to large fluctuations. Thus our main conclusion is the same as in Chapter 1: so long as liquidity preference and the quantity of money retain the capability of being major constraints, involuntary unemployment in its strictest sense is possible in a market economy.

One more important thing, although implicit in our analysis so far, is the stages of the banking development. Both in the discussion of the precedence of investment over saving and the analysis of the money market and the credit market we assumed that the banking system was moderately developed. (That is to say we assumed that the banking system was at least in its second stage of evolution.) In the next chapter we will have a closer look at the historical evolution of the banking sector in a market economy. We will discuss the importance of the banking system in facilitating economic activity. Also particular attention will be given to the vulnerability of the modern financial system to cyclical shocks.

In short, in this chapter we have completed our analysis on the nature and characteristics of money and the process of money creation in modern monetary economies. In the next chapter we will turn our focus to the discussion of the role of

finance and financial superstructure in facilitating economic efficiency and growth. We will relate the stages of banking development theory to this particular issue and examine how the evolution of banking sector can shift the financial constraints of the economy to a certain degree by enabling investment to precede saving.

3. Finance, Banks and Development

One of the most important problems in the field of finance, if not the single most important one, almost everyone would agree, is the effect that financial structure and development have on growth.

Goldsmith (1969: 390)

3.1 Introduction

In the first two chapters we studied the working of a contemporary market economy and the role and importance money and banks play in it. In Chapter 1 we made two major conclusions. First, the existence and further development of property rights explains the very evolution of monetary economies, as we know them today. As a unit of account in labour contracts, price lists and debt instruments money facilitates the economic activity. Second, money plays a very vital yet peculiar role in the economic process. As a convenient abode of purchasing power it 'lulls our disquietude' during the period of increased uncertainty about the future. Paradoxically, however, because of the same virtue of money aggregate effective demand is prone to large fluctuations.

In Chapter 2 we analysed the process of money creation. We showed that in advanced market economies the quantity of credit supplied by the banking system changes endogenously in response to changes in demand. However, although banks are able to create credit ahead of saving, the supply of credit is not always fully responsive to changes in demand. As long as the quantity of money and liquidity preference retain the capability of being major constraints in the way of production, fluctuations in effective demand and thus involuntary unemployment are possible in contemporary monetary economies.

In short, the discussions of these two chapters will be of crucial importance in analysing and assessing fundamental differences in the nature of money and the process of credit creation under central planning.

Now, in this chapter we will investigate the process of evolution of banks in a market economy. A special attention will be given to the time-consuming nature of banking development from pure intermediation to credit creation and beyond. Since our ultimate goal is to analyse the evolution of money and banks during transition, the discussion of the chapter will be of paramount importance in understanding the time-consuming nature of the institution-building process during transition.

The chapter is organised as follows. In Section 3.2 we will start our analysis with basic theoretical arguments on the facilitating role of finance in development. In Section 3.3 we will briefly and critically review McKinnon and Shaw framework on finance and development. Section 3.4 is the most important part of the chapter in that it deals with the stages of banking sector development. In our discussion in Chapter, we took the stages of banking development for granted and assumed the precedence of investment over saving. The fact, however, is that this becomes possible only after the banking system undergoes a certain stage of development. The discussion of the role of finance in the economic process would not be complete without mentioning unstable character of finance associated with uncertainty and liquidity preference. Using Minsky's financial instability hypothesis, we will discuss this issue in Section 3.5. Finally, Section 3.6 summarises main findings of the chapter.

3.2 Finance and Development

The emergence of property rights and thus the development of money and monetary economies greatly enhances opportunities for exchange and trade, which in turn translates into division of labour and economic efficiency. In a monetary economy agents are able to measure the relative worth of any good in terms of a specific good with stable value, i.e. money. In order to carry out any exchange transaction they use money as a unit of account and means of exchange to effect payment. Because money is convenient to carry and is a good store of value it can be readily used to buy goods and services at any *time* and any *place*.¹ As a unit of account and means of exchange money reduces uncertainty across *space*, while as a store of value it reduces uncertainty across *time* and *space*. This we already discussed earlier in Section 1.5.1 and noted the latter characteristic of money as its finance feature. The finance feature of money is in fact a hidden potential, which, if used effectively, can greatly enhance the production possibility of the economy even further. What brings this hidden potential into effect, then, is the establishment of financial institutions.

In the absence of financial institutions and thus financial intermediation the 'finance' feature of money can still be at work, but it is used inefficiently. Money still helps entrepreneurs to keep their purchasing power from eroding through the mere passage of time until they accumulate enough resources to start/enlarge their businesses. However, under these circumstances it takes a great deal of time for worthwhile projects to be realised, if they are realised at all.

In general, the facilitating role of financial deepening can be easily shown using the following example (Coghlan, 1980). Investment can be financed from two

¹ In modern times specific national currencies serve as a legal tender within a specific geographic area, i.e. national states.

sources: internal finance, i.e. the entrepreneur's own resources; and external finance – from borrowing. If there are no financial intermediaries then, no matter how profitable the investment project might be, the chance of financing this investment decision is limited to investor's own saving. In case the entrepreneur decides to undertake any new investment he must wait until he accumulates enough resources for this purpose. Depending on the scope of the project the waiting period can be long. Therefore, the cost of internal finance is waiting and postponement of investment until sufficient resources are accumulated. When financial intermediaries do not exist, attracting external finance directly from surplus units is still possible. However, the process is prohibitively costly due to information and transaction costs for searching surplus units. In fact, in this particular case the cost of external finance may be higher than the cost of waiting and accumulating the required amount from investor's own earnings.

In a market with comparatively developed financial intermediaries and limited borrowing and lending opportunities, the cost of external borrowing is lower compared to that of internal finance, but the situation can be further improved with an even more developed financial system. The evolution of financial intermediaries will gradually increase availability of external finance and reduce its cost.

In short, the process of moving to financial intermediation can facilitate the economic process in several ways (Dow, 1998: 19). Firstly, by offering a return on saving it encourages saving. As a result, this creates greater access to external finance, increases its availability and reduces its cost discounted for risk. Second, the allocation of finance becomes more efficient. As specialised institutions financial intermediaries improve the process of selection of borrowers according to their credit-worthiness. Third, by increasing the stock of financial assets, financial intermediation

encourages further financial development. Fourth, for an individual economy financial development may open the doors to international capital markets.

Banks emerged as one of the first and most important financial intermediaries. They accept short-term liquid deposits against which they advance long-term loans for businesses. Borrowing short to provide liquidity for savers and lending long to finance business decisions – “maturity transformation” - is one of the important functions of these institutions in facilitating growth. By successfully managing the payment mechanism of the economy and reducing time and energy spent on exchange of goods and services the banking sector indeed can facilitate trade, increase efficiency in production and sale, and thus the total productivity of the society. (See Gerschenkron, 1962 and Cameron, 1967.)

These are the functions of banks commonly acknowledged in the mainstream literature on banking. However, modern banks achieved these developments already in their early stage of evolution. After a certain stage of development banks learn to create credit ahead of saving. Banks create financial resources to finance business decisions and simultaneously offer their depositors liquidity and return. Since the analysis of institutional evolution is of paramount importance in understanding the complex nature of transition, we will discuss this process in more detail in Section 3.4.

The issue of economic growth has been the centre of attention of research scholars for many years. Many voluminous books and lengthy articles with complicated mathematical models and policy prescriptions have been devoted to the issue. However, in most of the work undertaken in this direction the role of finance in facilitating economic growth has been undermined or not been taken seriously.

In some ways this is not a surprise because in the analysis of the classical economic thought before Keynes and afterwards in the studies of their successors – the neoclassical thinkers – very little role is given to money in the economic process, if given at all. In mainstream economic models money is seen as a technical input with no real influence on economic activity. In other words, money is a ‘veil’ that ‘wraps’ the real economy. That is why, not only money’s but also the financial system’s role in facilitating economic growth is seen as insignificant. In these models ‘capital markets are perfectly efficient and all agents have full information, so there is no important function served by financial intermediaries’ (Beim and Calomiris, 2001: 69).

Hence, due to methodological reasons orthodox classical theories gives only a limited role to money and finance. In this regard it would be true to note that the attempt to explain the logic of the association between financial development and real economic growth in a systematic way is a relatively new phenomenon in the mainstream economic literature (Drake, 1980). In other words the research interest in the subject revived not long ago after the pioneering works notably by Schumpeter, Goldsmith, Gurley, McKinnon, Shaw, Patrick and others (Fry, 1995). The particular role of banks in economic development was discussed in Cameron (1967) and Gerschenkron (1962) among others.

Indeed, the existence of an interrelation (not necessarily of exact causation) between financial deepening and economic growth cannot be denied as is elegantly shown in Goldsmith’s (1969) financial interrelation ratio (FIR). Goldsmith constructs his financial interrelation ratio by dividing the total value of all financial assets by the total value of tangible assets plus net foreign balance. His analysis showed that the FIR rose with the country’s economic growth and eventually levelled off at a value of

greater than one, meaning that the financial structure grew faster than the real economy. So the FIR depends on the level of country's income. The FIR is higher for developed countries and lower for underdeveloped countries. However, it is also true that the existence of an interrelation between financial development and economic growth does not necessarily prove which way the causation goes: from finance to growth or otherwise. Goldsmith himself was aware of this too (Goldsmith, 1969: 409). Since the pioneering seminal works of Goldsmith (*ibid.*) and later McKinnon (1973) and Shaw (1973) the issue of a correlation between financial development and economic growth has attracted considerable attention: different theoretical approaches have been developed and many empirical works have been carried out.²

Interestingly, empirical results seem to be of mixed nature. For instance, while Benciventa and Smith (1991), Greenwood and Jovanovic (1990), Thakor (1996), King and Levine (1993a and 1993b), Levine (1997), Choe and Moosa (1999), Tsai and Wu (1999) and some other empirical works find support in favour of financial development leading to economic growth, Demetrides and Hussein (1996), and Ireland (1994) suggest that causation goes the other way around. According to these works it is income that drives financial development. There also exists some empirical support for "bi-directional" causation. It can be found in Luintel and Khan (1999) and Al-Yousif (2002).

Although the empirical findings on finance and development appear to be of mixed nature, the theoretical underpinnings for the 'finance leading' approach appear stronger than others. As Levine (1997: 688) put it 'although conclusions must be stated hesitantly and with ample qualifications, the predominance of theoretical

² The mainstream literature on finance and development can be divided into several streams, e.g. structuralists led by Goldsmith (1969), repressionists led by Shaw (1973) and McKinnon (1973), and the second generation financial growth models developed in the framework of endogenous growth models highlighted by King and Levine (1993a, 1993b), and Pagano (1993) and others. Fry (1995) gives a nice summary review for all of these schools.

reasoning and empirical evidence suggests first-order relationship between financial development and economic growth' and 'broad cross-country comparisons, individual country studies, industry level analyses, and firm level investigations point in the same direction: the functioning of financial systems is vitally linked to economic growth' (ibid.: 689-90).

The fact, however, is that it is not very easy simply to conclude whether financial development leads to economic growth or it is the otherway around. In general, a more cautious suggestion is that economic development can occur without financial deepening, and financial development may not always lead to economic development. The former centrally planned economies of the socialist camp reached a considerable degree of economic development without any financial deepening. Whereas, although some offshore centres have developed sophisticated financial systems, economically they are still underdeveloped economies (Dow, 1998: 19 and Beim and Calomiris, 2001: 71).

3.3 Theories in Finance: McKinnon and Shaw Framework

Now, taking into account the fact that most of the academic discussions on the issue of financial deepening leading to economic development were concentrated around the influential theory developed by McKinnon and Shaw in the early 1970s, we find it necessary to note certain special characteristics of this approach.

The basic problems faced by financial superstructures of most of the less developed countries in the 1970s and the 1980s were high inflation, low (even negative at times) real interest rates, high reserve requirements, dual or multiple exchange rates and so on. In many instances these policies were deliberately

employed by the authorities to promote industrialisation and thus economic growth. McKinnon and Shaw criticised these policies and convincingly argued that these conditions in fact would hinder the effective mobilisation of scarce financial resources and therefore would hamper economic growth. In their analysis they referred to these economies as financially *repressed* economies. McKinnon and Shaw demonstrated that in financially repressed economies agents would not save in inside money, i.e. banking liabilities, due to low rates of interest on deposits.³ Instead the surplus economic units would store their savings in outside money in the form of unproductive assets such as cash, gold, jewellery and other precious metals. Therefore a sizeable part of the aggregate saving in the economy would leave the active circulation and be kept idle as a 'dead stock'. This in turn would imply a wasted opportunity, which less developed countries could not afford.

McKinnon and Shaw argued that financial liberalisation policies (such as setting higher real interest rates, lowering reserve requirements, and abolishing multiple exchange rates) were the right remedy to treat this pathology. For instance higher real interest rates would discourage surplus units from saving in outside money. This policy would create an incentive for surplus agents to keep their savings in banks. This of course would increase banks' cost of borrowing as well as lending. On the other hand, dropping the rate of reserve requirements on deposits would lower the cost of attracting funds to a certain extent thus giving more flexibility to the banking sector in their lending decisions. In a nutshell, financial liberalisation policies would stimulate financial intermediation and increase efficiency in the process of mobilisation of finance. As a corollary, on aggregate more loanable funds would be available for new investment purposes and thus would foster economic growth.

³ The general implication of the argument was that all of the above mentioned repressive policies would weaken confidence of agents in inside money. This in turn would worsen conditions for financial intermediation.

Due to its straightforward policy implications, the McKinnon and Shaw thesis gained much popularity throughout the 1970s and 1980s. In fact, with the support of the International Monetary Fund and the World Bank the theory was put into practise in many less developed countries. Regrettably, however, the theory failed in the majority of the countries that tried to implement policies highlighted in the McKinnon and Shaw theory. Since then their approach has been widely criticised (for general criticisms see Taylor, 1983, Arestis and Demetriades, 1993, Fry, 1995; for more fundamental (yet implicit) criticisms from the standpoint of agriculture dominated economies see Bhaduri, 1977 and 1983, Coats and Khatkhate, 1980, and Basu, 1984). The McKinnon and Shaw school deserves credit for having identified some of the basic problems faced by many less developing countries. However, it should also be noted that the policy proposals of the approach could not make the grade. Even if the critique of this theory is not the focus of this research, we would like to note several important issues that have direct relevance for our future analysis.

First, in contrast to the McKinnon and Shaw thesis, there is weak empirical support for the claim that allowing higher real rates of interest leads to substantially increased saving (Beim and Calomiris, 2001: 71). Moreover, since the real rate of interest can be seen as ‘a good proxy for the efficiency of capital accumulation’ (de Gregorio and Guidotti, 1995: 436-37), one must be careful not to confuse it with the marginal efficiency of capital (Chick, 1983: 207 and 2000).

In this regard, if we accept the argument that the real rate of interest is indeed a good proxy for the efficiency of capital accumulation, then we can suggest that the increased saving may in fact be the outcome of a higher level of capital accumulation, *not* a higher level of financial intermediation. Furthermore, as was discussed in Chapter 1, modern money and thus the entire financial superstructure is built upon the

notion of confidence. If confidence in central bank money, for instance, falls, then there is a danger that the entire inverted pyramid of private financial sector (liability of which is inside money) may collapse. In this sense in the case of less developed countries, if agents do not have confidence in inside money, the size of the inverted pyramid (which is a proxy for financial development) will not expand *regardless* of the level of return promised on these assets. Therefore, raising the rate of interest is not a sufficient tool to attract idle savings into the formal financial system to boost financial intermediation. Policies directed towards building confidence in inside money, and its issuer - the private financial sector, may play an important role as well. In addition, if saving in inside money is a new 'culture' for the agents, then, naturally the confidence-building period may take even longer time.

Second, the McKinnon and Shaw model is based on a loanable funds theory. (We already discussed the drawbacks of this approach earlier in Section 2.4.) This approach does not take into account the distinctiveness of contemporary banking business. Banks are distinct from the rest of the financial institutions in that their liabilities are accepted as money. In this sense, as will be discussed in the next section, after a certain stage of banking development banks can finance investment *prior* to saving. (See for example Chick and Dow, 1988). This means that the loanable funds theory cannot capture the credit creating potential of the contemporary banking system.

Another drawback of the McKinnon and Shaw approach is that the model is based on an implicit assumption that the financial systems of developing countries are perfectly competitive (Arestis and Demetriades, 1993: 291-2). The corollary of this assumption, then, is that all agents possess collateral and thus have access to credit markets. High interest rates on loans in informal credit markets reflect the direct

consequence of repressive redistributive policies undertaken by authorities. Therefore, ineffective informal credit markets will fade away shortly after liberalisation policies are carried out. This analysis, however, undermines the real economic structure of many developing countries.

The fact is that in most of the less developed countries the agricultural sector plays a predominant role. In this part of the economy both poverty and income inequality are equally appalling. In other words, in the agriculture sector subsistence production is evident. Therefore, the agricultural sector of the economy is a dual economy (in the sense that a substantial part of the production in the sector is non-monetized). The term monetization implies the enlargement of the use of money in the economic process through the absorption of the non-monetized sector (Chandavarkar, 1977: 714). One of the main reasons for the existence of a non-monetized economy in the subsistence sector of many industrially backward modern-day dual economies could be the fact that individuals receive a sizeable part of their income in kind and production for own consumption is dominant. In this sense, the unique nature of the economies of less developed countries necessitates employment of different techniques that take into account these peculiarities.

For instance, Bhaduri (1977 and 1983) drew attention to a peculiar characteristic of the informal credit markets in the backward subsistence agricultural sector. In contrast to the conventional literature on the issue, Bhaduri approaches the problem from the point of view of borrower's risk. Bhaduri reminds us of the essence of *two* major problems that exist in informal credit markets of less developed countries.

The *first* issue is that financial liberalisation alone might not be a sufficient recipe to eliminate informal credit markets. In a backward agriculture rural

households borrow money mostly in small amounts predominantly for consumption purposes. A future crop, a small piece of land and even future labour commitments are offered as collateral. Most of this collateral, however, cannot be accepted as pledges by formal credit institutions. Since the informal local moneylenders have better knowledge about the 'creditworthiness' of their customers, they accept these and other types of unconventional collaterals. In short, this line of reasoning implies that as long as the backward agricultural sector remains a subsistence sector and so long as production in this sector of the economy is not fully monetized and commercialised⁴, the informal moneylenders' business will not vanish. Formal credit institutions will not be able satisfy rural households' credit demand simply due to the quality of the collateral offered by rural households.

The *second* issue at stake is the excessively high rates of interest charged on loans in informal credit markets. Bhaduri (ibid.) argues that because of their monopolistic position informal lenders may severely undervalue the price of an asset offered as collateral. If the market price of the collateral sufficiently exceeds the lender's valuation of an asset, then the lender is better off if the loan is *not* repaid. Indeed, he makes a profit if the borrower defaults. Therefore, it makes sense to suggest that in the informal credit market lenders have an incentive to set the rate of interest on loans very high making it nearly impossible for borrowers to repay the loan. These circumstances necessitate the use of a different approach to the analysis borrower's risk and lender's risk. In backward agriculture where subsistence production dominates it is the borrower's risk rather lender's risk that may deserve special attention. This, however, is not to suggest that the borrower's risk theory be used as an alternative dual to the lender's risk theory. Rather, it is to remind us that

⁴ As defined in Section 1.4 earlier.

depending on the structure of the economy in question the analyst might consider in his analysis, the techniques put forward by both of the approaches.

In this regard if we take into account that the agriculture sector is still paramount in the Uzbek economy⁵, and also consider the fact that both poverty and income inequality have risen equally disappointingly during the transition, we may expect the emergence of subsistence production in the agricultural sector. However, in this work the focus of our analysis will be on the activity of commercial banks, i.e. the formal credit market, in the transition economy of Uzbekistan. Therefore, while bearing this problem in mind, we may leave it for our future research.

3.4 Stages of Banking Development Framework

In our discussions in the previous chapters, and in the earlier sections of this chapter, in several occasions we made references, sometimes explicitly and sometimes implicitly, to the stages of banking development framework, but did not discuss it in detail. Finally, in this section we will discuss the evolution of banks and their peculiar role in a market economy.

Our discussion will be based on the stages of banking development framework, which was originally developed by Chick (1992⁶ and 1993). Further developments and different applications of the theory can be found elsewhere (Chick and Dow, 1988; Dow, 1998 and 1999). The theory focuses on the evolution of the English banking system and succinctly and successfully summarises the main developments and changes in banking institutions and their behaviour.

⁵ Agricultural production accounts for more than one third of the GDP and employs more than 40 percent of the total labour force.

⁶ The original date of publication of this paper is 1986.

This approach captures changes in the nature of banking business in capitalist economies through the passage of time. It distinguishes the evolution of banks in terms of special particularities of the development achieved by the system. The theory has profound implications for the theory of saving, investment and interest (Chick, 1992) as well as for the conduct of monetary policy (Chick, 1993). In other words, on the one hand the theory settles an old argument between the loanable funds theory and Keynes's (1970) theory of saving and investment on causality in the saving-investment nexus. It proves Keynes's theory to be true. At the same time, however, it warns that Keynes's theory 'should not be seen as correct theory in triumph over error *but as a change in what constituted correct theory due to the development of the banking sector*' (Chick, 1992: 194, emphasis added). On the other hand, the theory gives plenty of useful insights about the changes in the conduct of monetary policy necessitated by innovative developments in the banking sector. Moreover, in contrast to free banking theory and other mainstream theories that predict the gradual disappearance of the distinctiveness of banks, the theory shows that as long as there is a need for a safe asset in an economy and as long as bank liabilities are a generally acceptable means of exchange, thus performing the safe asset function, banks will retain their distinctiveness among the sundry financial institutions.

The framework identifies seven stages of banking development. That is to say the theory tries to capture the main characteristics of the evolution of banking by dividing the entire process of development into seven notional stages. The last two stages were added only in Chick's second paper, 1993, which indicates that the process of evolution is still in progress. Below we will discuss the evolution of banking in a market economy, in the example of the English banking sector, in a

chronological order. The main characteristics of the different stages are summarised in Table 3.4.1 (Dow, 1998 and 1999).

Table 3.4.1 The Stages of Banking Development

Stage 1: Pure financial intermediation
<ul style="list-style-type: none"> • Banks lend out savings • Payment in commodity money • No bank multiplier • Saving precedes investment
Stage 2: Bank deposits used as money
<ul style="list-style-type: none"> • Convenient to use paper money as means of payment • Reduced drain on bank reserves • Multiplier process possible • Bank credit creation with fractional reserves • Investment can now precede saving
Stage 3: Inter-bank lending
<ul style="list-style-type: none"> • Credit creation still constrained by reserves • Risk of reserves loss offset by development of inter-bank lending • Multiplier process works more quickly • Multiplier larger because banks can hold lower reserves
Stage 4: Lender-of-last-resort facility
<ul style="list-style-type: none"> • Central bank perceives need to promote confidence in banking system • Lender-of-last-resort facility provided if inter-bank lending inadequate • Reserves now respond to demand • Credit creation freed from reserves constraint
Stage 5: Liability management
<ul style="list-style-type: none"> • Competition from non-bank financial intermediaries drives struggle over market share • Banks actively supply credit and seek deposits • Competition over deposits pushes up interest rates, adding to cost-push inflation and encouraging industrial concentration as marginal firms fail cover costs • Credit expansion diverges from real economic activity
Stage 6: Securitisation
<ul style="list-style-type: none"> • Capital adequacy ratios introduced to curtail credit • Banks have an increasing proportion of bad loans because of over-lending in Stage 5 • Securitisation of bank assets • Increase in off-balance sheet activity • Drive to liquidity • Banks are now highly vulnerable to market fluctuations in value of securities as well as in capacity to raise capital
Stage 7: Market structural diffusion
<ul style="list-style-type: none"> • Trend to universalisation in financial services: diffusion between retail and investment banking • Competitive pressure due to deregulation • Increased emphasis on services requiring increased marketing • Structural regulation being replaced by supervisory re-regulation, addressing moral hazard issues, off-balance sheet activities, global diffusion

Stage 1. Pure Financial Intermediation. In the first stage of banking development commodity money is widely used as a means of exchange. Surplus units find it attractive to deposit their hoards in banks as a relatively safe way of saving. However, since there is not much confidence in the reliability of banks, the general public does not yet acknowledge the receipts on deposits, i.e. bank liabilities, as a generally acceptable means of payment. Deposits at this point represent savings and therefore transaction balances almost do not circulate through banks. Banks run their business independently from each other because they still do not know the advantages of working together as a united system. In other words, at this stage unit banking prevails; branch banking is not developed yet. Banks do conduct lending activities but in order to stay trustworthy they should back up their liquidity position with new deposits in the form of liquid reserves. In this sense banks' lending activity is dependent upon the availability of reserves, which in turn depends upon new deposits. In short, denoting R – reserves, L – loans or advances, and D – deposits the causal chain can be shown as follows:

$$\Delta D \Rightarrow \Delta R \Rightarrow \Delta L.$$

Hence in this stage of development banks merely act as financial intermediaries between savers and investors. Reserves are not yet fractional and the bank multiplier process is still non-existent. Financing of new investment decisions is strictly constrained by the availability of loanable funds. That is to say, saving simply precedes investment. In this respect the loanable funds theory is applicable only to this stage.

It can be suggested that Stage 1 captures a comparatively long period of time in early banking history – from the beginning of banking business to the early years of the Industrial Revolution. The process, however, was not static; developments occurred continuously. Two main distinctive developments in this stage obviously occurred in the seventeenth and eighteenth centuries. They were the transformation of goldsmiths, prosperous shopkeepers and merchants into bankers and the foundation of the Bank of England (Pringle, 1973: 16-20). The Bank of England was established with a Royal Charter in 1694 (ibid.) as a joint stock company. It is interesting to note that the Bank of England was a private commercial institutions and the immediate purpose behind the establishment of the bank was to raise money from the rich London merchants to finance the war against France. It is also worth noting the role of the legislature in the development of the banking business. Although the Bank of England was a commercial bank, laws were passed increasingly in favour of the bank. The trend can be explained by the existence of a special relationship established from the outset between the bank and the government. For instance, an Act of 1697 prevented establishment of any more joint stock banks by Act of Parliament. An Act of 1709 placed a limit to the issuance of notes by the joint stock type of banks. Pringle (ibid.) suggests that this legislation could have slowed down the process of banking development to a certain extent.

Stage 2. Bank Deposits Used As Money. In the second stage, the practice of banking, as we know it today, emerges from pure financial intermediation. Banks demonstrate their viability and win the public's confidence. Convenience of the use of paper money is acknowledged. Bank liabilities (e.g. claims on deposits and bank notes) are increasingly used as a means of exchange. The most important condition here is the existence of the general public's confidence in banks' ability to convert

their liabilities to coins upon first demand. Since the confidence in banks tends to rest on local knowledge, at this stage the use of titles to deposits as a means of exchange, unit of account and a store of value seem to be limited to the local geographic area (Dow, 1999: 37).

The development of branch banking and the consolidation of clearing arrangements promote the general public's confidence and play an encouraging role in the use of bank liabilities as a means of payment. As confidence grows, there will be less need to for cashing in deposits. Bank liabilities soon become such a convenient means of payment that the public starts using them progressively more in a large part of their monetary transactions, coins being left for only the smaller kind of transactions. Consequently, banks became braver and started issuing notes in excess of the coins actually held with them. Hence banks learned to 'create money' (see Wilson, 1986: ch.1).

In general, acceptability of claims on deposits as money is of crucial importance at this stage of banking development. The implication of this process is that now deposits represent not only saving but also transaction balances financing expenditure. Consequently, deposits may move from one bank to another but not leave the system as a whole to a significant extent. Mainly for this reason the redeposit ratio from bank lending will be high. Now, the primary constraint on lending is reserves, not deposits as it was in the first stage. Therefore, the causal chain takes the following form:

$$\Delta R \Rightarrow \Delta L \Rightarrow \Delta D.$$

That is to say if reserves go up (regardless of their source whether they are coming from new deposits - 'primary deposits', capital inflows or open market

operations) banks as a whole can lend out a multiple of this amount. By doing so banks create secondary deposits as they finance new investment, which in turn generates income and the required saving (Chick and Dow, 1988: 231). In other words, the bank deposit multiplier theory is relevant at this stage. Banks now can create credit with fractional reserves. In general the extent of the credit creation depends upon the degree of centralisation of banks as a system. The more coherent the system is, the higher the credit creating capacity will be. Since loans made by banks tends to return to the banking sector as a deposit, for the system as whole, deposits will tend to increase, or to decrease, more or less to the same extent as loans (Wilson, 1986: 9). However, by convention, habit or some other force banks create far less credit than their theoretical limit allows them (Chick, 1992: 196).

Credit creating ability of banks implies that now it is possible for investment to proceed without the need for prior saving, which in turn opens the way for Keynesian income multiplier (Chick, 1983 and Chick and Dow, 1988). Hence banks gain considerable experience in this stage that plays an important role in their further development.

Stage 3. Inter-bank Lending. Although in Stage 2 banks are already capable of creating credit, this activity is still constrained by the supply of coinage, which is required as reserves of the banks, as well as the trust of the public in the soundness of banks. In Stage 3 banks learn to evolve techniques to ease these constraints. They realise 'that it is in their mutual interests to develop a *system of inter-bank lending* (Dow, 1999: 38, emphasis in the original). Individual banks can extend credit in excess of the initial increase in reserves because now they are confident that they can borrow the required amount of reserves from other banks, which have excess reserves. This means that in Stage 3 banks finally develop into a *coherent system*. Credit

creation is still constrained by the availability of reserves, but because of the development of inter-bank lending banks can now hold less reserves. The process of the deposit multiplier is quicker and credit creation is likely to reach the limits of the deposit multiplier. Increased availability of finance pushes its cost down. Consequently, the process facilitates economic growth.

Banks also learn that lack of trust of the public in the soundness of the banks is subject to contagion. If one bank fails, news quickly spreads and confidence in other banks may suffer as well. Therefore, maintenance of confidence is vital for the viability and further development of the banking system. Because of the importance of the banking system in the economic process, the authorities are also concerned about its feasibility and thus try to support the banking system. Therefore at this stage of banking development there may be a deliberate move by the authorities to create a central bank (Dow, 1999: 38). If this is not the case, then, the private sector itself may create a central bank to meet the needs of the banking system. Dow and Smithin (1999) prove the latter argument in terms of the experience of the Scottish banking system. Hence normally by Stage 3 of banking development the central bank is established. Liabilities of the central bank in the form of banknotes will add to the stock of reserve coinage, which in turn allows further expansion of the monetary base (Dow, 1999: 38).

Stage 4. Lender of Last Resort Facility. In the fourth stage, the central monetary authority starts taking an even more important role in banking business. It accepts responsibility for the stability of the financial system. As a lender of last resort the central bank commits itself to lend to any bank that finds itself in crises. This development is of critical importance because now the level of reserves becomes responsive to the demand of banks for reserves. Availability of the lender of last

resort facility encourages banks to overlend because they know that if they are short of reserves, in the worst scenario the central bank will come to rescue. '*Banks collectively expanding credit can now do so without the risk of being caught short of reserves, for they will reliably be supplied by the authorities*' (Chick, 1993: 83, emphasis added).

The only problem will be at what cost these funds will be supplied by the central bank. Even if reserves are supplied at higher interest rates, banks may still create credit beyond the reserve capacity of the system. However, they will only deliberately do so if they expect the expansion to be profitable. If the central bank has a stable interest rate policy and does not charge a penalty rate, the willingness of banks to expand will be greatest. If the central bank is pursuing the latter type of policy it can be said to be acting as a lender of *first* resort (ibid.). Under this scenario reserves become *endogenous* to the banking system. The supply of bank credit becomes fully demand determined, and the supply of deposits simply follows.

In short, in the fourth stage, the central monetary authorities take full responsibility for promoting confidence in the banking system. The central bank does this primarily by providing the lender of last resort facility if inter-bank lending and other sources are insufficient to meet demand. Reserves become demand responsive and credit creation is no longer constrained by them. The causal chain appropriate for this stage can be described as follows:

$$\Delta L^d = \Delta L \Rightarrow \Delta D \Rightarrow \Delta R,$$

where L^d means demand for loans and L is the actual volume of new loans.

Stage 5. Liability Management. In previous stages of development changes in banking activity took place primarily on the asset side of the bank balance sheet. In Stage 5 banks enter the new phase in their development, liability management. As the public's confidence in banks grew and bank liabilities were increasingly being used as a means of payment, the role of banks in the economic process grew in importance. The capacity of the banks to create credit was further augmented by the enlargement of the supply of reserves made available by the central bank, which now performed the function of lender of last resort. Since NBFIs use the liabilities of banks as their reserve base, this process stimulated a strengthening and spreading of the activity of NBFIs. As a corollary, banks found themselves in a position facing strong competition from NBFIs.⁷ The 1971 policy of 'Competition and Credit Control' further tightened conditions of competition. It extended reserve requirements to a wide range of bank type of institutions. This in fact was an advantage for banks as they were no longer penalised by controls levied *only* on them. However, banks also had to abandon their cartelised lending and deposit rates. All conventions linking commercial bank lending and deposit rates to other interest rates were abolished. Thus banks were thrown into open competition among themselves and with other NBFIs.

The main objective behind the 1971 policy of the authorities, of course, was an attempt to control the supply of money. The growth of money supply is affected mainly by the increase in bank lending either to the private sector or to the government. Since in both cases bank deposits are created, the supply of money will increase. In a way, the best choice for controlling the supply of money would be to induce banks to cease lending and the general public to invest in government securities. However, since the new policy encouraged setting interest rates freely, the

⁷ Already in the end of 1971 deposits of only three types of NBFIs, namely Building Societies, Saving Banks and Finance Companies, attracted from the UK residents stood at £15,590 million against £16,965 million of the banking sector (Pringle, 1973: 131, Table 1).

only way of achieving it would be to raise the yield on government securities and to let the rate of interest on bank loans rise in the hope that this would decrease the demand for and supply of credit (Pringle, 1973: 112-130).

The banks' response to the new policy changes, however, was totally different from what the monetary authorities had expected. Individual banks, facing strong competition from other banks as well as NBFIs, became increasingly concerned about their market position and took a much more pro-active stance in their business activities. Rather than just waiting for new loan requests, as they would have done in the past, now banks aggressively sought new lending opportunities. To match these new loans, then, banks had to compete with NBFIs for deposits. (This is where the terms *liability management* comes from.) This put upward pressure on interest rates on deposits. As a corollary, the cost of lending went up as well. Despite this fact, however, the supply of and demand for loans did not shrink. The money supply kept growing at an unprecedented rate (Pringle, 1973: 126). There is reason to suggest that in the 1970s demand for loans seemed to be interest inelastic (Chick, 1993: 89).

The interesting point is that conventional belief would suggest that higher interest rates on loans would decrease demand for loans and in this way would allow only the most productive projects to be carried out. Stage 5 of banking development proved this belief inaccurate. The aggressive expansion of bank lending in Stage 5 fuelled the financing of speculative activities, leaving the financing of real economic activity well behind and increasing the fragility of the overall economy. Hence in this stage of banking development availability of finance for investment or for any other purpose became a market phenomenon which in turn depended on bankers' expectation and cost of funds (Chick, 1993: 84). In a nutshell, as the importance of the

banking system in financing economic growth grew, the instability of the system also increased.

Stage 6. Securitisation. At the outset of Stage 6 banks have an increasing proportion of bad loans due to the fact that the excessive credit expansion of the 1970s was not supported by real economic activity. The monetary authorities now realised that the supply of reserves had become an endogenous variable to the system. (In fact, as we noted earlier, the supply of reserves had already become endogenous in Stage 4 of banking development with the establishment of the lender of last resort facility.) As a corollary, they turned to capital adequacy requirements in an effort to constrain both the volume of credit and excessive risk taking by banks (Dow, 1999: 39 and Gardener, 1993: 120.). From the point of view of supervisory control, capital adequacy requirements were designed to restrain an excessive risk taking by individual banks and thus to maintain confidence in the entire banking system. This policy obliged banks to raise additional capital if they were to expand credit beyond the level allowed by their current capital holdings. In this sense the policy affected not only banks' risk exposure but also their profitability and competitiveness (Gardener, 1993: 120 and Heffernan, 2005).

In this regard the development of securitisation was a direct consequence of the afore-mentioned changes in banking environment. Gardener (1988: 16) defines securitisation as 'the transformation of financial assets into securities that can be sold in capital markets'. Since capital adequacy requirements obliged banks to keep a percentage of their assets as capital, the securitisation technique helped them to bypass this constraint to a certain degree. Banks learned to transform their illiquid loans in their balance sheet into tradable securities. Usually, the loans initiated by banks are held as securities by NBFIs. The value of these securities, then, fluctuates

with the market rate of interest for them. This may have a serious effect on banks, since the higher rate of interest reduces the capital value of banks (Chick, 1993: 90). In short, in Stage 6 banks are generally more vulnerable to market fluctuations in terms of both raising capital and variability of the value of securities.

Another distinctive characteristic of Stage 6 is the rise in off-balance-sheet activities. In this stage, banks became more and more involved in arranging syndicated loans, providing insurance, letters of guarantees, consultancy and advisory services and so forth. An interesting piece of research found that almost half of all the revenue of the leading 25 largest US banks in the late 1990s was generated by these forms of non-interest income (Radecki, 1999 in Hawkins, 2000: 73). Indeed, banks found these activities increasingly important in raising their profitability without violating capital adequacy regulations. However, off-balance-sheet exposures were also duly taken into account in later capital adequacy requirement regulations (Gardener and Molyneux, 1993: 57 and Heffernan, 2005).

Stage 7. Market Structural Diffusion. In Stage 7 of their development the distinctiveness of banks among other financial institutions appears to be fading away. Due to deregulation, competitive pressure, technological change and innovation there is a trend of universalisation of functions of banks and NBFIs. Traditionally banks used to hold assets of long-term maturity against sight liabilities. Banks were able to do so because their liabilities were of a peculiar character; they were accepted as a means of payment. The development of securitisation techniques is reducing the peculiarities of banks on the asset side, whereas liabilities of some of the NBFIs (building societies and money market mutual funds for instance) are increasingly being used as a means of payment. Some (the New Monetary Economists for instance) argue that legislation and regulations are the primary reasons behind the

distinctiveness of banks. Therefore, on these grounds they suggest that as time passes and regulations erode, banks will no longer be the distinctive part of the financial system. The financial system then simply plays the role of intermediation thus eliminating the need for money in the form of bank deposits (Dow, 1996 and 1999).

However, the logic behind the Chick framework proves this suggestion wrong (Dow, 1999). It is true that traditional banking business is declining in relative importance within the financial system. Nevertheless, it will continue to play its fundamental role in providing *the money base upon which the entire financial pyramid is built*. This is explained by the role and importance of money and uncertainty associated with it in the economic process. As was argued in Chapter 1 the successful working of the modern capitalist economies requires the existence of a liquid asset, which is a good store of value and whose unit serves as denominator of contracts. Although, in times of economic growth and prosperity other assets will increasingly be used as money, as uncertainty increases agents turn to an ultimate source of liquidity, which in modern economies by definition is the liabilities of banks and the central bank. And it is on this liquid base that the entire financial system is built.

Hence our analysis of the stages of banking development framework showed that 'the banking system evolves, not only to satisfy the transactions and credit needs of the economy, but also to satisfy the need for a safe asset, money. The satisfaction of these needs is interdependent: only safe assets are generally acceptable in payment, and it is the fact that bank deposits circulate as means of payment which allows them the scope to create credit in anticipation of redeposit' (Dow, 1998: 25).

3.5 Minsky's Analysis and Instability of Finance

Our discussions so far in this chapter focused on the facilitating role of finance in the economic process. We showed that the main channel through which financial institutions facilitate economic activity is through the mobilisation of idle financial resources in the early stages of financial development, and creation of new credit after the banking system reaches the necessary maturity.

The weakness of this type of approach, however, was that it left the *destructive* role of finance unnoticed. In fact, as we have already shown in our first two chapters, the very financial feature of money can well explain to us why the financial system and thus the overall economy can become vulnerable at times. To put it in a few words, agents' preference for liquidity rises as their anxiety about the uncertain future increases. As a corollary, the money rate of interest can exceed the marginal efficiency of capital well before the economy reaches its full employment level. In the previous two chapters we showed the validity and applicability of Keynes's original arguments to a contemporary world.

The role of finance in Keynes's monetary theory was further explicated by Minsky. Inspired by Keynes's works Minsky (1975 and 1982) developed his own theory of investment (or financial instability hypothesis as Minsky referred to his theory). Minsky's main contribution to the theory of monetary analysis is that capitalist markets are inherently unstable and *financial instability* is an inevitable part of it. According to this theory, *general financial conditions*, i.e. finance, plays a crucial part in determining the level of investment, employment and thus total output. The object of Minsky's analysis, similar to that of Keynes, is the working of a capitalist market economy in its *advanced* stage of development. As Keynes noted in

one of his post *General Theory* articles, in an advanced capitalist economy *mobilisation* of finance in the sense of financial deepening is not a major problem. Rather financial *conditions* in general, and the *instability* of finance in particular are the issues at stake. In other words, in Minsky's analysis finance is *potentially* available but because of the existence of uncertainty as such it is inherently *unstable*. Below we will discuss this theory in brief (for details see Minsky, 1975 and 1982). Figure 3.5.1 will help us to underline the main essence of Minsky's argument.

Following Keynes's (1970: 144) distinction between borrower's risk and lender's risk, Minsky gives special attention to these two notions in his analysis. Investment can be financed either from internal sources (retained earnings) or from external sources (bank credit). Firms finance their new investment decisions partially by their own funds and partially by borrowing from outside sources. Since finance is potentially available, profit maximising firms make complete use of different types of financial instruments (loans, bonds, shares, etc.) in their everyday economic activity. Consequently, firms are bound by financial contracts to redirect a part of their current profits to discharge loans attracted from external sources.

The potential availability of finance implies that lack of finance is not a major problem for new investment, rather terms and conditions of forthcoming finance is an issue. In this regard, '... the fundamental speculative decision by a firm is how to finance control over its needed capital assets: *how much by the firm's own resources and how much by borrowed resources*' (Minsky, 1975: 107, emphasis added). This decision in turn determines not only the firm's size but also growth of its capital assets and profit. Minsky discusses this issue in an example of a representative firm. Figure 3.5.1 below attempts to illustrate the theory.

period of time to implement the project successfully, then the demand for credit (with respect to the cost of borrowing) would be infinitely elastic. However, in the real world agents operate in an uncertain world where they face unquantifiable risk attached to any project involving time. Under these circumstances the notion of borrower's risk becomes essential. Borrower's risk 'arises out of doubts in his own mind as to the probability of his actually earning the prospective yield for which he hopes' (Keynes, 1970). Therefore, the borrower's perceived risk increases as the amount of new investment, and thus the amount of outside borrowing, goes up. In other words, borrower's demand for credit decreases as his perceived risk increases. This is shown as the DP_k curve in Figure 3.5.1. Perceived borrower's risk is the distance between the P_k curve and the DP_k curve.

Similarly, for the same reasons discussed above the supply of credit is not perfectly elastic all along P_l . The slope of SP_k depends, among other things, on bank's confidence in the profitability of investment (P_k). Lender's risk rises as ratios for firm's debt to equity financing or committed cash flows to total prospective cash flows rise. This will be reflected in 'higher interest rates, shorter terms to maturity [of loans], a requirement to pledge specific assets as collateral, and restrictions on further borrowing' (Minsky, 1975: 116). The intersection of the SP_k curve and the DP_k curve determines the level of externally financed new investment $(I_i - \hat{I})$.⁸ Future profit from the new investment, $(I_i - \hat{I})(P_k - P_l)$, will be shared by the borrower and the lender alike. The lender gets his share in the form of interest rate cost.

Both borrower's and lender's confidence in the profitability of investment plays an equally important role in determining the level of new investment. In Figure 3.5.1 the $SP_{k(b)}$ curve and the $P_{k(b)}$ curve represent a boom in the business cycle. Usually

⁸ In the original analysis Minsky uses marginal supply curve. For the sake of simplicity of exposition we didn't go into details.

during the boom expectations about the future yields are high. Therefore, 'the popular estimation of the magnitude of both these risks, both borrower's risk and lender's risk, is apt to become unusually and imprudently low' (Keynes, 1970: 145). As a result, during the boom credit supply and credit demand curves tend to be flatter. In our particular example at the intersection of these two curves I_1 amount of new investment takes place.

During a slump in business cycle expectations about the future yield on new investments tend to become very low. Thus steeper credit demand and credit supply curves, the $DP_{k(s)}$ curve and the $SP_{k(s)}$ curve respectively, represent lower expectation on future profit prospects which usually occurs during the downturn in business cycle. Under this scenario only I_2 amount of new investment takes place.

Figure 3.5.1 shows the above-mentioned two cases only. In fact, depending upon general economic conditions and thus terms and conditions of finance, the expected profit margin from new investment ($P_k - P_l$) and retained earnings may shrink. In its extreme case P_l may well exceed P_k so that no new investment takes place.

Minsky (1982) develops this microanalysis into a macro theory by identifying three types of financial 'postures' in terms of cash flow analysis. He argues that firms' leverage may increase due to two major reasons. First, profit maximising firms' are always looking forward to making profit from any and every opportunity. In this sense they take advantage of the availability of finance and readily go into debt today for the sake of future profit that involves unquantifiable risk. Second, if they are already engaged in external financing schemes, then if the interest cost on existing loans goes up unexpectedly, they may be forced to go further into debt in order to honour interest payments on outstanding debt.

Given these conditions, and assuming $P_k > P_l$, firms may use three types of financing schemes in their economic activity.

- *Hedge finance*. This is a healthy financing scheme. Under this method of financing firms' current earnings from past projects are expected to exceed current cash commitments on outstanding debts.

- *Speculative finance*. Under this scheme of financing firms' current earnings may or may not be sufficient to cover interest costs. Therefore, the viability of firms depends on higher capital gains from new investment and lower interest costs on outstanding debts in the future. In normal cases, firms are confident that in the worst scenario they can borrow short-term loans to pay the difference they are not able to make from their investments.

- *Ponzi finance*. Under this financing posture current earnings are not sufficient to cover interest cost on outstanding debt. Therefore, firms using Ponzi financing scheme can meet their payment obligations on outstanding debt only by borrowing.

Firms running their business under speculative and, even more so, Ponzi financing postures are heavily exposed to the risk of default. This is just because their expected earnings from new investment are not certain. During the upturn in the business cycle usually capital assets are priced high. Since the perception of borrower's risk and lender's risk tends to be low during the upturn, finance is available at cheaper cost for new business decisions. Therefore, overoptimistic firms engage themselves in excessive external borrowing. More and more firms now take speculative and Ponzi financing positions making themselves financially vulnerable to fluctuations on the rate of interest on loans. The increasing use of loans for financing speculative activities leaves the financing of real economic activity well behind and

intensifies the fragility of overall economy. Thus in the upturn the entire financial structure becomes fragile.

When the downturn in business cycle starts, interest rates start rising, whereas price of capital assets falls. Both the perception of borrower's risk and lender's risk go up. Although demand for credit to finance new investment goes down, cash-strapped firms' demand for credit to pay interest commitments on loans goes up. The rate of interest on loans rises and new investment decisions will be postponed. As a corollary, unemployment rises. Under these circumstances the financial condition of all three 'financing postures' deteriorates. While the position of the hedge financing units becomes more like speculative or Ponzi, speculative and Ponzi financing units may in fact go bankrupt. Finally when this happens, demand for credit falls and thus interest rates fall as well. With lower interest rates business activity, however, does not revive at once. Rather it may take some time for the business confidence to recover. Hence in short, Minsky's analysis shows that finance might have both *creative* as well as *destructive* effects on economic activity.

3.6 Conclusion

In this chapter we extended our analysis to the role of finance in economic development. In a market economy the cost and availability of finance set the pace of new investment and thus economic growth. Since financing decisions necessarily involve time, the cost of finance reflects not only the scarcity of financial resources but also the degree of confidence about the uncertain future.

Among financial institutions banks play a special role in facilitating economic activity. The main contributions of the banking sector to financial development are

provision of a safe asset in terms of which contracts, price lists and debt instruments are denominated; organisation of the payment system of the entire economy by serving as a clearing centre; and satisfying the credit demand of the economic system. As banks evolve the importance of these functions grows in vitality. After the second stage of banking development banks are capable of removing the constraint of 'priority of saving' over investment. Also in the later stage of banking development bank liabilities are used not only as a means of payment but also as reserves by NBFIs. In this way banks play an even more important role in facilitating financial deepening in market economies.

In general, we can say that the nature and essence of the role of finance in the economic process is revealed through the functions the financial system performs. If we can summarise these functions, then, the financial system provides: opportunities for transferring economic resources through time and across space; prospects for managing risk; ways of maturity transformation; ways of clearing and settling payments to facilitate trade; and last but not least opportunities to carry out new investment decisions by creating credit well before the actual saving takes place.

To summarise the main points of this chapter, we discussed the role of finance in the economic process. We noted two aspects of finance in the economic process: facilitating and hindering. The development of financial institutions and thus financial intermediation and credit creation will undoubtedly foster economic growth. At the same time, however, the inherent instability of the financial superstructure implies that potential vulnerability of the overall economy may grow as the degree of financial deepening increases. As Minsky (1975: 130) put it 'it is finance that acts as the sometimes dampening, sometimes amplifying governor of investment. As a result, finance sets the pace for the economy'. Therefore, as has been suggested elsewhere

(Minsky, 1982) the working of advanced capitalist economies necessitates cautious and prudent management of money and financial systems.

Hence, this chapter concludes the analysis of the working of a monetary economy and the role and importance money and financial institutions play in it. The conclusions drawn from the first three chapters will be of crucial importance to our analysis of the working of a centrally planned economy in the next chapter, and the process of transition thereafter. Since the economic structure of transition economies is gradually to take the shape of the monetary economy, the framework of modern monetary economies will be used as a benchmark in our analysis of the working of the transition economy of Uzbekistan in the chapters to follow.

4. Money and Banking in the Centrally Planned Economy of the Former Soviet Union

Moziyga qaitib ish ko`rishni xairlik deydi.

(It is virtuous, it is said, to start your work by revisiting the past.)

A. Qodiriy (1926)

4.1 Introduction

In the previous three chapters we discussed the role of money, finance and banks in a market economy. In a market economy money represents a universalised title to tradable goods and services. As a unit of account money is an *active and inseparable* ingredient of the process of production. Money and liquidity preference associated with it play a peculiar, facilitating and constraining, role in the economic process. Money and general conditions of finance can play a paramount importance in determining the level of output, investment and thus employment. In a capitalist economy money and finance does not passively accommodate real economic activity. They play an active role and set the pace of investment.

In Chapter 3 we also gave special attention to the role of banks in the economic process. Banks have very special place in market economies. After the second stage of development banks collectively can create credit independently of the level of saving in the economy. That is to say in a market economy with an advanced banking system, it is actually investment that determines the level of saving through changes in income. In advanced market economies banks create credit endogenously. However, since banks themselves have liquidity preference, the supply of credit is not always fully responsive

to demand. Moreover, banks' special role in the system is not limited to the credit creating function. Since liabilities of banks are used as money and are kept by other NBFIs as reserves, banks play the role of the source of liquidity for the entire financial system.

Now, since this study investigates evolution of money and banking in Uzbekistan under transition from a historical point of view, before starting the analysis of the transition economy of Uzbekistan, we will look at the organisation, role and importance of money and banking in the traditional economy of the Former Soviet Union (FSU). The rationale behind this exercise is to provide us with a clear idea about the initial background from which the economics of transition took off.

The role of money and banking were different under central planning. These institutions were designed to play only an accommodative role in the economic process. To understand why these institutions were designed to function differently, we have to understand the very philosophical foundations of centrally planned economies. Therefore, Section 4.2 starts our investigation by discussing the theoretical and philosophical foundations of central planning. We will briefly discuss Marx and Lenin's view on both money and the design of a communist economy. Next, in Section 4.3, we look at the role of money in two distinctive periods of change in soviet economic history, namely War Communism and New Economic Policy. We will also discuss early dilemmas on the speed of industrialisation and the method of central planning. Effects of these choices on the role and design of money and banking will be discussed in Section 4.4, which covers the period of 'classical' planning, i.e., the period leading up to the beginning of the process of fundamental reforms known as *perestroika* (restructuring).

4.2 Marx and Lenin on Money, Banks and Planning

As is the case with works of many great economists, Marx's writings are interpreted in many different ways. One interpretation of Marx that dominated in the FSU was that of class struggle between the working class and capitalists. The underlying assumption of this interpretation then was that a capitalist economy was not capable of achieving objectives of social 'justice' such as full employment, equal distribution of income, opportunities, etc.

A capitalist economy's organisational structure and design were blamed for such a failure. Marx's teachings, especially the soviet interpretation of them, implied that direct human interference in terms of planning all economic decisions in advance was necessary for the stability of the system. In other words, the way in which capitalist economies worked was the result of human action, but human beings did not specifically design the process. Therefore, it was argued that under socialism human action should be given an active role in managing the economic system so that it purposefully determined the design of society. Construction of a centrally planned economy in the FSU was, by and large, a fruit of this line of reasoning. (See Ellman, 1989: 10 and Temkin, 1994: 197-8 among others.)

Marx believed that one of the reasons why a capitalist economy was inherently unstable was the anarchy of production. Capitalist overproduction or crisis was seen as a result of a class struggle associated with *the lack of organisation and planning in the economic process*. As an alternative to this economy Marx advocated a communist economy, in which the anarchy of production would be replaced by central planning so

that it would become an organised and orderly system (Temkin, 1998: 308).¹ In other words, the commodity exchange system of a capitalist economy would be replaced by production for *use*, not for *exchange* (Bukharin and Preobrazhensky, 1994: 28). Centralisation of the entire process of production, in turn, would imply *elimination of the market* from the system. One of the drawbacks of this process, however, was that any such centralisation would inevitably end up having ‘a multilevel, hierarchically organised plan-bureaucracy as its functionally inescapable accompaniment’ (Nove, 1991: 63).

One of the important aspects in Marx’s analysis of a capitalist economy was the role of money in the economic process. In the writings of the classical economists prior to Marx, money was seen as a neutral link, merely connecting transactions of purchase and sale. In their analysis, all transactions were ‘spot transactions, taking place – somehow! – simultaneously’ (Hicks, 1989: 47). Money was seen only as a means of facilitating exchange. As once noted by Ricardo ‘Productions are always bought by productions, or by services; money is only the medium by which the exchange is effected’ (quoted in Sardoni, 1987: 16). In other words, money was never kept idle and this was a fundamental assumption of the classical school, rejection of which would mean that Say’s Law would not hold.

Marx did not accept this assumption. Referring to Ricardo’s above-mentioned statement, Marx said that it was ‘the childish babbling’ of Say ‘but unworthy of Ricardo’ (quoted in Sweezy, 1970: 137). Marx disagreed with this point on the following grounds. Commodities (C) are directly exchanged for commodities, i.e. C-C, in a simple barter economy without money. Here a person who is selling his commodity is concurrently involved in buying somebody else’s commodity. That is to say acts of purchase and sale

¹ Temkin (1998: 308) suggests that actually Marx borrowed these ideas from Saint-Simon.

are necessarily inseparable, which in turn implies that *supply creates its own demand*.

Hence, theoretically a barter economy is an ideal environment for Say's Law to hold.

Marx argued that in a commodity production economy, where money is employed to effect exchanges, Say's Law does not necessarily hold true. To explain this process Marx uses the metamorphosis 'C-M-C', where M stands for money. He shows that when money is used in an exchange transaction, the act of sale and purchase for an individual trader does not necessarily have to be simultaneous. When the trader sells his commodity for money, money enables him to postpone the act of a new purchase. In Marx's own words 'The purchaser has the commodity, the seller has the money.... No one can sell unless someone purchases. But no one is forthwith bound to purchase because he has just sold' (quoted in De Brunhoff, 1976: 42). Hence money separates the transaction in time and space, i.e. C-M and M-C are separate transactions now. As a result, when hoarded, money holds effective demand back and thus creates the *possibility* for general overproduction and thus crisis. (See De Brunhoff, 1976, Sweezy, 1970 and Sardoni, 1987.)

The nature of a commodity production economy is that the exchange values of C at the beginning and C at the end are identical. The only reason for an individual to engage in trade is to gain a higher use value. That is to say in this economy production is for *consumption*. This implies that the crisis of overproduction is unlikely to occur in this economy.

The case is much more serious in the case of a capitalist economy, in which the driving force of production is *profit*, not consumption. In a capitalist economy the dominant form of circulation is in the form of M-C-M'. That is to say, capitalists spend their money on labour and other means of production to start the process of production.

After the completion of a production cycle, they convert newly produced commodities back into money (M'). Unless M' is expected to be greater than M , capitalists do not start up their business. It is more likely that overproduction and thus crisis can occur in this economy. If capitalists think that the rate of profit is not high enough to lure them to throw their capital into circulation, they may decide to hoard, i.e. keep their capital in monetary form. As a result, some of the goods already produced will not be sold due to the lack of effective demand. The result is the crisis of overproduction; the coexistence of stocks of unsold commodities and unsatisfied wants.

All in all, Marx was well aware that the mere existence of money in a capitalist economy would make crises *possible* (De Brunhoff, 1976: 40) and the contradiction of capitalist production could turn this possibility into reality (Geraschenko, 1970: 117). Interestingly enough, in many ways Marx's analysis of a capitalist economy and his rejection of Say's Law is similar to Keynes's analysis of an entrepreneur economy and his rejection of the same law (discussed in Chapter 1). Sardonì (1987), however, convincingly argues that although Keynes and Marx made similar conclusions about the non-neutrality of money in a capitalist economy, their approaches were completely different from each other methodologically.

Now, Marx also believed that money was a means by which the bourgeois class thrived by parasitically sucking the 'blood' of the working class. Since money served as a means of accumulation of capital, it was seen as a necessary evil and therefore relevant only to a capitalistic mode of production. Thus in a communistic society, Marx had in mind, there would be no room left for capitalist money. Marx was very clear about this in his famous work *Capital*:

In the case of socialised production the money-capital is eliminated. Society distributes labour-power and means of production to the different branches of production. The producers may, for all it matters, receive paper vouchers entitling them to withdraw from the social supplies of consumer goods a quantity corresponding to their labour-time. These vouchers are not money. They do not circulate.² (Marx, 1893: Ch.18)

Lenin readily borrowed the idea of a moneyless society from Marx. In his *the State and Revolution*, commenting on Marx's *Critique of the Gotha Programme* and describing the attributes of the communist society, Lenin wrote:

The means of production are no longer the private property of individuals. The means of production belong to the whole society. Every member of the society, performing a certain part of socially-necessary labour, receives a certificate from society to the effect that he has done such and such an amount of work. And with this certificate, he draws from the social stock of means of consumption, a corresponding quantity of products. After deduction of the amount of labour which goes to the public fund, every worker, therefore, receives from society as much as he has given it. (Lenin, 1938: 96)

Marx and Lenin's conclusion in favour of a moneyless economy was not unthoughtful. They rightly concluded that the very existence of money explained the inherent instability of a capitalist mode of production. According to them money that serves as a unit of account, a means of exchange and a store of value was the cornerstone

² In his other work, *Critique of the Gotha Programme*, one can find words with exactly the same spirit. We quote: "Accordingly the individual producer receives back from society – after the deductions have been made – exactly what he gives to it. What he has given to it is his individual amount of labour. For example, the social working day consists of the sum of the individual labour hours; the individual labour time of the individual producer is the part of the social labour day contributed by him, his share in it. He receives a certificate from society that he has furnished such and such an amount of labour (after deducting his labour for the common fund), and with this certificate he draws from the social stock of means of consumption as much as costs the same amount of labour. The same amount of labour which he has given to society in one form, he receives back in another" (Marx, 1938: 11-12).

of a capitalist economy based on a decentralised exchange system.

In a nutshell, an economy advocated by Marx and Lenin had to be free from any of the instability that is seen as an inherent feature of a capitalist system. It is because the instability of an economy and the cyclical character of unemployment was unacceptable in a communist economy. To look at the issue from a different perspective, theoretically, centralisation of the entire process of production and distribution would imply elimination of capitalist uncertainty, which is embedded in the very structure of a decentralised capitalist economy. Moreover, in an economy where the entire process of production and distribution is centrally planned from above there is no need for capitalist money anyway.

Capitalist money as such plays a crucial role in an economy based on private property rights. In a capitalist economy decision-making is carried out in a decentralised way by millions of individual private proprietors. It is a free market response to uncertainty (which in itself is an inherent feature of a decentralised economy) that gives money its peculiarity and thus non-neutrality in the economic process (Rousseas, 1992). In this sense central planning can be seen as a socialist response to uncertainty. Therefore, it is not surprising to see rejection of money in a socialist economy.

Essentially in a socialist economy central planning takes over the role of money to deal with uncertainty in the process of production. Thus, generally speaking, by means of planning the process of production and distribution, fluctuations in effective demand are removed and the problem of chronic unemployment is eliminated. Theoretically, then, in an economy organised in this way there would not be any uncertainty associated with a capitalist mode of production.

To summarise, Marx and Lenin advocated an economic system where the process

of production and distribution would be planned. They also agreed that in an economy organised in that way there would be no need for money, except perhaps for its use as a means of exchange.

The reason why we touched upon Marx's and Lenin's views on money and planning in this section was to show that it was on these very foundations that the soviet economic theory was built. We would like to indicate that, although extremely general, the very idea of economic planning and abandoning money from the economic process became a dogma of the soviet ideology and as such remained as a constraint in economic thinking at least until the *perestroika* reforms began.

Now, in the next section we will start our discussion of the organisation of the soviet economy. We decided to begin our analysis from the very outset of the establishment of the soviet economic system. The rationale behind this is very simple, yet important. This method enables us to observe not only the evolution of soviet economic theory through time in the face of practical difficulties associated with its implementation, but also the very fundamental reason why money and banks were passive ingredients of the system. Hence the main purpose in the next section is to examine two contrasting approaches towards money and banks during the period of war communism and the NEP.

4.3 Money and Banking during the Early Years of the Soviet Economy

4.3.1 Money and Banks during the period of War Communism

War communism is ‘the name commonly given to the period of extreme communization’ (Nove, 1992: 39.). During this period trade was replaced by a coercive exchange system maintained by administrative and military measures (Kuschpeta, 1978: 26). The war communism, full of chaos, combat, anarchy, and, of course, revolutionary romanticism, lasted for only about three years, from 1918 to 1921. Nevertheless, it was one of those decisive moments in soviet economic history that had a great impact on the future of the monetary-financial system of the soviet economy. The period of War Communism gave the Bolsheviks a unique chance to implement Marxist ideas about a communist economy.

After the revolution Lenin’s view on the moneyless, marketless character of a socialist economy was still very strong. He went so far in advocating this theory that he included the following paragraph in the 1919 Draft of the Russian Communist Party (RCP): ‘*The R.C.P. will strive as speedily as possible to introduce the most radical measures to pave the way for the abolishing of money*’ (quoted in Temkin, 1998: 313, emphasis added).

Indeed, the idea of abolishing money was so widespread that it was treated as an unquestionable attribute of an economy the Bolsheviks wanted to build. In one of the first economics textbooks on a socialist economy, *the ABC of Communism*, Bukharin and Preobrazhensky (1994) described a socialist economy as *a moneyless economy*. Summarising the debate on this issue, Yurovsky (1994) also noted that this matter was not just an intellectual debate among curious communist economists. It definitely had

practical implications. Several special study groups were set up to study practical problems associated with establishing a moneyless economy. Some later generation soviet economists (Geraschenko, 1970: 108 and Shenger, 1984: ch.1) also admit that demonetisation of the economy was a purposeful attempt by the authorities to establish a moneyless economy, inspired by Marx and Lenin's thoughts on the issue.

As to banks, Lenin understood their role to be of high importance in successful completion of the revolution and regulation of the economic life. In line with Marxist teachings, he maintained the opinion that the banks had to be nationalised. As recently as on the eve of the revolution he said that 'a single state bank, the largest of the large, with branches in every parish and factory would already mean nine tenths of the socialistic apparatus' (Lenin, 1938: 96). However, in an economy advocated by Lenin, the functions of banks would be completely different from those in a capitalist economy. They would be limited mainly to *accounting and control*. Although banks would become an important mechanism of the system, their role as a financial institution would be passive and accommodative.

In this sense, the *Bolshevik* government's sending of the Red Guards to occupy the *Gosbank* (the State Bank) within the first few days of the revolution was not a surprise. Already in November 1917 all private banks were closed, the management of the *Gosbank* was replaced with soviet commissars and further steps were taken towards the unification of the banking system into a single body. Within a few months the *Gosbank* was renamed *Narodny Bank* (People's Bank) and the whole banking system was declared to be a state monopoly and thus nationalisation of the banking system was complete. In short, in the last two months of 1917 all major banks were liquidated and merged with *Narodny Bank*.

The centralisation of the whole banking system in one single body, as Lenin advocated in the beginning of the revolution, gave the young soviet government a great advantage in the manipulation of the entire financial system according to their needs. At the start of its activity *Narodny Bank* was the clearing centre of the economy and also was authorised to be in charge of money-issuing activity. In addition, the bank was engaged in providing short-term credits to the economy. However, the credit activity of the bank lost its importance after it was decided that all financing decisions would be taken through the State Budget. Centralisation of financial decisions in the hands of the Commissariat of Finance had two important implications. First, it was a prelude to giving crucial importance to physical distribution, which inevitably downgraded the role of money and banks in the economic process. Second, provision of enterprise finance by the centre in the end created the problem of 'soft budget constraints'.

Nationalisation of the industrial sector after the revolution implied that the soviet industry headquarters – the *VSNKh* (the Supreme Council for National Economy) – was now in charge of production and supply of industrial products. Centralisation of the process of production in the industrial sector gave the government the opportunity to deliver raw materials for enterprises free of charge and thus enabled her to distribute produced goods accordingly at her sole discretion. In other words the *VSNKh* effectively became an official central body in charge of organising *moneyless* exchange transactions in *the socialised sector* of the economy, which at this stage mainly consisted of the industrial sector.

As a result of these policies, not only the concept of loss and profit but also the notion of market-determined price became irrelevant (Kuschpeta, 1978: 27). Now, economic relations among state enterprises were brought about predominantly in *physical*

terms, i.e. tons, meters, litres, etc. Starting from 1919, money accounts of the enterprises ceased to be important. That is to say, accounting for the passage of goods from a state enterprise to a state enterprise in their various stages of manufacture, and their final transfer to the individual consumer, was done in physical terms. (See Davies, 1958: 38-9 for details.)

In addition, in cities some services were provided free of charge. It is reported that towards the end of 1920 steps were deliberately taken to abolish monetary charges for the use of a number of services: postal, telegraph and telephone facilities; water and electricity supply; housing accommodation in municipal dwellings; railway travel; supply of basic food rations, etc (Dobb, 1966: 106 and Geraschenko, 1970: 32). It is reported that, at the beginning of 1921, 93% of all wages were paid in kind against 7% in money (Geraschenko, 1970: 31 and Kuschpeta, 1978: 28).

Thus during the first three years of governing the country, the soviet government effectively transferred the economy from a monetary economy into a 'glorified' barter one. Taxes and wages were paid in kind. In cities most of the products and services were provided free of charge.³ More importantly money and credit ceased to play a connecting role in inter-enterprise relations. These policies downgraded the role of the monetary exchange system even further.

As the role of monetary exchange steadily declined, so did the importance of the *Narodny Bank* in serving the interests of the soviet government. High inflation and a seriously demonetised economy deprived *Narodny Bank* of accomplishing its credit-extending function and it became only a *de facto* Central Clearing Office of the soviet

³ Presumably, it was assumed that workers were getting their share of output from the social fund, to the formation of which they already contributed in the form of working hours.

economy. As a result, on 19 January 1920 *Narodny Bank* ‘was liquidated and its assets and liabilities were transferred to the Central Budgeting and Accounting Department of the Commissariat of Finance’ (Baykov, 1946: 35, emphasis added).

Within the first couple of years of ruling the country, the Bolsheviks seriously demonetised the economy and put an end to the banking sector. Thus the existence of both a firm theoretical background and the gradual development of the events in accordance with it show that the period of war communism was the very time for the Bolsheviks to experiment with their ideas of a moneyless and marketless society. Nonetheless, we should also note that it is possible that some of the decisions made by the authorities during this period could have been necessitated by the emergency situation (most probably it might have been true with regard to agriculture, where the private sector still dominated production).

The experiment, however, turned out to be a disaster. When finally the civil war ended in 1920, the total production of the country was well below its pre-war 1913 level. By the end of 1920 industrial output was equal to only one fifth, agricultural production to almost two thirds, and transportation to a little over one fifth of their pre-war levels (Gregory and Stuart, 1998: 48). As a result, the political situation was getting unfavourable to the new government. It was again Lenin himself who assessed the situation correctly with his intelligent and pragmatic approach and completely changed the course of events by announcing the New Economic Policy (NEP).

4.3.2 Money and Banks during the NEP

As a pragmatic leader, Lenin was among the first to note the impracticability of abolishing money within such a short period of time. Already in May 1919 Lenin asserted that ‘immediate abolition of money is not possible. In order to abolish money, it is necessary to organise distribution of commodities for hundreds of millions of people. It is the work of many years’ (quoted in Geraschenko, 1970: 32).⁴ In his April 1921 article on food tax Lenin also noted that ‘War Communism was thrust upon us by war and ruin. It was not, nor could it be, a policy that corresponded to the economic tasks of the proletariat. It was a temporary measure’ (quoted in Dobb, 1966: 123).⁵

The NEP was to develop a mixed economy with the elements of state socialism and a free market. Therefore, sometimes it was referred to as ‘state capitalism.’ Private entities were permitted to engage in both wholesale and retail trade. In the agricultural sector compulsory requisitioning was replaced with an in-kind food tax. In the industrial sector the government kept control over the ‘commanding heights’ of the economy, which included military production, metallurgy, transportation, foreign trade and banking. In the industrial sector only small-scale production entities were transferred to private hands.⁶ Thus the state control over the production and distribution of goods among different sectors of the economy, except for the ‘commanding heights,’ was partially replaced by free market forces.

⁴ Author’s translation.

⁵ Based upon this quote many commentators argue that the economic policies which severely affected money and banking during war communism were never intentional. However, as was argued above, there seems to be theoretical and empirical evidence suggesting the purposeful character of the attempts to abolish money and banks during this period. Moreover, as an extraordinarily intelligent man and a crafty politician Lenin, with hindsight, might have easily branded his war communism policies concerning money and banks as ‘temporary’

⁶ By the decree of 17 May and 10 December 1921 all enterprises with less than 20 workers reverted to their previous owners or leased to new ones.

With the restoration of the importance of private property rights⁷ and revival of trade and thus monetary transactions in the economy, the necessity of banking services was reconsidered too. The *Gosbank* was re-established in October 1921 and began its business in November 1921. The purpose of establishing the *Gosbank* was 'to assist the development of industry, agriculture and trade as well as to concentrate monetary transactions and apply measures aimed at the establishment of a sound monetary circulation' (Baykov, 1946: 83). The *Gosbank* was allowed to extend short-term as well as long-term credits not only to the state but also to private and co-operative legal entities. Besides that, the bank carried out all other standard banking operations.

Abolition of the economic order based on barter exchanges and restoration of monetary transactions required the introduction of a stable currency. However, to control inflation during the first two years of the NEP proved to be impossible. In October 1922 the *Gosbank* was awarded the right to issue the new stable currency – the *chervonets* (equal to 10 pre-war golden roubles). This was a preliminary step undertaken towards the stabilisation of the rouble. In order to promote confidence in the new currency it was decided that *chervonets* would be backed 25% by gold and foreign currency, and 75% by readily marketable goods.

Besides the *Gosbank*, a number of other specialised banks and credit institutions were created in 1922 and the following years of the NEP.⁸ The Savings bank was

⁷ Private property rights were revitalised mostly in the agricultural sector and to a limited extent in the industrial sector.

⁸ In February 1922 the Consumers' Co-operative Bank (*Bank Potrebilskoy Kooperatsii*, or '*Pokobank*') was set up for the purpose of satisfying the growing need of the consumers' co-operatives. In January 1923 *Pokobank* was reorganised and renamed the All-Russian Co-operative Bank (*Vserossiyskiy Kooperativniy Bank*, or '*Vsekobank*'). *Vsekobank* provided all ranges of standard commercial bank services including extending long-term credits. In December 1922 agricultural credit societies were created. The Commercial Industrial Bank (*Torgovo-Promyshlenniy Bank*, or '*Prombank*') was set up to support the industrial and transport sectors of the economy. *Prombank* granted short and long term credits to the above-mentioned sectors of the economy. In reality, *Prombank* provided mainly short-term credit and 80% of these credits

established in December 1922. It started its business in the beginning of 1923. At the beginning the bank operated only in Moscow and Leningrad. Only later it gradually opened its business throughout the country. Even according to soviet standards the Savings bank was a quasi bank because it only concentrated in attracting deposits from the population and was not directly involved in credit-extending activities. It was under the direct administration of a specific department of the Commissariat of Finance.

In short, during the first three years of the NEP a varied and widespread system of banking and credit institutions emerged. By the end of 1923 there were more than 150 main banks and credit societies with over 750 branches and over 2500 Savings bank offices in the country.

The NEP brought changes to the state-owned industrial sector too. The basic market principles of profit and loss were reintroduced. The relationships between enterprises and central regulating state bodies were reorganised. Economic units became more or less autonomous. Although enterprises were given financial autonomy to some considerable degree, the regulatory influence was still kept with the central administration. Enterprises were required to organise their business under economic accounting (*khozaistvenniy raschet* or *khozraschet*) principles, which meant enterprises were to operate and finance their business out of sales on cost accounting principles. Now they had to go to the market to procure raw materials and sell their products on their own. Rationing was abolished and thus workers were again paid money wages.

were extended to industry (Kuschpeta, 1978:34). Bank *Elektrocredit* was established for financing projects of electrification in agriculture. Later *Elektrocredit* was reorganised and renamed *Elekrobank*, whose main function now was to finance electrification projects in general. The Russian Commercial Bank (*Rossiyskiy Kommercheskiy Bank*, or '*Roskombank*') was set up in October 1922. Later *Roskombank* was reorganised and renamed Bank for Foreign Trade (*Bank Vneshney Torgovli*, or '*Vneshtorgbank*'). At this time *Vneshtorgbank* provided the full range of commercial bank services, but the main concentration of its activity was directed towards financing of foreign trade.

The main tasks of the banking system during the first half of the NEP were: to achieve monetary and financial stability; to provide mainly short-term credits and other financial support for economic units to facilitate their economic activity and trade. During this period credits were available not only to the socialised sector, but also to the private sector. But since banks were under the direct control of the state they discriminated against the private sector. The credit policy of the banks was much more favourable to state-owned enterprises (Banerji, 1997).

The 1927-8 banking reform was a step taken towards the preparation of the banking sector for a planned economy. With this reform the banking system became more centralised. The *Gosbank* was given indirect control over banks and became the only bank to provide short-term credits. *Prombank* and *Electrobank* were merged into one single body and renamed Bank for Long-term Credit for Industry and Electrification (*BDK*). *BDK* carried out its activity in accordance with an annual credit plan based on the production plan and financing plan (*promfinplan*) of the industrial sector.⁹ All budget grants, funds deducted from profits of enterprises and other sources were centralised in *BDK*. Some of these resources were allocated as non-refundable grants, and some part of it was extended as loans bearing arbitrary interest rates.

As to the determination of the interest rate, it did not depend on demand for and supply of credit in the market. Making profit was *not* the main task of the banking system. Therefore, the interest rate was arbitrarily determined by the central administration to cover the costs incurred in connection with carrying out the usual business activities of banks. Any profit generated by the banking sector would be further re-distributed for financing the economy. Preobrazhensky's following words describe the

⁹ The nature of credit planning will be discussed in the next section.

basic philosophy of interest rate determination and banking policy in the soviet economy.

[O]ur socialist state, if we may in this connexion make the relevant comparison with capitalist relations, is in the position of an entrepreneur who works with his own capital and does not pay interest to himself, though he may, for the salving of his book-keeping conscience, attribute some interest to himself and his ledgers. (Preobrazhensky, 1966: 213)

The decision to industrialise the economy put more emphasis on the role of the banking system during the NEP. Now besides carrying out its previous functions it had to attract and accumulate every possible free resource of the economy and re-distribute them mostly towards the expansion of the industrial sector.

The state budget and the banking system generated and attracted badly needed resources for investment purposes through several channels. By legislation economic units were ordered to deposit their free resources in the banking system. Savings of the population were attracted into the savings banks, or attracted by the sale of state bonds. The income of the population and all legal entities was taxed. Loanable funds accumulated in this way were spent to finance industrial expansion. And of course, investment was partly financed by money-issuing.

Hence, the NEP was developed to revive the economy torn apart by the civil war and radical changes brought into the economy by the Bolsheviks during the period of War Communism. In many sectors of the economy private ownership of production was re-introduced. Those enterprises which were kept under the direct control of the government were also encouraged to operate their business strictly under the principles of profit and loss. As a result, the process revived trade, which in turn necessitated

restoration of money and banks. These reforms restored confidence and helped the economy to grow. However, the NEP was only a 'temporary retreat' from comprehensive central planning; it did not last even a decade. Towards the end of the 1920s the NEP was abolished, collectivisation of agricultural farms was initiated, and the further policies towards central planning and industrialisation of the economy were launched.

Hitherto we have discussed the theoretical foundations of the central planning and practical problems associated with it. Two mutually interconnected points were emphasised. First, originally the idea was to build a stable economic system, free from recessions and cycles, as an alternative to an inherently unstable capitalist system. Although the organisation and structure of this system was not thought out in detail, by and large this economy was imagined to be a moneyless economy in which the entire process of production would be planned. The directive central planning theory was developed only in the late 1920s. And in the early 1930s it was chosen as an appropriate model for the Soviet economy and became benchmark of a traditional soviet economy. The detailed discussion of why and how directive central planning was preferred over indicative planning can be found in Appendix 4A.

Second, money was seen as irrelevant to a socialist economy. However, as will be clear in this chapter this goal was achieved only partially. Initially it was suggested that money would be eliminated from the economic process as early as during the construction of communism. Nonetheless, later Stalin extended the lifespan of money by saying that money would remain in a socialist economy until full communism was reached. After Stalin, the issue of eliminating money from the economic system was never discussed seriously again. The matter was left to be resolved in due course, when the due time came.

In short, this section showed the foundations upon which centrally planned economies were built. In the next section we will extend our analysis to the discussion of a traditional centrally-planned economy. In other words, we will examine the organisation of the economic process in the traditional or 'classical' centrally planned economy of the FSU. We will show that although nominally there were such notions of money and banks in the traditional planned economy of the FSU, they were in fact nothing more than 'poor imitations' of the money and banks of a capitalist system.

4.4 Money and Banking Under 'Classical' Central Planning

4.4.1 Superstructure and Economic organisation of the 'classical' soviet economy

The classical Soviet economy can be best described as a centrally planned and bureaucratically administered system. State ownership of the means of production, political dictatorship, a mono-hierarchical system, and directive planning in *physical* terms are the main features of the classical model (Ellman, 1989: 19). We can also add to this list the following system-specific attributes: soft budget constraints, sellers' market, weak responsiveness to prices, quantity-driven economy with plan bargaining, chronic shortages (including labour), full employment economy (unemployment on the job) (Kornai, 2000: 29), and absence of innovations particularly in the field of consumption goods (Aganbegyan, 1988). Since the focus of this chapter is on the role of money and banking in the traditional soviet economy, below we will be selective in the discussion of these issues. In other words we will discuss only those issues that are most relevant to the subject of our analysis.

In the classical Soviet economy, in one way or another, industry and agriculture, wholesale trade and transportation, construction and mining, health and education, research and development, in short almost all productive resources belonged to the state.

The cooperative sector functioned alongside the state sector. This sector included consumer cooperatives, which dealt with retail trade in consumer goods, and collective farms (*kolkhozes*). *Kolkhozes* were one of the two main economic entities in the agricultural sector, the other main agricultural entity being state farms (*sovkhoses*). By definition *sovkhoses* were state property. *Kolkhozes* were not classified as state property because they belonged to *kolkhoz* members. The fact, however, was that in essence the role and functioning of consumer cooperatives and *kolkhozes* in the economic system did not differ much from those of state enterprises and farms. Thus although there was a separation between state and quasi-state ownership, de facto all productive resources were state-owned. Therefore, all productive sectors of the economy together, whether state-owned or collectively-owned, were referred to as a 'socialised' sector (Ericson, 1991: 12).

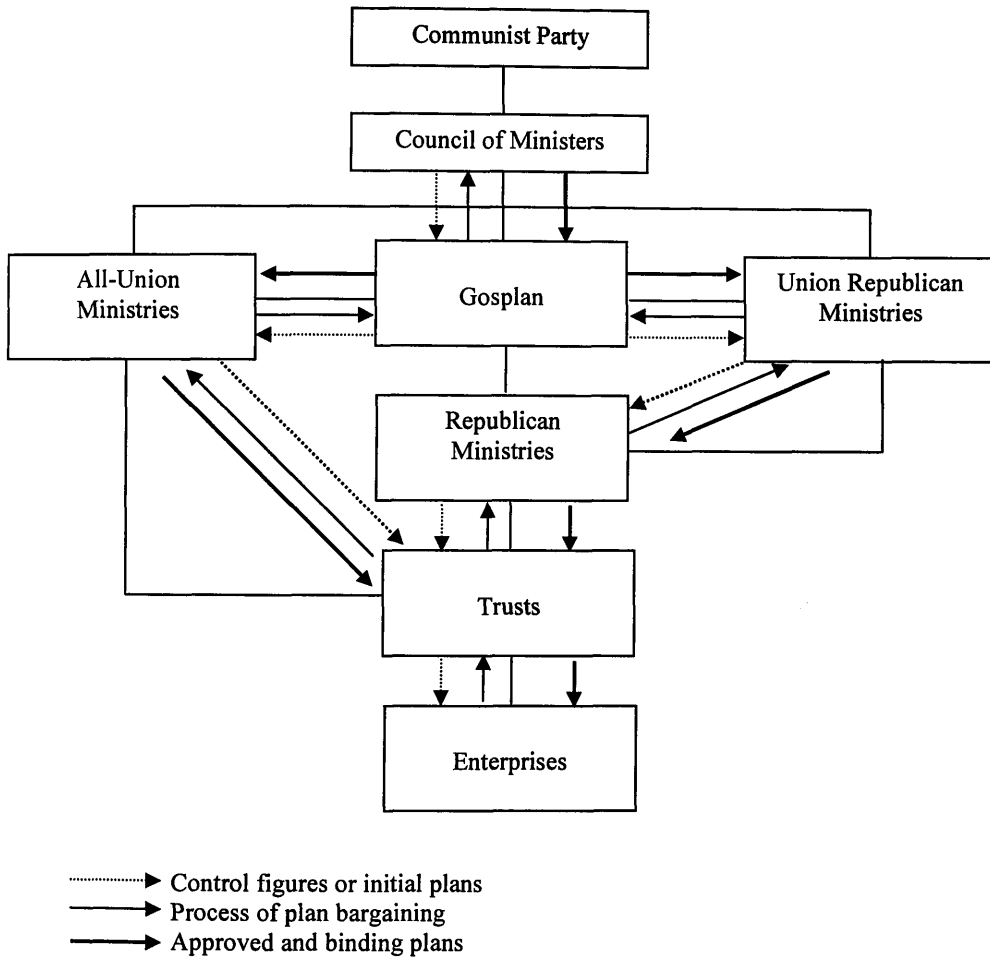
Because in the traditional soviet economy virtually all means of production belonged to the state, the share of the socialised sector in total production was immense. In this economy employment of a person by another was illegal. Therefore, theoretically there was no private production as such in this type of economy. However, in a small scale, individuals did produce goods and rendered services - a phenomenon known as 'a second economy' (Grossman, 1981, and Katsenelinboigen and Levine, 1981). Because the household sector was seen as a supplier of labour, exchanging their 'product' with that of a socialised sector, it can be best described as a *personal sector* in such a system.

As far as the industrial sector is concerned, individuals were not allowed to be involved in private production.

However, some small-scale agricultural activities (family plots) were permitted; other services such as those of construction workers to build and repair private houses, services of repairman to fix consumer durables (including automobiles) and some other professional and personal services were tolerated. In short, there *was* a 'second economy,' where small scale private production persisted. (For details see Grossman, 1981, and Katsenelinboigen and Levine, 1981.)

Figure 4.4.1 in the next page is an attempt to capture a simplified institutional structure of the Soviet economy. The figure also explains the process of planning. (See Kuschpeta, 1978, Ellman, 1989, Ericson, 1991 and Gregory and Stuart, 1995 and 1998.) From the very beginning the soviet economy was an ideology-driven system. Therefore at the top of the system stood the sole monopolistic political leadership – the Communist Party – represented by the Central Committee of the Communist Party. Although the party was formally outside the executive apparatus, in fact there was no clear-cut separation between the party and the government. From top to bottom in a vertical hierarchy central, republican, regional and local party organs could influence economic decisions at the enterprise level to a considerable extent (Bornstein, 1985, and Gregory and Stuart, 1995 and 1998).

Figure 4.4.1. Simplified picture of the institutional structure of the classical soviet economy



Source: modified from Gregory and Stuart, 1995 and 1998.

Formally the highest executive organ of the system, responsible for managing the working of the entire economy, was the Council of Ministers. It stood at the top of the executive superstructure. Below the Council of Ministers in the hierarchy were Union Republican Ministries, All-Union Ministries and several specialised State Committees. Because of the large number of enterprises in each ministry, ministries were in turn divided into special ‘main departments’ called ‘*glavki*’. These departments coordinated

and supervised specific sectors of the economy by output type and geographical location.¹⁰

The FSU was formed as a federation of fifteen national republics.¹¹ The structural organisation of central ministries was duplicated in each of these constituent republics. Republican Ministries, which were direct subordinates of Union Republican Ministries, were divided into separate *glavkis* of their own. Unlike Union Republican Ministries, All-Union Ministries had no similar subordinate ministries at the republican level of the hierarchy. All-Union Ministries directly coordinated and controlled, without any substantial involvement from republican authorities, activities of strategic industries of national importance such as heavy metallurgy, precious metals industry, military related industries and so on. The Union Republican Ministries chain took into account local factors. Although Republican Ministries possessed substantial control over respective industries at the local level, Union Republican Ministries had ultimate authority over major decisions.

Next in the hierarchical pyramid were usually the so-called trusts (*trests*). Trusts were special administrative bodies that supervised activities of enterprises with similar production orientation within a specific sector of the economy. They were subordinated either to Republican Ministries or directly to All-Union Ministries depending upon the importance of the industry they represented. The last in the chain were enterprises (*predpriyatiya*) and associations (*obedineniya*). These were the end organisations, which ultimately produced goods and rendered services for the whole economy and upon them the entire hierarchical pyramid was built. In 1986 there were approximately 46,000

¹⁰ Since the early 1970 various '*glavkis*', especially in industrial ministries, were renamed 'industrial associations' (Bornstein, 1985: 191).

¹¹ These were Armenia, Azerbaijan, Byelorussia, Estonia, Georgia, Kyrgyzstan, Kazakhstan, Latvia, Lithuania, Moldavia, Russian Federation, Tajikistan, Turkmenistan, the Ukraine, and Uzbekistan.

industrial enterprises, 23,000 state farms, 27,000 collective farms, 17,500 interfarm and associated enterprises, 1000 agro-industrial associations, 47,000 construction organisations, and almost a million wholesale and retail organisations in the FSU (Ericson, 1991: 14).

In addition to All-Union Ministries and Union Republican Ministries, the Council of Ministers had several specialised State Committees. Although State Committees were equal in rank with ministries and had ministerial status, they were assigned to deal with very specific functions in the economic process. These committees were not designed to be involved directly in the production process. They were specifically established to deal with organisational issues. For instance, *Gosplan* (State Planning Committee) was in charge of economic planning, *Gossnab* (State Committee for Material and Technical Supply) dealt with materials and equipment supply, *Goskomtsen* (State Committee for Prices) was responsible for prices, *Goskomtrud* (State Committee for Labour) was responsible for labour issues, *Goskompriroda* (State Committee for Environment) was responsible for environmental issues, the *Gosbank* dealt with monetary issues, Ministry of Finance was responsible for public finance and so forth.

Thus the soviet economic system was a very complex bureaucratic pyramid, the functioning of which required tremendous effort. To put it in Ericson's words, 'Central control and the priorities of the political leadership are maintained through a vast and complex structure of overlapping administrative hierarchies that gather information, disseminate instructions, coordinate interactions, manage change, and monitor and enforce commanded performance' (Ericson, 1991: 13).

Economic Planning. In the previous sections we have seen how the theory of economic planning was developed in the FSU. Now, we will discuss how planning worked in the classical soviet economy.

The political leadership undertook all long-term decisions as well as influencing major short-term decisions. The 'economic cabinet' of the system, that is the Council of Ministers, was responsible for other central decisions. *Gosplan* and other respective state committees acted as an advisory to the 'economic cabinet'. Various ministries were responsible for the implementation of the 'wishes' of the centre. To put it differently, ministries and state committees administered and supervised the implementation of plans. (See Davies, 1979 and 1981.)

Planning is a very broad phenomenon. It is a complex and continuous process. It covers almost every single sector of the economic process. Planning involves direct arrangements in the sphere of production, distribution, investment and even consumption. Unlike in some simplified models of a command economy in which there is a single 'planning board' that plans every single aspect of economic life, in the classical soviet economy planning is carried out by many specialised agencies responsible for different aspects of economic activity. For instance, *Gosplan* deals with output and investment plans. *Gosplan* is given special responsibilities and authorities so that it stands at the core of the entire process of planning. *Gossnab* deals with allocation and supervision of materials and technical supply. The *Gosbank* plans and supervises money flows among enterprises, and also between enterprises and households. (See Bornstein, 1985.)

Usually there were five-year plans and annual plans. Five-year plans were much less detailed than the annual ones. As a generalised framework, five-year plans served as

guidance in the construction and implementation of much more detailed annual or 'operational' plans. Therefore, for practitioners annual plans were essential.

Now, a few words on the *modus operandi* of annual plans. The preparation of annual plans involved three different stages: the initial plan or control figures; plan bargaining; and approved and binding plans. Figure 4.4.1, that was presented earlier, captures not only the simple institutional structure of the classical soviet economy but also tries to capture the process of planning. We have indicated initial plans with dotted arrows. Regular arrows indicate the process of plan bargaining, while bold arrows mean plan assignments are approved and have become binding on enterprises.

Usually at the beginning of the current year the political leadership established aggregate growth targets for the main types of production and other activities. These targets were based on the actual performance of the economy in the past and determined what was achievable in the next year or so. The latter was usually based on *Gosplan's* assessments. These major decisions also affected the goals of five-year plans.

On the basis of these directives from the political leadership, *Gosplan*, together with other central committees, constructed a set of 'control figures' for annual plans (dotted arrows in Figure 4.4.1). Control figures were initial plan assignments for respective ministries and they could be negotiated. In the early summer ministries disaggregated preliminary plan assignments among respective departments. Departments in turn distributed assignments among trusts, associations and enterprises. Once enterprises and associations knew what their tasks were for the next season, they calculated how much input was needed to achieve these output targets. These calculations then formed enterprise requests for necessary inputs, which at the end were passed onto higher bodies.

Once enterprises knew what their preliminary production targets were, and the authorities also knew tentatively how much inputs were needed to achieve plan targets, the process called 'plan bargaining' would begin (regular arrows in Figure 4.4.1). As a rule enterprises and lower bodies in the administrative hierarchy wanted easier plans, while central authorities wanted to impose more ambitious plan targets. Enterprises usually asked for more inputs relative to targeted outputs and could even hide their true production capacities so that they could fulfil plan targets with minimum effort.

When bargaining was over, *the Gosplan* and other respective central agencies prepared revised output plan assignments and input authorisations for the entire economy. This was usually done in the autumn. Later revised plans were submitted to the Council of Ministers for final approval. At the end of the year the final plans, approved by the government, would be sent back to ministries. Ministries would send them to departments, departments to associations and enterprises. Once approved, plans became *binding* assignments for enterprises for the next year (bold arrows in Figure 4.4.1).

Another special moment in the process of planning that needs our particular attention is the so-called 'material balances.' (For details see Ellman, 1974, Davies, 1979, and Bornstein, 1985.) One of the biggest challenges for planners was to maintain internal consistency between planned demand for inputs and their planned supply. To achieve this consistency a large number of material balances were constructed for variety of raw materials, intermediate goods, fuel, machinery and equipment, etc. For example, a material balance for a product X would give information about all possible sources of supply of this product (including imports and stocks from previous years) and its final distribution for variety of uses (intermediate use, final use, exports, and excess stocks). Each balance was expressed in material units such as metal in tons, electricity in

kilowatt-hours, cloth in square meters and so on. Again, the emphasis was on physical flows; the financial matters played only an accommodating role in the entire process of planning of the economic process. Hence, at the core of classical soviet planning *the focus was on material or physical flows rather than on financial ones.*

Prices. It is through prices that the physical world of the economy was connected with that of the financial world. By and large, we can say that in a capitalist market economy prices reflect relative scarcities of goods and services. Any change in relative prices gives entrepreneurs a signal to increase or decrease supply of a particular set of goods and services. As Hayek (1985: 36) argued, to understand the real function of the price system we must look at it as 'a mechanism for communicating information'. This means that prices play an important role in the economic process; they are driving force of production and determining force of consumption. However, this simple yet fundamental logic does not apply to traditional centrally-planned economies. (See Bornstein, 1974 and 1985, Ellman, 1989, IMF *et al.*, 1991, Ericson, 1991 and McKinnon, 1991 and 1993.)

Contrary to the situation described above, in the classical soviet economy prices did not have any importance in the economic process *in terms of affecting demand and supply*. More importantly, they did not represent *relative scarcities* of goods and services and thus did not independently affect resource allocation and production decisions. Therefore, they were not a key tool for enterprises in their decision-making. Again, this was due to the system-specific attributes of the economy in which planning in *physical* terms was of paramount importance.

The main function of prices under central planning was to serve as a means of aggregating physical data for the purpose of *accounting and control* (Ellman, 1989: 30).

For soviet theoreticians constant prices were one of the greatest achievements of the socialist system. According to them inflation was only relevant to a capitalist mode of production. For this reason, in the textbooks on money, banking and credit no particular attention was given to the problem of inflation.

Wholesale prices, which reflected priorities of planners, were set by *Goskomtsen*, in association with other central organs, on cost-plus bases and were held unchanged for a long period (Bornstein, 1974 and 1985). *Retail prices*, which were administered as well, were prices of consumer goods. Households received money wages in cash money for their labour contributions and they had sovereignty over their decisions on what and when to spend. In this sense prices and thus money had some meaning only in the household sector's decision making process. Although the authorities planned and controlled the distribution and supply of consumer goods, they could not perfectly predict consumer tastes and preferences. To prevent any systematic mismatch between supply and demand, turnover taxes were automatically included in retail prices to approximate 'market clearing' prices (Bornstein, 1974 and 1985).

In a nutshell, in the classical soviet economy the price mechanism was not important. Prices reflected planners' priorities about types of goods and sectors of production. The price mechanism was necessary for planners to express complex input and output targets for enterprises in some sort of a value term. Having a common denominator for physically different units of raw materials, labour, capital and consumption goods enabled the planners to better evaluate, assess and control activities of enterprises. Now, our succinct discussion of prices was a prelude to the financial world of the traditional planned economy. Next we will discuss financial aspects, i.e. the role and organisation of money and banking in the traditional soviet economy.

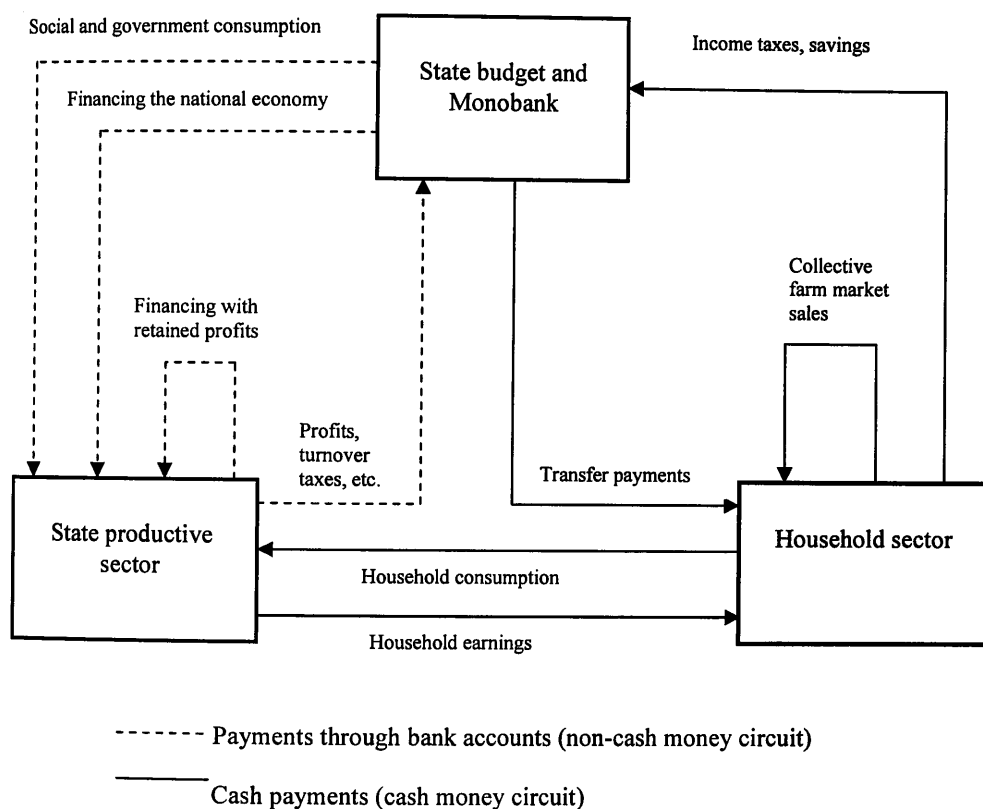
4.4.2 Financial Aspects

Money. Unlike in market economies, there was a strict distinction between cash money and non-cash money in the FSU. The term cash money (or *nalichnie den'gi*) implied currency outside the banking sector such as coins and notes, while the term non-cash money (*beznalichnie den'gi*) referred to bank deposits. Since households used cash money and enterprises non-cash money in their everyday economic activities, some authors (Garvy, 1977 and Zwass, 1979) used the terms household or private money to imply cash money and enterprise money to imply non-cash money.¹² Saving deposits of the household sector with the Savings bank were also included in the non-cash money category.

Figure 4.4.2 in the next page illustrates the dual nature of cash money and non-cash money circuits. As we can see from the figure, the non-cash money circuit and the cash money circuits were semi-independent. Cash money and non-cash money were not freely interchangeable. Non-cash money was exchanged for cash money only through payroll withdrawals, and sundry transfer payments to the household sector. Non-cash money was exclusively used as a payment instrument by enterprises, organisations and other economic entities in their everyday economic activity through their bank accounts.

¹² We opted to use the terms 'cash money' and 'non-cash money' simply because these are derived from word-by-word translation of the terms used in the Russian literature.

Figure 4.4.2. Dual nature of cash money and non-cash money circuits in the traditional soviet economy



Source: Green and Petrick (2002: 3)

There was a strict limit to the use of cash money by enterprises. Besides paying wages in cash, enterprises were permitted to pay cash money to settle accounts only if the amount of the transaction did not exceed one hundred roubles.¹³ The scope of the use of non-cash money was limited to organised markets, which included a wholesale market for raw materials and intermediate goods, as well as a retail market for consumer goods.

Cash money was used in both organised and non-organised markets. Non-organised markets consisted of a market for goods and services traded among individual groups of

¹³ About a hundred US dollars.

the population, a black market for various kinds of goods and services, and a *kolkhoz* market, a market for agricultural goods produced in kolkhozes and family plots. Although non-organised markets grew in importance after the 1970s (Grossman, 1981), their size was much smaller than that of organised markets. Households spent their cash money earnings in organised markets to buy consumer goods from retail trade organisations, as well as in non-organised markets ('a second economy') to purchase consumer goods and services.

Non-cash spending by enterprises was under the direct control of the authorities. *Enterprises were able to use their funds in bank accounts to pay for goods and services within the limits of their material input plans. If enterprises were entitled to buy goods according to their input plans but were short of money, then money would be automatically supplied by the banking sector.* On the other hand, enterprises could not spend their extra money holdings if they did not have an authorisation to buy. Nevertheless, since some manoeuvring was possible within administratively set plan targets, enterprises would convert their redundant non-cash balances into inventory (Garvy, 1977: 42). In other words, enterprises would prefer to stick to inventories rather than non-cash money to deal with system-specific uncertainty associated with the planned supply of production inputs.

This behaviour is explained by the fact that the nature of production plans set by the authorities made enterprises output maximising institutions, not profit maximising ones. As a result, the theory of liquidity preference, as we understand it, was not relevant to the enterprise sector. Finance was only of secondary importance for enterprises. If enterprises managed to get their material input plans authorised, then finance would be forthcoming from the banks.

Since non-cash money was designed to follow passively the flow of goods and services stipulated in material plans, extra non-cash money balances not envisaged in material plans did not have purchasing power of their own. That is to say, non-cash money was *not* freely convertible into goods and services (McKinnon, 1991 and 1993). Therefore, it was argued that excess non-cash money holdings of enterprises would not have any inflationary effects. (See Geraschenko, 1977: 136-37, and Zwass, 1979: 10). The sequence of payments and clearing methods developed for effecting payments in the non-cash money circuit reflected the inactive character of non-cash money.

Sequence of payments. As the only clearing institutions of the economy, banks had to follow an established sequence of payments in clearing claims on enterprise accounts. Usually two types of payment sequence were employed in former socialist economies: chronological and purposeful. According to the chronological sequence for payments, if several claims were made in relation to a particular enterprise account, banks effected payments in a chronological order, i.e. on a first-come-first-serve basis, independent of the nature of the claim. Contrary to this, in the purposeful sequence for payments, the chronological order of claims was not given any attention. Here the nature and purposeful character of payments were given priority. Banks could honour a claim first or last taking into account the nature and purpose of the claim. The date of its arrival did not play a significant role.

Until 1954 the following order was used in payments: first the enterprise's own claim on wage payments were honoured; then payments to the state budget were effected; next interest payments on bank loans were deducted; then contributions to depreciation funds were deducted; and last payments for goods and services were made. After 1954 the authorities made a slight amendment to the described sequence of payments. Now

payments for goods and services were to be made after wage payments and payments to the state budget.

Some more slight addenda were made to regulations in 1983. Now payments were divided into five separate groups depending upon their nature and importance: i) wage payments, payments of fees for state social insurance, payments for state budget, and payments for obligatory state insurance; ii) payments for goods and services (suppliers' claims), and payments for different types of depreciation and capital construction funds; iii) payment of fees and fines for the failure of fulfilling obligations under special agreements and arrangements; iv) payments of credits borrowed from banks (except for credits extended to meet suppliers' demands, which were included in ii.); v) all other payments.

It was also decided that payments within one group would be made in accordance with the chronological order of arrival of payment claims or arrival of due dates for payments. This meant that the payment sequence used after 1983 was a hybrid of chronological and purposeful sequence payments. (For more detailed discussion please see Lavrushin, 1984: 55-56.)

Clearing methods. The authorities developed special clearing methods of effecting payments from a buyer's account to a seller's account too. The main methods of payments used in the traditional soviet economy were bank collection (or acceptance), payment order (money order), check, letter of credit (or *accreditiv*) and some others.¹⁴ The evidence suggests that from 1961 to 1980 almost 90 percent of all payments were

¹⁴As a general rule, bank collection would be used if both suppliers and buyers were located in different cities. If both sellers and buyers were in the same city or locality, payment order would be used. Checks were usually used to settle transactions between enterprises and transport firms. (For more detail on this please see Geraschenko and Lavrushin, 1982, Lavrushin, 1984 and Zwass, 1979.)

made using only the first two methods (Zwass, 1979: 84, and Geraschenko and Lavrushin, 1982: 38).

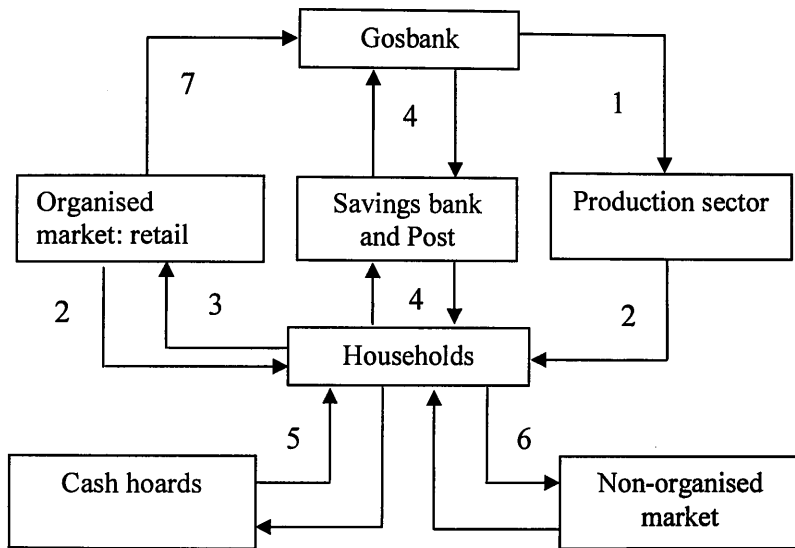
The necessary condition of each clearing method was that it had to be consistent with the *planned flow of goods and services*. Therefore, each payment necessarily involved the use of the particular method of clearing, which in turn required presentation of corresponding payment invoices. Banks were obliged to verify invoices of suppliers' claims. A claim not supported by a respective invoice would not be considered. As a rule, until the claim was cleared, enterprises would be granted a bank credit with the tenure of no more than ten days.

The special design of the sequence of payments and clearing methods in this way implies that soviet enterprises did not have the sole authority over their funds in their bank accounts. They could not dictate to banks which payment should be made first, and which one next. Now, although the passive character of non-cash money was not a novelty to western writers, Wiles (1964) was one of the first to make the explicit distinction between the active character of cash money and the passive nature of non-cash money.

Organisation of the cash money circuit. The cash money circulation was organised on the basis of Marx's simple law of metallic money flow. In principle the flow of cash money can be described as follows: Gosbank → production units → household units → trade and commercial organisations → Gosbank. When cash money was hoarded or spent in the non-organised market, it would leak out of the banking sector.

Graphically it can be presented as in Figure 4.4.3 below. Cash money enters the currency circulation only through the bank. As was already noted, non-cash money held

in bank accounts did not have a universal purchasing power. Moreover, there was a strict limit to the degree of converting this neutral or passive money into active cash money.



- 1 – Injection of cash from the Gosbank
- 2 – Payment of wages
- 3 – Consumption expenditure in organised market
- 4 – Flow of savings, pensions, and other cash transfers
- 5 – Hoarding (dishoarding)
- 6 – Income and expenditure in non-organised market
- 7 – Return of cash to the Gosbank

Figure 4.4.3 Circulation of cash money under central planning

When wages became due, enterprises would request banks to convert their non-cash money in their accounts into cash money to pay wages of their employees. If enterprises did not have a sufficient amount of non-cash money in their holdings, they could always ask for credit to pay. So, cash money could also be released from the Gosbank as credit.

Once wages were paid, households could freely decide how to spend their money. Households could, for example, buy sundry consumption goods from retail trade and

commercial organisations in the organised sector. They could also deposit their money at the savings bank to earn interest income. Whenever households used these two channels to spend their wage earnings, cash money would return to the banking sector and automatically would take the form of non-cash money again.

Households could also hoard (or dishoard) their cash earnings from time to time as they found it appropriate. When cash money was hoarded or was used in the non-organised market, it would leave the banking sector. Consequently, cash money outside the reach of banks would create a potential threat to the stability of prices in *non-organised markets* only.

Since households had full control over their spending decisions, in some sense the theory of liquidity was relevant to the household sector. Moreover, because households' spending desires were limited by the amount of income they earned, they, unlike socialist firms, faced hard budget constraints (Kornai, 1979: 816). However, since the traditional socialist economy was inherently a shortage economy (Kornai, 1979 and 1982), where production of consumer goods was deemed to be of secondary importance,¹⁵ excess effective demand of the household sector would be constrained by a shortage of consumer goods leading to involuntary savings. Because most of this was kept in the form of 'liquid' cash money, the situation was described as a 'monetary overhang.' (See among others IMF et al, 1991: ch. III.3.) This, combined with fixed prices, implied that money did not affect investment decisions and any inflationary pressure in *organised* markets was in suppressed form.

Cash money could also create inflationary pressures and instability in *non-organised* markets in the following instances: a failure to fulfil material plan targets by

¹⁵ This especially applies to consumer durables (Kornai, 1979: 802).

enterprises; a failure to fulfil planned targets for rendering services; a failure to fulfil planned production targets in agriculture due to bad weather; payment of wages for employees in excess of the limits envisioned in plan targets, etc.

To prevent any instability created by an excess supply of cash money and to monitor its movements, special mechanisms and techniques were developed. The Cash Plan of the Gosbank was one of these mechanisms. The Cash Plan involved planning of all possible sources of cash money flowing in and out of the Gosbank. Figure 4.4.3, presented earlier, approximates (excepting for the Cash Hoards and Non-organised Market parts) the sphere of cash planning. Enterprises, trusts, and supervisory ministries were involved in the process of planning the cash money circuit.

Initially, enterprises would submit applications to the relevant Gosbank branch, where they had their account, indicating their cash money proceeds and spendings. Then these plans would be passed to the regional offices of the Gosbank, which in turn would check if these plans were in conformity with material production plans. Drafts of the plans would go through republican offices and the central office of the Gosbank before they were submitted to the Council of Ministers for affirmation.

Under the rules of the Cash Plan, retail trade organisations were allowed to keep in their vaults only a minimum necessary amount of cash money needed for their daily activities. The rest of the cash money received from the sale of goods would have to be placed in their bank accounts, meaning automatic conversion of cash money into non-cash money. Cash money holdings of the savings bank would also become non-cash money in that they would be used as credit resources of the Gosbank.

According to the soviet literature, the role of the savings bank was to attract idle resources of the household sector, which then would be re-allocated by the *Gosbank* to

finance economic activities. Although this interpretation is technically true, essentially *Gosbank's* credit activities were not constrained by the availability or cost of credit resources. Since liabilities of the *Gosbank* were 'non-cash money' used by enterprises, it would be automatically forthcoming whenever there was a demand for it. The true role of the savings banks under these circumstances was to stabilise effective demand of the household sector and to facilitate in preventing any inflationary pressures.

Now, in order to summarise our analysis on the role of money in the traditional soviet economy, we would like to compare the fundamental characteristics, functions, and motives for demanding money in the two different economic systems: a capitalist free market economy and a socialist centrally planned economy. (See Table 4.4.1 below.)

Table 4.4.1 Characteristics of Capitalist Money and Socialist Money Compared

Types of money	Functions	Motives for Demanding	Fundamental Characteristics
I. Capitalist money	<ul style="list-style-type: none"> ▪ Unit of account ▪ Means of exchange ▪ Store of value 	<ul style="list-style-type: none"> ▪ Transaction motive ▪ Precautionary motive ▪ Speculative motive ▪ Finance motive 	<ul style="list-style-type: none"> ▪ Universal purchasing power ▪ Non-neutral. Affects investment decisions
II. Socialist money:			
a. Cash money	<ul style="list-style-type: none"> ▪ Unit of account ▪ Means of exchange ▪ Store of value 	<ul style="list-style-type: none"> ▪ Transaction motive ▪ Precautionary motive (to a very limited extent) 	<ul style="list-style-type: none"> ▪ Limited purchasing power ▪ Neutral. Does not affect investment decisions
b. Non-cash money	<ul style="list-style-type: none"> ▪ Unit of account ▪ Means of exchange ▪ Store of value 	<ul style="list-style-type: none"> ▪ Transaction motive ▪ Finance motive (in restrictive sense) 	<ul style="list-style-type: none"> ▪ Lack of universal purchasing power. Accounting tool only ▪ Neutral. Does not affect investment decisions

Note: The table is modified from Petrick (1998)

The first striking difference between capitalist money and socialist money is that the latter is composed of two separate and semi-independent money circuits, each with its

own characteristics and peculiarities. Therefore, they are compared to capitalist money as separate categories. In terms of the general functions they perform, and the motives for demanding them, capitalist money and socialist money does not differ considerably. The specifics of the differences are revealed when we look at the fundamental characteristics of both capitalist money and socialist money.

The most fundamental characteristic of capitalist money is that it is a generally accepted universal title for all tradable goods and services, which makes it the most liquid of all assets. The main functions of money are unit of account, means of exchange and store of value. Agents have different reasons to demand money. It can be demanded for transaction purposes, precautionary purposes, speculative purposes and finance purposes. Money affects investment decisions and plays a peculiar, enabling and constraining, role in the economic process.

As to socialist money, cash money had some attributes of universal purchasing power, but only to a limited extent. Cash money could be used as a medium of exchange within the supply limits of consumer goods and services set by authorities. It can also be used in non-organised markets. However, prohibition of private production implied that it could not be used to purchase capital goods. Moreover, since the supply of consumer goods and services, as well as their prices, were arbitrarily set by the authorities from above, cash money, and thus liquidity preference of the household sector, could not affect investment decisions of the corporate sector. In this sense although cash money performed all three functions of money, its 'moneyness' had some limitations. It was neutral in the economic process.

The 'moneyness' of soviet money weakens even further when we look at the qualities of non-cash money. First and most importantly, non-cash money does not

possess the quality of universal purchasing power. Non-cash money can be used only for specific tasks as decided by the authorities. That means extra non-cash holdings of enterprises do not have the purchasing power of their own. Non-cash money is neutral in the economic process and thus can be seen as an accounting tool only. Nevertheless, non-cash money is demanded by enterprises for transaction purposes (because for accounting purposes the transaction of purchase and sale is not complete without it) and finance purposes (because although secondary and accommodative in the transaction, to complete the transaction enterprises need it).

Taking these traits of soviet money into account Heinsohn and Steiger (2000: 70) rightly referred to cash money and non-cash money as 'anonymized ration cards'. According to them these cards 'did not give an absolute command over resources but functioned as an entitlement to obtain the centrally-planned and produced goods. Thus, these cards had nothing whatsoever to do with anonymized titles to property that are the money of property-based societies' (Heinsohn and Steiger, 2000: 70).

All in all, under central planning the role of money was reduced to the function of a 'numeraire' so that money and liquidity preference not only ceased to be constraints in the economic process, but also they were irrelevant to the system. Money simply did not affect such vital macro-variables of the system as prices, investment, output and employment. As Kornai once put it elegantly 'It is clear that in the traditional form of the socialist economy ... financial accounting of the firm's trade transactions takes place. Despite that, this sphere is only monetized in appearance' (Kornai, 1982: 8-9). Nevertheless money was a vital part of a centrally planned economy, which was too complex for direct distribution of goods to consumers via a voucher system as was advocated by Marx and Lenin.

Banking. The role of banks in the economic process was passive. One of the main functions of the banking sector was to provide the authorities with all necessary information about the flow of real transactions. Banks extended credits in accordance with credit plans, which in turn were constructed in line with general economic plans. Concepts of collateral and analysing financial viability of enterprises to assess their creditworthiness were irrelevant to soviet banking practice. More importantly, similar to soviet enterprises banks were not profit maximising entities. Enterprises were allowed to borrow even if they did not repay previous loans. In short, banks were ‘a mixed breed of accountants and public notaries’ (Calvo and Coricelli, 1993: 32).

The evolution of the mono-banking system in the traditional soviet system can be divided into four stages.¹⁶ (See Poskonov, 1967, Garvy, 1977, Kuschpeta, 1978, Zwass, 1979 for the first three stages. For the last one see Abdullaeva, 2000: 192.) Since we have already discussed the first stage of banking development that took place during the periods of War Communism and NEP, we can skip its discussion here.

The second stage of banking development is associated with the replacement of the NEP with directive central planning. To be more precise, it started with the Credit Reform of 1930-32. This was an attempt to adjust the banking sector to the needs and requirements of central planning. The further reforms brought only slight improvements to the system established by this reform.

¹⁶ Perhaps we should be careful with the use of the word ‘evolution’ here. Because, the soviet banking evolution was an artificial development which reflected central planners’ desires about the shape and form of banking. Moreover, as was evident from our discussions so far, the centrally planned economy itself was a big experiment without a proper theoretical model. So, although we are using the term evolution, we would like to note that our use of the term ‘banking evolution’ in this context reflects only technical changes in the nature of soviet banking through time, and of course through fundamental economic reforms purposefully carried out by the authorities.

The reform was carried out in several steps. The process was a natural outcome of the 'improving by experimenting' approach. In the first phase of the reform, inter-enterprise commercial credits were outlawed.¹⁷ Enterprises were prohibited from engaging in trade credits when selling goods and rendering services to each other. Commercial credit was substituted by direct bank credit. That implied increased responsibility for banks in facilitating as well as monitoring economic activities of enterprises. To manage the system better, the short-term credit activity of the banking sector was centralised so that only one bank, i.e. the *Gosbank*, would take over all short-term credit activities of all other specialised banks. Moreover, the *Gosbank* effectively became the sole clearing centre of the economy. Almost all non-cash transactions of enterprises would be cleared by the *Gosbank*. The foundations of the traditional soviet monobank system were laid down during this period.

One more important moment in the first phase of the reform was an experiment of 'credit automatism' or 'automatism of accounts' (Poskonov, 1967: 40-48). This meant that the *Gosbank* paid a seller on behalf of a buyer without buyer's authorisation whether buyer had enough funds in its account or not. This meant the *Gosbank* was effectively covering all expenditure of an enterprise in excess of its proceeds even if this was happening due to bad management. Therefore, once its inefficiency was duly noted, credit automatism was soon abandoned.

In the second phase of the reform, responsibilities of the *Gosbank* were further clarified. Now, the *Gosbank* would effect any payment from a buyer's account if the amount of the transaction did not exceed the buyer's own funds plus an amount of credit previously agreed by the bank in the credit plan. More importantly, now a necessary

¹⁷ This legislature remained valid until the perestroika reforms.

condition of effecting any payment would be the buyer's prior authorisation. In addition to this method of payment, letters of credit and some other special forms of payments were put into practice during this time.

In the third phase of the reform, a special regulation on the working capital of state enterprises, trusts and other economic entities was adopted. According to the new rule, economic entities would be provided with their own working capital in an amount which was just enough to cover expenses for generating the minimal necessary stock of production inputs. This regulation became a rule of thumb in the traditional soviet economy until Gorbachev's perestroika reform.

The final phase dealt with the reorganisation of specialised banks into banks for financing long-term investment programmes. Four big specialised banks responsible for long-term financing of the economy were *Prombank* (reorganised from *BDK*) - responsible for financing industrial and electricity sectors; *Torgbank* (reorganised from *Vsekobank*) - responsible for financing construction projects in the production sector; *Selkhozbank* responsible for financing agricultural sector; *Tsekombank* - responsible for financing construction of apartments and houses for households.

In the next, the third stage of banking development, fundamental changes did not take place. In accordance with the Reform of 1959 *Selkhozbank* and *Tsekombank* were liquidated and their functions were taken over by the *Gosbank* and *Prombank*. Moreover, in 1961 the savings bank system was incorporated into the *Gosbank*. After the 1959 reform there were only three banks in the economy: the *Gosbank*, *Prombank* and Bank for Foreign Trade (*Vneshtorgbank*). Other than that, the banking system remained unchanged - the *Gosbank* performing main functions, and *Prombank* and *Vneshtorgbank* with narrower specialised functions. The fact is that the foundation of banking business

set forth during the Credit Reform of 1930-32 remained effectively unchanged until 1988. (See Garvy, 1977: 31, and Abdullaeva, 2000: 192.)

The fourth stage of banking development started in 1988. The well-known *perestroika* economic reforms can be seen as a prelude to the transition banking in all formerly soviet constituent national republics of the FSU. Having this in mind, and also taking into account the fact that in this section we are discussing only the classical soviet economy, we would like to leave the discussion of this stage to Chapter 7 where we will discuss the evolution of banking in Uzbekistan during transition.

Credit Planning. (See Garvy, 1977, Kuschpeta, 1978, Zwass, 1979 and Lavrushin, 1991: 113-118.) Since credit was one of the main sources of working capital financing for enterprises, the process of credit planning played an important role in the organisation of the non-cash money circuit.

Under central planning, credits were designed to finance planned needs of enterprises for generating sufficient stocks of inputs. In other words, credit planning was closely linked with material input plans. The process of credit planning in the classical soviet economy, which was effective until 1988, was organised as follows. Similar to material planning of the economy, ministries, main departments (*glavkis*) and other superior central authorities actively cooperated with the *Gosbank* in the process of credit planning. In accordance with the affirmed credit plan, credits were distributed among different ministries and main departments, which in turn passed this information to their subordinated enterprises in local levels through local bank branches. Bank branches were advised about the credit limits for each borrower, and sometimes for each project. It was deemed that planning credit resources in this way was a rational form of distribution.

Moreover, it was also recognised that short-term credit planning would be of help in preventing disproportionalities in the process of production.

Enterprises could use either their own resources or short-term bank credits to pay for goods and services. Soviet enterprises were supplied with only a minimum amount of necessary working capital, which made their activities dependent upon bank credits. This formula was a purposeful design by planners. The reason for such an organisation was to give banks an opportunity to monitor day-to-day activities of enterprises associated with plan fulfilment, the process known as 'control by the rouble'. Kornai (1979, 1982, and 1986) used the term 'soft budget constraint' to capture organisation of enterprise finances in centrally planned economies in this manner.

As a rule, the start-up fixed capital and working capital of enterprises were supplied by the State either from the central budget or from a higher economic authority to which they were subordinated. Working capital in turn was divided into own resources and borrowed ones. Any need for additional working capital during the process of production would be readily supplied by banks. If there was a need to increase the amount of working capital, funds would be injected from the state budget or from special funds of the respective ministries. Table 4.4.2 in the next page shows that in 1980 own resources of enterprises comprised less than a quarter of the total working capital. (For information on earlier years please see Zwass, 1979: 85.) In 1982 working capital of the industry was only 32% (Sichev, 1982: 53).

Table 4.4.2. Structure of enterprise working capital in the FSU, in 1980.

	National economy	Industry	Agriculture*	Trade
Own resources	24.0	33.0	22.8	28.0
Bank credits	46.3	50.2	55.7	56.6
Other	29.7	16.8	21.5	15.4
Total	100.0	100.0	100.0	100.0

*excluding *kolkhozes*

Source: Geraschenko and Lavrushin, 1982: 20

The seeming importance of credit in the economic activities of soviet enterprises does not mean that money and credit played an active and important role in the economic process. In the traditional soviet economy banks were not profit-seeking institutions. In such an economy a higher volume of credits could simply indicate imbalances in the process of production unforeseen in the plan. Therefore, in essence the role of credit was passive and accommodative.

As was repeatedly noted above, the traditional soviet economy was a quantity-driven system. The role of credit in this economy was to maintain consistency in material plan implementation and therefore had to be drawn taking into account primary material plans. In other words, credit planning was strictly connected to other material plans and thus reflected their imperfections (Lavrushin, 1991: 110 and Garvy, 1977: 106). This implied that banks created credit endogenously, albeit passively, in response to the needs of the economy. Since the concept of liquidity preference was irrelevant to the banking sector, this credit endogeneity can be seen as fully responsive to demand.

4.5 Conclusion

This chapter dealt with the role of money and banking in the FSU under central planning. The importance of the analysis of this chapter is that on the one hand, it was a prelude to our discussion on money and banking during transition which will be the subject of chapters to come. On the other hand, it gave us an opportunity to compare the functions and working of these institutions in a centrally planned economy and in a market economy.

Marx, Lenin and other founders of a communist economy were aware of the fact that money was non-neutral in the capitalist economic process. They knew well that the argument of classical economists about the neutrality of money and thus the stability of a capitalist economy was fallacious. This argument was built on the assumption that acts of purchase and sale, in which money merely connected the transaction, were inseparable. Contrary to this, Marx argued that as a store of value money would give its holders an opportunity to hoard, which meant money could separate acts of purchase and sale in time and space. As a result, in a capitalist economy demand would not necessarily create its supply simultaneously. This implied that money would create the possibility for overproduction and thus economic crisis. The existence of money explained why fluctuations in effective demand were likely to happen in a market economy.

A centrally planned economy, then, was developed as an alternative to a capitalist one. To prevent overproduction and cyclical crises communist theorists advocated to replace decentralised markets with central planning and to abolish money from the system altogether. Unlike in a capitalist mode of production, in a communist economy uncertainty would be dealt with by *planning* the working of the entire economy. The economic relations among enterprises would be planned so precisely that theoretically

there would not be any production failures in the process of production. In theory, planning would enable enterprises, economic entities and households alike to anticipate future events with perfect foresight. In this regard, the 'skilful hands of soviet planners' would be seen as capable of reducing capitalist *uncertainty* into socialist *certainty*. There would be no need for capitalist money in such an economy.

However, practical difficulties associated with the abandoning money from the economic process proved that the idea of establishing a moneyless voucher exchange system was unimaginably difficult and thus infeasible. As a result, money and banks were reintroduced to the system. Following Lenin's later encouragement regarding the use of money during the first stage of communism, a later generation of soviet authors clarified that the functions of money in the soviet economy were quite different from those of a capitalist money (Atlas et. al., 1967, Lavrushin, 1984, and Shenger, 1983). The functions of money were no longer of 'capital' but rather that of a planned and managed economy (Kuschpeta, 1978: 13).

Hence in the classical centrally planned economy, the neutrality of money was achieved by (i) planning the entire process of production and distribution, (ii) fixing prices for goods and services, and (iii) separating the supply of money into two semi-independent circuits - the cash money circuit and the non-cash one. As a result, capitalist money and liquidity preference associated with it were irrelevant to this economy. No longer could they affect investment and production decisions, and no longer could they constrain the process of production.

Non-cash money was neutral by definition because it passively followed the flow of goods and services envisaged in the plan. Cash money had some attributes of money because it could be used by households freely at their discretion. However, since prices

were fixed and the process of production as well as distribution was planned from above, it could not affect either production or investment decisions of enterprises. Under this regime, any excess cash money holdings of the household sector would represent a forced saving or a monetary overhang because a central economy was a shortage economy by definition.

Mobilisation of resources from one sector of the economy to another was carried out through the price mechanism. Therefore, the start-up capital of new enterprises or new investment expansion in existing ones would be financed from the state budget as non-repayable grants and long-term soft loans.

As to banks, they were designed to facilitate the process of planning and production. Banks pumped short-term credit to the enterprise sector endogenously to facilitate inter-enterprise trade as well as to smooth imperfections unforeseen in planning. They functioned as if they were a finance department of a big company. Since all enterprises held their accounts with banks, banks controlled their financial flows, monitored their performance, and supplied all necessary information to the authorities. Notions such as market-determined interest rates, liquidity preference, cost of funds, collateral and creditworthiness were irrelevant to the soviet banking practice. Under this regime money and banks played passive and accommodative role in the process of planning and production. Interestingly enough, because the supply of credit was almost perfectly responsive to changes in the real economic activity, the non-cash money supply curve could be depicted as a horizontal line. Since the rate of interest did not have any real economic meaning, graphically, the vertical axis of the diagram would represent real economic activity and the horizontal one would represent the supply of money.

The soviet planners always argued that perpetual full employment was achievable only under central planning. In some ways the working of the soviet type of economy can be likened to Keynes's co-operative economy, discussed in Chapter 1. The means of production belongs to the proletarian government and thus the output is generated by 'collective efforts.' Because money per se was not employed in this economy, there could be no room for fluctuations in effective demand and no room for chronic, as distinct from temporary, unemployment. The role of the planning authorities in the process of production and redistribution can be seen such that continuous full employment becomes attainable unless authorities make some 'stupid miscalculations.' In a nutshell, the centrally planned economy of the FSU was monetized only in appearance. In fact, the institutions of money and banks were passive and accommodative tools that were used to facilitate the smooth accomplishment of production plans.

Therefore, since transition implied transformation of this economy into a monetary economy, for the sake of clarity we can call this economy a barter-like economy. In other words, we will look at the process of transition as transition from a barter-like economy into a monetary economy, which will be the subject of our discussion in the next three chapters.

5. The Analysis of the Uzbek Economy: Transition Path, Structure and Performance

... more than ten years after the collapse of the Soviet Union, Uzbekistan still has an information environment based on a presumption of secrecy rather than a presumption of openness, the hallmark of transparent and accountable government.

(World Bank, 2003a: 19)

5.1 Introduction

The notion of economic transition is a historically unique phenomenon. It reflects the process of transition from one mode of production into another. One of the major arguments against centrally planned economies (CPEs) was their inefficiency. Indeed, the ultimate incentive behind transition into a market economy, after all, is the belief that a market economy provides the right structure to use economic resources efficiently and thus facilitates to achieve a better prosperity.

This chapter deals with the analysis of the Uzbek economy during transition. We will discuss the transition path, structure and performance of the Uzbek economy during transition from a barter-like centrally planned economy into a monetary production economy. Building a successful monetary economy requires accomplishment of comprehensive reforms in a range of areas such as decentralisation of the economic process, liberalisation of prices, encouraging competition through privatisation and new entry, improving corporate governance, and building market-oriented banking sector and abolishing soft financing, putting up an end to resource allocation through non-market mechanisms, centralised and directed credits, budget subsidies and tax exemptions.

However, since it takes time for institutions to evolve, these changes should only be seen as precondition to building a monetary production economy. The socialist economic infrastructure inherited by transition countries from the past was not built overnight. Therefore, it would be rather naïve to expect to successfully replace the infrastructure of CPEs with that of a market economy within a short period of time. Obviously, the major problem in the process of transition is not to simply imitate institutions and other components of a market economy. Rather the issue at stake is establishment of market institutions and creation of right conditions for their successful functioning and further development.

This task, in turn, necessitated accomplishment of structural changes and improvements simultaneously in both directions: establishment of right institutions as well as development of market skills and knowledge, both of which were absent under central planning. This means that only through the thorough analysis of the working of both socialist and capitalist systems can one find right solution to the problem, which in the end should lead to coherent policy conclusions. Because our ultimate goal is to analyse development of the banking sector during transition, we will be selective and discuss only those aspects of the economic transformation that have direct relevance to our study.

As was argued in the previous chapters, the real and financial sectors of the economy are inseparable, inter-connected and interdependent elements of a single system. Since changes in one of these sectors will not happen without affecting the other, they ought not to be analysed separately. In this sense, it should be duly noted that the main purpose behind the study of the chapter is to show that, without proper understanding of the peculiarities of the current structure of the economy and its

functioning, one cannot comprehensively and successfully analyse the issue of money and banking in the country.

Building our analysis on the background of the arguments we put forward in the previous chapters, we will discuss the following issues in turn. In Section 5.2 a general overview of transition will be discussed succinctly. The most important changes that are needed in order to transform a classical centrally planned economy into a market one will be discussed here. In Section 5.3 we will examine initial conditions of the Uzbek economy before transition. Section 5.4 briefly discusses factors that have affected reform choice, and current structure of the economy in Uzbekistan. Along the lines of these arguments, then, in Section 5.5, we will pay attention to the current structure and functioning of the economy and discuss some important issues such as resource allocation, price distortions, and degree of centralisation in the economic process. A summary and conclusions of the chapter will be presented in Section 5.6.

5.2 General Overview of Transition

Many theoretical and empirical works on transition have emerged since the process of the transition took off in the late 1980s and in the early 1990s in former CPEs. Theoretical models developed during the early stages of transition seemed to have a generalised understanding of the basic problems of the CPEs on the basis of which reform ‘packages’ were developed. However, unprecedented output fall in almost all former CPEs during the transition proves that initial reform packages based on neoclassical orthodox theory were flawed. Persistent output decline, high inflation, aggravation of the problem of unemployment and the resulting fall of living standards

of households were common to almost all transition economies of Eastern Europe, and Commonwealth of Independent States (CIS) during transition. Although it was predicted that, as a consequence of decentralisation of the economic process and broad macroeconomic reforms, output would fall and the problem of unemployment would be exacerbated at the start of transition, the true extent of the production decline and its *persistence* was largely unanticipated.

The major *ex post* criticism of these reform packages is that early models of transition gave little or no weight to the role of institutions (Stiglitz, 1999, Kolodko, 2000a and 2000b, Havrylyshyn, 2001, Roland, 2001, and Marangos, 2001).¹ In this study we will argue that this applies especially to the role and importance of money and banking in the economic process. (See Marangos, 2001, Ould-Ahmed, 2003, Petrick, 1998, and Green and Petrick, 2001.)

Now, speaking retrospectively, transformation of CPEs had to bring major changes into the system that would facilitate establishment of a market-based economy. First and foremost, directive central planning, which had transformed the economy into the net of intertwined relationships among enterprises, had to be abolished altogether. This implied that enterprises and other economic agents in the system were to be given real autonomy over their economic decision-making so that they could freely decide on their own what to produce, for whom to produce, how much to produce and how much to invest.

Moreover, in order to increase competition among enterprises, which was deliberately suppressed as a harmful feature of a capitalist economy, reforms had to be directed towards making state-owned enterprises (SOEs) work as market-oriented

¹ The view of Jeffrey Sachs, one of the designers of the Polish economic reforms, represents one extreme example of this 'time and institution free' approach. He has argued that 'markets spring up as soon as central planning bureaucrats vacate the field' (quoted in Green and Petrick, 2002: 205).

firms would do – the process known as marketisation and commercialisation of SOEs (McKinnon, 1993 and Lavigne, 1999). Although setting up legal foundations for free entry of new firms was seen as a way to increase competition, it was argued that a faster and more effective way of doing this would be through reorganisation and restructuring of SOEs via privatisation (Kornai, 1990 and 1995).

As has been discussed by Kornai (1980 and in other numerous cases) enterprises in CPEs face soft budget constraints.² Enterprises were eligible to borrow from banks regardless of their economic viability; credit was created endogenously by the monobank sector on ‘soft’ conditions. (This we already discussed in detail in Chapter 4.) The implication of this phenomenon is that, under the conditions of administered prices, centralised output planning and endogenously created credit to facilitate fulfilment of these plans, enterprises ultimately reduce their responsibilities to use resources efficiently. That is to say, the soft budget constraint syndrome breeds inefficiency and resource waste in the overall economy, which was the main criticism of CPEs.

Contrary to this, agents in monetary economies operate under market-determined prices, which signal relative scarcity of goods, scarce money supply associated with liquidity preference, and hard budget constraints; these are fundamental conditions to provide efficiency in the system. In other words, in a market economy ‘scarce money steers the allocation of resources and, above all, holding money scarce limits the input of resources and therefore makes a surplus of prices above costs possible, which forms interest income. Scarce money thereby brings about the trinity of cost-recovery, prices reflecting scarcity and buyers’

² Szego (1991) notes that the term ‘budget’ constraint is built on the assumption that saving is prior to investment. She argues that priority of investment over saving and endogenous creation of credit in a monetary economy implies that the constraint firms face is a finance constraint not a budget one. (See also Kraft, 1993.) Having this caveat in mind, we use the words ‘finance constraint’ and ‘budget constraint’ interchangeably to imply one and the same thing – finance constraint.

markets, which are pivotal for the efficiency of a monetary economy' (Riese, 2004: 177).³ At the same time we have also to note that efficiency of a monetary economy comes at a cost: instability is its fundamental and inherent feature.

Under central planning enterprises' goal was to maximise their output, not their profit. That meant prices did not (and need not) make any economic sense. Therefore, unless inefficient prices, which were fixed by authorities and did not reflect relative scarcities of goods and services, were liberalised, the true market incentive system would not be established in transition economies. Then again, price liberalisation alone would not suffice to make enterprises carry out their activities efficiently. Therefore, parallel to price reforms, concurrent reforms had to be carried out in the financial sphere as well. Kornai (1995 and elsewhere) argued that unless budget constraints were hardened properly, liberalised prices would not bring any efficiency into the system simply because under the conditions of soft budget constraints enterprises would not 'react strongly to the signals of relative prices, and make no great effort to reduce their costs' (Kornai, 1995: 22). In this sense, price liberalisation and hardening of soft budget constraints were argued to be complementary reforms (Fischer and Gelb, 1991: 96-7).

Hardening of finance constraints through creating a market-oriented banking system and establishing financial discipline among enterprises would in turn naturally imply liquidation of inefficient and loss-making enterprises. Inefficient SOEs would go out of business for the following basic reason. Under the previous regime both effective and ineffective SOEs benefited from soft credits generously created by the monobank system. Under the new regime, only commercially viable and creditworthy enterprises would have access to bank credit. Since the working capital of SOEs was

³ The idea of scare money supply, which is associated with liquidity preference, does not necessarily contradict to the theory of endogenous money creation as argued by the structuralist endogenous money school discussed in Chapter 3.

purposefully kept at minimal levels under central planning, inefficient enterprises would not survive that long without external finance.

This in turn would imply output loss and aggravation of unemployment. Since these outcomes were politically sensitive issues, there was a possibility that the authorities might be forced to return to the vicious circle of soft budget constraints syndrome by imposing upon the banking sector to extend credit to troubled enterprises in order to maintain production and employment.

Building a monetary production economy would mean that condition of hard budget constraints would apply to the state budget as well. This implied the use of alternative means of financing the budget deficit such as borrowing from the private sector or raising taxes. It also would mean abolition of government support programmes such as budget subsidies, directed low-cost credits and tax exemptions to support enterprises, and monetisation of the budget deficit (Havrylyshyn, 2001: 54, and Herr and Westphal, 1991).

All in all, policy packages developed during the early stages of transition advocated implementation of reforms simultaneously in a wide range of areas: abolishing directive central planning, increasing competition through both new entry and privatisation of existing SOEs, price liberalisation, establishing a well-functioning market-oriented financial system, setting up a legal environment to protect property rights, etc.

The fact, however, is that market institutions do not emerge spontaneously in a short space of time. Institutional evolution is a time-consuming process. Therefore, these important reforms can be seen only as a precondition to building a monetary production economy. Moreover, the uniqueness of the situation under transition is that it requires understanding of both the importance of the time needed for the evolution

and further development of market institutions and also the possible reaction of old institutions to new changes.

Now, the main rationale behind discussing the initial conditions, transition path, and current structure of the Uzbek economy in the following sections is to examine the degree of success in carrying out the above-mentioned important reforms, which constitute the foundation for establishing a monetary production economy, during transition.

5.3 Initial Conditions

Uzbekistan, home to the Great Silk Road cities of Samarqand, Tashkent, Bukhara and Khiva, occupies the heart of the area of Central Asia historically known as Turkistan. Three independent khanates, centred in Bukhara, Khiva, and Kokand had dominated Turkistan between the 16th and 19th centuries before the region was occupied by Russia by the end of the 19th century. Having ousted the Tsar and taking over the power in Russia, the *Bolsheviks* set up socialist republics in former Russian colonies. Uzbekistan was created in the early 1920s as part of a 'national delimitation' that re-divided Kokand, Bukhara, and Khiva into new national republics.

Uzbekistan's experience with central planning lasted for more than seventy years. Among the national republics of the former Soviet Union (FSU), Uzbekistan ranked third in terms of population and fifth in terms of territory. From the economic development point of view, it was the least industrialised of all the union republics. Industrial production accounted for only one-third of the country's total output⁴. For comparison, in Russia and Ukraine industrial production accounted for 48 percent and

⁴ Agriculture also accounted for one-third, and services for another one-third of the total output in 1990 (Asian Development Bank, 2004). Note: Further in the text will use the abbreviation ADB to imply the Asian Development Bank.

44 percent of national output respectively. (For this and some other initial conditions statistics for a range of comparable economies please see Table 5.3.1.)

Table 5.3.1 Initial Conditions in the FSU Members

National Republics	Population (million) 1989	Years under Central Planning	Share of Industry in GDP, 1990	Income per capita*, 1988	Poverty** (% of pop) 1989	Natural Resource Endowment
Russia	148	74	0.48	110	5.0	Rich
Ukraine	51.8	74	0.44	96	6.0	Moderate
Belarus	10.3	72	0.49	102	3.3	Poor
Estonia	1.6	51	0.44	133	1.9	Poor
Latvia	2.7	51	0.45	123	2.4	Poor
Lithuania	3.7	51	0.45	114	2.3	Poor
Moldova	4.4	51	0.37	84	11.8	Poor
Georgia	5.5	70	0.43	108	14.3	Moderate
Armenia	3.3	71	0.55	86	14.3	Poor
Azerbaijan	7.1	70	0.44	71	33.6	Rich
Kazakh.	16.7	71	0.34	93	15.5	Rich
Kyrgyz R.	4.4	71	0.40	72	32.9	Poor
Tajikistan	5.2	71	0.34	54	51.2	Poor
Turkmen.	3.6	71	0.34	71	35.0	Rich
Uzbekistan	20.3	71	0.33	62	43.6	Moderate***

*As percentage of the USSR average.

**Households with gross per capita income less than 75 roubles per month.

***Although labelled 'moderate' along with Ukraine and Georgia, Uzbekistan is far richer in natural resources than these countries. Uzbekistan is a net exporter of energy resources.

Sources: Columns 2 and 5 are from IMF et al (1991).

Columns 3, 4 and 7 are from IMF (2000a). Column 6 is from Pomfret (2003: 43).

Although moderately endowed with natural resources, Uzbekistan was the second poorest after Tajikistan in terms of per capita income; Uzbeks earned only 62 percent of the USSR average. Moreover, about 44 percent of the population earned income below the poverty line.⁵ Depressed prices for the Uzbek-made agricultural goods and other raw materials implied that in real terms Uzbekistan contributed more to the all-union fund⁶ than it received from it (Plyshevski, 1995: 86).

⁵ Defined as those whose gross per capita income was less than 75 roubles (Pomfret, 2003: 43).

⁶ The central budget of the USSR.

The Uzbek economy was specialised in agricultural production.⁷ Agriculture accounted for more than one-third of the country's total production in 1990. Cotton, referred to as 'white gold,' was the primary agricultural crop and the entire system was geared for its production. The country produced more than 61 percent of the Soviet Union's cotton fabric.⁸

The common formula of the soviet-style development, i.e. emphasising the production of non-consumption goods over consumption goods, applied to the Uzbek industry too. Branches of heavy industry accounted for almost half of industrial production; light industry and the food processing industry accounted for 36 percent and 14 percent of the total respectively. In addition, it has been suggested that the Uzbek 'industry's production potential was on the whole more oriented towards the satisfaction of its own needs than was the case in other union republics' (Plyshevski, 1995: 87). That is to say chemical fertilisers and machineries produced in the country were mostly for domestic use in the agricultural sector.

As to the inter-republican aspects of trade, Uzbekistan ran a trade deficit in consumption goods, machinery and fuel, and ran a trade surplus in agricultural production and light industry. This is shown below in Table 5.3.2.

Table 5.3.2 Uzbekistan: Inter-republican Trade Balances. Selected Items, 1988. (Million Roubles)

Electric power	Oil and Gas	Chemicals	Machine Building	Food Processing	Light Industry	Agriculture
-11	-349	-163	-1949	-649	1786	469

Source: IMF et al, 1991: 228

⁷In 1989 about 40 percent of the employed worked in agriculture, 44 percent in services, and only about 16 percent worked in industry (ADB, 2004).

⁸Uzbekistan still remains one of the largest producers, the fifth largest producer after China, the USA, India, and Pakistan, and the second largest exporter after the USA, of cotton in the world (Baffes, 2004).

Although the country was rich in natural resources, including gas, oil and gold, this industry was underdeveloped and its potential was not fully realised. Under central planning there was no pressure on the Uzbek government because there was no real economic burden from running an inter-republican trade deficit.

There were two implications of this type of industrial organisation. On the one hand, it made the country heavily reliant on the import of consumption goods, which proved to be costly for the economy during the initial years of transition. On the other hand, the natural resource endowment and industry geared to the production of goods mainly for domestic use meant that, unlike many other union republics, Uzbekistan was potentially less vulnerable to outside shocks. Indeed, as will be mentioned later, these two facts, combined with good management and a relatively low level of industrialisation, not only affected the choice of reform policy but also explained the relatively better performance of the Uzbek economy during the first ten years of transition.

5.4 Transition Path and Recent Developments

When Uzbekistan became independent towards the end of 1991, the Uzbek authorities announced their adherence to market-oriented reforms, the process already underway under *perestroika*. Although at the beginning no official argument was made about the model of economic development to be chosen, the authorities were clear from the onset that the ‘big bang’ or ‘shock therapy’ approach to transition would not be acceptable for the country (Karimov, 1995 and 1998).

This meant that the Russian model⁹ of immediately rejecting the management of the economy through central planning in favour of decentralised management through indirect monetary policy and fiscal policy tools, which in fact destabilised the economy and proved to be costly, could not be considered. Besides the Russian model, there were several alternative models of development on the agenda at the beginning of transition: the South Korean model of export-oriented growth, the Turkish model of active state support for the development of entrepreneurial activity, and the Chinese model of gradual reforms that started with agricultural reforms and extended to industry. Yet, none of these models was adopted in the end.

It was argued that the Uzbek model of transition and economic development had to take into account national peculiarities and socioeconomic conditions. Heavy dependence on the import of consumption goods,¹⁰ combined with the high share of low-income population, implied that any attempt at rapid transformation of the economy would affect the lives of millions, which consequently could lead to social unrest. Moreover, although the country was abundant in energy resources, their production was still well below the level of self-sufficiency. This especially referred to the production of oil products because at the beginning of transition the country's economy was already more or less self-sufficient in electricity and natural gas production.

Hence, the peculiarities of the structure of the economy and concerns about socioeconomic conditions formed the basis upon which the Uzbek model of transition was formulated. This model, according to the authorities, was built on *five*

⁹ In the early 1990s Uzbekistan adopted a more or less 'wait and see' approach to transition. When the country seriously considered transition reform after 1993, the Russian model of transition was one of the cases to review.

¹⁰ Technical crops, crops that cannot be immediately consumed without first being industrially refined, such as cotton dominated agricultural production. Wheat was usually supplied to the country from Ukraine and Kazakhstan.

fundamental principles, which duly reflected national conditions and peculiarities. These were *the priority of economics over politics, the guiding role of the state during the transition, the rule of law, strong social protection, and the gradual and evolutionary transformation of the economy into a market one* (Karimov, 1995 and 1998).

The choice of the Uzbek reform path, however, was not influenced, as argued by the government, solely by socioeconomic conditions. Alternative theories also do well in explaining why a particular country might choose a gradual or slow transition method. The choice of reform is likely to be constrained by initial conditions, notably history and geography (de Meto et al, 2001). The longer is the exposure to central planning, the greater are macroeconomic distortions and thus the less is the incentive for rapid reforms. On the other hand, proximity to a large dynamic market economy encourages trade and institutional spillovers and positively affects political and economic reform (Kopstein and Reilly, 2000). Abundance of natural resources may also play a role (Auty, 2003). Resource abundance is likely to ease pressure for economic and political reform, and perpetuate cumulative misallocation of resources (Esanov et al., 2001 and Auty, 2003). For these reasons, it might be true that a lengthy history with central planning, an awkward geographical location¹¹, and a rich natural resource base might have influenced the pattern of Uzbek reform to a certain degree.

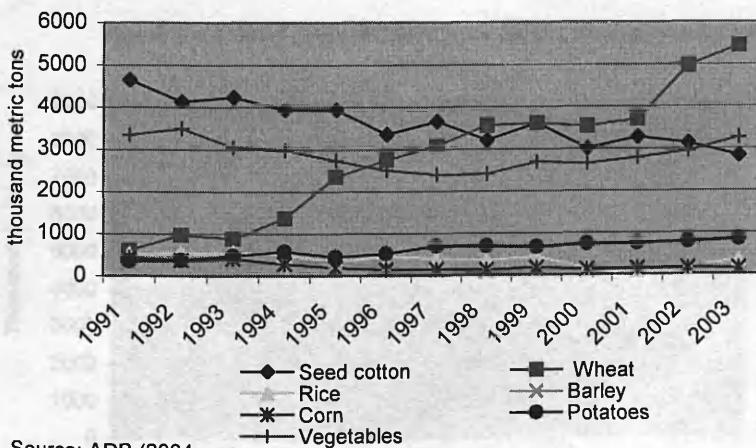
After independence Uzbekistan had to pay for imported goods, including energy products and consumption goods, at the 'world market prices'. And this was the moment when the country felt the real burden of running a trade deficit in

¹¹ Apart from being far from a dynamically growing market economy, Uzbekistan is one of the only two doubly landlocked countries in the world, making it an awkward destination for transportation. (The CIA World Factbook. Available on <http://www.cia.gov/cia/publications/factbook/geos/uz.html>. Accessed 17 September 2005.)

consumption goods and energy products. During the initial years of transition, annually the country had to spend more than one billion US dollars for the import of wheat and energy products alone, which together accounted for about 40 percent of the country's total import bill (Mullajonov, 2001: 69).

Therefore, there was an urgent need to develop the country's own potential in these areas to achieve 'economic independence'. The initial policies were targeted at reducing dependence on the import of consumption goods and energy products by increasing their production at home. As Figure 5.4.1 indicates, from 1991 to 2003 wheat production was increased by more than five times. This, however, was achieved at the cost of a reduction in cotton production. During this period wheat imports were reduced from more than 3.8 million tons per year to negligible amount. The level of self-sufficiency in wheat production was reached by 1998 (World Bank, 2003a: 2). Production of other major agricultural crops such as rice, corn, barley, potatoes, and vegetables remained relatively stable.

Figure 5.4.1 Production of Major Agricultural Crops during Transition.

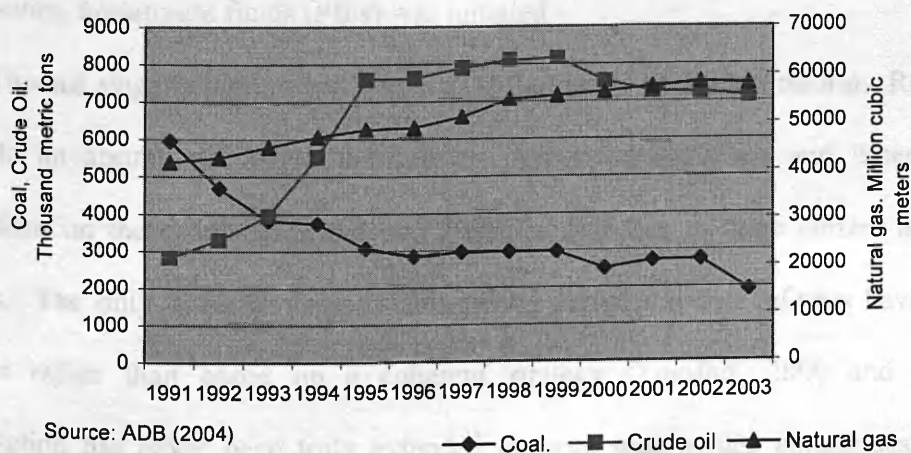


Source: ADB (2004)

The same strategy was applied to oil and gas extraction. The country managed to increase production of energy resources significantly after independence, with the exception of coal production (Figure 5.4.2). This, however, came at a great cost. The development of oil and gas fields required importation of modern technologies and know-how mostly from western countries. Since independence, a total of more than 1.8 billion US dollars was borrowed from foreign donors under sovereign guarantee to finance projects in the energy sector (World Bank, 2003b: 36). Heavy investments paid off quickly and the country reached self-sufficiency in energy by 1995. Petroleum imports were reduced from 475 million US dollars in 1992 to zero in 1996 (World Bank, 2003a: 2).

Interestingly enough, these two examples show the textbook advantage of administrative central planning in achieving certain ambitious targets in the shortest possible time, no matter how draconian and costly they might be. Through centralised decision making and collective efforts Uzbekistan managed to reach a self-sufficient level of production in energy and wheat within a short period of time.

Figure 5.4.2. Production of Coal, Crude Oil and Natural Gas during Transition.



By and large, Uzbekistan's reform path can be divided into three distinct phases: the period of slow and limited reforms (1992-93), the period of accelerated reforms (1994-96), and the period of stalled reforms (1996-present) (World Bank, 1999 and Pomfret, 2000). Indeed, Uzbekistan's inconsistency in its gradual reform strategies earned it the name 'inconsistent gradualist' (Pomfret and Anderson, 1997). During the first stage of reform state-owned housing as well as small and medium size state enterprises operating in retail trade, services and light industry were successfully privatised. The initial price liberalisation policies were carried out in 1992. However, to prevent any negative impact of price liberalisation on living standards, the government kept control over the prices of energy products and a number of consumption goods. As to the large-scale privatisation and introduction of effective corporate governance no reforms were initiated at this stage.

During the second stage, consumer prices and trade were further liberalised. More importantly, centralised planning of agricultural production, except for cotton and wheat, was eliminated. The process of institution building in the financial sector was re-emphasised. A Stock Exchange and a National Share Depository were established. An innovative programme of privatising state-owned enterprises through privatisation investment funds (PIFs) was initiated.

The last stage, which is still ongoing, is the period of limited reform. Reforms came to an abrupt end when the country introduced exchange and other trade restrictions on the economy in the mid 1990s in response to large current account deficits. The only distinctiveness of this period perhaps is that reforms have been reactive rather than based on a coherent strategy (Pomfret, 2000 and 2003). Privatisation has never been truly extended to large state-owned enterprises; price distortions still remain important in agriculture as well as in industry; no attempt has

been made to introduce efficient corporate governance in the enterprise sector, which is still dominated by state-owned entities; and finally no decisive attempt has been made to reform the banking sector.

5.5 Analysis of the Structure and Performance of the Economy

With all the shortcomings in reform, Uzbekistan has done surprisingly well in terms of macroeconomic performance.¹² Figure 5.5.1 compares relative performance of Uzbekistan during transition to that of Russia, Belarus, Kazakhstan, the Kyrgyz Republic, as well as to the average performance of all transition economies, and the CIS countries. Real GDP declined continuously in the CIS from 1991 to 1996. Although in 1997 positive output growth was reported for the first time, in 1998 production growth was negative again. Positive growth has been persistent only since 1999.

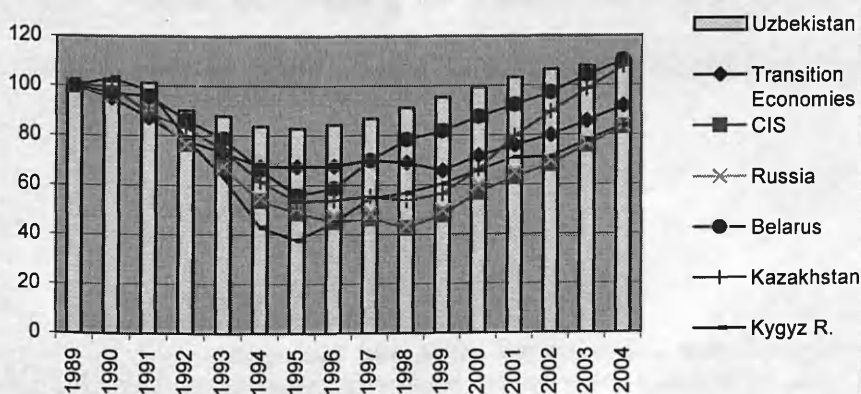
Individual performance of the CIS countries differs from each other substantially. For instance, economic powerhouses of the CIS - Russia and the Ukraine – have shown persistent real output growth starting only from 1999 and 2000 respectively. Although Armenia was the first CIS country to report positive real output growth in 1994, output decline a year before that date was reported to be almost 42 percent (EBRD, 2000). Unlike any other transition economy, Uzbekistan did not suffer from heavy output loss at the beginning of transition and was amongst

¹²There is a concern about the reliability of Uzbek data due to methodological and other deficiencies in assessing national accounts statistics (Taube and Zettlemeyer, 1998). Although this still remains an issue, these shortcomings have been somewhat improved with the guidance of international institutions (IMF, 2000b). Taking these shortcomings into account, international financial institutions usually give their own independent estimate of Uzbek macroeconomic data. The data used in this work come mostly from these independent sources. However, the banking sector data we use in our analysis come mostly from the Uzbek monetary authorities and commercial banks. The banking sector data are unlikely to suffer from the above-mentioned problems because they are based on balance sheet information.

the first to report positive output growth (Figure 5.5.1). Uzbekistan's positive economic growth was reported for the first time in 1996; it has been persistent since then. Although the rate of growth was moderate, it was sufficient to surpass the 1989 GDP level by 2001. In fact, Uzbekistan was the only CIS country to achieve this result by 2001 (Figure 5.5.1). The worst performers among the CIS countries were the Ukraine, Moldova and Georgia. They did not reach even half of the 1989 output level in 2002, reaching only 47 percent, 39 percent and 38 percent of the 1989 GDP level respectively (EBRD, 1995, 2000, and 2004).

All in all, Uzbekistan has performed better than any other CIS country during transition. This extraordinary performance, known in the literature as the 'Uzbek Puzzle', was explained by the initial favourable economic conditions (dominance of agricultural production, low level of initial industrialisation, and rich natural resource base) and to a lesser extent good policy and public investment (Zettlemeyer, 1998, and Taube and Zettlemeyer, 1998). Although deficiencies in data compiling also played a role, it was not significant to cast a shadow on the final conclusion (ibid.).

Figure 5.5.1 Output Recovery during Transition, 1989=100



Source: EBRD (1995, 2000, 2004)

Moreover, the country did relatively well in socioeconomic terms as well. Despite economic difficulties, the country remained committed to providing a social safety net, alleviating poverty and limiting spending cuts in education and healthcare (Pomfret and Anderson, 1997, Pomfret, 2000, and Esanov et al, 2001). Although not emphasised in these works, the central management of the economy played a strong role in maintaining production in the enterprise as well as the agricultural sectors of the economy. As will be discussed in the next two chapters, centralised credits were made easily available to enterprises by the monetary authorities, as in the good old days, to prevent unemployment and output loss.

Output recovery was not the only sphere where Uzbekistan's economic performance was better than the CIS average. Table 5.5.1 and Figure 5.5.2 compare Uzbekistan's selected transition performance indicators to those of the CIS and Central Eastern Europe and Baltic States (CEEBS). Uzbekistan reached macroeconomic stability by the mid 1990s. In key macroeconomic issues such as output, current account deficit, inflation and government deficit, Uzbekistan has outperformed the CIS average. Interestingly, Uzbekistan's output and government deficit indicators were similar to those of the advanced transition economies of the CEEBS. Yet, in terms of reforming the economy the country is still lagging far behind, which is reflected in a lower ranking in the EBRD's overall transition index.¹³

¹³ The overall transition indicator used here is the average of nine transition indices: large-scale privatisation, small-scale privatisation, governance and enterprise restructuring, price liberalisation, trade and foreign exchange system, competition policy, banking reform and interest rate liberalisation, securities markets and non-bank financial institution, and infrastructure reform. The measurement scale for each of these indices ranges from 1 to 4+, where 1 represents no or little change from a centrally planned economy and a 4+ represents a standard typical of an industrialised market economy. Pluses and minuses represent the borderline between two categories and are given the value of 0.3. For example, numerically a 4- means 3.7, whereas a 4+ means 4.3 (EBRD, 2000).

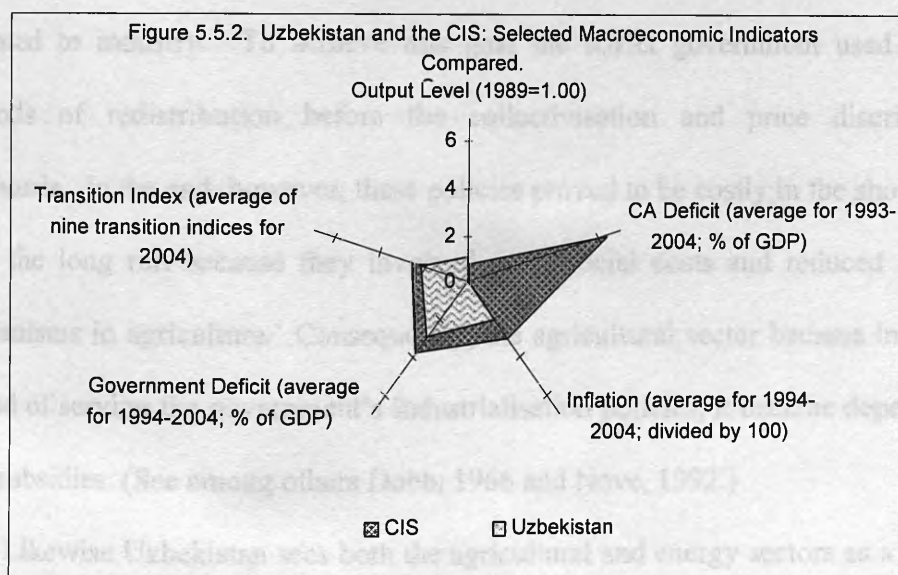
Table 5.5.1 Uzbekistan, the CIS, and CEEBS: Selected Transition Indicators Compared. (1994–2004 Average)

	CEEBS*	CIS	Uzbekistan
Output Level (1989=100)	119	75	107
Overall Transition Index	3.61	2.53	2.1
Inflation (%)	48.38	303.24	195.19
Government Deficit (% of GDP)	3.15	3.75	2.95
Current Account Deficit (% of GDP)**	4.64	6.45	0.09

*Central Eastern Europe and Baltic States.

**1993-2004

Source: EBRD (1995, 2000, 2004)



As was discussed above, from the very beginning of transition the Uzbek authorities pursued policies aimed at substituting imported goods with domestically produced products. After achieving self-sufficiency in wheat and energy production, the Uzbek government took a much more ambitious stance in steering the economy. In the next stage of development they sought to modernise the economy by increasing the share of industrial production in total output. That is to say, the country ‘adopted an import substitution development strategy that was intended to transform the

economy from heavy dependence on agriculture and natural resources to a modern industrial economy' (World Bank, 2003a: i).

Industrialisation through import substitution policies is the classical problem of the developing world.¹⁴ In the case of Uzbekistan, however, history was just repeating itself. Indeed, as will become evident from our discussion below, in many ways Uzbekistan's industrialisation policy resembles that of the FSU. When the policies of industrialisation were undertaken during the early years of central planning in the FSU, it was the agricultural sector from where resources were intended to be allocated to industry. To achieve this goal the soviet government used coercive methods of redistribution before the collectivisation and price discrimination afterwards. In the end, however, these policies proved to be costly in the short as well as in the long run because they involved great social costs and reduced incentive mechanisms in agriculture. Consequently, the agricultural sector became inefficient; instead of serving the government's industrialisation policies, it became dependent on state subsidies. (See among others Dobb, 1966 and Nove, 1992.)

Likewise Uzbekistan sees both the agricultural and energy sectors as a potential source to finance its industrialisation objectives. We focus first on the agricultural sector. The government actively pursues 'interventionist policies, primarily in the cotton sector, to redistribute income from agriculture to develop industries producing import substitutes' (World Bank, 1999: 51). The government redistributes income generated in the agricultural sector to develop its industrial base mainly by two channels: its price policy in purchasing cotton and wheat products and an overvalued exchange rate, which are indirect tools of taxation.

¹⁴ Adopted by many of the Latin American countries in the 1970s, these policies proved to be futile.

The government buys wheat and cotton from farmers at multiple prices.¹⁵ As a rule a percentage of wheat production is procured at 'state order' prices, and another portion at 'negotiable' prices. The rest of production is left at the discretion of farmers to sell at market prices. The average of these two government purchase prices for wheat usually does not exceed the half of the market price.

A similar procedure applies to cotton procurement. (For the organisational structure of the sector see Baffes, 2004.) A percentage of the production is procured at 'state order' prices and the rest is left at the discretion of producers to sell at market prices. However, cotton is considered as a 'strategic good' and the private sector cannot buy it. As a corollary, cotton producers have no other choice than to sell the remainder of their product at the state-owned cotton marketing chain at a higher than state-order price but still much lower than the world market price. Another peculiarity of cotton production is that, as in the old days, the state still sets production targets for farmers. Producers who do not meet their targets cannot sell any part of their product at a 'market' price.

Usually cotton procured at state-order prices accounts for more than half of total production. Cotton farmers usually get less than half of the world market price. According to the World Bank (1999: 50) in 1998 Uzbek cotton farmers received approximately 775.00 US dollars per ton of their product from the government, whereas the Chinese cotton farmers were able to sell their cotton at well over 1300.00 US dollars at the farm gate. Although the situation has marginally improved since 2000, farmers still get only one-third of the export price for cotton (Baffes, 2004).

¹⁵ The government has recently officially abolished these policies (Government of Uzbekistan, 2002a and 2002b). It does not use price discrimination in cotton and wheat procurement any more. Yet, from interviews with cotton producers we found out that, in practice farmers have seen little or no change in government's policy. The essence of the problem remains unaltered because the state is the only buyer of cotton and sets prices monopsonistically. Unless structural reforms are undertaken in this sector, the essence of the problem remains the same. Also see Baffes (2004) for the structural organisation of the sector and the nature of the problem.

Meanwhile, Table 5.5.2 shows that the total transfer extracted from agriculture by these means constituted more than 10 percent of GDP in the late 1990s (World Bank, 1999). If we recall the fact that agricultural production accounts for one-third of GDP, the true nature of this distortion becomes evident. The table also shows that although part of these resources returned to agriculture in the form of subsidies and cheap credits to finance next year's crop, the net annual transfers from agriculture remained high and on average constituted about 4 percent of GDP.

Table 5.5.2 Uzbekistan: Net Resource Transfer in Agriculture, % of GDP

	1996	1997	1998*
Subsidies	10.35	7.08	6.18
of which credit subsidies (rescheduling/write offs)	3.58	1.84	1.84
Taxation through price gap	6.96	6.34	4.18
Cotton	4.77	5.11	3.86
Wheat	2.19	1.23	0.32
Taxation through foreign exchange gap	7.69	3.93	6.28
Cotton	2.33	3.17	5.01
Wheat	0.54	0.76	1.27
Total transfer	14.65	10.27	10.47
Net transfer	4.30	3.20	4.29

*Estimate.

Source: World Bank (1999)

Moreover, it is still the case that only a tiny proportion of resources extracted from agriculture is reinvested in the sector. As Table 5.5.3 in the next page reveals from 1996 to 1999 only about 5 percent of total investment was directed to agriculture. During the same period about 40 percent of all investment was directed to the industrial and energy sectors of the economy.

Table 5.5.3 Uzbekistan: Structure of Economic Investment, 1996-99. (%of Total.)

	1996	1997	1998	1999
Agriculture	5.2	5.2	4.9	4.7
Industry	24.8	24.4	21.6	22.4
Energy	18.4	13.8	12.2	15.8
Transport and Communication	17.5	19.8	18.1	18.2
Other	34.3	36.7	43.3	38.9
Total	100.0	100.0	100.0	100.0

Source: Ghaybullaev (2000)

The government's policies in the agricultural sector hinder incentive mechanisms, breed inefficiency and thus are not sustainable in the long run. Moreover, since these policies redistribute income from agriculture, they lead to a deterioration of living standards in rural areas. For instance, only between 1991 and 1995 agricultural wages decreased from 15 percent above national average wages to 70 percent below (Klugman, 1996, in Pomfret and Anderson, 1997: 15).

Unfortunately, agriculture is not the only sector of the economy being sacrificed for the promise of a better future in the modern industrialised country foreseen only by the country's policy makers. A share of the burden is borne by the energy sector too. Uzbekistan is rich in natural energy resources such as oil, coal, and gas. It is the third largest natural gas producer in the CIS and among the top ten gas-producing countries in the world. (For details please see World Bank, 2003b.) Oil, coal and gas products are sold in the local market at a fraction of world market prices. This policy was especially prevalent until 1995 when the state provided highly subsidised energy to the entire economy – industry, agriculture, transportation and households (Esanov et al. 2001).

As indicated in Table 5.5.4 below from 1992 to 2000 the average of domestic consumer subsidies constituted about 28 percent of GDP. After the mid 1990s slowly but gradually energy product prices have been liberalised.¹⁶ As a result, at present most of the rent generated in the energy sector is left with the domestic producer; this figure was about 26 percent of GDP in 2000. Since almost all domestic producers are state-owned entities, the rent accumulated in the sector is effectively left with the authorities to use at their discretion. Given the commitment of the government to industrialisation, it is not difficult to predict where these funds will be directed. (For the detailed discussion of this issue please see Auty, 2003 and Esanov et al. 2001.)

Table 5.5.4 Energy rents in Uzbekistan, 1992-2000, in percent of GDP

Export rent	Domestic producer rent	Total rent	Domestic consumer subsidies
Average for 1992-2000			
5.7	5.6	39.5	28.2
2000			
6.3	26.2	36.4	3.9

Source: Esanov et al. (2001)

Notes: Export rents = actual export revenues – transport costs – production costs.

Total rents = total output times export price - transport costs – production costs.

Domestic consumer subsidies = domestic consumption times the difference between domestic price and import price.

Domestic producer rent = total rent - export rent - domestic consumer subsidies.

Ironically, despite the significant appropriation of rent from the agricultural and energy sectors, the investable surplus generated by the authorities was not sufficient to finance the government's ambitious development programme. Thus the government resorted to considerable external borrowing and since independence borrowed about 7

¹⁶ Nonetheless, underpricing of energy products still remains an issue. (See World Bank, 2003b.)

billion US dollars from abroad. As will be discussed later in our case study of the National Bank of Uzbekistan, almost all of these funds were borrowed by the bank under sovereign guarantees and were on-lent to local enterprises¹⁷. On the whole, from 1999 to 2002 more than half of the total financing of fixed capital formation came from the state budget, external borrowings and foreign direct investments¹⁸ (Makhmudov and Isaqov, 2004).

Although singled out and nurtured by the government, the industrial sector has its own serious problems which result from the government's unwillingness to liberalise the enterprise sector. Little has been done to change the organisational structure of the sector since independence. Although reform policies during transition have been aimed at the gradual decentralisation of the economy by dismantling industrial ministries and converting large stated-owned enterprises into joint-stock companies, the government has been able to maintain control over the process of production through the chain of trade associations and holding-like structures, most of which turn out to be former industrial ministries.

These associations and holding-like structures have controlling power over enterprises' decision-making regardless of whether they have a controlling stake in their stock or not. In the enterprise sector, as in the old days under central planning, there seems to be no clear distinction between the state as a business, the state as an owner, and the state as a manager. (For details please see Broadman, 2000.) In this

¹⁷Unfortunately, many of these 'show-case' enterprises were not successful. For instance, the car plant Uzdaewoo operates at 20% of capacity, the tractor plants Uzcasetractor and Uzcasemash operate at 27% and 5% respectively, the new Bukhara and the modernised Ferghana oil refineries are operating well below capacity as well (World Bank, 2003).

¹⁸As a rule when indicating sources of finance of investment projects, official statistics combine data on foreign borrowing and foreign direct investment. Uzbekistan, however, has been amongst the least successful transition countries in attracting foreign direct investment (\$3 per capita). (See EBRD, 2004 among others.)

sense, in a relatively recent paper on the structure of the Uzbek economy, the World Bank observed the following:

The enterprise sector is little exposed to competition: it functions under centralised production targets and state distribution systems, little import competition, extensive price regulations, and soft budget constraints. Industry is to a large extent still subject to central planning through the system of “value and material balances” for industrial associations and enterprises of all forms of ownership ... (World Bank, 2003a: 11. Emphasis in the original)

Price distortions and lack of incentive mechanisms are postponing market-oriented corporate governance in the sector. Uzbekistan started price reforms back in 1992 when it was still a member of the rouble zone. Reforms were accelerated after the introduction of the national currency in 1994. After the abolition of profit margin regulations and a shift to full-cost recovery pricing by state enterprises, the IMF (1996) concluded that price liberalisation was completed by 1995. The truth, however, is that hitherto most prices for goods and services are still pretty much administered.¹⁹

Selected transition indices in Table 5.5.5 in the next page provide information on these issues. The first two rows are on price liberalisation, the next three rows are on enterprise privatisation and restructuring, the last row is on private sector's share in GDP.

As the first two rows of the table reveal, the price system still remains distorted. The EBRD's price liberalisation index of 2.7 indicates that although substantial progress has been made in terms of liberalising prices, state procurement in non-

¹⁹ Some of the prices are depressed directly by the State Anti-Monopoly Committee (based on the definition of market share of producers), whereas some are depressed indirectly through import or export bans.

market prices remains substantial.²⁰ Moreover, the EBRD (2004) also estimates that the share of administered prices in the consumer price index (CPI) exceeded more than 50 percent each year from 1999 to 2004.

Table 5.5.5 Uzbekistan: Selected Transition Indicators, 1996-2004.

	1996	1997	1998	1999	2000	2001	2002	2003*	2004**
Price Liberalisation Index	3.0	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Share of Administered Prices in CPI, %	Na	Na	53.0	60.0	53.0	53.0	53.0	53.0	53.0
Small-scale Privatisation Index	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Large-scale Privatisation Index	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Enterprise Reform Index	2.0	2.0	2.0	2.0	1.7	1.7	1.7	1.7	1.7
Private Sector Share in GDP, %	40.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0

*Estimate

**Projection

Source: EBRD (2000, 2004)

The next three rows of the table show that although small-scale privatisation has been in principal completed, there has not been much progress in terms of privatising large-scale enterprises and achieving effective corporate governance. The small-scale privatisation index of 3.0 implies that a nearly comprehensive privatisation programme has been implemented, which we already noted earlier. The large-scale privatisation index of 2.7 indicates that only about one-fourth of large-scale enterprises have been privatised, and major unresolved issues remain regarding corporate governance. The enterprise reform index was 2.0 from 1996-1999. In 2000 it was downgraded to 1.7. It has not changed since then. The index of 2.0 implies that moderately tight credit and subsidy policy, weak enforcement of bankruptcy legislation, and weak corporate governance. The score of 1.7, which is the borderline

²⁰ Full information on the implication of the four indexes in Table 5.5.5 is given in Appendix 5A.

between the scores 1.0 and 2.0, implies that very little progress has been made in terms of hardening budget constraints and improving corporate governance since transition began.

Hence, our arguments so far show that the Uzbek government is still heavily involved in maintaining centralised management over the key sectors of the economy. It allocates resources based on detailed planning and control over the process of production. Little progress has been made in terms of enterprise restructuring, and hardening soft budgets constraints. Although significant reforms have been made in terms of liberalising prices, the price system still remains distorted.

All of these criticisms and shortcomings of reforms, however, should not create an impression that the Uzbek economy remains a completely centrally planned economy as it was in 1991. Reforms have been much more productive and fruitful at the small and medium-sized business level, in which the private sector is thriving. As the last row of the table indicates, the share of the private sector in GDP has increased from almost zero at the start of the transition to 45 percent in 1997, although it has remained unchanged since then. Likewise, as recognised by the international financial organisations, small-scale privatisation has been fast and successful. By and large, privatisation of small enterprises was completed as early as in 1995 (IMF, 2000b).

Hence, the analysis shows that one can draw a neat line that divides the economy in terms of ownership into two separate sectors: the centrally-planned state-owned sector and the decentralised private sector. Slow progress of reforms in areas of price liberalisation, resource allocation, soft budget constraints, as well as privatisation and corporate governance means that preconditions for building an incentive-based monetary production economy are only partially met. Moreover, since

continuance of the policy of resource allocation through distorted prices, subsidies and lax credit policy has direct relevance to the monetary and banking sectors of the economy; we expect to see some distortions in these sectors too.

Hence, the implication of this conclusion for money and banking is that the dual nature of the Uzbek economy with its embedded structural problems creates unfavourable conditions for the healthy development of a market-oriented banking sector. In fact, the afore-mentioned policies are likely to create system-specific problems in the monetary and banking sectors of the economy, which will be the subject of our next two chapters.

5.6 Conclusion

To summarise the main points of the chapter, we have touched upon several issues that have direct relevance to the subject of our study. These were the choice of a gradual reform path with its own particular policies of price distortion, resource allocation and import substitution.

We showed that after more than ten years of transition the Uzbek economy still suffers from some degree of centralisation; the basic preconditions for building a monetary production economy are not still met. As mirrored in the government's resource allocation and industrialisation policies, the central planning type of management is still prevalent in the Uzbek economy. This especially refers to large-scale enterprises functioning in the key sectors of the economy. Prioritisation of the administrative methods of macro and micro management negatively affects the evolution of a monetary economy. As a result, this process undermines the

importance of financial intermediation and thus inhibits the healthy development of money and banks.

The government uses prices as a means of extracting resources from one sector of the economy and reallocating into another and by doing so severely discourages market production incentives in both the private and public sector production. Price distortions inhibit incentive mechanisms and lead to a misallocation of resources.

Maintaining strict control over the key sectors of the economy, combined with reallocation of resources from one sector to another through distorted prices, lax credit and subsidies, and other administrative means, leads to misallocation of scarce resources, damages private property rights, and reduces the market incentive mechanism, which in the end breeds inefficiency. As a result, the process of evolution of true market institutions is slowed down.

Although the implications of this type of economic organisation for the issue of money and finance will be the focus of our discussion in the next two chapters, based on the analysis of this chapter we can already make some preliminary suggestions. In the previous chapters we have suggested that money would evolve in a property-based economy as a universalised title for goods and services. A unit of account function expands the use of money from simple exchange transactions to financial contracts in which money is used as a common measure of wealth. Respect for private property rights and the effectiveness legal system then ensures that titles to real assets become acceptable as collateral. Although banks still need to assess the quality of collateral, there is no longer any need for them to possess collateral physically. This in turn reduces transaction costs, improves financial intermediation, and thus increases both availability of credit and access to credit.

Now, as we analyse the transition economy of Uzbekistan we find that there are too many missing links in the 'property rights – rule of law – money – banks – financial intermediation' chain. Continued control over the key sectors of the economy, combined with distorted prices, damages private property rights and reduces the market incentive mechanism. Consequently, the Uzbek economy becomes one of the least attractive environments for the healthy development of money, banking and finance. Weak property rights, allocation of resources through distorted prices, soft budget constraints, and more importantly state-directed lending and pervasive government interference inhibit the development of banks as effective financial intermediaries between savers and borrowers and as allocators of new credit. We will discuss these and some other issues in more detail in the next chapter.

6. Reforming Money and Banks during Transition

6.1 Introduction

Along with the most essential reforms, such as the abolition of administrative central planning, liberalisation of prices, and privatisation of state-owned entities, the process of transition also necessitated the introduction of important changes in the financial sphere as well. Basically, these changes would involve putting an end to the formal distinction between the cash money and non-cash money, and establishing the market-oriented two-tier banking sector. Since we have discussed the significance of some of these issues already in the previous chapter, in this chapter we deal with the development of money and banks during transition.

In centrally planned economies strict control over enterprise activity, administratively fixed prices, and the distinction between the cash money and non-cash money circuits made it possible that changes in one sector would not affect another. Because non-cash money was used only as a unit of account, and flowed strictly through the lines determined by the central plan, it did not create fluctuations in effective demand. Moreover, since it did not represent universalised title, it did not create any problem of inflation either.

On the other hand, cash money, which to a limited extent had the attributes of market money, potentially could create imbalances. However, since prices were administratively fixed and production of goods and services depended more on the central plan rather than household demand, increased cash money balances of the household sector could either create queues in retail outlets or turn into a monetary overhang but not affect production decisions.

As far as long-term investment projects are concerned, they were financed directly through the state budget. The monobank system's role was limited to the organisation of the payments system for the enterprise sector, monitoring financial flows in enterprises' bank accounts, and creating short-term credit endogenously to meet the demands of the enterprise sector for trade. An inevitable feature of this system was that, as was argued by Kornai on numerous occasions, the enterprise sector did not face market-type financial constraints.

The decentralisation of the economic process, the imposition of hard finance constraints, and the introduction of reforms towards market-oriented corporate governance mean that each and every individual enterprise has to organise the process of production independently. Naturally, organisation of the process in this manner reinforces the importance of debt instruments and contracts, which are denominated and discharged in money. The use of money as a universalised title for all tradable goods and services, and as a unit of account in debt contracts underlines the importance of money under a market-based economy.

As a result, agents hold money during times of increased uncertainty, which is an inherent feature of a decentralised market economy. What is more important is that the entire financial superstructure of market-based economies is built upon the existence of strong trust in the institution of money.

Under the new regime the banking sector had to take on the role of allocating resources among millions of autonomous entities by acting as an intermediary between surplus units and deficit units. In this sense, the role of the banking sector in the new environment would be immense. Furthermore, as our arguments on the stages of banking development shows, after reaching a certain stage of development, we would expect the banking sector to be able to free the enterprise sector from the loanable funds constraint.

Now, the questions whether transition banks would be able to create credit as a mature market banks would do, and whether transition banks would be able to fill the gap left by the monobank system in their infant stage of development will be the focus of our analysis in this chapter.

In Section 6.2 we will discuss the issue of reforming money and banks in transition economies. In this section we will demonstrate that, although in some respect transition banking can formally take off from the fourth stage of banking development, they cannot use the potential of this stage of development to full effect without the necessary build-up of confidence in new institutions. We will argue that the time-consuming nature of institutional development explains why the banking sector fails to satisfy enterprises' demand for credit. We will also explain why the reliance on cash increases and the importance of banking decreases during the early years of transition. In Section 6.3 we will look at the basic indicators of the development of money and banking across different countries. In this sense, the analysis of this section simply complements that of Section 6.2. In Section 6.4 we will attempt to explain the emergence of non-monetary transactions using this institutional framework and try to interpret the process as a development of a monetary economy. Finally, in Section 6.5 we will summarise our major findings and conclude the chapter.

6.2 Reforming Money and Banks

In Chapter 4 we showed that the role of money and that of banks in CPEs were passive. These institutions were purposefully designed to facilitate the economic process, which was modelled as a barter-like economy. Activities of enterprises in CPEs were *not* inhibited by monetary constraints; rather their activities were constrained by the availability of real resources in the system. In this sense, CPEs were classified as supply-constrained systems (Kornai, 1979). Organisation of the economic process by means of central planning, combined with the accommodative character of money in the process of production, distribution, and resource allocation, meant that the cohesion of the system was established by the institution of planning.

Since money did not represent universal purchasing power, it was not the most desirable asset to hold. For instance, to deal with any uncertainty unforeseen by the plan, enterprises would accumulate real resources, but not money. In the household sector accumulation and hoarding took place in two forms: voluntary and involuntary. Voluntary hoarding occurred by saving in non-monetary assets, such as commodities and foreign currencies. Involuntary saving was in monetary form. However, it was forced in nature because it was the result of a short supply of goods. According to one estimate, the share of forced saving in total monetary saving of the household sector in the FSU increased from 9 percent in 1965 to 42 percent in 1989 (Kim, 1999: 605).

Contrary to this, in market economies money has stable value and represents title to all tradable goods and services. This makes money the most liquid of all assets and this is the reason why wealth formation takes place in monetary form. One of the fundamental features of market economies is that the entire process of production is built upon monetary matters; the economic process is organised on the basis of sundry debt contracts, in which money is used as a unit of account; that means money

facilitates the economic process. In this sense, Riese (2004: 178) argued that in a market economy the cohesion of the system was established by the institution of money.

In the meantime, however, being the most attractive asset to hold, especially in times of increased uncertainty, money is capable of constraining aggregate effective demand. Hence, the role of money in the economic process, and liquidity preference associated with it, implies that market economies are demand-constrained systems. (See also Kornai, 1979.)

Now, as was noted in Chapter 5, in orthodox theory decentralisation of the economic process, price liberalisation, privatisation, and restructuring the banking sector by copying the blueprint of the banking sector in advanced countries, were seen as a sufficient condition to guarantee the success of the process of transition. However, since the transformation would require a complete change *from one mode of resource allocation into another*, these nominal changes would not suffice. Rather the evolution and gradual maturity of vital market institutions such as money, banks and other financial institutions would be required for a smoother transition. Taking this caveat in mind, we will take an alternative view and attempt to analyse the process using the Post Keynesian approach, which emphasises institutional evolution.

Now, to transform a supply-constrained centrally planned economy into a demand-constrained monetary one, it is essential that (i) wealth formation and thus the habit of hoarding must shift from goods to money (Engerer, 2001: ch. 3), (ii) the banking sector has to be reorganised and restructured, and (iii) banking habits must evolve. To achieve these objectives, first of all, money had to become a universalised title for all tradable goods and services; so that it becomes a generally acceptable means of payment, store of value, and more importantly standard of denominating and discharging debt contracts. In other words, money has to become an active ingredient

in the economic process. Establishment of trust in money is important for the quicker development of the banking sector simply because the entire financial superstructure of a market economy is built upon trust in money. Let us discuss these issues in more detail in turn.

First of all, the legal and practical separation between cash money and non-cash money circuits had to be abolished altogether. As in a market economy, money had to represent universalised title to all tradable goods and services. This especially referred to non-cash money. Enterprises were to be given the right to spend their financial resources freely. 'Other than auditing against fraud, what they did with their owned cash balances – including deposit money – for new investments or the purchase of supplies would be unrestricted' (McKinnon, 1993: 247). Carrying out these basic yet fundamental reforms was a precondition for transforming the financial sector of the economy.

Second, there was a need to build a market-oriented banking system. The monobank sector had to be dismantled and replaced by the two-tier banking sector consisting of the central bank and commercial banks. Broadly speaking, the central bank would be in charge of monetary policy and supervision of commercial bank activities, whereas commercial banks would be in charge of, and therefore had to be capable of, allocating and channelling financial resources into productive businesses strictly on the basis of financial viability (Gowland, 1992, Calvo and Coricelli 1993, Rostowski, 1995, and OECD, 1997).

Under the new regime, the banking sector had to abandon certain functions relevant only under central planning such as granting soft loans, collecting taxes on behalf of the government, and revealing information on customers' accounts to the authorities or any other third party. The only aspect of banking under central planning

that could be relevant under the new regime would be the role of banks as payment clearing centres.

Reforming the banking sector was necessary for the following reason. As was shown in Chapter 4, under central planning, economic rent generated in various sectors of the economy was appropriated by means of distorted prices and other administrative methods of planning. These resources then were allocated to the enterprise sector in the form of non-refundable grants, subsidies, and soft credits through the banking sector. The banking sector was used as an effective but neutral conduit in the government's resource allocation policy. (As was shown in Table 4.5.2 enterprises heavily depended upon bank credits to finance their working capital.)

Giving up administrative methods of planning, setting up market clearing prices that represent value and scarcity, and hardening soft finance constraints mean that under the new regime the financial sector will be responsible for allocation of resources from surplus units to deficit ones. As was discussed in Chapter 3, in a market economy economic growth is constrained by the cost and availability of external finance. In the absence of a well-functioning stock market, the banking sector is of paramount importance in meeting the enterprise sector's demand for external finance. To increase availability of finance and reduce its cost, banks should act as effective intermediaries between lenders and borrowers at their earlier stage of development. As the general public's trust in banks increases and agents start using bank liabilities as money, banks can then ease loanable funds constraints by being able to create credit ahead of saving.

Reaching this stage of development, however, depends upon how quickly and successfully institutions of money and banks, which played completely different functions under central planning, evolve during transition. Below we will discuss the

evolution of these institutions by employing the logic of the stages of banking development framework discussed in Chapter 3.

In some respect, copying the blueprint of the banking sector in advanced market economies, the banking sector of the transition economies could be equipped with the following: (i) acceptability of bank liabilities as payment instruments; (ii) fractional reserve banking; (iii) the lender-of-last-resort facility; and (iv) the inter-bank market for liquid facilities.

As was seen in our earlier discussions, at this stage of development banks are already in a position to ease financial constraints of the corporate sector by being able to create credit ahead of saving. However, the logic of the stage of banking development in advanced countries on the one hand, and the underdeveloped nature of the institutional structure inherited from the central-planning past on the other hand, prove that banks in transition could not use the potential of stage four to full effect without the necessary build-up of confidence in bank liabilities and gradual development of the banking habit of the household sector. That is to say they had to start their way to the development almost from scratch.

We may, conditionally, describe the gradual rise of confidence in both cash money and bank liabilities (non-cash money) and thus the development of money and banking during transition as a five-phase process. Table 6.2.1 briefly summarises the main points of this process. Bearing in mind the distinctions made between cash money and non-cash money, as well as between corporate and retail banking services under central planning, we will look at the following issues in turn: (i) why cash-based transactions may increase during the early years of transition; (ii) how the modernisation of payments system and the gradual rise of confidence in banks can lead to internal convertibility between cash money and non-cash money; and (iii) how bank liabilities can gradually be accepted as money by the household sector.

To describe the process succinctly, we use three columns labelled 'retail banking', 'corporate banking', and 'money outside the banking sector' in Table 6.2.1 in the next page. This, from left to right, in a way reflects relative liquidity of household deposits, non-cash money and cash money respectively. In the end, this exercise will show how internal convertibility between these components of broad money can gradually be achieved and how these changes and developments can explain the ability of banks to create credit ahead of saving.

Phase One: The period under central planning. One of the particularities of banking under central planning was the separation of corporate banking from retail banking. As a rule, big specialised banks provided only corporate banking services. As was described in Chapter 4, by law enterprises were obliged to carry out their payment transactions almost exclusively in non-cash money via the banking sector. The important point, however, is that since non-cash money was seen as a mere accounting tool in the process of resource allocation, the issue of trust was not relevant here. (Please see Chapter 4 for the detailed discussion of the issue.)

Provision of retail banking services to households was *Sberbank's* primary function. The pool of funds *Sberbank* attracted from the population was sold as medium and long-term loans to other banks, which then on-lent these facilities to ultimate borrowers in the corporate sector of the economy. Although *Sberbank* also provided consumer credit services to the household sector, they remained underdeveloped mostly due to the shortage of consumer goods in the economy. No mechanism of clearing similar to cheque clearing was put in place and therefore titles to these deposits were not used to effect transactions. Unlike the enterprise sector, the household sector's transactions were almost exclusively carried out in cash money.

Table 6.2.1. Gradual rise of confidence in bank liabilities during transition

Retail Banking	Corporate Banking	Money Outside the Banking Sector
Phase 1. Under Central Planning		
Deposits are exchanged for currency at one-to-one ratio but no clearing system exists. Bank deposits are savings but not money.	Well-defined but slow and ineffective payments clearing system. Corporate deposits are non-cash money by design. Non-cash money is used by the enterprise sector alone.	The household sector's transactions are almost exclusively carried out in cash money.
Phase 2. Early Years of Transition: Hyperinflation and Collapse of Confidence		
Trust in banks erodes and the size of depositary base shrinks.	Weak trust in banks, payment delays associated with inefficient payment system, incentives to under-report business dealings, and abolition of distinction between cash money and non-cash money result in lower demand for non-cash money. In the end this leads to relative illiquidity of non-cash money.	Confidence in domestic currency is lost. Savings are kept in foreign hard currencies. Because it is legal tender, cash money is demanded mostly for transaction purposes. In short, cash-based transactions have dominant power.
Phase 3. Period of Moderate Inflation		
Due to moderate inflation and positive deposit rate offered by banks, depositary base slowly increases. However, trust is still weak and deposits are not money.	Payments system is modernised. Trust in banks, and thus in bank liabilities, slowly increases. Nonetheless, no significant increase in deposit-based transactions yet. Non-cash money might not be as desirable as cash money.	Trust in national currency gradually picks up. Households start using domestic currency as a store of value. Cash-based transactions still dominate.
Phase 4. Inflation is controlled and stability of national currency is achieved		
Depositary base increases significantly. Payment-clearing mechanism is being introduced slowly. Deposits are still not money.	Confidence in banks is high. Effective payments system. Non-cash money and cash money are equally liquid. Non-cash money transactions on the rise.	Stability of national currency is achieved. Wealth formation takes monetary form. Some cash transactions are replaced with non-cash ones.
Phase 5. Banks regain public's confidence. A market-type banking sector is established.		
Depositary base increases significantly. Effective payment clearing system. Deposit-based transactions are on the rise. Deposits are money.	Banks regain confidence. Deposit-based transactions now have dominant power. Now banks can create credit ahead of saving.	As banks regain confidence, and efficiency of non-cash transactions is realised, cash-based transactions start declining considerably. Cash money is used only for small transactions.

The underdeveloped nature of personal banking services also implied that the household sector saw their bank deposits only as a store of value. Despite this fact, however, the general public's confidence in *Sberbank* was high because it offered its depositors financial gain and readily exchanged deposits for cash money at a one-to-one ratio on demand. In this phase credit creation is endogenous in the system-specific sense.

Hence, three important things that we can note in this phase are the following:

(i) corporate-banking is separate from retail-banking; the former is much more advanced relative to the latter; a well-defined but inefficient payments system is in place, which means the enterprise sector uses bank liabilities as money (in the system-specific sense); (ii) retail-banking services are extremely underdeveloped; no clearing mechanism is set up; household sector deposits are not money; (iii) cash money is used almost exclusively by the household sector, while non-cash money is used by the enterprise sector.

Phase Two: Transition - the period of hyperinflation and collapse of confidence in the domestic banking sector. The monetary overhang¹ generated in the economy over the years under the previous regime represented suppressed inflation, which was contained by fixed prices, and the centralised and administrative nature of the process of production, distribution, and resource allocation. With the decentralisation of the economic process, liberalisation of prices, and accompanied output fall, the monetary overhang (combined with loose monetary policy) translated into hyperinflation. The annual rate of inflation for the fifteen former soviet republics averaged about 173 percent and 1507 percent in 1991 and 1992 respectively (EBRD, 1995). This quickly wiped out the purchasing power of bank deposits and thus eroded the general public's

¹ Kim (1999: 605) gives very detailed account of monetary overhang in the FSU.

trust in the banking sector. As a result, household savings were held predominantly in foreign currencies and in kind in this period.

Hyperinflation also affected agents' attitude towards the use of cash money and non-cash money. The abolition of the distinction between cash money and non-cash money meant that enterprises now could choose freely between cash money and non-cash money to effect transactions. Weak trust in banks, the inefficient and sluggish payments system, and more importantly incentives to avoid taxes induced some businesses, especially small and medium-sized ones, to switch a certain part of their deposit-based transactions to cash-based ones. As a result, demand for non-cash money decreased, while demand for cash money increased.

The sudden upsurge of demand for cash money is also explained by the expansion of the retail trade sector during transition, which was suppressed under central planning. After the liberalisation of retail trade, the privatised retail sector expanded massively by new entrants such as private retail outlets and 'shuttle traders'². Consequently, the need for the use of cash money for transaction purposes became much higher compared to what it was during the pre-reform period.

Figure 6.2.1, below, helps us to explain better why demand for cash money goes up and why cash-based transactions increase subsequently during transition. It is important to note that the difference between Figure 4.5.3, presented in Chapter 4 that showed the circulation of cash money under central planning, and Figure 6.2.1 is that the latter reflects fundamental institutional reforms that affected the circulation of cash money during transition. First of all, the monobank sector is replaced by the two-tier banking sector. Second, under the previous regime cash money was used by the household sector only in the retail sector of the organised market, and in the non-

²Individual entrepreneurs who, by law, are allowed to travel to foreign countries to bring consumer goods and sell them in the home market.

was largely completed by the mid 1990s. These changes, accompanied by the formal abolition of the legal distinction between cash money and non-cash money, meant that now small and medium enterprises, privatised ones as well as new entrants, were free to choose between using cash money and non-cash money to conduct their business in retail and 'small wholesale' markets. The incentive to hide some part of their income to evade taxes, combined with weak trust in banks and thus bank liabilities, implied that these enterprises naturally substituted some of their non-cash money transactions with cash ones.

As was mentioned earlier, another reason why enterprises may substitute some of their deposit-based transactions with cash-based ones is inefficiency of the payment clearing system. Indeed, the payment system inherited from the past was ineffective and extremely sluggish because payment clearing required the physical transport of paper documents (Balino et al, 1994 and 1996, and Bazarov and Rahimova, 2002). Differences in timing between crediting and debiting of accounts caused by delays in the transmission of payment information and in the subsequent registration of accounting entries has increased significantly from 1991 to 1993 in the CIS (Balino et al, 1994). Although rules and regulations stipulated that payments had to be effected within 3 working days, it was much worse and burdensome. In fact it would take from weeks to months to finally clear deposit-based transactions³ (Bazarov and Rahimova, 2002).

In short, collapse of confidence in banks, higher liquidity preference associated with increased uncertainty during transition, the sluggish and ineffective nature of deposit-based transactions, and incentives to underreport business dealings to avoid

³ Moreover, there would be cases when the entire package of paper documents (called *aviso*) would be lost or some of the documents would be reported missing. Under these circumstance banks had to present the duplicate of these documents to the supplier's bank. (From an interview with the Senior Executive Director of a payments department who worked in the banking system for more than 20 years.)

taxes put upward pressure on the use of cash money and thus reduce the inflow of cash money into the banking sector. Cash money injected by the central bank into the system does not flow back to the banking sector. Rather cash money increasingly flows back and forth between the retail and wholesale markets, households, and cash hoards sections in the diagram. *This shows that the economy's reliance on cash money increases dramatically during transition.*

In the meantime, excess non-cash money that has been accumulating in the banking sector (due to the monetary overhang and excessively created soft credits) and a complete collapse of trust in banks mean that under these circumstances achieving immediate convertibility between cash money and non-cash money may come at the cost of undesirably high rate of inflation. In an attempt to restrain this excessive inflationary pressure the monetary authorities may restrict free convertibility of bank liabilities into cash money.

To do this, the authorities may simply refuse to inject new cash money into the circulation. The inability of commercial banks to raise cash money from the general public, then, automatically translates into restrictions on the free convertibility of bank liabilities into cash money. Household depositors lose immediate access to their deposits. Enterprises will be allowed to carry out non-cash transactions without restrictions. However, they may face difficulty in converting their deposits into cash money even for such basic need as paying wages of their employees. As a result of these restrictions, non-cash money becomes less liquid relative to cash money.

Cash shortages were reported to be a common problem throughout the FSU in the mid 1990s, which combined with the above-mentioned factors, then, resulted in the relative illiquidity of non-cash money (Hardy and Lahiri, 1996 and Conway,

1997).⁴ This suggests that the non-cash component of the broad money would not be as liquid as its cash component in this period. In other words, the internal convertibility of cash money and non-cash money would not be achieved during the early years of transition. The duration of this stage may vary from country to country depending upon the degree of success achieved in conducting consistent reforms and the speed of institutional developments. As will be shown later in due course, unfortunately this irregularity still holds true for the present Uzbek banking sector.

Now, as the economy's reliance on cash money increases and the liabilities of banks becomes a less and less popular means of saving and payment, the banking sector's ability to create credit will be severely affected. A collapse of confidence in banks and bank liabilities means that banks can hardly attract new deposits from the general public. As a result, unless the authorities come to the rescue and supply centralised funds to the banking sector, the size of bank credits shrinks considerably at this stage.

Phase Three: the period of moderate inflation. In this phase, a sound national currency is established, usually through currency reform and the maintenance of moderate inflation. Although the payments system is modernised in the corporate-banking sector, payment clearing is not yet introduced in the retail-banking one. Therefore, household deposits represent savings but not money.

Moderate inflation and the introduction of an efficient payment clearing system gradually promote confidence in bank liabilities (non-cash money) as a safe and liquid asset. There is an upward tendency in the corporate sector to use bank liabilities along with cash money for payment purposes. Despite these positive changes, however, entrepreneurs are not confident yet to increase their deposit-based transactions

⁴ It is a well-documented fact that non-cash money was widely traded for cash money at a discount during this time (ibid.).

dramatically, and households' savings with banks do not increase that much either. Therefore, the economy will be still highly reliant on cash money, which can be observed in the relatively high ratio of cash money to demand deposits (non-cash money). This, in turn, implies that the banking sector is still suppressed. This simply shows that trust in central bank (outside) money precedes trust in bank liabilities.

As to the issue of credit creation, the ability of the banking sector to create credit ahead of savings depends upon the acceptability of bank liabilities by the general public as money, which might be a slow and time-consuming process. The gradual increase of trust in the banking sector in this stage slowly facilitates bank intermediation. However, banks' ability to create credit depends heavily upon new deposits, which do not increase that much in this stage.

Phase Four: the period when inflation is controlled and stability of national currency is finally achieved. As was argued in the previous chapters, financial development presupposes the existence of sound outside money on the basis of which inside money system can develop. *The existence of confidence in money facilitates monetisation of wealth formation. Sound money also facilitates financial development and thus fosters financial intermediation.* During the early stages of transition, building trust in outside money and creating the right conditions for the development of inside money and thus financial intermediation would be very important to prevent sharp output loss (Perotti, 1994).

In the retail-banking sector, the depositary base increases significantly. Banks start offering better personal banking services; the household sector's banking habit gradually develops too. Households start converting their monetary savings into bank deposits, which then will be followed by a habitual voluntary saving. A payment-clearing mechanism is being introduced slowly. Banks start introducing plastic debit and credit cards. Slowly but gradually retail outlets start accepting these cards as

payment instruments. However, since this practice is not yet widespread and popular, household deposits are not yet money.

As far as corporate banking is concerned, public confidence in banks as an integral part of a new market economy gradually grows. This, combined with the stability of the national currency and the modernised effective payments system, induces entrepreneurs to reduce their reliance on cash money as a medium of exchange and increase their deposit-based transactions. As a result, some cash-based transactions are replaced with non-cash ones. Deposit-based transactions are on steep rise, but in general they are not still dominant.

As to the credit activity of banks, since bank liabilities have not yet been fully accepted as money, the banks' role is still limited to acting as an intermediary between savers and borrowers. Banks can boost their credit activity only by attracting more deposits. In other words, at this phase this activity is still constrained by the availability of loanable funds.

Phase Five: the period when banks finally fully regain public confidence. In the retail-banking sector the depositary base increases significantly. In addition, the introduction of a payment clearing mechanism (such as an electronic clearing mechanism for plastic debit and credit cards, cheque clearing, direct debit/credit instruments, etc) implies that household deposits are now money. As banks regain public confidence and the efficiency of deposit-based transactions are realised, cash-based transactions start declining considerably in the corporate-banking services sector too. As acceptability of bank liabilities as money increases in the economy, agents minimise their cash-based transactions and increase their deposit-based ones. *Finally in this phase, household demand deposits, enterprise demand deposits, and cash money are equally liquid.*

Hence, in the fifth phase trust in banks is firmly established and the public starts using bank deposits not only as a store of value but also as a means of payment. Finally, deposit-based transactions dominate. Bank liabilities are accepted as fully-fledged money by both the corporate sector and the household sector. This means that banks' credit activity is no longer constrained by the availability of loanable funds. Banks now create credit endogenously ahead of saving. In other words, in the early years of transition the banking sector's ability to create credit ahead of saving will be limited.

To summarise, the collapse of confidence in the banking sector during transition meant that the banking sector had to start from stage one. Another particularity is that due to the cash-based nature of the household sector transactions and deposit-based nature of the enterprise sector transactions, corporate sector banking reaches stage two earlier, while the retail banking sector development is going to be gradual and slow. Moreover, depending upon initial conditions, pace, consistency and success in undertaking institutional reforms, different transition economies can facilitate development of the banking sector and reach phase five at different times.

Below in Section 6.3 we will analyse some macroeconomic data in search of some empirical support for the arguments we put forward in this section.

6.3 Some observations on the importance of banking and reliance on cash across different countries

To see the differences of development in banking habits across individual transition countries we can use several basic macro indicators. Before we start this exercise, however, it is important to note that the degree of acceptability of bank deposits as money, which is a distinctive feature of 'stage two', differs in advanced countries too.

The ratio of currency to demand deposits, which is a basic measure that indicates economy's reliance on cash, shows that banking sector development is not the same across the individual members of the European Union (EU). According to Chick and Dow (1996 and 1997), in countries like the UK and Denmark, agents heavily rely on bank liabilities to carry out transactions; whereas in countries like Greece, Portugal, Spain, Germany and Ireland cash-based transactions are still high. According to the same source, in 1992 the ratio of currency to demand deposits was only 7.5 percent in the UK, 9.7 percent in Denmark, while it was 20.6 percent in Portugal, 30.4 percent in Germany, 35.5 percent in Spain, 42.1 percent in Ireland, and 83.5 percent in Greece. While wider use of cash in the southern countries of the EU might be explained by their comparatively large informal economies, the German case is explained by the dual nature of the banking sector in which industry and commerce is served by the universal banks, and the public by the savings and cooperative banks. Since savings and cooperative banks mainly focus on attracting savings, a large percentage of household transactions are carried out in cash (*ibid.*).

Table 6.3.1, in the next page, updates the above-mentioned information on advanced countries and attempts to compare reliance on cash and the importance of banking in these countries to those in transition countries. There are three sub-groups in the table: five transition countries from the CIS, three advanced transition countries, which are already members of the EU, from Eastern Europe, and seven countries from the EU to represent advanced market economies. Countries are placed in rank order, with respect to the degree of reliance on cash, within their respective sub-groups.

Table 6.3.1 Reliance on cash and importance of banking in selected countries, 2003

	Currency to demand deposits (1)	Currency to total deposits (2)	Demand deposits to total deposits (3)	Total deposits to GDP (4)
Ukraine	166.0	54.0	33.0	23.0
Uzbekistan*	151.0	90.0	60.0	7.0
Russia	114.0	41.0	36.0	22.0
Kazakhstan	100.0	34.0	34.0	16.0
Belarus	71.0	24.0	33.0	11.0
Poland	59.0	15.0	30.0	37.0
Hungary	59.0	18.0	30.0	41.0
Czech R	30.0	14.0	46.0	63.0
Greece**	72.0	13.0	18.0	80.0
Spain	24.0	7.0	28.0	87.0
Portugal	20.0	8.0	38.0	100.0
Germany	20.0	6.0	30.0	98.0
Sweden	14.0	9.0	62.0	45.0
Denmark	10.0	6.0	61.0	50.0
UK***	8.0	2.0	39.0	115.0

Notes: *1999.

**2000.

***Data for demand deposits could be retrieved from the IFS.

Columns 1 and 3 are from (Chick and Dow, 1997: 257).

Source: IFS (IMF). Except Uzbekistan (ADB).

While Column 1 shows the use of bank deposits as a means of payment along with currency, Column 2 indicates acceptability of bank deposits as a means of payment *and* saving. In both cases, the higher is the ratio, the heavier is reliance on cash. Column 3 shows the ratio of demand deposits to total deposits. In advanced countries this ratio is expected to be higher because of the wide use of bank liabilities as money.

As far as transition economies are concerned, however, Column 3 should be interpreted cautiously. As was discussed earlier, due to hyperinflation and the collapse of confidence in the banking sector, the size of both demand deposits and saving deposits would shrink initially. The important point, however, is that the size of saving deposits would decrease more relative to that of demand deposits. Firstly, it is because saving deposits, which almost exclusively belonged to the household sector,

are indicators of trust, and thus with the collapse of trust in banks these deposits would reduce in size considerably. And secondly, as long as the banking sector performed the function of a payment clearing centre for the enterprise sector, enterprises would still be better off in using these services; carrying out large-value transactions in currency would be ineffective and costly for them. This means that although loss of trust in banks would likely reduce the size of demand deposits, the reduction would be smaller compared to that of time and saving deposits. Column 4 shows the ratio of total deposits to GDP. In general terms this indicator measures the importance of banking sector as an intermediary.

As the table shows, with the exception of Greece in our sample, in advanced market economies reliance on cash-based transactions is low (Column 1). Another particularity of the development in advanced countries is that the northern countries of the EU rely less on cash-based transactions than their southern counterparts. Nonetheless, the general tendency is that the importance of banking in these countries is extremely high, which is evidenced by the low ratio of currency to total deposits (less than 10 percent for all of them, except for Greece) and the high ratio of total deposits to GDP (Columns 2 and 4 respectively).

As to the advanced group of transition countries, the Czech Republic, Hungary and Poland seem to have made better progress compared to the CIS countries. Although reliance on cash is still high in these countries (Column 1), importance of banking has surely increased (Columns 2, 3 and 4). The Czech Republic seems to have made particularly well: the ratio of currency to demand deposits is 30 percent – the lowest amongst the transition economies; and the ratio of bank liabilities to GDP is about 63 percent – the highest amongst the transition economies.

The faster progress of banking development in these countries can be explained by the fact that they had fewer years of experience with central planning and thus had

less centralised economies and a less distorted financial sector. They started transition earlier and were more consistent reformists. And more importantly, they were closer to dynamically functioning market economies. It is important to note that these relative advantages made the Central and Eastern European countries very attractive for foreign bank entry, *which in the end made institutional spillover easier and quicker.*

Table 6.3.2, below, shows the share of foreign capital in total bank capital in the CEEBS. As we can see from the table, foreign banks play an important role in these countries. The share of foreign bank capital in total bank capital exceeded more than 80 percent in the Czech Republic, Estonia, Hungary, Lithuania, and Slovakia. This figure exceeds well over 60 percent in countries like Bulgaria, Poland, and Romania. It has been argued that foreign banks brought market expertise and efficient corporate governance to these markets (Bonin, et. al., 2005). Entry of foreign banks increased competition, which made domestic banks cut costs and increase efficiency (Claessens et. al., 2001). Moreover, local banks also benefited from positive externalities such as technological and financial innovative spillovers (Havrylchuk and Jurzyk, 2005).

Table 6.3.2 The share of foreign capital in total banking capital in the CEEBS

	1995	1996	1997	1998	1999	2000	2001	2002	2003
Bulgaria	Na	Na	34.8	43.4	46.6	68.1	66.7	66.6	76.3
Czech Republic	22.8	24.1	29.5	38.7	48.4	54.5	70.0	81.9	84.9
Estonia	29.2	37.2	Na	55.5	62.2	83.9	85.7	86.7	85.7
Hungary	35.6	45.9	61.2	60.4	62.1	64.0	61.0	58.6	81.9
Latvia	27.7	55.6	67.7	66.2	69.8	69.8	67.7	54.3	53.9
Lithuania	16.0	25.0	32.0	41.3	45.3	59.9	82.3	88.0	88.0
Poland	19.2	29.8	41.5	49.7	56.0	56.6	61.3	63.2	63.3
Romania	14.1	12.8	24.5	35.8	41.8	53.8	60.6	64.9	66.3
Slovakia	Na	39.6	39.2	37.3	24.6	28.1	60.0	85.3	Na
Slovenia	9.6	9.2	11.9	11.1	11.3	12.0	16.0	32.5	32.5

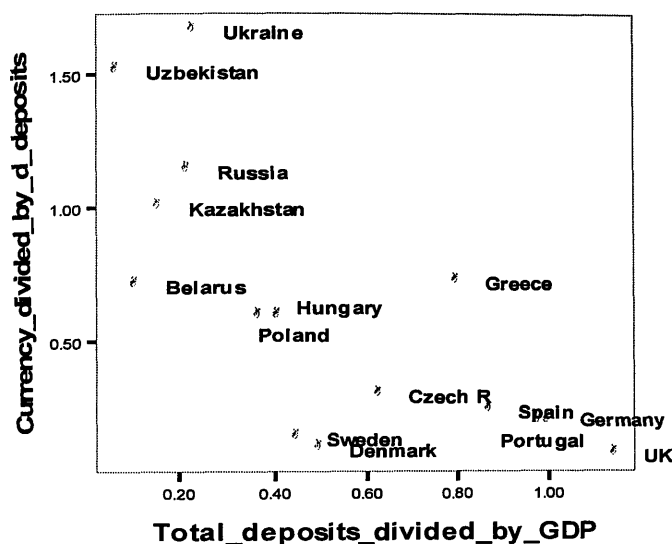
Source: Havrylchuk and Jurzyk (2005)

Now, as far as the CIS countries are concerned they have not yet completely recovered from the shock of the phase two. They are still heavily cash-based economies. For a quick comparison, if the ratio of currency to demand deposits is only about 8 percent in the UK, it is about 166 percent in Ukraine, 151 percent in Uzbekistan, 114 percent in Russia, and 100 percent in Kazakhstan. The ratio of currency to total deposits is also comparatively low. This shows that the CIS countries are still cash-based economies.

Uzbekistan's indicator of reliance on cash is the second highest after that of Ukraine (Column 1). In fact, Uzbekistan's case is unique because as indicated by the high ratio of both currency to total deposits, 90 percent, and total deposits to GDP, 7.0 percent, the banking sector has not yet regained the general public's confidence. As was noted earlier, the higher ratio of demand deposits to total deposits, which is 60 percent in this case, does not mean that bank liabilities are a widely accepted means of payment; rather it indicates the failure of the banking sector to regain the general public's confidence. As a result, the liabilities of banks are not yet accepted as a fully-trusted means of saving by the household sector.

Figure 6.3.1, in the next page, gives pictorial analysis and does a better job in comparing reliance on cash in transition and advanced countries. The vertical axis represents the ratio of currency to *demand* deposits and the horizontal axis represents the ratio of total deposits to GDP. Based on these measures, we would expect that countries with high reliance on cash and lower importance of banking will be placed on the top left corner, while countries with lower reliance on cash and higher importance of banking will be placed on the bottom right corner. Now, it is not surprising to see most of the transition countries on the top left corner of the figure.

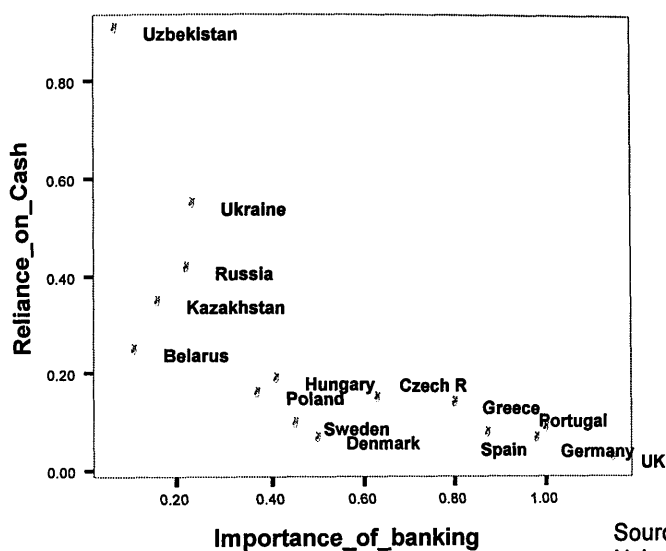
Figure 6.3.1 Reliance on cash in selected countries, 2003.



Source: IFS (IMF), except for Uzbekistan (ADB).

Figure 6.3.2, in the next page, compares another basic measure of bank development. This time the vertical axis represents the ratio of currency to *total* deposits, while the horizontal axis represents the ratio of total deposits to GDP. While the former indicator shows reliance on cash, the latter measures popularity of bank liabilities as a means of saving and a means of exchange among the general public. As shown in the last two figures, according to these basic indicators Uzbekistan and Ukraine still rely most heavily on cash. In these countries, the liabilities of banks are of least importance for agents. Although in general terms, transition economies are still far behind, the three Eastern European countries in our sample have made much better progress compared to their CIS counterparts.

Figure 6.3.2 Reliance on cash in selected countries, 2003.

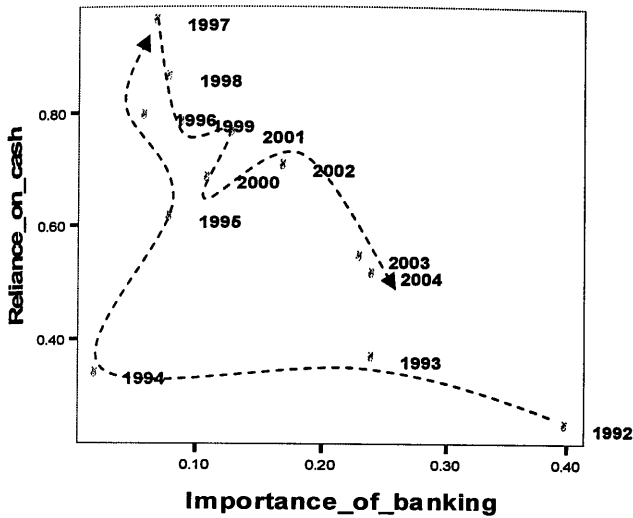


Source: IFS (IMF), except for Uzbekistan (ADB).

Now, since Uzbekistan and Ukraine show the worst two cases in our sample, we looked at the dynamics of banking development in these two countries.⁵ A more attentive look at the dynamics of banking development in Ukraine shows that in fact the country has overcome the peak of reliance on cash money. This is illustrated in Figure 6.3.3 in the next page. (The horizontal and vertical axes of the figure represent the same indicators as in Figure 6.3.2.) In Ukraine, from 1992 to 1997 the ratio of total bank deposits to GDP decreased and the country's reliance on cash dramatically increased. Since 1998 the economy's reliance on cash has slowly but gradually decreased, while the importance of banking has grown.

⁵For a discussion of the similar experience of different transition countries please see Peachey and Roe (2001).

Figure 6.3.3 Ukraine: Dynamics of reliance on cash, 1992-2003.



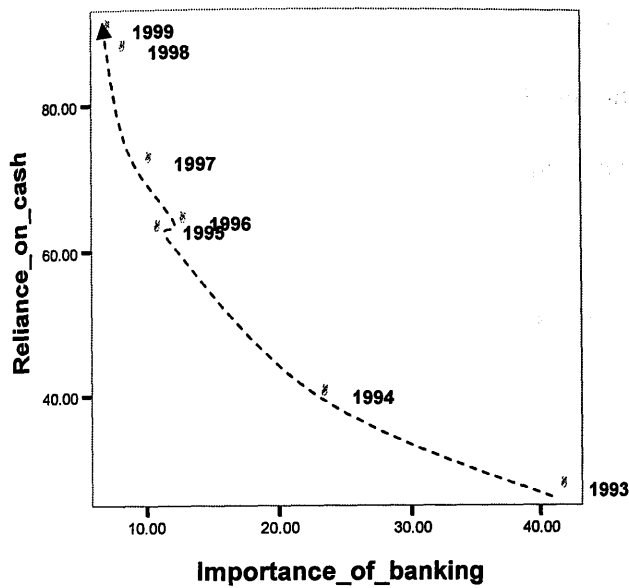
Source: IFS (IMF).

As Figure 6.3.4 in the next page shows, Uzbekistan's case is quite striking: the Uzbek economy is still heavily reliant on cash money. (Again, the horizontal and vertical axes represent the same indicators as in Figure 6.3.2.) Actually, the dynamics of monetization, from 1993 to 1999, shows that reliance on cash money started increasing sharply after the introduction of the national currency in 1994. In 1999 the ratio of cash money to deposits reached its peak and was about 90 percent⁶.

Although data were not available to analyse the subsequent years, the fact that the ratio of broad money to GDP was higher in 1999 than in any subsequent year up to 2003 suggests that the public's confidence in the banking sector is still weak and therefore the economy remains heavily reliant on cash money.

⁶Due to the limited availability of data, we used the 1999 data for Uzbekistan. Although the data are relatively old, the slow and almost non-existent reforms in Uzbekistan make us believe that the picture has not dramatically changed since then. This belief is also supported by the low level of the ratio of broad money to GDP for the subsequent years leading up to 2003.

Figure 6.3.4 Uzbekistan: Dynamics of reliance on cash, 1993-1999.



Source: ADB

Although inflation has been more or less controlled in the country since 1996 (less than 50 percent per year, which is moderate by the standards of transition economies), the rate of interest offered on bank deposits remained negative until 2002 (IMF, 2000b, and EBRD, 2004). Despite the significant drop in the rate of inflation in 2003 (less than ten percent per year) and the adoption of the law on household deposit insurance in 2002, the rise in household confidence has been slow and insignificant. The ratio of household deposits to GDP rose from 1.5 percent in 2000 to 2.5 percent in 2003. Similarly, in 2002 and 2003 the ratio of broad money to GDP was at its historic low, 11 percent and 12 percent respectively.

The fact that most transition countries have experienced a similar path of development shows that the collapse of confidence in the banking sector during transition meant that the banking sector had to start from stage one.

As far as our case study is concerned, again, the basic Uzbek data show that the pattern of development of money and banking in the country is different from that of other transition economies. Although this underdevelopment might be partially

explained by macroeconomic and other structural irregularities already discussed in the previous chapter, the detailed analysis of the issue will be carried out in the next chapter. Particular attention will be given to the institution-building process, current developments, and systems-specific micro and macro issues in more detail.

6.4 Rise of non-monetary transactions and development of a monetary economy

In the previous sections we discussed the evolution of money and banking during transition by emphasising the gradual character of the process. We suggested that, depending upon the initial conditions, pace and consistency of reforms, banking sector evolution could differ across individual countries. In our discussion, for the purpose of simplicity, we assumed that after the establishment of the two-tier banking sector, the central bank would work under market principles and act as a *lender of last resort*, which then would necessitate natural evolution of the banking sector as was speculated above. However, the evidence suggests that at least until the mid 1990s political concern about output loss and fall in employment induced many transition countries to make so-called ‘centralised credits’ available to state-owned and other enterprises in the priority sectors. Creation of credit in this way meant that the central bank was working more or less as a *lender of first resort* (Perotti, 1994: 73 and Fan and Schaffer, 1994: 177).

The implication of this evidence is that, although acceptability of bank liabilities would decrease and the banking sector’s depositary base would shrink in phase one, the banking sector’s credit activity would not decrease as much as we would predict. Centralised credits would be created somewhat endogenously to finance the politically ‘favoured’ priority sectors. Meanwhile, ‘the other’ sectors would face the market type of credit constraints. Weak bank intermediation in the early years of

transition would mean that enterprises in the ‘other’ sectors of the economy most likely would face a credit crunch. Since the response of the latter sectors to this situation is of paramount importance in understanding the development of a monetary economy, we will discuss this issue in more detail.

As was discussed in Chapter 4, the policy of assessing creditworthiness of borrowers was not a common practice in soviet banking under central planning. The imposition of hard budget constraints would necessitate the development of these banking skills. However, as was argued extensively in the previous sections, the banking sector might not be able to allocate credit resources efficiently due to the lack of trust, as well as market expertise and knowledge. In other words, the competitive banking system does not evolve spontaneously.

This means that the complete reliance of investment financing upon banks, which are still in their early stage of development, could have some serious repercussions. The result could be either a credit contraction due to cautious approach of credit rationing by banks, or a worsening of overall balance sheets of banks due to the growth of the share of non-performing loans in their credit portfolio, which would at the end indicate failure of banks to harden financial conditions sufficiently. As a result, in both cases financial crisis would hamper real economic activity either in the short run or in the longer run.

Indeed, the inability of the banking sector to fill the gap left after the elimination of the direct credit policy of the monobank system, combined with the failure to build a robust monetary environment, gave rise to the emergence of a phenomenon known as barterisation of transactions in many transition economies. It is important to note that the use of the term ‘barter’ is inaccurate in this context because it does not imply direct exchange of goods for goods; rather it means the use of non-monetary debt instruments or money surrogates such as *veksels* (bills of exchange issued by

corporations, banks, or local and regional governments) and off-sets (mutual write-off of debt) to effect transactions. (For details please see Commander et al., 2000, Ledeneva and Seabright, 2000, Commander and Mummsen, 2000, Carlin et al, 2000, Yakovlev, 2000, Kim et al., 2001.)

Although barter was observed in most of the transition countries, it was especially severe in Russia and Ukraine. For instance, in Russia barter transactions as a share of total industrial transactions increased from 9% in 1993 to 42% in 1997 (Kim et al.: 2001). In 1998 monetary surrogates comprised over 50% of total industrial transactions (Litwack and Sutherland, 2000: 3).

According to the survey data provided by the Russian Economic Barometer, enterprise managers in Russia stated that one of the main reasons for using barter transactions was a shortage of working capital. From 1994 to 1998 number of respondents stating this to be the main reason increased from 47% to 61% (Aukutsionek, 1998: 181). Moreover, managers of enterprises noted that both the liquidity of their business partners and their own liquidity were amongst the most important reasons for using non-monetary transactions (Ivanenko and Mikheyev, 2002: 409). The main reason for a liquidity shortage then was argued to be the inability of banks to satisfy the credit demand of enterprises. In other words, banks failed to fill the gap left by the monobank system. This evidence is consistent with our analysis.

The result is not surprising because under central planning the enterprise sector was designed to be heavily dependent upon bank credit so that the monobank sector could monitor and control the enterprise sector's economic activity. Now, the time-consuming character of the evolution of money and banking meant that the newly established two-tier banking sector was too immature and too weak to satisfy the enterprise sector's demand for credit after the immediate dismantling of the previous

monobank system.

As a result, faced with credit shortage firms resorted to trade credit. Not surprisingly, in Russia aggregate overdue payables or arrears, which increased from 15% of GDP in 1995 to 60% GDP in 1998, were four times larger than bank credit to firms in the mid-1998 (Glaz'ev, 1998, and Commander et al., 2000).

In short, the literature on barter suggests three main explanations for the occurrence of this phenomenon. Namely, liquidity squeeze or credit shortage, decentralisation and network effects, and tax incentives. (See Ivanenko and Mikheyev 2002, Glaz'ev 1998, Commander et. al. 2000, and Seabright, 2000, who edited and compiled most influential works in this topic.)

Yakovlev (2000) rightly argued that the major reason for the emergence of barter is the lack of a competitive monetary system. According to him avoiding tax has been the outcome rather than the cause of the initial barterisation. Initially, enterprises used to have tax payments as their first priority. 'Companies were ready to increase their payables to suppliers and wage arrears in order to pay taxes on time' (ibid.: 285). However, non-payment of taxes became inevitable when total money revenues of enterprises were less than their tax liabilities. Hence when non-paid tax arrears increased substantially, enterprises changed their priorities. 'Tax payments became the last priority, even for companies that could have paid taxes, as managers in healthy companies saw no reason to pay taxes if others were not doing so' (ibid.: 286).

Interestingly enough, although barter emerged partly as a response to the imposition of hard budget constraints and the failure of the banking sector to meet the corporate sector's demand for credit, tolerance of late tax payments and non-monetary payments in lieu of taxes to the tax authorities actually implied implicit subsidies and credit channels to firms by the authorities (Commander et al., 2000). This in turn

means that the authorities were in fact creating credit endogenously, albeit implicitly. That means whether in the form of decentralised credits or in the form of implicit subsidies the authorities were creating conditions to support production.

What is more interesting, however, is that the possible reaction of old institutions to the imposition of changes had been discussed in the Post Keynesian literature long before the FSU seriously started reforming its economy. Unfortunately, this analysis was not given worthy attention at the time. Gedeon (1986) investigated the issue of money endogeneity in former Yugoslavia, the most decentralised of all CPEs. In Yugoslavia a two-tier banking system was established in the 1980s and there was an attempt to impose harder budget constraints on enterprises in the hope of increasing their overall efficiency. The intention was to extend credit on hard conditions on the basis of commercial viability of investment projects.

However, in response to the policy of tighter credit, *enterprises started using non-monetary surrogates such as bills of exchange and promissory notes to continue the process of production*. In addition, they behaved in a manner, which suggests that they anticipated what the ultimate response of the authorities would be; payment delays and even non-payments for the goods and services were more frequently observed during this time. Consequently, inter-enterprise credit in the form of arrears increased substantially within a short period of time.

In normal circumstances, the market solution to this problem would be to announce loss-making and debtor enterprises bankrupt. However, in the Yugoslav case enterprises belonged to the state. Moreover, since the state bore the sole responsibility to keep unemployment at low levels, shutting down inefficient enterprises was hardly an ideal and acceptable solution. So, in order to solve the problem the government required the banking system to monetise inter-enterprise debt, thus ultimately creating credit endogenously to maintain production and

employment. Because banks initially did not take part in the process of credit creation, Gedeon (ibid.) calls this endogeneity non-bank credit endogeneity. In fact, because of the political nature of this endogeneity, this can be referred to as a political credit endogeneity.

Another application of endogenous credit creation, now in the context of transition economies, was carried out in mid 1990s. Norcic et al (1996) considered the case of Slovenia. They investigated the case by dividing the economy into two separate sectors: healthy and unhealthy. Healthy enterprises were those which operated under market principles without any direct recourse to subsidies and assistance from the government, whereas unhealthy enterprises were inefficient companies, maintenance of whose operation necessitated subsidies and soft credits. Although the government planned to shut down these companies in the long run, in the short run it had to support them to prevent loss of output and aggravation of unemployment.

They argued that in the transition economy of Slovenia there was a dual money endogeneity. In the healthy sector of the economy credit is created endogenously as in market economies - that is structural credit endogeneity is in place. In the unhealthy sector of the economy, political motives dominate the process of credit creation. Therefore, the second type of endogeneity is political endogeneity. (In another similar work Petrick (1998) found support for that this type of dual money endogeneity in Hungary and the Czech Republic.)

In a nutshell, the experience of most transition countries shows that when well-defined outside money is in scarce supply, and when the financial sector fails to develop sufficiently to satisfy the credit demands of enterprises, the enterprise sector itself is capable of developing its own means of payment no matter how ineffective and unstable it might be. In fact, these instruments are private or inside money

because they represent liabilities of the private sector (Ould-Ahmed, 2003). The use of debt instruments in turn is of paramount importance for the development of a monetary economy. As Keynes (1971) noted a monetary economy evolves from a barter economy when people start using money as a unit of account in price lists and debt contracts. As was mentioned in the earlier chapters already, Davidson (1978 and 1994), Wray (1991), and Heinsohn and Steiger (on numerous occasions) clarified even further why development of debt instruments was vital in a monetary production economy, in which the future was seen as uncertain and production took time.

In this sense, we can look at the process of barterisation of transactions in transition economies as a natural response of the corporate sector to the inability of the banking sector to create credit. On the other hand, since these trade instruments are debt instruments developed to maintain production in a completely decentralised environment, the process can be seen as a development of a monetary economy in its rudimentary form.

Finally, in a way the rise of non-monetary transactions explains endogenous credit creation too. Endogenous credit creation is present in two ways. First, trying to commit themselves to the tight monetary policy argument, in fact the authorities are providing implicit credit to enterprises in the form of late payments of taxes and non-monetary payments in lieu of taxes. Secondly, enterprises are creating credit endogenously in response to their trade needs. Hence we are observing the dual nature of endogenous credit creation. The first part can be interpreted as political endogeneity, and the second part non-bank structural endogeneity in its rudimentary form.

As far as the experience of Uzbekistan is concerned, however, surprisingly, barterisation of transactions has not become a big issue in the country during transition. In fact, an estimate of barter in industrial sales has decreased from 23.2% in

1996 to 12.5% in 1999 (Marin *et al*, 2000: 208). Our initial comparison of the general pattern of economic development in Uzbekistan shows that in almost every aspect of financial development the country's experience is different from that of other transition economies.

These irregularities can be explained by macroeconomic and microeconomic factors. We have already touched upon some macro-issues in Chapter 5 and suggested that maintenance of old-style resource allocation methods and lack of consistent reforms in the financial sector most likely would affect developments in the financial sphere. Finally, in the next chapter we will give a detailed explanation of all of these issues. We will discuss, for instance, why barter did not become a big issue as it has been everywhere else, why the Uzbek economy is still highly reliant on cash money, and which phase of the proposed banking development framework the country's banking sector development would fit.

6.5 Conclusion

As was discussed already in the previous chapter in detail, fundamental changes to the previously centrally planned economies such as the abolition of administrative central planning, liberalisation of prices, encouragement of incentive-based corporate management through privatisation of SOEs and new entry, and hardening of soft budget constraints were a necessary but not sufficient condition to guarantee smooth and successful transition to a monetary production economy. The success of all these reforms and the process of transition as a whole would indeed depend upon the speed of institutional developments.

Building upon the theory of the stage of banking development in market economies, in this chapter we argued that as far as financial sector development is

concerned the process of evolution can be slow and time-consuming. Underestimation of this issue, which comes from not duly recognising the role and importance of institutions in the economic process, was tantamount to a wrong assumption that the banking sector in its infant stage of development was capable of accomplishing the tasks of a mature banking sector which has already become a vital part of the entire financial superstructure and thus was no longer constrained by the availability of loanable funds.

Our analysis shows that the banking sector of transition economies had to go through at least five different phases of development to reach the necessary maturity, and to gain full strength to create credit ahead of saving. It is true that in some respect, by copying the blueprint of banking development from market economies, transition banks could start with stage four of banking development, i.e. by design the banking sector could be equipped with fractional reserve banking, the interbank market for liquid facilities, the lender of last resource facility, and liabilities of banks being accepted as payment instruments. However, as we have shown, in practical terms banks could not use the potential of the stage four to full effect without the necessary build-up of confidence in bank liabilities and gradual development of the banking habit of the household sector.

In the early years of transition banks are weak and underdeveloped, and therefore their credit activity depends upon the inflow of new deposits. This task is not easy under the conditions of hyperinflation and the resulting monetary instability. However, once inflation is controlled, monetary stability achieved, and payments system modernised, banking habits develop and bank liabilities start being used more and more as money. Only then will banks be able to create credit ahead of saving.

The time-consuming nature of the institutional development shows the reason why the newly created two-tier banking sector could not fill the gap left by the entire

apparatus of the previous monobank system. As a result, this created a credit shortage and negatively affected enterprises whose activities were designed to be heavily reliant upon bank credit under central planning.

However, faced with a liquidity squeeze, the enterprise sector, which now faced hard budget constraints and functioned under a market-based incentive system, created their own inside money endogenously. They resorted to trade credit and started using sundry debt instruments and monetary surrogates to effect payments. Although this phenomenon is known as barterisation of transactions in the mainstream literature, our analysis shows that this phenomenon could actually be interpreted as a development of a monetary economy. This suggestion is supported by the increased role of money in the economic process. In response to the failure of the banking sector to satisfy demand for credit, the enterprise sector created sundry debt instruments to carry out production.

As to the issue of the development of money and banking in Uzbekistan, our preliminary analysis shows that the Uzbek economy remains heavily reliant on cash money and that the importance of banking is still weak. As was shown in Chapter 5, the Uzbek authorities took a cautious approach to transition and undertook reforms gradually. This way they were able to prevent output fall, and maintain moderate economic growth. However, since this achievement was supported by the partial maintenance of the old-style resource allocation mechanism, reforms have always been partial. As a result, the role and importance of the financial institutions were undermined and the development of money, banks, and other financial institutions was inhibited. Hence, finally in the next chapter, we will carry out a detailed analysis of the evolution of money and banks in Uzbekistan and explain the particular pattern of evolution of these institutions in the country during transition.

7. The Evolution of Money and Banks in Uzbekistan during Transition

7.1 Introduction

In the previous chapter we argued that the evolution of money and banking during transition would be gradual and time consuming. The functions performed by these institutions under central planning were different than those accomplished by market institutions. The historical distinction between both cash money and non-cash money and corporate and retail banking, and hyperinflation in the early years of transition, implied that it would take time for banks to gain market experience as well as the trust of the general public. Our analysis showed that in order to be able to create credit ahead of saving, which is a hallmark of Stage Two, transition banks had to undergo at least five different phases of development and reconstruction of their own.

Now, finally in this chapter we will analyse the evolution of money and banks in Uzbekistan. Although the generalised pattern of evolution of these institutions developed in the previous chapter will be used as a benchmark in our analysis, the ultimate goal of the chapter will be far deeper than simply comparing the Uzbek banking sector's development to any benchmark. In this sense, the chapter attempts not only to assess the current state of banking sector development, but also tries to identify major structural and system-specific problems that inhibit financial development in the country. In this way the chapter complements not only arguments developed in Chapter 6, but also those in Chapter 5.

As we argued in Chapter 5, because of the immediate availability of financing from different sources for investment projects, the government was not eager to hasten true market-oriented reforms in the banking sector. The possibility of

reallocating resources from the agricultural and energy sectors through price distortions and other administrative methods, as well as the availability of foreign credits from international financial institutions and multinational banks, have made the role of the banking sector less important in terms of acting as an intermediary between domestic lenders and borrowers. Maintenance of the semi-centralised way of resource allocation undermined the role and importance of money and banks in the economic process and created some system-specific problems not observed in other transition countries. Hence, the role and importance of these and other relevant issues in explaining the banking sector development will be the main focus of this chapter.

Along with the publicly available macro data, and micro data from the commercial banks, we will use valuable first-hand information generated during our field trip to Uzbekistan at the end of 2004. The specificity of all the data used in the study will be briefly described in Section 7.2. The data collected through survey questionnaires and interviews with practitioner bankers will be extensively used throughout this chapter.

Next, in Section 7.3, we will present background information on the process of institution building in the banking sector during transition. We will make a general investigation into the nature of developments, including the technical development of the payments system, the state of concentration, and the ownership structure, in the banking sector. In this sense this section will be an important build-up for our further discussions.

In Section 7.4 we will look at financial deepening and bank intermediation. Initially, we will look at the issue by using conventional measures of financial deepening. Next, using the case study of the largest bank, the National Bank of Uzbekistan, we will try to find out whether banks are successful in attracting savings

from the general public, and whether banks' credit activity is affected by the economic priorities set by the government.

In Section 7.5, system-specific problems of the banking sector will be analysed. Discussing one of the biggest irregularities, i.e. the failure of achieving internal convertibility between cash money and non-cash money and resulting relative illiquidity of bank deposits or non-cash money, some weaknesses of conventional measures of financial intermediation will be noted. Moreover, issues such as natural evolution of banking habits, soft budget constrains phenomenon, wage arrears, non-monetary transactions, and the cash squeeze policy will be discussed in detail.

Section 7.6 concludes the chapter. We hope that by the end of this chapter we will be able to analyse successfully the current state of development in the banking sector of Uzbekistan.

7.2 Specificity of the data used in the study

Three main sets of different data will be used in the study. The first set of data relates to macro data on banking and financial sector development. This information is obtained from the Central Bank of Uzbekistan (CBU), and various international financial institutions such as the IMF, the World Bank, the Asian Development Bank, and the EBRD. The second set of data comes from consolidated balance sheets and other publicly available financial statements of commercial banks in Uzbekistan. Since these two sets of data come in standardised form, we use their official definition.

The third and the most important set of data was collected through interviews and questionnaire surveys during a field trip to Uzbekistan from September 2004 to

December 2004. The important particularity of the data is that they represent the viewpoint of practitioner bankers. The data were collected through (i) face-to-face interviews with twenty-one senior bank officers from various banks and three independent researchers, and (ii) a survey questionnaire among ninety practitioner bankers. Further specificity and particularity of interviews and questionnaires are discussed below in more detail.

Interviews

The method and design of the organisation and sampling of the interviews were based on 'networking' as discussed in Bewley (1995). The essence of this method is that initial interviews are conducted through relatives, friends, and acquaintances. Respondents then can also help to arrange further interviews with other people. The organisation of interviews in this way enables an interviewer to work with respondents sampled through the network of connections. The main strength of this method is that, because the interviewer is not a complete stranger or an outsider to the network, respondents will be less suspicious and anxious and they might reveal more sensitive and personalised information than might be obtained through conventional random sampling. Using this method Bewley (1995 and 1999) was able to uncover empirically the circumstances that gave rise to the phenomenon of wage rigidity in a case study of the American labour market.

Given the strong and persisting soviet-style information-censoring environment in Uzbekistan, the method of networking was of particular importance for our case study. As in the old days most data concerning economic activity are still considered to be of importance to national security and are not made publicly available in

Uzbekistan.¹ As a result of this policy, respondents want to be on the ‘politically safe’ side and do not want to reveal information to outsiders and people they do not know closely.

Out of the total of twenty-one interviews with senior bank officers, fifteen were arranged through personal contacts and another nine were arranged with the help of intermediaries.² Interviewees came from four geographical regions of the country: the city of Tashkent – eleven interviews, the Qashqadaryo region – five interviews, the Tashkent region – two interviews, and the Samarqand region – three interviews. Since all of the participants occupied senior positions in respective banks and thus were experts in their field, we believe that they gave a fairly representative view on issues that have been raised. More importantly, since participants considered us as a trusted insider to the ‘network’, they were able to express their views openly. As a result, much more transparent and genuine information was obtained. The interviews were conducted strictly under conditions of anonymity and therefore neither the names of interviewees nor the names of banks they are affiliated with are revealed in the study.

It is important to note that very valuable and detailed first-hand information, which reflects current problems and system-specific issues, was obtained during these interviews. In order not to sacrifice the quality and depth of the data, they are presented in Appendices 7C, 7D, and 7E of this chapter respectively. In short, while

¹ On this we would like to quote from the World Bank: ‘While there are legitimate national security concerns that lead all countries to restrict access to some forms of information, *Uzbekistan defines an unusually broad range of information on economic and social development – with no clear threat to national security – as secret. Data in such areas as macroeconomic performance, fiscal policy, banking and monetary statistics, foreign trade, debt, and poverty levels – publicly available in most countries of the world – continue to be subject to secrecy provisions or limited circulation in Uzbekistan*’ (World Bank, 2003: 18. Emphasis added).

² The author graduated from the Faculty of Credit and Economy of the Tashkent Institute of Finance, which primarily prepares specialists for the banking sector. Moreover, he worked for more than two years in one of the largest banks in the country. During this time he also worked as a part-time lecturer in the Department of Money and Banking of the Tashkent Institute of Finance. This played a very important role in organising these interviews.

discussing the results and analysis of these interviews in this chapter, reference will be made to appropriate appendices whenever necessary.

The Survey

Although the survey methodology does not differ from the conventional one in terms of sampling and representativeness, it does have some particularities, which need to be mentioned. The survey respondents were bankers who were enrolled in a specialised part-time executive programme organised by one of the local universities.

Bank employees are required to have an academic degree or other equivalent training in banking and finance. Those bankers who do not have degrees in banking and finance join part-time executive degree programmes run by universities specialising in banking and finance. This type of programme is also run by the Tashkent Institute of Finance, which is one of the most important and leading institutions that prepares specialists in this field. Practitioner bankers enrolled in the part-time executive degree programme of this institution participated in our survey.³

The total of 125 questionnaires were distributed among the survey participants. For one reason or another, some chose not to collaborate and 30 questionnaires were returned unanswered or answered but unsuitable for use. The particularly high response rate (76 percent) is explained by the fact that the timing of the survey was scheduled in advance to coincide with the usual five-week study period of bankers in the autumn semester 2004. We met with the respondents and asked for their collaboration in face-to-face conversation; individuals who agreed to cooperate got

³ The excellent cooperation and support of the former colleagues from the Department of Money and Banking of the Tashkent Institute of Finance in conducting the survey is duly recognised and highly appreciated. Special thanks go to Professor Abdullaeva, the Head of Money and Banking Department, for her invaluable assistance in organising meetings with several groups of students enrolled in specialised degree programmes.

together in one of the auditoriums of the institute to take part in the event. Three different classes of students - fourth, third, and second-year students enrolled in the part-time executive programme - participated in the survey. Before handing out the questionnaires, respondents were given an explanation of the goal of the research and the content of the questionnaire, as well as generalised instructions on how to complete them.

By and large, the sample was fairly representative. Almost half of the participants came from the capital city and the rest came from different regions of the country. In terms of banking experience, 22.5 percent of the respondents had more than 8 years of experience, 38.2 percent of them had between 4-7 years of experience, about 34.8 percent of them had between 2-3 years of experience, and only 4.5 percent of the respondents had less than 2 years of banking experience. Although the results of the questionnaire will be used extensively in this chapter, their full analysis and complete interpretation can be found in Appendix 7B. The questionnaire format is given in Appendix 7F.

Hence, we will use all three sets of data extensively in the study to support our arguments. While relevant figures and tables with appropriate referencing may appear in the main body of the text, some of the important but rather lengthy information obtained through interviews and questionnaires will be given in separate appendices.

7.3 Initial Steps to Institution Building. Background Analysis

Unlike its many European counterparts in transition, Uzbekistan did not have a proper banking system prior to the adoption of central planning.⁴ As an integral part of the centrally planned economy of the FSU, it inherited the kind of monetary and banking system which was described in Chapter 4. The functional structure of this banking system was considerably reorganised during the years of *perestroika*, which in the end turned out to be the fourth and last stage of banking reform/development under central planning. The reform was a part of the comprehensive economic reforms of the period, which envisaged the gradual imposition of harder budget constraints on enterprises by reducing the availability of direct long-term financing from the state budget.

The reform was unique compared to the previous ones because it formally replaced the *monobank* system with the market style two-tier banking system. The *Gosbank* was assigned the tasks of safeguarding the payment system, providing liquidity to the banking sector and monitoring the activities of the specialised commercial banks; no longer was it allowed to grant credits directly to the enterprise sector. Now only specialised banks, the number of which was increased by another two, *Agroprombank* and *Zhilsotsbank*, were responsible for long-term as well as short-term financing of enterprise activities. Thus after the reform the total number of

⁴ Uzbekistan's experience with market-type banking was very short-lived in history. In fact the business of banking was imported from abroad. Strong religious opposition against banking business on moral grounds (Islam denounces usury) and the backwardness of the economy (a feudalistic mode of production) might have prevented the natural evolution of banking in this region. The first bank, the branch of the *Gosbank*, was established in the country only in 1874 by the imperial government of Russia. Although the first private bank was set up only in 1890, by 1913 there were already about 40 banks functioning in the territory of today's Uzbekistan. However, almost all of these private banks belonged to Russian capitalists. (See Ozerova, 2003, for details.)

banks in the second tier of the banking system reached five: *Promstroibank*; *Vnesheconombank*; *Agroprombank*; *Zhilsotsbank*; and *Sberbank*.

By design all of these banks were highly specialised: *Promstroibank* in charge of financing industrial reconstruction, *Vnesheconombank* – financing foreign economic activity, *Agroprombank* in charge of financing agriculture, *Zhilsotsbank* – financing real estate and other social spheres, *Sberbank* (Savings bank) – attraction of household deposits.

As was mentioned in Chapter 4, traditionally the main task of the specialised banks was to serve the needs of the enterprise sector by providing payment clearing services and short-term working capital financing. The failure of the *perestroika* reforms to change the structural rigidities of the centrally planned system implied that the 1987-88 banking reform could not, and as a matter of fact did not, change patterns of bank financing either. In other words, short-term financing retained its importance in banking activities, comprising almost 80 percent of total bank loans (Abarbanell and Meyendorff, 1997: 67).

The current Uzbek banking system was formed on the basis of the regional branches of the *Gosbank* and the afore-mentioned specialised banks located in the country, after Uzbekistan had gained its independence. The legal foundation for banking activities in the country was laid down with the adoption of the law ‘On Banks and Banking Activity’ in February 1991. This formally opened the door to the first wave of the institution-building process in the financial sector of the country during transition.

The Tashkent branch of the *Gosbank*, which had already enjoyed some monetary autonomy from the centre as a result of the afore-mentioned reforms, became the Central Bank of Uzbekistan. Specialised banks of the system were

reorganised and sometimes renamed. Yet, they all retained their area of specialisation.⁵ The government's privatisation policies did not yet apply to the banking sector at this stage and therefore these banks remained state-owned and state-controlled.

In a nutshell, in the first wave of the institution-building process, the institutional functioning and governance of banks were not altered; only the shape of banking business changed, not its essence. Hence, although the country started the transition with a *de jure* market-based two-tier banking system, *de facto* it was only a little different from the soviet *monobank* system. Banks still continued policies of soft financing. This was especially true until 1994, the year in which the national currency was formally introduced. Until 1994 the CBU pursued old-style monetary management when Uzbekistan was still in the rouble zone. According to Nurmuradov⁶ (1998: 223) during this time the CBU extended centralised credits⁷ to finance both working-capital needs and start-up capital of enterprises in strategic sectors of the economy.

The second wave of the institution-building process took place during 1994-96. Several more specialised banks were established in the banking sector during this time: *Asaka* bank (specialising in finance for enterprises in the automobile industry); *G'allabank* (specialising in finance for wheat-producing farms); *Tadbirkorbank* (specialising in finance for entrepreneurs in micro, small and medium businesses), etc. All the specialised banks established during these years were set up at the initiative of

⁵ The savings bank became *Xalq* Bank (People's Bank), and *Vnesheconombank* was renamed the National Bank for Foreign Economic Activity of the Republic of Uzbekistan (NBU). *Promsroibank* kept its name (only in Uzbek now - *Sanoatqurilishbank*) while *Agroprombank* was later given a new name *Paxta* Bank (Bank for Cotton).

⁶ To emphasise the strength of this source perhaps we have to mention that Dr. Nurmuradov was the Deputy Chairman of the Central Bank of Uzbekistan at the time he wrote this article. Later he was promoted to the position of the Minister of Finance.

⁷ Centralised credits are purposeful credits that are extended by the CBU to commercial banks, which in turn on-lend these facilities to designated enterprises on soft conditions.

the government. Their capital was either directly injected from the state budget or provided by state-owned enterprises, which naturally became majority shareholders of the banks. Sometimes existing banks also contributed to the start-up capital of newly formed banks.

Not only were new banks established during this time, but also banking legislation was further refined. The new law 'On Banks and Banking Activity' and the law 'On the Central Bank of the Republic of Uzbekistan' were adopted in April 1995 and December 1995 respectively. According to the law 'On the Central Bank' the CBU is economically independent from the government and reports only to the *Oliy Majlis* (the Parliament) of the country. However, as our discussion in the course of this section will show, decisions of the CBU are still influenced and shaped in accordance with the economic priorities of the government.

Modernisation of the payments system was also initiated during this time. Banking reform also necessitated the establishment of a well-functioning payments system. The introduction of an efficient system of processing the debits and credits arising from deposit-based transactions facilitates transfer of *ownership claims* in the financial sector and thus fosters the corporate sector's trust in banks. Gradual computerisation of the payment system was initiated from the very beginning of transition. To facilitate the process, in 1994 the government announced a four-year tax holiday for all commercial banks regardless of their ownership structure.⁸ Under the conditions of the regulation, banks were to use these resources only towards the technical development of the sector.

⁸ For further details on this tax holiday please see the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No 362 dated 13 July 1994 'On measures to provide financial support for the development of the banking sector of the Republic of Uzbekistan.'

As a result, the payments system was modernised amongst the first in the CIS (Mullajonov⁹, 2004: 3). From 1991 to 1994 the average time spent on clearing payments was reduced from 90 days to 2 days; this was reduced to an hour towards the end of 1995. To decrease the exposure of the system to operational risk an automated backup system with secure software and hardware was put in place in 1997. Currently the payments system functions on a near real-time basis (Bazarov and Rahimova, 2002). The authorities are planning to take further steps to modernise the system in the near future so that all electronic transactions can be settled on a real-time basis (Jumagaldiev, 2004: 8).

As far as retail-banking services are concerned, however, these remain underdeveloped. Consumer credits are still a rarity. Although banks have recently started offering various deposit plans and plastic debit cards, they are not popular with the general public for two basic reasons. First, the general public's trust in the sector is still low. And second, there is a need to develop a unified clearing system for retail transactions.¹⁰

The monetary authorities affirm that, since 1994, directed and centralised financing from the central bank has been abolished (Mullajonov, 2001). Nonetheless, the evidence suggests that the policy of soft financing has not been completely abandoned. According to the World Bank (1999: 47) even in 1996 the CBU was involved in extending centralised credits. For instance, in 1996 the CBU extended credits (worth about 3.6 percent of GDP) to agriculture to finance arrears in payments and pre-financing of the 1997 crop. The same source, which provided a systematic

⁹ The Chairman of the Central Bank of Uzbekistan.

¹⁰ The new way of promoting banking habits among the population, which envisages payment of wages to employees' bank accounts and issuance of personalised plastic debit payment cards, has been initiated recently by the authorities. However, this initiative is limited mostly to the capital city. Moreover, due to the persistent shortage of cash money in commercial banks, as well as the absence of a well-developed chain of retail outlets that can accept cards, it is unrealistic to expect that plastic debit cards will become popular.

and comprehensive analysis of the economy up to 1999, reported that accumulated debts and arrears of the agricultural sector were periodically written off or rescheduled. It also reported that annually, in agriculture, payables in excess of receivables amounted to about 20 percent of the gross value of output. Moreover, in a similar but more recent work the World Bank noted that the enterprise sector still *'functions under ... soft budget constraints'* (World Bank, 2003: 11, emphasis in the original). This implies that the government has not put an end to the practice of soft financing.

The gradualist approach taken by the authorities to economic reforms also implied a cautious approach to novelty and innovations. Under the scenario of semi-centralised economic management, anything new to the system created suspicion that it might generate instability. This of course could not leave the banking sector unaffected. In this sense, it is natural to see more conservative methods and a stricter approach taken by the central bank in licensing private banks. This meant that, unlike in some other transition countries, small private banks and quasi-banking institutions did not mushroom in Uzbekistan throughout the years of transition.

As Table 7.3.1 in the next page shows, during the entire period of transition, the number of commercial banks never reached forty. Despite this fact, however, the Uzbek banking sector has a moderate level of branch penetration¹¹ – about 800 branches (approximately 31000 people per branch) and approximately the same number of mini-banks.¹² The table also shows the EBRD's index of banking reform.¹³ A score of 1.7 for the Uzbek banking sector indicates that, since the

¹¹ To compare to other transition economies please see Jaffee and Levonian (2001).

¹² A mini-bank is a small bank office with no more than 5 employees. It is usually set up in remote areas to attract additional customers.

¹³ The indicator provides a ranking of liberalisation and institutional reform in the banking sector on a scale of 1 to 4+. A score of 1 represents little or no change from a socialist banking system, except for the formal establishment of two-tier banking system. A score of 2 indicates establishment of internal

establishment of the two-tier banking system, not much progress has been made in terms of liberalising policies of credit allocation, directed credits and interest ceilings. Unfortunately, the issue of development of the banking habits and savings behaviour among the general public, and how they build trust in bank liabilities do not feature in the EBRD's (2000: 15) transition indicator for banking reform and interest rate liberalisation.

Table 7.3.1 Uzbekistan: the Banking Sector

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Number of Banks (of which foreign-owned)	29 (1)	31 (1)	29 (2)	30 (4)	33 (4)	35 (5)	34 (6)	37 (6)	na (na)	28 (5)
EBRD index of banking sector reform	1.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7

Source: EBRD (2000 and 2004), except for 2001, which comes from CBU (2001) and Mullajonov (2001)

Although there are some foreign banks in Uzbekistan, their influence and impact on the banking sector is nowhere near the standards enjoyed by the banking sectors of more advanced transition economies such as Hungary, Poland, and the Czech Republic.

Appendix 7A presents detailed information on the market share of 37 individual commercial banks in terms of assets and capital, ownership structure, founding date,

currency convertibility and significant liberalisation of interest rates and credit allocation. A score of 3 means that a country has made significant progress in developing prudential regulation and supervision, and hardening budget constraints on banks. A score of 4+ means a banking standard typical of an industrialised market economy, represented, for instance, by the Basel Committee's Core Principles on Effective Banking Supervision and Regulation (EBRD, 2000 and 2004). (See also Fries and Taci, 2001.)

and relevance to the previous banking system.¹⁴ We can see from the appendix that the market share of foreign-owned banks is of marginal importance in the country. Moreover, not surprisingly, banks owned by the state directly or indirectly account for more than 90 percent of the total banking sector assets. (See also EBRD, 2004.) Although compared to previous years the number of private banks has seen an upward trend in recent years, their share in the banking sector and influence in the economy remain very weak.

It is true that in a way the conservative policy of bank licensing prevented the formation of pyramid schemes that flourished in some transition countries, the collapse of which severely shattered confidence in their financial system. (See Jarvis, 2000, for the Albanian case and Rock and Solodkov, 2001, for the Russian case.) However, there exists a mountain of doubt that this was the ultimate objective of the authorities.

As was discussed in Chapter 5, the possibility of allocating resources from the agricultural and energy sectors by means of price regulations and other administrative methods reduced the government's dependence on household and institutional savings to finance investment projects. This meant that reforming and developing the banking sector, so that it was capable of acting as an intermediary between savers and borrowers, and a creator of new credit, was not on the top of the government's reform agenda. As a result, the lack of restructuring of state-owned banks discouraged the development of a competitive environment in the banking sector. Consequently, the current banking sector is extremely concentrated - the state directly or indirectly owning majority stakes in most of the commercial banks.

¹⁴ The data are not for the end of 2001 and they come from two different sources, i.e. CBU (2001) and Mullajonov (2001).

Of course, the concentration of the banking sector need not necessarily be such a bad thing. Unlike any other sector of the economy, the banking sector's success depends upon the general public's confidence. Because larger banks have more widespread network of branches and can offer a richer menu of services, they tend to give more confidence to the system, and thus will be able to attract more deposits. In this sense, it is not surprising to see that in some advanced countries like Australia, Canada, Denmark, Finland, Netherlands, New Zealand, and Sweden the largest five banks control more than 80 percent of the market (Cetorelli and Gambaro, 2001: 625).

Nonetheless, it is also true that high concentration gives banks monopolistic power. As a result, as profit maximising institutions, banks gain a stronger negotiating position in terms of rationing credits, and may set higher prices for banking products and services, which in the end may create inefficiency (Poloucek, 2004: 56). However, the state ownership of the largest banks may actually solve these problems. If the authorities' goal is to promote financial and economic development, they may intervene and prevent banks from acting monopolistically.

In Uzbekistan, however, the development of a market-oriented banking sector does not seem to be the authorities' main concern. Lack of fundamental reforms in terms of changing the old-style resource allocation mechanism indicates that the banking sector still might be used as a neutral conduit for channelling soft credits and budget subsidies to enterprises in the priority sectors of the economy. When a few large state-owned banks control the banking sector, it is most likely that their credit activity will be tuned to the priorities set by the authorities. In this sense, in Uzbekistan, state ownership and high concentration may actually play a constraining role in financial development. Therefore, we have to have this caveat in mind when looking at the dynamics of the banking sector concentration in Uzbekistan.

Table 7.3.2 below compares the dynamics of banking sector concentration in Uzbekistan and selected transition countries using the Herfindahl-Hirschman Index (HHI).¹⁵ As can be seen from the table, the Uzbek banking sector is highly concentrated by this measure. Moreover, over the years of transition the HHI has increased from the already high value of 2405 in 1996 to even higher value of 5197 in 2000. One more caveat we need to mention here is that it is most likely that the HHI for Uzbekistan is underestimated. This is due to the fact that large state-controlled banks are sometimes shareholders of smaller, not necessarily private, banks.

**Table 7.3.2 Herfindahl-Hirschman Index of the
Banking Sector in Selected Transition Countries**
(Calculated by multiplying by 10,000.)

	Poland	Czech R.	Slovak R.	Uzbekistan
1996	788.0	1019.2	1261.4	2405.2
1997	758.0	969.2	1084.6	3220.0
2000	834.0	1036.4	1132.5	5197.9

Source: Author's calculations and Poloucek (2004)

Moreover, by looking at the market shares of largest one, three, four, and five banks Table 7.3.3 in the next page gives an even better picture of bank concentration in the country. According to the information presented in the table the assets of the largest 5 banks in the country account for more than 90 percent of the total banking sector assets. The largest three banks control more than 80 percent of banking business in Uzbekistan. However, it is important to note that what makes the Uzbek

¹⁵ The HHI measures absolute concentration and is a commonly-accepted measure of market concentration. The HHI takes any value between zero and one. As a rule, the value of the HHI is multiplied by either 100 or 10000. The higher the value, the more concentrated is the banking sector. If the value is less than 10 or 1000 respectively, the banking sector is considered to be a competitive marketplace. If the value is between 10 and 18 or 1000 and 1800 respectively, then the banking sector is considered to be a moderately concentrated marketplace. If the value exceeds 18 or 1800 respectively, the banking sector is considered to be highly concentrated. As a general rule, mergers that increase the HHI by more than 1 point or 100 points respectively in concentrated markets raise antitrust concerns. (See Poloucek, 2004.)

banking sector special is the dominating market power of a single bank: the assets of the single largest state-owned bank – the National Bank of Uzbekistan (NBU) – accounted for more than 70 percent of the total banking assets in 2000.

Table 7.3.3 Dynamics of Concentration in the Uzbek Banking Sector

(In percentages of the banking system's total assets)

Year	NBU	3 Banks	4 Banks	5 Banks
1996	39.6	76.0	87.6	90.4
1997	n.a.	75.0	82.0	87.0
2000	71.3	83.5	87.7	90.5

Source: 1996 and 2000 author's calculations.
1997 from the World Bank (1999).

In a nutshell, this section presented a background analysis of the initial institution-building process in the country. Our discussion so far shows that the authorities have undertaken a lot of positive changes in terms of legal, regulatory and technical developments of the sector since independence. However, the banking sector is still dominated by large state-owned banks. Although the practice of extending grants from centralised funds and soft loans from the state-owned banks has been formally abolished, the current organisational structure of the Uzbek banking sector still allows the government to carry out centralised financing of the economy. The state can easily manipulate the banking sector by making them finance 'priority' sectors of the economy.

Now, building upon the discussions of this section, in the following section we will discuss financial deepening and bank intermediation in more detail.

7.4 Financial Deepening and Banking Intermediation

As a rule the ratio of broad money (M2) to GDP, sometimes referred to as measure of monetisation¹⁶, and the ratio of banking sector assets to GDP, are used to proxy bank intermediation and financial deepening. As far as banking sector development is concerned, however, these ratios might have some shortcomings.

For instance, broad money, which consists of currency outside the banking sector, demand deposits and quasi money, does not differentiate between whether the liabilities are those of commercial banks, the central bank or other financial intermediaries and as such it cannot give a clear picture of banking sector liabilities. At the same time, it assumes that the liquidity of broad money is the same in all countries regardless of the degree of institutional development. As was already discussed in Chapter 6, depending upon the degree of progress in the banking sector development, the liquidity of the components of broad money may differ from country to country.

Now, as to the banking sector assets, since this indicator does not show sources of funds, it does only a half of the job in explaining bank intermediation. As will be shown in the example of Uzbekistan later in this chapter, the higher ratio of bank assets to GDP does not necessarily connote a better-developed banking sector and thus better banking intermediation.

¹⁶ The term monetisation is subject to different interpretations in the literature. As a rule two concepts can be understood by monetisation: enlargement of the monetary economy through the substitution of monetised transactions for non-monetised ones; and financial deepening, which indicates increased economic and thus financial activity in the already monetised sector (Chandavarkar, 1977 and Ghosh, 1986). Under central planning subsistence production was almost non-existent and all the production in the agricultural sector was monetised (but not necessarily commercialised). Deterioration of economic conditions in this sector during transition has changed the situation and now it is possible to observe the problem of subsistence and de-monetisation in agriculture in the former sense of the term. While recognising this issue, we will focus our analysis on the formal sector, and as such by monetisation we imply effective use of bank liabilities in the already monetised sector.

Having this caveat in mind, we will start our analysis by looking at the monetary liabilities of the financial system in selected transition economies. Figure 7.4.1 below gives a general picture of financial deepening in selected countries for 2003, the year for which the most current data were available for all countries in the sample.¹⁷ In 2003 Uzbekistan ranked last among the nine transition countries in our sample; the ratio of broad money to GDP in the country was only about 12 percent.

Figure 7.4.1. Broad Money (M2) in Selected Countries (% of GDP 2003). Source: IFS (IMF), ADB, EBRD.

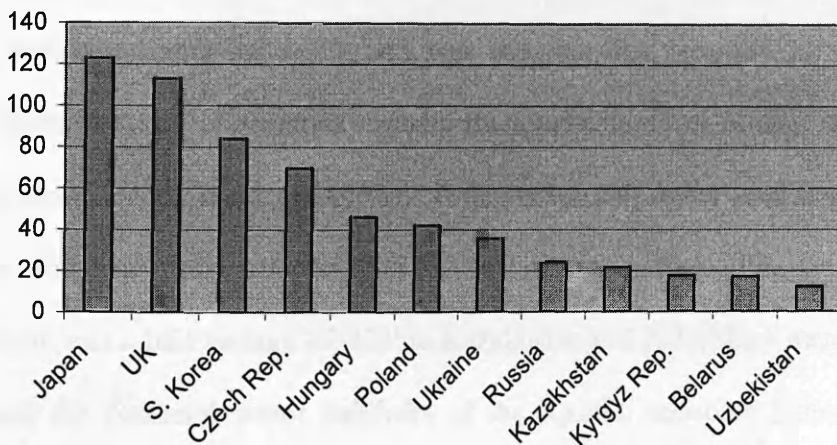


Table 7.4.1 in the next page shows broad money as a share of GDP for a selection of transition countries for the period 1995-2003. Monetary liabilities of the financial sector were comparatively high in the Czech Republic and remained stable at around 70 percent of GDP from 1995 to 2003. Hungary and Poland experienced slower but consistent growth in their monetary liabilities during this period. Although the degree of financial deepening looks high in these three central European countries, it is still very low when compared to that of advanced countries.

¹⁷These countries are divided into three groups: the first group (the Czech Republic, Hungary and Poland) represent advanced economies in transition, the second group (Russia, Ukraine and Belarus), and the third group (Kazakhstan, the Kyrgyz Republic and Uzbekistan) are grouped in line with regional considerations. Belarus, Russia and Ukraine represent European members of the CIS, while Kazakhstan, the Kyrgyz Republic and Uzbekistan represent neighbouring and non-European members of the CIS.

Table 7.4.1 Broad Money (M2) in Selected Transition Countries
(% of GDP, 1995-2003)

	1995	1996	1997	1998	1999	2000	2001	2002	2003
Czech Republic	75.3	70.6	72.5	65.3	67.8	68.8	68.9	68.2	69.7
Hungary	41.9	48.1	46.5	43.4	44.5	43.1	44.7	45.1	46.2
Poland	36.1	38.6	40.3	40.4	43.7	42.2	43.8	41.6	42.0
Belarus	15.0	14.8	15.8	30.9	16.7	17.2	15.2	15.0	17.2
Russia	15.5	14.4	16.0	17.0	14.6	15.7	18.0	19.7	24.2
Ukraine	12.7	11.5	13.4	15.0	16.6	18.5	22.1	28.5	35.8
Kazakhstan	11.4	9.5	10.3	8.6	13.6	15.3	17.7	20.3	21.8
Kyrgyz Republic	17.1	14.3	13.6	14.4	13.5	11.3	11.1	14.6	17.6
Uzbekistan	17.7	21.0	17.5	15.4	13.6	12.2	12.4	10.6	12.1

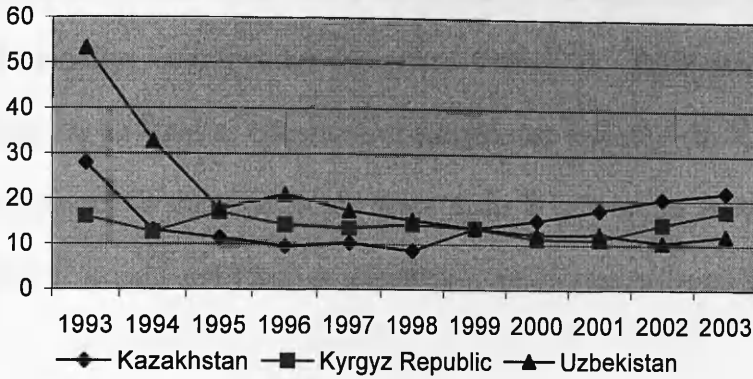
Source: IFS (IMF); the Uzbek data are from ADB and EBRD.

The macroeconomic instability and high inflation that persisted for almost a decade in many post-soviet countries severely shattered confidence in their respective financial systems. As a result, all of the CIS countries still suffer from a relatively low level of financial intermediation. For instance, the ratio of broad money to GDP was only eight and a half percent of GDP in Kazakhstan in 1998. Since then this has changed and the financial sector liabilities of the Kazakh economy have steadily increased reaching about 22 percent of GDP in 2003, which, however, still remains very low compared to that of more advanced transition economies.

As Figure 7.4.2 on the next page reveals, Uzbekistan started the transition with a moderate level of financial sector liabilities. This was partly explained by a monetary overhang associated with repressed inflation, which sharply eroded after the 1992 price reform and subsequent hyperinflation. From 1993 to 1995 the ratio of broad money to GDP declined from more than 50 percent to less than 20 percent. The particularly rapid decline of this ratio in 1993-1995 was associated with rapid reduction of financial claims due to high inflation, the large transfer of wealth from creditors to debtors and the loss of confidence in the banking system (World Bank, 1999: 33).

Figure 7.4.2 Broad Money (M2) in Uzbekistan, Kazakhstan and the Kyrgyz Republic (% of GDP, 1993-2003).

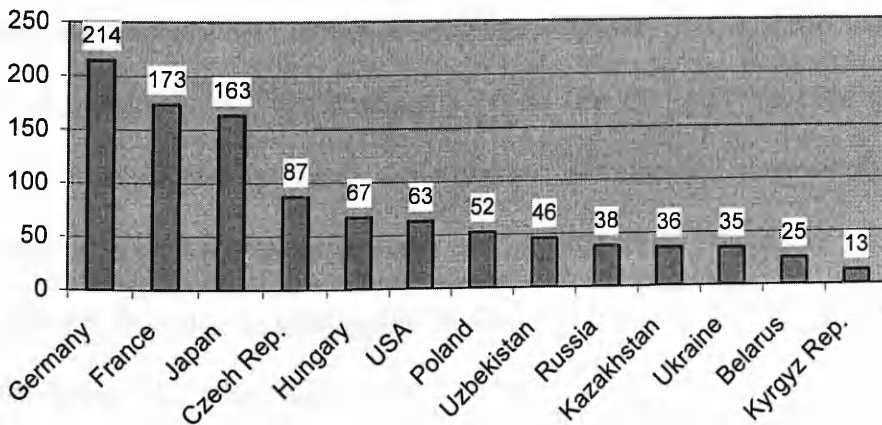
Source: IFS (IMF), ADB, EBRD.



Bank assets exceed national output in most advanced countries. As illustrated in Figure 7.4.3, bank assets were about twice the size of national output in Germany, and more than one and a half the size of national output in France and Japan. In the UK the ratio of bank assets to national output is even bigger – about three times the size of the national output.

7.4.3 Bank Assets in Selected Countries (% of GDP, 2003).

Source: IFS (IMF), ADB, EBRD



Transition countries are lagging far behind in this respect too. The notable exception is, again, the Czech Republic in this sample, whose bank assets are about to exceed its GDP.¹⁸ Table 7.4.2 shows the dynamics of bank assets to GDP for a selection of transition countries for the period 1996-2003. Bank assets have been steadily increasing in Russia, Ukraine and Kazakhstan recently. In Kazakhstan the ratio of bank assets to GDP increased from about 9 percent in 1996 to about 40 percent in 2003. Russia and Ukraine are about to reach similar levels of bank assets to GDP.

Table 7.4.2 Bank Assets in Selected Transition Economies
(% of GDP; 1996-2003)

	1996	1997	1998	1999	2000	2001	2002	2003
Czech Republic	92.9	100.5	95.1	95.6	91.3	89.8	88.5	86.9
Hungary	56.9	58.5	58.6	59.7	61.1	61.6	61.8	67.0
Poland	42.5	43.5	45.7	47.7	48.7	51.8	51.0	52.2
Russia	25.9	27.9	39.2	35.2	32.8	34.3	35.5	38.3
Ukraine	11.6	13.3	15.2	16.2	18.5	19.9	25.0	35.0
Belarus	18.2	21.5	46.0	23.3	24.2	21.2	21.1	24.5
Kazakhstan	8.6	9.2	9.6	14.9	18.2	23.4	29.1	36.2
Kyrgyz Republic	10.5	8.2	9.5	8.7	7.1	7.0	10.4	13.4
Uzbekistan	63.7	n.a.	45.2	44.7	51.6	64.9	52.6	45.7

Source: IFS (IMF), ADB, EBRD; Bank Assets for Uzbekistan – the Central Bank of Uzbekistan.

Since the ratio of broad money to GDP has been very low in Uzbekistan over the years of transition, one would naturally expect that the country's ratio of bank assets to GDP would also be amongst the lowest. Surprisingly, however, the asset size of the Uzbek banking sector not only exceeds that of the Russian or Ukrainian banking sectors, but also is comparable to that of advanced transition economies. (Please see Table 7.4.2 above and Figure 7.4.3 below.) In 1996 and 2001 the size of bank assets was equal to approximately two thirds of national output. Even though

¹⁸Data on bank assets here were extracted from the International Financial Statistics of the IMF. However, according to the data provided by Poloucek (2004: 7), the Czech Republic's bank assets were well above its GDP even in 1996. In 2000 the ratio of bank assets to GDP was about 129 percent.

this ratio dropped down to about 46 percent of GDP in 2003, it was still larger than that of all the CIS countries in the sample.

In short, the extremely low ratio of broad money to GDP in Uzbekistan indicates that after more than ten years of transition the banking sector has not regained the general public's confidence. Therefore, bank liabilities still remain unpopular. Despite this fact, however, the ratio of bank assets to GDP is comparatively high. In a way, this anomaly may indicate that the banking sector might be using centralised credits and some alternative source of finance, such as foreign credits, to grant loans.

However, at this point it is too early to jump to conclusions. In order to understand the true nature of the issue, we need to identify the current stage of banking development in Uzbekistan using the theoretical framework developed in Chapter 6. To do that, we will approach the matter from a micro perspective. First we will consider the case study of the largest bank of the country – the NBU. We will look at a number of relevant issues such as the structure of the bank's assets and liabilities, the share of centralised and government-guaranteed loans in bank's loan portfolio, etc. In addition, in the next section we will also analyse system-specific problems and current obstacles existing in the banking sector using the data generated through interviews and questionnaires.

The Case of the National Bank of Uzbekistan

The National Bank of Uzbekistan¹⁹ is the biggest and the most important bank in the country with monopolistic powers. Its assets and loans account for more than 70 percent of the banking sector assets and loans respectively. The bank was established in 1991 on the basis of the former *Vnesheconombank*. Originally, the NBU was set up as a specialist bank (i) to serve business needs of enterprises engaged in foreign trade, and (ii) to act as the financial agent of the government in the international financial markets.

With the adoption of the ‘universal banking’ approach towards the second half of the 1990s, which coincides with the second wave of institution-building reforms, special treatment of the bank in dealing with foreign currency-related transactions was formally abandoned. Nevertheless, the role and importance of the bank only increased since then. At present it controls well over two-thirds of the banking market in the country.

The bank is fully state-owned. The authorities have been reiterating their commitment to privatising state-owned banks, including the NBU, since 1998. The government plans to do this by selling up to 50 percent of its shares to strategic foreign investors. However, all of these numerous announcements have so far failed to translate into action. As far as the NBU is concerned, privatisation reforms have never advanced beyond the stage of due diligence to prepare the bank for restructuring, which was undertaken by Deutsche Bank Consulting in 2001. Below, we will analyse selected financial indicators of the NBU in the hope of finding answers to some of the questions raised earlier.

¹⁹ The full official name of the bank is the National Bank for Foreign Economic Activity of the Republic of Uzbekistan.

Table 7.4.3 below shows the dynamics of selected items of the balance sheet of the NBU for the years 1993-2003. These items are total deposits, current account deposits, foreign credits, total assets, and total loans extended.

Table 7.4.3 Selected Financial Indicators of the NBU, 1993-2003

Years	Total Deposits		Current Account Deposits		Foreign Credits*		Total Assets	Loans Extended	
	Million USD (1)	As % of Liabilities (2)	Million USD (3)	As % of Total Deposits (4)	Million USD (5)	As % of Liabilities (6)	Million USD (7)	Million USD (8)	As % of Assets (9)
1993	253	56.0	138	54.5	126	27.9	452	324	71.7
1994	784	58.8	332	42.3	138	10.3	1334	452	33.9
1995	898	47.6	363	40.4	307	16.3	1885	615	32.6
1996	928	27.1	572	61.6	609	17.8	3427	1142	33.3
1997	589	17.3	534	90.7	768	22.6	3402	1456	42.8
1998	623	17.2	453	72.7	1075	29.6	3629	1884	51.9
1999	659	16.0	497	75.4	1222	29.7	4119	2078	50.4
2000	440	11.2	343	78.0	1450	37.1	3913	2227	56.9
2001	387	10.2	324	83.7	1543	40.6	3799	2223	58.5
2002	389	12.5	320	82.3	1538	49.6	3102	2166	69.8
2003	442	14.4	362	81.9	1622	52.9	3064	2358	77.0

*Foreign credits represent loans that have been made available to the bank by foreign export-credit agencies, banks and international financial institutions mostly under the sovereign guarantee of the Republic of Uzbekistan.

Source: NBU's Annual Reports, from 1993 to 2003.

According to Column 1 of the table, from 1996 onwards the total deposits of the bank gradually decreased. What is more important, however, is that, as Column 2 of the table reveals, starting from 1994 the ratio of total deposits to total liabilities started to decrease. In 1994 the ratio stood at about 60 percent and in 2003 it was only about 14 percent. Now, Column 4 of the table, which decomposes total deposits into the current account deposits of the enterprise sector and the term and savings deposits of the general public, reveals that the share of savings and term deposits in total deposits also shrank during this period. For instance, if in 1993 the share of savings and term deposits in total deposits was more than 50 percent, in 2003 the figure was only about

18 percent. Given that the absolute value of current account deposits were also declining during 1996-2003, the decreasing share of these deposits in total deposits clearly indicates a gradual loss of confidence in bank liabilities.

It is important to note that these findings are not unique to the NBU. When we observe the analogous indicators in other banks, we find very similar results. For instance, in other big banks, such as *Sanoatqurilishbank*, *Asakabank*, *Tadbirkorbank*, *Xalq Bank* and *Turonbank*, the share of current account deposits in total deposits was 70.0 percent, 74.0 percent, 73.7 percent, 81.4 percent and 75.7 percent respectively.²⁰ (The data refer to 2003 except for *Xalq Bank* and *Turonbank* whose data refer to 2002 and 2001 respectively.)

Current account deposits represent the enterprise sectors' liquid assets (non-cash money), and enterprises have no other option than to keep these resources with banks. In this sense, the volume of these deposits does not indicate agents' trust in banks. What signals the public's confidence in the banking sector, however, is the volume of term and savings deposits, which are of longer maturity and as such are one of the main sources of loanable funds for banks. As was discussed in Chapter 6, during the early two phases of banking development during transition, the volume of both savings deposits and current account deposits would decrease. However, as long as the banking sector performed the function of payment clearing centre, the enterprise sector would be better off using banking services; carrying out large-value transactions would be awkward and costly. Hence, the fact that less than one-fifth of total deposits was term and savings deposits in 2003 shows the collapse of confidence in bank liabilities.²¹

²⁰ Annual financial reports of these banks.

²¹ Again, similar figures were reported in the annual report of *Sanoatqurilishbank*, the second biggest bank in terms of bank assets. In 2001 77 percent of total deposits came from enterprises and

Now, despite the declining popularity of bank liabilities among the public, the bank does not seem to be constrained by the availability of the stock of domestic loanable funds; loans and other assets of the bank gradually increased over the years. As Column 7 of Table 7.4.3 shows, total assets of the bank consistently increased from about USD452 million in 1993 to about USD4119 million in 1999. Although total assets have been slowly decreasing since then, it was still more than USD3000 million in 2003. Moreover, as Column 9 of Table 7.4.3 shows, after the initial decline in 1994, the share of loans in total assets increased from about 34 percent in 1994 to about 77 percent in 2003.

Another interesting piece of information we can derive from Table 7.4.3 is that foreign credits and sources other than deposits attracted from the general public were the main sources of the growth of the bank's loan portfolio.²² Column 6 of the table shows that from 1993 to 2003 the amount of credits attracted from abroad increased about 13 times. The share of foreign credits in total liabilities was about 53 percent in 2003.

The bank's own capital was one of the important sources of growth too. The bank, being 100 percent state-owned, was generously capitalised from the start: equity capital of the bank was USD200 million in 1992. Since then almost every year additional capital has been injected; in 2003 total equity capital of the bank stood at USD400 million. This process can actually be seen as another technique of legitimising the policy of granting centralised and directed credits to the economy. In short, according to the financial report of the bank for 2003, the sources of funds for lending (i) in foreign currency were generated by attracting foreign loans (86.1%) and

organisations, 19 percent was attracted from the population, and the rest came from other sources (*Sanoatqurilishbank*, 2002: 16).

²² Foreign credits represent loans that have been made available to the bank by foreign export-credit agencies, banks and international financial institutions mostly under the sovereign guarantee of the Republic of Uzbekistan.

the bank's own capital (13.9%), and (ii) in domestic currency by the bank's own capital (68.0%) and the resources attracted from various other sources (32.0%) (NBU, 2004: 19).

In addition to supplying the bank with necessary capital injections and centralised credits, the authorities also guarantee the bulk of the bank's loan portfolio. Table 7.4.4 shows this and some other financial indicators, which reflect the breath of the authorities' political influence in the banks' activity. As Column 3 of the table shows, well over 80 percent of total loans were guaranteed by the state during 1998-2003. An extraordinarily high share of state-guaranteed loans in the bank's total loan portfolio also indicates the degree to which the bank's credit policy is affected by the economic priorities of the government.

Table 7.4.4 Centralised Credits, State-Guaranteed and Other Loans in the NBU's Balance Sheet, 1998-2003

Years	Total Loans	State-Guaranteed Loans*		Other Loans		Centralised Credits**	
	Million USD (1)	Million USD (2)	As % of Total Loans (3)	Million USD (4)	As % of Total Loans (5)	Million USD (6)	As % of term deposits (7)
1998	1884	1663	88.3	221	11.7	80	47.1
1999	2120	1840	86.8	262	12.4	103	63.6
2000	2268	1968	86.8	300	13.2	95	97.9
2001	2276	2005	88.1	271	11.9	67	106.3
2002	2336	1993	85.3	343	14.7	43	62.3
2003	2537	2126	83.8	411	16.2	37	46.3

* Includes foreign credits and all other loans guaranteed by the government and government related agencies.

** Centralised credits are funds received from the CBU that are used by the bank to provide lending to targeted industrial enterprises.

Source: NBU's Annual Financial Reports, from 1998 to 2003.

Another important source of bank credit that we have to mention is the 'so called' centralised credits received from the CBU. The bank on-lends these credits to targeted industrial enterprises under specialised state programmes. As Column 6 of Table 7.4.4 shows when compared to the size of the bank's total loans, the size of

centralised credits looks pretty small. However, it is interesting to see in Column 7 of the table that the size of these funds was comparable to the size of term and savings deposits the bank managed to attract from the general public in 2000 and 2001 respectively.

When we look at the distribution of the loans by ownership structure of borrowers and by economic sector, the government's influence in the bank's credit activity becomes even clearer. Table 7.4.5 below shows that from 1998 to 2000 about three-fourths of total credits were granted to state agencies and state-owned companies; the rest were directed to finance the activities of private companies. Starting from 2001, the share of private sector financing began to increase, but it still remains very low – only about one-third of the loan portfolio.

Table 7.4.5 Distribution of the NBU Loans by Ownership Structure of Borrowers, 1998-2003

	1998	1999	2000	2001	2002	2003
State Agencies*	3.3	3.9	8.2	6.3	6.2	4.2
State-owned Companies and Agencies	74.9	71.7	68.4	61.5	56.9	59.2
Private Companies	21.8	24.4	23.4	32.3	36.9	36.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

* Ministries and Associations.

Source: NBU's Annual Financial Reports, from 1998 to 2003.

As to the sectorial composition of loans, they are almost entirely directed to the industrial sector of the economy, which is not surprising given that the country pursues intentional industrialisation policies as was already discussed in Chapter 5. Table 7.4.6 on the next page represents the cumulative amount of all credits extended by the bank to different sectors of the economy during 1993-2003. It appears that more than 77 percent of all bank loans were directed to financing projects in the industrial sector. Despite its strategic importance and the urgent need for its

modernisation, the agricultural sector accounted for only about 12 percent of the loan portfolio.

Table 7.4.6 Distribution of the NBU's Loans across the Sectors of the Economy. Cumulative, 1993-2003.

Sector	Number of Projects Financed (1)	Total Cost of Projects, Million USD (2)	NBU Loan Amount, Million USD (3)	Share in Total Loan Portfolio, % (4)
Industry	129	5503.5	3670.8	77.1
Agriculture	22	636.9	584.4	12.3
Services and Tourism	15	559.3	397.5	8.3
Other	3	117.1	110.6	2.3
Total	169	6817	4763.5	100.0

Source: NBU's Annual Financial Report for 2003.

All in all, our analysis so far shows that the government uses the banking sector to on-lend state-guaranteed loans to finance its investment projects mostly in the industrial sector. Moreover, it is likely that some of these loans are granted to finance non-competitive and non-viable enterprises to prevent unemployment and output loss. According to the World Bank (2003) state-guaranteed foreign loans account for about 70 percent of the banking sector loan portfolio, most of which is concentrated in the NBU.

However, the most important thing is that, even without the role and impact of foreign credits and domestic deposits, the banking sector's ability to create credit is not constrained by the availability of deposits. This is explained by a number of factors such as easy access to centralised and directed credits²³, the injection of

²³ On this we also learned from senior employees of the NBU the following. Usually export-credit agencies guarantee no more than 85 percent of the amount of an individual investment project and this is the maximum amount of foreign credit domestic banks can attract to finance any single project. It is possible to finance the remaining part of the project by attracting foreign credits guaranteed by private credit insurance companies. However, since Uzbekistan's sovereign credit rating is among the lowest, this type of financing will be prohibitively expensive. Therefore, to finance the remaining part of the project the authorities supply centralised credits to the banking sector, which then on-lend these facilities to ultimate borrowers. Now, about the legitimacy of this practice. Since foreign credits also require issuance of sovereign guarantees, the government usually issues a resolution outlining

additional capital by the authorities, the availability of the lender-of-last-resort facility, etc.

In a nutshell, despite the lack of faith in both banks and bank liabilities among the general public, the volume of banking sector credits to the economy remains comparatively high in Uzbekistan. It is primarily the current organisational structure of the banking sector that allows the banks to create credit independently of both the stock of available loanable funds and the necessary advancement in bank development. In other words, this type of creation carries the trademark of political credit endogeneity. The difference between this type of credit creation and credit creation in market economies, discussed in the earlier chapters, is that here the causal chain of credit creation starts from the government sector, not from the private sector. In other words, the process is not the result of gradual evolution of banking sector as such, rather enforced from above. The nature of political credit endogeneity and system-specific problems associated with it will be discussed in detail in the next chapter.

financing scheme of an investment project. And usually the authorities include a 'confidential clause' in the text of the resolution, the content of which will not be revealed to the general public. In this clause the central bank will be authorised to extend centralised credit to the bank, which in turn will refinance these facilities to the end user.

The use of centralised credits is also recognised by the NBU in its annual financial reports. In the bank's annual report for 2003, we can find the following words: 'During the period 1993-2003 National Bank of Uzbekistan in the framework of foreign credits lines, *centralised* and own resources financed 169 large investment projects' (NBU, 2004: 21. Emphasis added).

7.5 Current Issues and System-specific Problems. Explaining Lack of Trust in Bank Liabilities

We have discussed a number of important issues in the previous sections. Our discussions showed that the banking sector remained extremely centralised with state-owned banks controlling the banking sector. Although the payment system of the country was successfully modernised, the banking sector failed to regain the public's confidence. Moreover, continuance of the old-style credit endogeneity, which is a hallmark of the soft budget constraints phenomenon, implied that the banking sector's credit activity was not constrained either by the availability of loanable funds, or by the technical advancement of banks. As will be argued below, political credit endogeneity combined with some other system-specific issues explains the distinctiveness of Uzbek banking sector development.

Like every key sector of the economy in Uzbekistan, the banking sector suffers from extreme centralisation and excessive government intervention, which inhibit financial development and thus undermine the public's confidence. Hitherto Uzbekistan has not abandoned some of the old-style practices of monetary management. Under the current banking regulations, banks are obliged to control timely payment of taxes to the budget by enterprises.²⁴ Banks must withhold any outstanding amount of tax and similar payments owed by enterprises to the budget. Interestingly enough, when doing so banks do not need to get prior permission from the account holders. The function of collecting data on enterprise activities is also

²⁴ For these regulations please see, among others, to (a) the Decree of the President of the Republic of Uzbekistan dated 4 February 1998 'On measures to improve mechanisms of settlements and stimulation of payments to central and local budgets' and (b) the Instruction of the CBU dated January 1999 'On the writing off cash amounts from bank accounts of entrepreneurial agents.'

envisaged in the banking regulations.²⁵ Banks collect information on their clients' financial transactions and report them to the tax authorities and any other relevant local and central government bodies.

According to the IFC's 2003 survey of business environment in Uzbekistan, in which 1500 independent entrepreneurs, micro, small and medium businesses participated, more than 50 percent of the questionnaire respondents said that (a) banks disclosed information on accounts of enterprises to outside parties (91 percent of respondents specified the tax authorities), and (b) banks required businesses to provide statistical information on their economic activity (IFC, 2004).

The majority of the bankers we interviewed indicated that direct and indirect interventions by the authorities in everyday bank activities were preventing banks from working as profit-oriented market institutions. In other words, the banking sector was forced to perform two conflicting functions, i.e. acting as a financial intermediary, and working as a finance department of the government. Indeed, complaining about these practices and excessive intervention of local governing bodies in everyday bank activities, a branch manager of a regional bank said that *'if the definition of an institution is based on the functions it performs, then the word "bank" has to be replaced with the word "branch of the Cabinet of Ministers" in Uzbekistan.'*

In short, the banking sector is still used by the government as a tax collector, and a statistical organ to collect various financial data on enterprise activities. This hampers the enterprise sector's confidence in banks and makes bank liabilities a less desirable asset to hold. As a result, the economy's reliance on cash money increases.

²⁵ Please see the Instruction of the CBU 'On organising cash flows of enterprises,' registered with the Ministry of Justice as of 10 December 1998 and amended on 27 October 2001 and 18 July 2002.

Unfortunately, the list of system-specific problems does not end with these obstacles. Another important issue to consider is the practice of the 'cash plan'. The cash plan is the old-style control over the supply of cash money. Under new circumstances it implies putting limitations on free convertibility between cash money and non-cash money. It should be duly noted that recently the authorities have passed several resolutions to abolish this practice.²⁶ However, these regulations changed very little if anything at all.²⁷

Although a generous credit policy has been helpful in preventing unemployment and output loss, it naturally led to the excess supply of non-cash money in the economy. The fact that 'excess non-cash liquidity has been accumulating in the banking sector' over the years is recognised by the EBRD too (EBRD, 2003: 212). However, allowing free convertibility of non-cash money into cash money in this situation would result in an undesirably higher rate of inflation.

In this sense it is not difficult to see that in a way the cash plan was employed to deal with the inflationary side-effects of political endogeneity. Banks were allowed to convert non-cash money into cash money only to pay wages, pensions, and other immediate expenses such as business travel expenses. In fact, however, enterprises started having difficulties in converting their non-cash money into cash money not only for usual transaction purposes but also for paying wages and similar payments to their employees. Household sector depositors were affected too. They could not freely

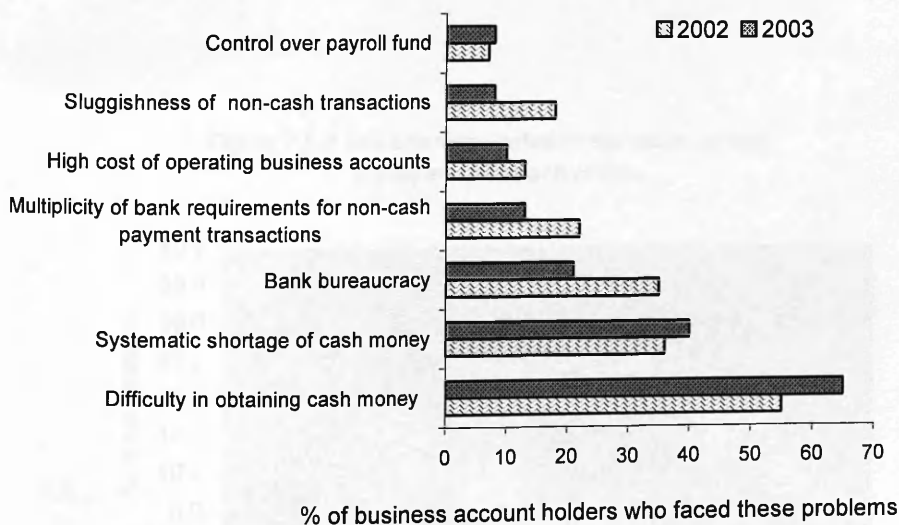
²⁶ The essence of the cash plan under central planning was discussed in Chapter 4. For regulations on the current situation please see, among others, (a) the Resolution of the Cabinet of Ministers No 280 dated 5 August 2002 'On measures to decrease further the circulation of cash money outside the banking sector,' (b) the Resolution of the Cabinet of Ministers No 63 dated 4 February 2003 'On measures to improve mechanisms of regulating monetary-credit indicators,' and (c) the Decree of the President of the Republic of Uzbekistan dated 5 August 2005 'On guaranteeing uninterrupted payment of cash money from deposit accounts held with banks.'

²⁷ Indeed, during interviews bankers said that despite the adoption of these decrees and resolutions on ending the cash plan and the formal distinction between cash money and non-cash money, the problem still remains the same. 'What the regulations changed is just to replace the word "control" with the word "forecast." Essentially, however, nothing has changed,' said one of the branch managers we interviewed.

convert their deposits into cash money on demand. As a result, the public's trust in banks and bank liabilities further weakened and this led to the emergence of the difference between the values of cash money and non-cash money. Non-cash money started selling at a discount to cash money, as if cash money was in short supply.

The IFC's (2004) survey of the business environment in Uzbekistan for 2003, which represents the viewpoint of entrepreneurs, found that the systematic shortage of cash money in banks and difficulty in obtaining cash money from banks were the two top problems in operating business accounts with banks. As Figure 7.5.1 below shows, if in 2002 more than 50 percent of the respondents acknowledged that converting non-cash money into cash money was problematic, in 2003 more than 60 percent of respondents indicated this to be the single most important problem.

Figure 7.5.1 Difficulties of operating business accounts with banks.
(IFC, 2004:74.)

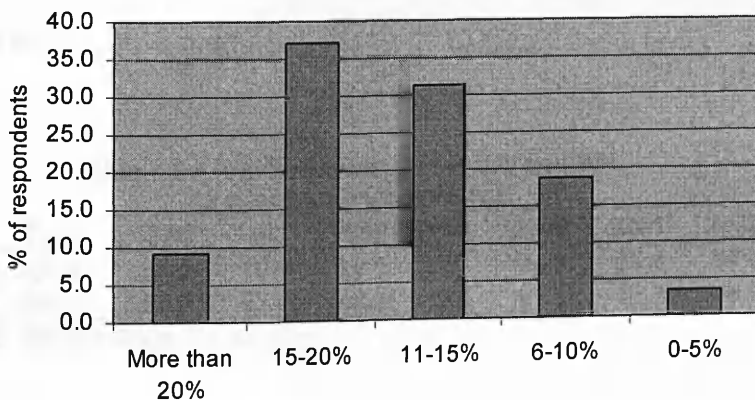


The results of conducted interviews and questionnaires, which reflect the viewpoint of practitioner bankers on the issues, also confirm the severity of the

problem. When asked about the enterprise sector's ability to convert their non-cash money into cash money when needed, the majority of bankers acknowledged that this still remained a big problem. Table 7B.5 of Appendix 7B shows the survey results on this question. About 68 percent of the respondent bankers who answered this question said that enterprises could not convert their non-cash money into cash money when needed on first demand.

As Table 7B.2 of Appendix 7B shows, bankers agree that the nature of non-cash money (i.e. its moneyness) has improved during transition; the majority of the respondents (64.3%) believe that, on average, there was a positive change. Nonetheless, bankers also confirm that because of the above-mentioned shortcomings the public does not yet rate cash money and non-cash money equally liquid. As Table 7B.3 of Appendix 7B reveals, about 78 % of bankers who participated in the survey opined that, on average, the public values non-cash money at least 11-15% less than cash money. The result of the table is also shown in Figure 7.5.2 below.

Figure 7.5.2 The difference between the values of cash money and non-cash money



As to the possible explanations of the emergence of the difference between the values of cash money and non-cash money, bankers were asked to rate several important factors on the scale of 1 to 5, 1 being of no importance and 5 being very important. The results, which are presented in Table 7B.4 of Appendix 7B, show that existence of the shadow economy on the one hand, and incentives to avoid taxes on the other hand, put upward pressure on the demand for cash money. In the meantime, the excessive supply of non-cash money and low interest paid on bank deposits make holding non-cash money less desirable.

Inflationary pressure coming from political credit endogeneity and the resulting difference between the values of cash money and non-cash is also reflected in the persistently higher rate of inflation in wholesale market prices, which are predominantly in non-cash money, relative to that in retail market prices, which are in cash money. Since the consumer price index (CPI) measures prices of cash-based transactions and the producer price index (PPI) measures prices of non-cash based transactions, the rate of inflation measured in these indices can also approximate the relative illiquidity of non-cash money. As Table 7.5.1 shows, during 1995-2002 the rate of inflation measured in PPI has consistently been higher relative to that measured in CPI.

Table 7.5.1 Inflation measured in CPI and PPI.
% change, annual average

	1995	1996	1997	1998	1999	2000	2001	2002
CPI	304.6	54.0	70.9	29.0	29.1	25.0	27.2	27.6
PPI	499.0	107.0	52.0	48.4	38.0	61.1	42.2	46.0

Source: EBRD, 2004

Now, although the private sector does not value non-cash money as being equally liquid to cash money, as a legal tender by law they should be treated the same. Moreover, according to the current rules and regulations, entities that sell goods and

provide services in cash money have to return their cash money proceeds to the banking sector at the end of each business day. Failure to do so will result in huge fines and other disciplinary penalties.²⁸

However, the opportunity of making extra profit by 'selling' the cash money proceeds, which otherwise would be returned to the banking sector for no explicit financial gain, to entities which are desperately in need of cash money induces cash-abundant entities to innovate and find loopholes in regulations. Interviews with practitioner bankers revealed that agents use various methods to convert non-cash money into cash money. Detailed discussion of a few of these methods are presented in Appendix 7C.

One of the many side effects of the cash squeeze policy is that due to the systematic shortage of cash money in banks, enterprises will find it increasingly difficult to convert their non-cash money into cash money to pay wages on a timely basis. Table 7B.6 and 7B.7 of Appendix 7B reflect bankers' viewpoint on this problem. As Table 7B.6 shows, when asked about this, 93 percent of the respondents said that at least a quarter of enterprises that held business accounts with their banks were not able to pay wages on time. The percentage of those participants who said that about every second enterprise faced this problem was close to 50 percent. In addition, when asked about the length of the wage payment delays, about 70 percent of respondents said that it was between 1 and 2 months (Table 7B.7).

To deal with the problem the government has recently introduced several regulations that hold banks responsible for the control of cash money circulation in

²⁸ See among others the Resolution of the Cabinet of Ministers No 264 dated 22 June 2001 'On additional measures to improve the circulation cash money and to increase responsibilities of commercial banks' and the Resolution of the Cabinet of Ministers No 280 dated 5 August 2002 'On measures to decrease further the circulation of cash money outside the banking sector.'

the economy including timely payment of pensions and wages.²⁹ In particular, banks are held strongly accountable for the timeliness of wage and other similar payments to civil servants, pensioners, and employees of state-owned and state-related enterprises in priority sectors.³⁰

However, since the real cause of wage arrears in Uzbekistan is the restrictions imposed on the free convertibility between cash money and non-cash money, these measures do very little to change the situation. As we learned from senior bank officers, under the current regime, paradoxically, banks have to engage in illicit transactions in order to fulfil the legal and regulatory responsibilities imposed on them. One of the examples of these transactions is selling foreign exchange in the black market to generate cash money, which will be used to pay wages, pensions and other similar payments.³¹ The technical details of the process are discussed in Appendix 7D. (We have already discussed several other similar cases earlier.)

²⁹ (i) The Resolution of the Cabinet of Ministers No 504 dated 17 November 1999 'On additional measures to increase responsibilities of ministries, organisations and economic units for timely payment of wages.' (ii) The Resolution of the Cabinet of Ministers No 264 dated 22 June 2001 'On additional measures to improve the circulation cash money and to increase responsibilities of commercial banks.' (iii) The Resolution of the Cabinet of Ministers No 88 dated 19 March 2002 'On additional measures to organise timely payment of wages.'

³⁰ 'It does not matter how we find cash money. We have to make timely payment of pensions of retired people and wages of state-related organisations; private enterprises are not big concern. Once or twice a month we sell hard currency in the black market to generate cash money. I know that this is the case with most banks nowadays across the country' said the Head of a regional branch of a commercial bank during an interview.

³¹ Squeezing of the supply of cash money is not only helpful to keep control over inflation, but is also of assistance in suppressing the household sector's demand for foreign exchange in the country. After a short period of liberal exchange rate policies following the introduction of the national currency, the government introduced exchange control in the early 1997. The primary intention behind this policy was to subsidize priority sectors of the economy. Industrial companies, which imported technologies and whose investment projects were financed by foreign credits, could convert their national currency earnings into the currency of import contracts and foreign credit agreements at a privileged exchange rate. Entities producing for export were in clear disadvantage, whereas the household and small-scale private entrepreneur sectors did not have a free access to foreign currency from official sources such as commercial banks.

During this period the black market exchange rate for the US dollars was about two times higher than the office exchange rate. Since 2002 the government, under the IMF's staff monitored programme, gradually abandoned multiple exchange rate policy and removed restrictions on access to foreign exchange for current account transactions (Government of Uzbekistan, 2002a and 2002b). As a result, from the beginning of 2003 foreign exchange became available to the enterprise sector as well as the household and private entrepreneur sectors. Due to increased availability of US dollars and shortage of cash money, the US dollar exchange rate fell from about 1500 *so`ms* per dollar to about

Now, under the persistent shortage of cash money, and all the difficulties associated with it, one would expect that enterprises and companies would choose an easier option and start paying wages in kind or in hard currency. However, although payment of wages in kind can be observed in some sectors of the economy, it has not become a popular practice. There are several reasons for this. Firstly, payment of wages in kind is prohibited by law.³² Regulations, however, allow agricultural entities to pay wages in kind provided that these goods are either from their own produce (wheat, fruits, vegetables, etc) or originated from own produce (flour, cooking oil, juice, etc). Therefore, only in agriculture are wages paid predominantly in kind. Secondly, enterprises are to pay wages only in the national currency. Moreover, although foreign exchange restrictions are lifted, neither commercial banks nor the monetary authorities are in a position to satisfy foreign exchange demand in large scale.

In addition, besides indirect costs of negotiations with banks and other agents, enterprises actually do not share the cost of the lost purchasing power of employee deposits. The cost will be borne solely by wage earners. In fact, when employers are too sluggish in paying their wages, employees may approach third parties, i.e. arbitrageurs, to convert their non-cash earnings into cash money. Mirzoeva (2004) discusses how this is done in large enterprises. Employees open bank accounts and ask their employers to transfer their wages to these accounts. Next, they issue power of attorney to arbitrageurs and authorise them free access to these deposits. Arbitrageurs convert non-cash money into cash money using one of the many possible methods of conversion discussed above and pay the wages to the employees.

1000 *so`ms* per dollar. During the last 2 years the black market exchange rate has been lower than the exchange rate offered by commercial banks.

³² Please see the Resolution of the Cabinet of Ministers No 88 dated 19 March 2002 'On additional measures to organise timely payment of wages.'

Naturally, the cash value of wages will be reduced in accordance with the incurred costs and the profit premium of arbitrageurs.

Our discussion so far shows that most of the problems that exist in the financial sector of Uzbekistan are system-specific. This also refers to the issue of non-monetary transactions. Unlike in many other transition economies, barterisation of transactions has not become a major issue in the Uzbek economy (Carlin et al, 2001). There are several reasons for this. Firstly, unlike Russia and Ukraine, or any other transition country which experienced a rise in non-monetary transactions, Uzbekistan has kept centralised control over production in key sectors of the economy and its banking sector generously supplied credit to the enterprise sector, including subsidised credits to the agricultural sector. Secondly, the use of non-monetary transactions, including bills of exchange (*veksels*), was officially banned since the mid 1990s.³³ And thirdly, in addition to the general credit policy, the government successfully initiated specialised programmes, the so-called 'credit schemes,' to deal with inter-enterprise payment arrears, which is thought to be one of the factors that prompt barter transactions.

Indeed, along with the above-mentioned measures, credit schemes play a very important role in preventing the development of non-monetary transactions in the economy. Appendix 7E draws the picture of how the 'credit scheme' programme is carried out. Primarily, schemes are used to prevent inter-enterprise payment arrears from becoming a payment crisis for the entire economy. When the problem of inter-enterprise payment arrears among several enterprises is discovered, the authorities take the initiative and try to solve it as soon as possible. As a rule, the authorities extend centralised credit to the banking sector, which then on-lends it to troubled

³³ Please see, among others, the Resolutions of the Cabinet of Ministers No 204 and No 452 dated 2 June 1995 and 24 September 1997 respectively.

enterprises at concessionary interest rates. The flow of the credit facility then will be monitored continuously until it is paid back to the banking sector. Because of the centralised and purposeful nature of this type of loan, it is referred to as 'dead' money in the jargon of practitioners. The reason for this is that non-cash money created by the authorities circulates only along the predetermined lines of the scheme and flows back to its origin.

All in all, because of the excessive interventions from the authorities and the inappropriate functions imposed on banks, the Uzbek banking sector is still struggling to go beyond phase three of the evolutionary path proposed in Chapter 6. In other words, although moderate level of inflation has been achieved and the payments system has been modernised, banks have failed to regain the general public's confidence, which had collapsed as a result of hyperinflation in the early years of transition. As a result, despite these changes the size of the depository base remains very low.

It is unfortunate that after more than ten years of transition, the basic precondition for financial development, that is, the internal convertibility between cash money and non-cash money has not been achieved. The core of the problem of less-than-perfect-substitutability of non-cash money to cash money is explained by the excessive supply of soft credits and the concomitant restrictions imposed on the free convertibility of non-cash money into cash money to suppress inflation. Because these restrictions make enterprises and households unable to convert their non-cash money holdings into cash money on demand, and thus hold back their purchasing power, they create a condition for *forced saving*.³⁴ The cost of suppressing inflation

³⁴ Attempting to control inflation through cash squeeze is not a new phenomenon. Cash shortages had been a common problem throughout the FSU prior to the introduction of national currencies in the ex-soviet republics (Hardy and Lahiri, 1996). Due to the inefficiency and sluggishness of the non-cash payment system and the uncertainty associated with it, enterprises' demand for cash money increased

under this regime then is the collapse of confidence in the banking sector and the resulting illiquidity of bank liabilities.

7.6 Conclusion

To summarise, there have been a lot of positive changes in terms of reorganising the banking sector of Uzbekistan during transition. The two-tier banking sector has replaced the monobank system. Relevant laws were passed clarifying functions and responsibilities of banks in each tier of the sector. After the introduction of the national currency in the second half of 1994, inflation has been more or less moderate. The banking sector has a moderate level of branch penetration with about 800 branches (approximately 31000 people per branch) and approximately the same number of mini-banks. Moreover, the deposit insurance fund has been set up to foster the household sector's faith in banks. Although the old-style cash plan was not completely abandoned, the enterprise sector was allowed to choose between cash money and non-cash money. The authorities were particularly keen in reorganising and modernising the payment system. Banks were exempted from paying taxes to the budget for four years provided that they used freed resources for the modernisation of the system. As a result, the transformation of the manual paper-based clearing system into a computer-based electronic one was achieved within a short period of time.

significantly throughout the FSU. In the meantime, due to the semi-autonomous credit policies of the semi-independent central banks of ex-soviet republics, the supply of non-cash money considerably increased during this time. The reluctance of the central bank of Russia, which was in charge of monetary policy in the rouble zone, to increase the supply of cash money contributed to the cash shortage phenomenon. As a result, banks became increasingly unable to convert agents' deposit money into cash money to pay wages and pensions. In the end, the policy of squeezing the supply of currency was aimed at restraining inflation by holding back purchasing power of households. In this sense Conway (1997) argued that the phenomena of monetary overhang and cash shortage were the same thing.

Despite all of these positive changes, however, the general public's trust in banks and bank liabilities remains weak. Most importantly, free convertibility between cash money and non-cash money, which is one of the preconditions of the monetisation of wealth formation and financial development, is not still met. A closer look at the balance sheets of the major commercial banks revealed that about four-fifths of the total deposits of banks are current accounts of enterprises.

In short, the analysis of the chapter shows that the Uzbek banking sector is still struggling to go beyond phase three of the evolutionary path suggested in Chapter 6. In other words, although moderate level of inflation has been achieved and the payments system has been modernised, banks have failed to regain the general public's confidence, which had collapsed as a result of hyperinflation in the early years of transition. Due to the lack of trust in banks and bank liabilities, banks find it increasingly difficult to attract term and savings deposits from the general public. In other words, the household sector barely keeps their savings with the banking sector. In this sense, it is not surprising to see that the Uzbek economy is heavily dependant upon cash money and the ratio of broad money (M2) to GDP in the country is the lowest amongst the CIS countries we considered.

More importantly, the discussion of the chapter also shows that the explanations for this unique situation can be found in system-specific issues, which reflect the specificity of the current structural organisation of the economy. In fact, this suggestion is not the fruit of this single chapter. While discussing the transition path and current structural organisation of the Uzbek economy in Chapter 5, we have already made some preliminary predictions that maintenance of the old-style resource allocation mechanism might undermine the importance of the banking sector and hinder its development.

Indeed, the main concern of the Uzbek authorities during transition was the prevention of output loss, and the aggravation of unemployment, and also modernisation of the economy through strengthening the industrial sector. To finance new investment projects in the industrial sector by simultaneously maintaining production in ailing enterprises, the government needed considerable financial resources, which were partially and endogenously created by the state-controlled banking sector, and attracted from abroad. In addition to this, considerable amounts of resources were reallocated from the agricultural and energy sectors to the priority sectors of the economy through the old-fashioned price controls and other administrative methods. As a result, the main role of banks in this environment was again limited to the organisation of the payments system and channelling centralised credits and credits attracted from abroad to the state-controlled enterprise sector. The market type intermediary function of the sector was seen of secondary importance.

Generously created credit, which can be classified as political credit endogeneity, resulted in an overexpansion of the supply of non-cash money.³⁵ Under this scenario, allowing free convertibility of non-cash money into cash money would trigger inflation, which was an undesirable outcome for the monetary authorities. As a result, the authorities opted for the policy of restricting free convertibility between cash money and non-cash money in order to suppress inflationary pressure. In a way, a soft credit policy prevented inefficient non-monetary transactions, credit crunch and the resulting output loss, but it also inhibited the development of money and banks.

Moreover, the maintenance of the old-style practices such as the cash plan and the excessive government intervention in everyday bank activities, including tax and data collector function imposed on banks, severely weakens the general public's trust

³⁵This was described as 'excess liquidity' in the EBRD (2004: 212).

in bank liabilities. As a result, this hinders development of a market-oriented banking sector and thus hampers financial intermediation. In short, the current semi-centralised structure of the economy and the system-specific issues associated with it explain not only the current state of development of money and banking but also why the development of a market-oriented banking sector has been slow in Uzbekistan.

In a nutshell, our findings clearly show that generalised measurements of financial development, such as the EBRD's index of banking sector reform and the basic measures of monetisation and banking intermediation, cannot capture some of issues raised in this study and as such overestimate the current stage of the development of money and banking in Uzbekistan. For example, the EBRD's index of banking reform for Uzbekistan does account for problems associated with free convertibility of non-cash money into cash money and the resulting illiquidity of non-cash money. Therefore, this measure understates the importance of this phenomenon in explaining weak trust in banks and slow development of banking habits.

8. Summary and Conclusions

Using the Post Keynesian theory of monetary production, this study investigated the development of money and banks during transition. We wanted to show that since money and banks played only a passive and accommodative role under central planning, their evolution into market institutions would be complex and time-consuming. Taking Uzbekistan as a case study, we also wanted to explain that the evolutionary path of these institutions could not be analysed successfully unless we took into account special particularities such as history, pattern of reform policies, institutional factors, and the structure of the economy in question. Below we will briefly summarise the main findings and conclusions of the study.

First we discussed the role and importance of money and banks in both a market economy and a centrally planned economy. And only then did we start discussion of the development of these institutions during transition. This way of approaching the issue enabled us to unveil not only the complex character of the transition process, but also the time-consuming nature of institutional evolution.

A market economy is an incentive-based, decentralised system in which production takes time and the future is uncertain. Incentives are reflected in terms of prices, which mirror relative scarcities of goods and services. Successful functioning of this system depends upon institutions and conventions. Contracts, debt instruments, and price lists are vital in reducing uncertainty and thus facilitating the economic process. Because these institutions are denominated and discharged in money, money becomes an integral and inseparable part of production and facilitates the economic process.

In a market economy wealth formation takes place in monetary form. It is not desirable for agents to accumulate their wealth in the form of a stock of goods and inventories simply because their maintenance and upkeep involve huge costs. Since money represents universalised title to all tradable goods and services, it is the most liquid of all assets. Therefore, during the time of increased uncertainty agents hold their purchasing power in money. This in turn translates into lower demand for goods and services. As a result, aggregate effective demand decreases and this negatively affects output and employment. In short, since money plays both a facilitating and a constraining role, it is non-neutral in the economic process. Taking this into account Post Keynesians refer to a market economy as a monetary economy.

The role of bank lending is no less important than that of money in a market economy. The monetary nature of the process of production means that the pace of investment and thus economic growth is dependent upon the availability and cost of external finance, which in turn necessitates financial development. Amongst different financial institutions banks play a special role in this process. The first two stages of banking development are of paramount importance in understanding the nature and importance of banking development in a market economy, which also has clear implications for transition banking.

In stage one all exchange transactions are carried out in commodity money. Banks are in the process of gaining public's confidence. Since banks do not yet work as a united system, bank deposits represent savings and transaction balances do not circulate through banks. Banks do engage in lending activities but these are constrained by the availability of loanable funds. In other words, in this stage banks work merely as intermediaries between savers and borrowers.

In stage two banks establish themselves as a viable market institution and thus gain the general public's confidence. Slowly but gradually branch banking develops. Banks also initiate integration of clearing arrangements. These play an important role in the use of bank liabilities as money. As a result of these developments, credit creation will be possible with fractional reserves. It is important to note that gaining the public's confidence and organisation of clearing arrangements are of paramount importance in the acceptability of bank deposits as money and as such can be seen as a precondition to the banking sector's ability to create credit ahead of saving.

Hence in stage two the banking sector will gain the necessary confidence and experience to be able to free the economy from the loanable funds constraints. In other words, in stage two banks learn to create credit endogenously. The implication of this is that now investment determines the level of saving through changes in income. In the later stages of development this function only gets more refined and reaches its perfection. Like money, however, banks do not always play a facilitating role in the economic process. They may contribute to the instability of the system as well. This is explained by the liquidity preference of banks.

During the downturn in the business cycle liquidity preference of different groups of economic agents will be high. Higher liquidity preference of consumers leads to lower sales and thus negatively affects firms' retained earnings. Although cash-strapped firms change their expectations and may reduce their demand for long-term credit to finance new investment decisions, their demand for short-term credit to finance working capital may go up. For instance, they might be forced to borrow short-term credits to pay interest commitments on already borrowed loans. Unfortunately, when the corporate sector needs to borrow so badly, bank credit will not be forthcoming easily. Since liquidity preference of banks will also be high during

the downswing, banks raise interest rates on loans. Banks even may decide to ration credits, granting them only to the most established and financially sound firms. As a result, this leads to lower output and higher unemployment.

The role and importance of money and banks were completely different in centrally planned economies. Discussion of the theoretical foundations of a centrally planned economy showed fundamental reasons for such a distinction. Marx, Lenin and the other founders of a communist economy were well aware that money was non-neutral in a capitalist economy. Marx was also aware that money would separate acts of purchase and sale in time and space. As a result, demand would not automatically create its supply and this could lead the economy to possible overproduction and crisis.

In a nutshell, a centrally planned economy emerged as an alternative to a market economy. To prevent overproduction and cyclical economic crises communist theorists proposed to replace decentralised markets with central planning and to abolish money and banks from the system altogether. Although there were genuine attempts to build a moneyless and marketless economic system during the early years of central planning, practical difficulties associated with its organisation proved it to be infeasible. As a result, money and banks were reintroduced to the system. However, all necessary steps were taken to make sure that these institutions played only a passive and accommodative role.

The neutrality of money was achieved by planning the entire process of production and distribution, fixing prices of goods and services, and last but not least separating the supply of money into two semi-independent circuits – the cash money circuit and non-cash money circuit. Both cash money and non-cash money could not affect investment decisions independently because mobilisation of resources was

carried out through administratively set prices. The start-up capital of new enterprises and expansion of the existing ones would be financed from the central budget as non-repayable grants.

Non-cash money did not have universalised purchasing power. It played a passive and accommodating role in the process of planning and production. Once material plans were confirmed, non-cash money would be readily supplied by the banking sector to facilitate the process. Because the supply of non-cash money was almost perfectly responsive to changes in the real economic activity, the money supply curve could be depicted as a horizontal line. (Since the rate of interest did not have any real economic meaning, graphically, the vertical axis of the diagram would represent real economic activity and the horizontal one would represent the supply of money.)

As to the role of banks, they were also designed to facilitate the process of planning and production. Banks supplied short-term credits to the enterprise sector endogenously to facilitate inter-enterprise trade. Banks were authorised to monitor enterprises' performance, control their financial flows, pay taxes on their behalf, and supply all necessary information to the authorities. Notions such as market-determined interest rates, liquidity preference, cost of funds, collateral and creditworthiness were irrelevant to the soviet banking practice. Perhaps the only function of banks under central planning that could be relevant during transition was the organisation of the payments system.

In a nutshell, the centrally planned economy of the FSU was monetised only in appearance. In fact, the institutions of money and banks were passive and accommodative tools that were used to facilitate the smooth accomplishment of production plans. Therefore, we called this economy a barter-like economy and

suggested that the process of transition should be understood as transformation of a barter-like economy into a monetary one.

The process of transformation would require a number of fundamental and structural changes such as the abolition of central planning, liberalisation of prices, privatisation of SOEs, abolition of resource allocation through distorted prices, soft credits and budget subsidies, restructuring the banking sector by copying the blueprint of the banking sector in advanced market economies, establishing legal institutions to protect private property rights, etc.

Since orthodox theoreticians do not take the role of institutions, including money and banks, seriously, they argued that these changes would guarantee the success of transition. Therefore, in almost all policy packages developed in the early 1990s emphasis was placed on these reforms. Contrary to this, we have shown that these reforms could be seen only as a precondition to establishing a monetary economy and that the success of the process would depend upon the speed of institutional development. Indeed, ignorance of the time-consuming nature of institutional evolution made the process of transition painful. Persistent output fall, macroeconomic imbalances, and deteriorating living conditions were observed in almost all transition countries. As a result, the general public lost confidence in new market institutions, which in turn further delayed the process of institutional evolution.

Since transformation would imply a complete change from one form of resource allocation into another, the evolution and gradual maturity of market institutions such as money, banks and other financial institutions would be required for a smoother transition. Achievement of internal convertibility between cash money and non-cash money was of first and foremost importance. If money became a perfectly liquid asset

that represented unconditional title to goods and services, this would foster monetisation of wealth formation and lead to financial deepening.

Although the blueprint of the banking sector could be readily copied from advanced market economies, it would be impossible for transition banks to immediately master the functions performed by mature market institutions that experienced hundreds of years of evolutionary path. Our analysis, which was based upon our discussions about the role and importance of money and banks in a monetary economy and a centrally planned economy suggests that, to reach necessary maturity and to become effective financial intermediaries and creators of new credit, transition banks have to go through at least five different evolutionary phases. This was explained by the historical distinction between cash money and non-cash money, underdeveloped banking habits of the general public, slow and inefficient payments system inherited from the past, and more importantly hyperinflation during the early years of transition.

The speed of this evolution can vary from country to country depending upon a number of important factors such as number of years spent under central planning, degree of centralisation of the economy, the starting date of reforms and their consistency, proximity to large and dynamically functioning market economies, and more importantly entry of foreign banks. Most of the Eastern European countries spent fewer years under central planning and had less centralised economies. They started transition earlier and were more consistent reformers. In addition, proximity of these economies to large market economies made them attractive to foreign bank entry. As a result, institutional and technological spillovers were made faster and easier. Unfortunately, most of the CIS countries, including Uzbekistan, do not have these comparative advantages.

Our discussions show that Uzbekistan was very slow in reforming its economy and therefore is still far from developing into a market economy. After more than a decade of transition, some basic preconditions to building a monetary economy are not met. As a result, the banking sector is still struggling to go beyond phase two of the proposed evolutionary path. In spite of some positive changes undertaken during transition such as establishment of the two-tier banking sector, formal abolition of the distinction between cash money and non-cash money, modernisation of the payments system, control of inflation, and the establishment of the deposit insurance fund, the banking sector failed to regain the general public's confidence.

As a result, bank liabilities have not become a popular means of saving and exchange. In 2003 the ratio of broad money to GDP was only about 12 percent – the lowest indicator in the CIS. Moreover, the analysis of the activities of major banks in the country showed that term and saving deposits, which signal depositors' confidence in banks, constituted only about one-fifth of total bank deposits. All in all, due to the lack of confidence in banks, the household sector does not keep their savings with banks. As a result, the economy remains heavily reliant upon cash money. Ironically, despite these facts the share of the total bank assets to GDP has been the highest amongst the CIS countries for the last 8-10 years. The current structural organisation of the economy was one of the main factors to explain this irregularity.

A semi-centralised way of managing the economy allowed the authorities to allocate resources in old-fashioned style through price distortions, soft credits and subsidies. This, combined with the availability of foreign credits from international financial institutions and multinational banks, made the role of banks less important in terms of acting as financial intermediaries in the market sense of the word. As a

corollary, under this regime the main role of banks is again limited to organisation of the payments system and allocation of soft credits.

In addition to this, maintenance of the old-style practices such as restrictions imposed on the free convertibility of cash money and non-cash money, excessive intervention in bank activities, and tax and information collecting functions imposed on banks further weakens the general public's trust in the banking sector and delays healthy development of money and banks.

Another particularity of the current regime is that, although the generously created credit was helpful in preventing sharp output loss and the emergence of ineffective non-monetary transactions, it led to excessive creation of non-cash money. To control inflationary pressure coming from this source, the authorities imposed restrictions on the free convertibility of non-cash money and cash money. As a result, wage earners could not get their salaries when they were due (because enterprises could not convert their non-cash money into cash money immediately) and deposit holders could not convert their non-cash money into cash money on demand.

Interestingly enough in a way this shows that the authorities attempted to make bank liabilities less 'liquid' by restricting their purchasing power. That is to say, the authorities 'forced' non-cash money holders to postpone conversion of their non-cash money holdings into cash money, and made them delay cash money spending. As a corollary, agents found loopholes in regulations and used many different methods to convert their non-cash money holdings into cash money and willingly agreed to discount the value of non-cash money in the process.

Now, this issue is the most worrying of all because having trust in the banking sector's ability to exchange their liabilities for cash money when demanded is of paramount importance. In fact, the entire financial superstructure is built upon the

existence of confidence in unconditional convertibility of bank liabilities into currency. If for some reason agents lose confidence in banks, they run to banks and withdraw their holdings. As a consequence, this may result in the collapse of the entire financial system. Ironically, restrictions on the free convertibility between cash money and non-cash money and the resulting relative illiquidity of bank liabilities show that this basic but fundamental condition has not been met yet in Uzbekistan.

In a nutshell, the weak development of money and banking in Uzbekistan is largely explained by the current structural organisation of the economy and some sector-specific issues associated with it. As Uzbekistan intends to gradually transform its economy into a market one, the authorities should appreciate that in a market economy availability and cost of external finance play an important role in facilitating the enterprise sector's drive to expand. Therefore, there is an urgent need to encourage development of money and banking.

The authorities have already taken some positive steps by modernising the payments system and establishing a special fund to protect household sector deposits. However, there are still many macro level and sector level problems that need to be addressed. First of all, immediate measures have to be taken to promote the general public's confidence in the banking sector. This should start with guaranteeing free convertibility between cash money and non-cash money. Excessive intervention in bank activities and tax and information collecting functions imposed on them can be seen as policing activities of both banks and enterprises alike. Abolition of these practices promotes confidence further.

Nevertheless, despite being of paramount importance in promoting confidence, these changes may not give the expected result unless the old-style resource allocation mechanism is brought to an end too. Abolishing allocation of resources through

distorted prices, soft credits and budget subsidies not only increases the importance of banks as financial intermediaries and creators of new credit, but also complements the confidence-promoting measures. The caveat, however, is that it takes time until banks reach the necessary maturity to be able to create credit ahead of saving.

To prevent an unnecessary output fall, without jeopardising the effectiveness of the measures aimed at promoting confidence in banks, these changes need to be carried out in several gradual steps. First, the authorities have to establish a provisional specialised bank, sort of a development bank, to take responsibility to supply credit to the economy. The importance of this bank should be gradually reduced taking into account the degree of progress achieved by the healthy developing commercial banks. Once the banking sector regains full confidence of the general public and starts working as an effective financial intermediary and creator of new credit, no longer will there be a need for this type of bank.

Limitations of the Study and Implications for Further Research

One of the main shortcomings of this study was that it concentrated only on the formal credit markets and investigated the problems of monetary evolution from a much broader perspective. This means that a number of interesting and important issues could not be discussed here. This especially refers to the activities of non-formal credit institutions such as moneylenders and usurers in the context of a dual economy. Since activities of these institutions are also important in understanding the true nature of the process of monetisation of wealth formation, and thus the evolution of a monetary economy during transition, studying these issues will hopefully be our next challenge.

Now, as far as the implications are concerned, by emphasising the role and importance of institutions in the economic process, this research shows that differences in history, geography, pattern of reform policies, and the structure of the economy play an important role in explaining the speed and possible evolutionary progress of institutions during transition. In this sense, this method of analysis might be used in further studies to assess evolutionary differences of institutional developments across different transition countries.

APPENDICES

Debates on Industrialisation and Planning

Two alternative growth theories emerged after the revolution: *the unbalanced growth* theory and *the balanced growth* theory. Supporters of the unbalanced growth theory argued for a 'big push'. They argued that the ultimate goal of rapid economic development would be achieved only through giving more weight to the production of investment goods. They saw the agricultural sector as a primary source of capital accumulation for financing industrial growth.

Contrary to this, advocates of the theory of balanced growth argued that the interdependence of agriculture and industry required adoption of balanced growth policies. According to this school maintenance of a balanced and gradual growth in all sectors of the economy was necessary to achieve harmonised and consistent long-term economic growth.

The balanced growth theory faded away from the scene along with its advocates, soon after the Stalinist 'purges' were initiated in the early 1930s. It meant that the theory of unbalanced growth was chosen as an appropriate theory to be implemented in the Soviet Union. The model of unbalanced growth was based on the theory of 'primitive socialist accumulation' developed by Preobrazhensky.¹

The accomplishment of ambitious investment decisions in the industrial sector would require accumulation of sufficient capital. Theoretically there were three sources from which the accumulation could be generated: surplus product created in

¹ Here we decided to mention only the most influential model among the many alternative growth theories. For instance for the discussion of similar growth models developed by Fel'dman and Kovalevsky, please see Temkin, 1998: 315.

the agricultural sector, any surplus generated in the industrial sector itself, and borrowing from abroad.

However, the last source was out of reach of the Soviet State. The politically unfriendly international environment and the 1917 declaration of default on all foreign debt borrowed by the previous government would hardly make it possible to borrow from abroad. The Soviet leadership was conscious of this fact. Even the radical left wing members of the party acknowledged that the source of surplus capital had to be sought in agriculture and in industry itself. In this regard the prominent representative of left wing opposition Preobrazhensky noted the following:

This process of extending and consolidating the state economy can proceed both at the expense of its own forces and resources, that is surplus product of the workers in state industry, and at the expense of the private, including peasant (itself including middle peasant) economy. Can it be otherwise? To express the problem in most easily understood words – can the burden of developing state industry and reconstructing its whole technical base be borne on the shoulders of our three million workers alone, or must our twenty-two million peasant households take a share in this too? (Preobrazhensky, 1966: 226)

Since 1925 the official line of the party was to give priority to industrialisation, putting special emphasis on heavy industry. At this point the discussion among party members was only regarding the tempo of industrialisation. Towards the end of the 1920's the decision was ruled in favour of faster industrialisation. Putting more emphasis on the production of capital goods implied that the number of employees in the non-consumption-goods sector of the economy would increase. Under this scenario the agricultural sector was to produce not only the 'surplus' for financing the

expansion of the industrial sector, but also to provide extra food supplies (wage goods) for those employed in newly built industrial enterprises.

In addition, if monetary stability, achieved with difficulty during the NEP, was to be maintained and inflation was to be avoided, the accumulation of resources had to be carried out by taxation, borrowing from the private sector and general population, or keeping the rate of productivity growth above the rate of growth of real wages in industry. A failure to provide the town with required extra foodstuffs from the village would create excess liquidity in towns not supported by the supply of goods and services and thus would result in inflation. Or the inability to generate sufficient capital accumulation for investment by the above-mentioned method, could tempt the authorities to use the *Gosbank's* money printing services to finance their ambitious plans and thus revive the problem of inflation and budget deficit.

However, because of the artificially created unfavourable trade conditions between agriculture and industry, peasants were unwilling to supply their surplus to the market and instead preferred saving in kind. Meanwhile in 1925-6 wages of industrial workers increased more than the production capacity of the industrial sector. This meant that towns now had higher purchasing power and higher demand for agricultural foodstuffs. Although production rose faster than total wage bill in the consecutive years of 1927-9, it did not transform into the market as a decrease in purchasing power of workers. Because the reduction in the real wage was offset by increased employment in the capital construction sector, it left total purchasing power of the town high (Davies, 1958: 90).

Hence, the government failed to take the necessary measures to increase production of consumer goods correspondingly in response to these changes. This, combined with wholesale price rigidities, created the problem of goods shortage and hence hidden inflation. This situation, also known as the 'goods famine,' augmented the reluctance of the peasantry to exchange their hard-earned grain for a currency in which goods could not be easily obtained in the market. As a consequence, the volume of total marketable agricultural production steadily declined during the period of suppressed inflation of 1925-6.

The idea of using the export proceeds of the agricultural sector to finance investment in the capital construction sector failed too. In the years 1925-9 total exports of agricultural foodstuff never reached even half of their pre-war level. Export of agricultural foodstuffs were equal to about 40 percent of its pre war level in the years 1926-7 and around 25-30 percent of its pre-war level in the following three years (Baykov, 1946: 76). In short, the government failed to attract the surplus product generated in the agricultural sector to finance its ambitious industrial projects.

These results convinced the authorities that it was impossible to carry out comprehensive industrialisation policies without reforms in the agricultural sector. The authorities were now sure that unless nationalisation policies were carried out in agriculture, private peasantry in agriculture would only be an obstacle to the ambitious rapid industrialisation plans. As a result, massive collectivisation policies were initiated in agriculture in the late 1920s. And by the mid-1930s collectivisation of agriculture was virtually completed. (See for instance Munting, 1982 and Gros and Steinherr, 1995, Gregory and Stuart, 1998.) As a result, by the end of the 1920s the

NEP was formally abolished, and foundations for a centrally planned command economy were laid down.

As in the case of industrialisation debate, there was a debate among the Bolshevik economists about the nature of planning in the economic process. Teleologists (from 'teleology', goal-directed development) and geneticists (from 'genesis', origin, evolution) represented two major alternative schools of central planning.²

Teleologists argued for *directive planning*. According to them plan targets had to be legally *binding* on enterprises. A model of planning advocated by teleologists reflected the soviet leaders' goal of rapid industrialisation. According to this model, the working of the economy would be organised entirely from above. Teleologists rejected the idea of equilibrium among different sectors of the economy put forward by balanced growth theorists. Therefore, their model was not constrained by market forces. They argued that planners, or 'social engineers' as they called them, must dictate the direction of economic activity, not market forces. The only constraint of this model was the physical limits of the economy. One more special feature of this model of planning was that it took as a reference point Marx's famous analysis of the economy where department I produced capital goods and raw materials and department II produced consumer goods. In an environment where everything that was of a 'Marxian' origin was glorified, Marxian reference played a very important role for the ultimate success of the directive planning theory over the alternative one.

² Kondratiev, Bazarov and Groman were the main intellectual leaders of the teleologists. The main supporters of the latter school were Strumilin, Pyatakov, Kuibeshev and Feld'man.

Geneticists supported *indicative planning*. They stressed the role of objective regularities in the economic process. Geneticists gave considerable importance to market forces. In this model consumer demand was seen as a driving force of the economy. It would indicate to the planners the direction of economy activity, which at the end would be taken into account by the authorities in further planning. In indicative planning targets would be set in the hope of affecting economic outcomes by providing information external to the market. Plan targets would only be *indicative*, not binding, on enterprises. In other words, in general individual firms would not receive directives from planners (Gregory and Stuart, 1995: 119).

The geneticist approach was influential in the early attempts of central planning during the period of NEP. However, as the NEP policies became less and less popular towards the end of the 1920s, this approach fell out of favour too. The formal abolition of the NEP implied an inevitable victory for the teleologists.

Indeed, the main reason behind choosing the unbalanced growth theory, the theory of directive planning being its necessary complement, was the military needs and economic backwardness of the Soviet Union. The ambitious goal now was catching up with and surpassing the most advanced countries of the capitalist world.

One feature of the history of old Russia was the continual beatings she suffered for falling behind, for her backwardness. ... Do you want our socialist fatherland to be beaten and to lose its independence? If you do not want this you must put an end to its backwardness in the shortest possible time ... We are fifty or a hundred years behind the advanced countries. We must make good this distance in ten years. Either we do it, or they crush us. (Stalin, quoted in Levine, 1974: 45)

As debates around industrialisation and central planning were occupying the minds of Bolshevik theoreticians, thoughts on the role of money became a secondary issue. Nonetheless, there were strong expectations among party members that under 'marketless' central planning money would also be eliminated. Indeed, this was a logical conclusion derived from Marxian teachings that under communism, including its first phase of development, a *commodity* exchange system would be replaced by a *product* exchange system. However, Stalin denounced this type of interpretation as 'leftist nonsense.' Speaking at the party congress in 1939 he declared that 'Money will remain with us for a long time, until the completion of the first phase of communism' (quoted in Temkin, 1998: 316.).

The issue of abolishing commodity-money relations and thus money from the economic process was never fully resolved. Time and time again it was postponed to a later period. As the early attempts to get rid of all commodity-money relations failed during the period of War Communism, 'there was a "temporary retreat" - a term used by Lenin as a justification for introducing the NEP' (Temkin, 1998: 317). Now with Stalin's clarification implementation of the idea of a moneyless society was postponed until communism was fully built. Later soviet theoreticians left the matter to be discussed in the future when appropriate time came.

The EBRD's Selected Indices of Transition Reform

Price liberalisation

- 1 Most prices formally controlled by the government.
- 2 Price controls for several important product categories; state procurement at non-market prices remains substantial.
- 3 Substantial progress on price liberalisation: state procurement at non-market prices largely phased out.
- 4 Comprehensive price liberalisation; utility pricing which reflects economic costs.
- 4+ Standards and performance typical of advanced industrial economies: Comprehensive price liberalisation; efficiency-enhancing regulation of utility pricing.

Small-scale privatisation

- 1 Little progress.
- 2 Substantial share privatised.
- 3 Nearly comprehensive programme implemented.
- 4 Complete privatisation of small companies with tradable ownership rights.
- 4+ Standards and performance typical of advanced industrial economies: no state ownership of small enterprises; effective tradability of land.

Large-scale privatisation

- 1 Little private ownership.
- 2 Comprehensive scheme almost ready for implementation; some sales completed.
- 3 More than 25 percent of large-scale enterprise assets in private hands or in the process of being privatised (with the progress having reached a stage at which the state has effectively ceded its ownership rights), but possibly with major unresolved issues regarding corporate governance.
- 4 More than 50 percent of state-owned enterprise and farm assets in private ownership and significant progress on corporate governance of these enterprises.
- 4+ Standards and performance typical of advanced industrial economies: more than 75 percent of enterprise assets in private ownership with effective corporate governance.

Enterprise reform index (Governance and Enterprise restructuring)

- 1 Soft budget constraints (lax credit and subsidy policies weakening financial discipline at the enterprise level); few other reforms to promote corporate governance.
- 2 Moderately tight credit and subsidy policy but weak enforcement of bankruptcy legislation and little action taken to strengthen competition and corporate governance.
- 3 Significant and sustained actions to harden budget constraints and to promote corporate governance effectively (e.g. through privatisation combined with tight credit and subsidy policies and/or enforcement of bankruptcy legislation).
- 4 Substantial improvement in corporate governance, for example, an account of an active corporate control market; significant new investment at the enterprise level.
- 4+ Standards and performance typical of advanced industrial economies: effective corporate control exercised through domestic financial institutions and markets, fostering market-driven restructuring.

Appendix 7A. Structure of the Uzbek Banking Sector at the Beginning of 2001.

Name of the Bank	Assets /Total Banking Sector	Assets Banking Sector	Capital/Total Banking Sector	Ownership structure	State Participation in Banks' Capital	Relevance to the Previous Banking System	Founding Date
1. NBU	0.71	0.57	0.57	State owned	100% State	Vneshekonombank	25.10.91
2. Xalq Bank (People's Bank)	0.01	0.01	0.01	State owned	100% State	Savings bank	16.03.92
3. Asaka Bank	0.05	0.15	0.15	State joint stock	Ministry of Finance, Uzavtosanoat, NBU	Not related	19.01.96
4. Zamin Bank	Neg*	Neg	Neg	State joint stock	State Property Committee, Uzqishloqxojmarsholding, Ministry of Finance	Not related	20.11.96
5. Ujjoyjamg'armabank	0.03	0.04	0.04	State Joint stock	Municipality of the city of Tashkent, State Property Committee, Ministry of Finance, etc	Not related	28.04.95
6. Sanoatqurilishbank	0.08	0.05	0.05	Joint stock	Uzbekneftegaz, Uzqishloqxujalikmashinasozlik, Uzbekistan Rail Roads, Navoi and Olmalyq mining complexes	Promstroibank	25.06.91
7. Paxta Bank	0.04	0.07	0.07	Joint stock	Uzpaxtasanoatsotish, Uzagrosu' gurta, Uzqishloqxujalikmashholding, Uzqishloqxujalikkimyo, etc	Agroprombank	01.07.91
8. G'allabank	0.03	0.02	0.02	Joint stock	Uzdunmahsulot and some other regional branches of this organisation	Not related	02.08.94
9. AT Turon Bank	Neg	Neg	Neg	Joint stock	Ministry of Melioration and Water Resources Management	Not related	31.12.90
10. Tadbirkorbank	0.01	0.01	0.01	Joint stock	Business Fund, State Property Committee	Not related	31.12.90

11. Savdogarbank	0.01	0.01	Joint stock	Ministry of Finance, Uzbeksavdo, Uzmevasabzavot	Not related	21.05.94
12. Aloqabank	Neg	0.01	Joint stock	Uzpostelecommunication and other communication agencies	Not related	22.03.95
13. Trastbank	Neg	Neg	Joint stock	Uzelektrosavdo, Uzulgurjisavdo	Not related	21.06.94
14. Ipak Yoli Bank	Neg	Neg	Joint stock	Uzbekinvest, NBU	Not related	31.12.90
15. Aviabank	Neg	0.01	Joint stock	Uzbek National Airlines	Not related	31.12.90
16. Hamkorbank	Neg	Neg	Joint stock	Founded on the basis of Andijonbank, No state participation	Not related	29.07.00
17. ABN Amro Bank Uzbekistan NB, JV	0.01	0.01	Joint stock with foreign participation	NBU	Not related	16.12.96
18. Uzprivatbank	Neg	0.01	Joint stock with foreign participation	AGMK, NGMK, State Property Committee	Not related	28.02.95
19. Uzdaewoo Bank	0.01	0.01	Uzbek-Korean Closed Joint Stock	NBU	Not related	01.03.96
20. Uzbekistan-Turkey Bank	Neg	0.01	Joint stock with foreign participation	Paxta Bank	Not related	13.05.93
21. Soderot (Branch of an Iranian Bank)	Neg	0.01	Foreign Bank	No state participation	Not related	26.08.99
22. Central Asian Cooperation Bank (Branch)	Neg	Neg	Joint stock with foreign participation	No state participation	Not related	25.10.97
23. Parvina-Bank	Neg	Neg	Private Closed Joint Stock	No state participation	Not related	10.05.94
24. Alp-Jamol Bank	Neg	Neg	Private Closed Joint Stock	No state participation	Not related	16.03.98

25. Turkiston Bank	Neg	Neg	Private Joint Stock	No major participation	Not related	16.03.98
26. XIF Bank	Neg	Neg	Private Joint Stock	No state participation	Not related	16.03.98
27. Istiqbol	Neg	Neg	Private Joint Stock	No state participation	Not related	19.05.98
28. O'ktambank	Neg	Neg	Private Joint Stock	No state participation	Not related	30.10.98
29. Adilet Bank	Neg	Neg	Private Joint Stock	No state participation	Not related	24.08.99
30. Karvon Bank	Neg	Neg	Private Joint Stock	No state participation	Not related	26.08.99
31. Biznes Bank	Neg	Neg	Private Joint Stock	No state participation	Not related	07.03.00
32. Sug'diyona Bank	Neg	Neg	Private Joint Stock	No state participation	Not related	04.09.00
33. Samarqand Bank	Neg	Neg	Private Closed Stock	No state participation	Not related	30.12.00
34. Qo'qon Bank	Neg	Neg	Private Closed Stock	No state participation	Not related	20.03.01
35. Kapital Bank	Neg	Neg	Private Closed Stock	No state participation	Not related	07.04.01
36. Ravnaq Bank	Neg	Neg	Private Joint Stock	No state participation	Not related	23.06.01
37. Davr Bank	Neg	Neg	Private Joint Stock	No state participation	Not related	29.09.01

*Negligible

Source: Central Bank of Uzbekistan (2001) except for the last four banks, which are added from Mullajonov (2001).

The Survey Results and Their Full Analysis and Interpretations

Part A. Results

Table 7B.1. Popularity of alternative means of saving among households
(Percentage of respondents; number of responses are given in brackets)

	Most popular	Popular	Somewhat popular	Little popular	Not popular	Mean popularity	Rank
	5	4	3	2	1		
Foreign currency	27.4 (n=23)	36.9 (n=31)	14.3 (n=12)	17.9 (n=15)	3.6 (n=3)	3.67 (n=84)	1
National currency	28.75 (n=23)	17.5 (n=14)	32.5 (n=26)	20.0 (n=16)	1.25 (n=1)	3.53 (n=80)	2
Precious metals and jewellery	22.9 (n=19)	33.7 (n=28)	19.3 (n=16)	18.1 (n=15)	6.0 (n=5)	3.49 (n=83)	3
Real estate	15.7 (n=13)	39.8 (n=33)	30.1 (n=25)	6.0 (n=5)	8.4 (n=7)	3.48 (n=83)	4
Livestock	12.1 (n=10)	34.9 (n=29)	27.7 (n=23)	15.7 (n=13)	9.6 (n=8)	3.24 (n=83)	5
Consumer durables	11 (n=9)	29.3 (n=24)	29.3 (n=24)	21.9 (n=18)	8.5 (n=7)	3.12 (n=82)	6

Table 7B.2. Perceived change in the nature of cash money and non-cash money
(Percentage of respondents; number of responses are given in brackets)

	Very Positive	Positive	Somewhat positive	slightly negative	Very negative	Mean change
	5	4	3	2	1	
Did the nature of non-cash money and cash money changed during transition?	8.0 (n=7)	47.1 (n=41)	9.2 (n=8)	23.0 (n=20)	12.6 (n=11)	3.1 (n=87)

Table 7B.3. The difference between the values of cash money and non-cash money
(Percentage of respondents; number of responses are given in brackets)

	More than 20%	15-20%	11-15%	6-10%	0-5%	Mean difference
	5	4	3	2	1	
On average, what is the difference between the values of cash money and non-cash money?	3.5 (n=8)	18.6 (n=32)	31.4 (n=27)	37.2 (n=16)	9.3 (n=3)	3.30 (n=86)

Table 7B.4. Most likely explanations for the emergence of difference between cash money and non-cash money

(Percentage of respondents; number of responses are given in brackets)

	Very Important	Important	Somewhat Important	Of Little Importance	Of No Importance	Mean Importance	Rank
	5	4	3	2	1		
Shortage of cash money	43.2 (n=35)	32.1 (n=26)	9.9 (n=8)	12.3 (n=10)	2.5 (n=2)	4.01 (n=81)	1
Demand for cash money is high due to the shadow economy	38.5 (n=30)	23.1 (n=18)	17.9 (n=14)	15.4 (n=12)	5.1 (n=4)	3.74 (n=78)	2
Cash is dearer because it is used to avoid taxes	18.5 (n=15)	34.6 (n=28)	27.2 (n=22)	13.6 (n=11)	6.2 (n=5)	3.46 (n=81)	3
Excessive supply of non-cash money	10.3 (n=8)	38.5 (n=30)	25.6 (n=20)	20.5 (n=16)	5.1 (n=4)	3.28 (n=78)	4
Cash is dearer because it is faster to effect transactions in it	22.8 (n=18)	22.8 (n=18)	22.8 (n=18)	21.5 (n=17)	10.1 (n=8)	3.27 (n=79)	5
Interest rates on bank deposits are too low	14.3 (n=11)	31.2 (n=24)	22.1 (n=17)	28.6 (n=22)	3.9 (n=3)	3.23 (n=77)	6

Table 7B.5. Ability of enterprises to convert non-cash money into cash money

(Percentage of respondents; number of responses are given in brackets)

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean Value
	5	4	3	2	1	
Do you agree that enterprises that hold business account with your bank can convert non-cash money into cash money without any difficulty?	3.4 (n=3)	9.2 (n=8)	19.5 (n=17)	41.4 (n=36)	26.4 (n=23)	2.22 (n=87)

Table 7B.6. Enterprises with wage arrear problems
(Percentage of respondents; number of responses are given in brackets)

	Almost all of them	About 75% of them	About 50% of them	About 25% of them	Non of them	Mean Value
	5	4	3	2	1	
What proportion of enterprises that hold business accounts with your bank do not pay their employees' wages on time?	12.8 (n=11)	18.6 (n=16)	17.4 (n=15)	44.2 (n=38)	7.0 (n=6)	2.86 (n=86)

Table 7B.7. The length of wage arrears

	None	1-2 months	3-4 months	5-6 months	more than 7 months	Mean Value
	5	4	3	2	1	
What is the length of wage payment delays?	2.4 (n=2)	67.5 (n=56)	25.3 (n=21)	3.6 (n=3)	2.4 (n=2)	3.67 (n=83)

Table 7B.8. Importance of Alternative Sources of Bank Credit

	Very Important	Important	Somewhat Important	Of Little Importance	Of No Importance	Mean Importance	Rank
	5	4	3	2	1		
Own Resources	63.4 (n=53)	30.9 (n=25)	3.7 (n=3)	0 (n=0)	0 (n=0)	4.62 (n=81)	1
Deposits of Enterprises	29.6 (n=24)	42 (n=34)	16 (n=13)	9.9 (n=8)	2.5 (n=2)	3.86 (n=81)	2
Household Deposits	32.5 (n=26)	32.5 (n=26)	20 (n=16)	8.7 (n=7)	6.2 (n=5)	3.76 (n=80)	3
Loans from International Financial Institutions	26.4 (n=21)	32.4 (n=24)	10.8 (n=8)	14.9 (n=11)	13.5 (n=10)	3.47 (n=74)	4
Government Funds	11.4 (n=9)	19 (n=15)	29.1 (n=23)	25.3 (n=20)	15.2 (n=12)	2.86 (n=79)	5
Interbank Credits	3.8 (n=3)	25.3 (n=20)	26.6 (n=21)	32.9 (n=26)	11.4 (n=9)	2.77 (n=79)	6

Table 7B.9 Likelihood of obtaining bank credit for various enterprises
(Percentage of respondents; number of responses are given in brackets)

	Most likely	Likely	Neutral	Less likely	Unlikely	Mean Likelihood	Rank
	5	4	3	2	1		
Majority shareholders of banks	37.5 (n=27)	38.9 (n=28)	20.8 (n=15)	0 (n=0)	2.8 (n=2)	4.08 (n=72)	1
Creditworthy enterprises regardless of size and ownership structure	37.0 (n=27)	38.4 (n=28)	16.4 (n=12)	0 (n=0)	8.2 (n=6)	3.96 (n=73)	2
Large enterprises regardless of their size	12.3 (n=9)	42.5 (n=31)	34.2 (n=25)	9.6 (n=7)	1.4 (n=1)	3.55 (n=73)	3
Small and medium enterprises regardless of their ownership structure	12.5 (n=9)	37.5 (n=27)	43.1 (n=31)	0 (n=0)	6.9 (n=5)	3.49 (n=72)	4
Private enterprises regardless of their size	4.5 (n=3)	40.6 (n=28)	47.8 (n=33)	0 (n=0)	7.2 (n=5)	3.35 (n=69)	5
State-owned enterprises regardless of their size	3 (n=4)	28 (n=23)	33 (n=32)	0 (n=11)	5 (n=1)	69 3.25 (n=71)	6

Table 7B.10. Bad Loans in Banks' Loan Portfolio
(Percentage of respondents; number of responses are given in brackets)

	None	10-20%	25-30%	30-40%	More than 50%	Mean Value
	5	4	3	2	1	
What is the share of bad loans in your banks loan portfolio?	26.3 (n=21)	51.2 (n=41)	13.8 (n=11)	6.2 (n=5)	2.5 (n=2)	3.93 (n=80)

Table 7B.11. Worst obstacles for banking business
(Percentage of respondents; number of responses are given in brackets)

	Very Important	Important	Somewhat Important	Of Little Importance	Of No Importance	Mean Importance	Rank
	5	4	3	2	1		
Excessive intervention from the authorities	59.0 (n=46)	25.6 (n=20)	10.3 (n=8)	2.6 (n=2)	2.6 (n=2)	4.36 (n=78)	1
Excessive intervention from the monetary authorities	43.6 (n=34)	34.6 (n=27)	15.4 (n=12)	3.8 (n=3)	2.6 (n=2)	4.13 (n=78)	2
Imperfections in current laws	35.5 (n=27)	43.4 (n=33)	18.4 (n=14)	2.6 (n=2)	0.0 (n=0)	4.12 (n=3)	3
Banks lack market expertise	22.1 (n=17)	49.3 (n=38)	22.1 (n=17)	5.2 (n=4)	1.3 (n=1)	3.86 (n=77)	4
Distrust in banks	23.4 (n=18)	45.4 (n=35)	23.4 (n=18)	7.7 (n=6)	0.0 (n=0)	3.84 (n=77)	5
Corruption	17.1 (n=13)	42.1 (n=32)	27.6 (n=21)	9.2 (n=7)	3.9 (n=3)	3.59 (n=76)	6
Crises in the local financial market	20.3 (n=15)	47.3 (n=35)	21.6 (n=16)	10.8 (n=8)	0.0 (n=0)	3.45 (n=74)	7
Crises in international financial markets	11.3 (n=8)	28.2 (n=20)	26.8 (n=19)	26.8 (19)	7.0 (n=5)	3.10 (n=71)	8

Table 7B.12. Importance of Factors that Foster Public's Confidence in Banks
(Percentage of respondents; number of responses are given in brackets)

	Very Important	Important	Somewhat Important	Of Little Importance	Of No Importance	Mean Importance	Rank
	5	4	3	2	1		
Ability of households to withdraw their deposits from their bank accounts on first demand	78.3 (n=65)	19.3 (n=16)	0.0 (n=0)	1.2 (n=1)	1.2 (n=1)	4.72 (n=83)	1
Low Inflation	46.2 (n=36)	34.6 (n=27)	14.1 (n=11)	3.8 (n=3)	1.3 (n=1)	4.21 (n=78)	2
Ability of enterprises to convert their non-cash money into cash money upon first request	53.1 (n=43)	25.9 (n=21)	9.9 (n=8)	7.4 (n=6)	3.7 (n=3)	4.17 (n=81)	3
Complete abolition of any separation between cash money and non-cash money	47.5 (n=38)	28.8 (n=23)	12.5 (n=10)	8.8 (n=7)	2.5 (n=2)	4.10 (n=80)	4
Enhancing application of electronic means of payment such as debit and credit cards	41.3 (n=33)	33.8 (n=27)	12.5 (n=10)	10.0 (n=8)	2.5 (n=2)	4.01 (n=80)	5
Enhancing telephone and internet banking services	35.8 (n=29)	34.6 (n=28)	13.6 (n=11)	13.6 (n=11)	2.5 (n=2)	3.88 (n=81)	6
Less intervention from local and central authorities	47.0 (n=39)	10.8 (n=9)	22.9 (n=19)	14.5 (n=12)	4.8 (n=4)	3.81 (n=83)	7
Higher rates on interest on deposits	19.8 (n=16)	55.6 (n=45)	12.3 (n=10)	4.9 (n=4)	7.4 (n=6)	3.75 (n=81)	8

Part B. Full Analysis and Interpretation of the Results*Trust and Money – Cash and Non-cash*

As our discussions so far showed, the public's trust in bank liabilities is still very low and the economy remains highly reliant upon cash money. Disapproval of bank deposits by the household sector, however, does not mean that the general public do not save. Furthermore, high level of reliance on cash money does not necessarily mean that all saving takes place in the national currency.

Lack of trust in the national currency implies that households take a more cautious approach and keep their savings in alternative assets. The stability and instant liquidity offered by foreign currencies, such as US dollars and the euro, make them an attractive means of saving for the household sector. Some conservative savers may even turn to precious metals and jewellery. Other venturesome savers, in the absence of a well-functioning stock market, might decide to go after relative stability and return and thus might decide to keep their savings in real estate or livestock depending upon whether they live in urban or rural areas. However, since converting these alternative assets, including foreign currencies, into legal tender involves some transaction costs, short-term and small denomination savings will be kept in the national currency. In this sense, one would expect that demand for the national currency would be explained mostly by transaction motives for holding money.³

Table 7B.1 reveals the bankers' viewpoint on this issue. The bankers' indication that the national currency is only the second best means of saving tells that the national currency has not still gained the confidence of the general public.

³ For the payment of larger transactions such as purchase of cars and real estate, however, individuals still prefer to use foreign currencies (predominantly US dollars).

Foreign currencies still remain people's first choice as a means of saving. Bankers also recognise that households save in other different means. Saving in precious metals and jewellery, real estate and livestock were ranked after foreign currencies and the national currency in the respective order.

The line of demarcation between cash money and non-cash money has been abolished during transition. In practical terms, bankers, too, agree that the nature of the problem changed towards a positive side (in the sense that 'moneyness' of non-cash money has improved). The majority of the respondents (64.3%) believe that, on average, there was a positive change (Table 7B.2). *Nonetheless, the public does not yet rate cash money and non-cash money equally liquid.* As Table 7B.3 reveals about 78 % of bankers who participated in the survey believe that, on average, non-cash money is at least 11-15% less liquid than cash money.

As to the possible explanations of the emergence of the difference between the values of cash money and non-cash money, bankers were asked to rate several important factors on the scale of 1 to 5, 1 being of no importance and 5 being very important. The results show that bankers agree that shortage of cash money is an important but not the single most important factor that explains the difference (Table 7B.4). The results also show that existence of the shadow economy on the one hand, and incentives to avoid taxes on the other hand, put upward pressure on the demand for cash money; in the meantime, excessive supply of non-cash money and low interest paid on bank deposits make holding non-cash money less desirable.

All in all, the results indicate that when all the listed factors are ranked in terms of their importance in explaining the issue, shortage of cash money and existence of

the shadow economy are the top two factors that explain the difference. About 75 and 62 percent of the respondents said that shortage of cash money and the shadow economy phenomenon were important factors that explained the difference between the values of cash money and non-cash money. (See Table 7B.4.)

As was discussed earlier, one of the effects of the cash squeeze policy is that due to the systematic shortage of cash money in banks, enterprises will find it increasingly difficult to convert their non-cash money into cash money to pay wages of their employees on a timely basis. When asked about the enterprise sector's ability to convert their non-cash money into cash money when needed, majority of bankers acknowledged that this still remained to be a big problem. About 68 percent of the respondents said that enterprises could not convert their non-cash money into cash money on first demand when needed; only 13 percent of the respondents do not see this as a problem (Table 7B.5).

As for the problem of wage arrears, 93 percent of the respondents said that at least a quarter of enterprises that held business account with their banks were not able to pay wages on time; in particular about 50 percent of the respondents said that about half of the enterprises faced this problem (Table 7B.6). As to the length of the wage payment delays majority of respondents (about 70 percent) agreed that it was between 1 and 2 months (Table 7B.7).

Credit Activity of Banks

On banks' credit activity, we were interested in investigating three different issues: (i) the relative importance of alternative sources of bank credits; (ii) the

likelihood of obtaining credit from banks for different enterprises; and finally (iii) the degree of non-performing loans in the banks' credit portfolio.

As far as the first is concerned, in the previous section we have already noted that the banking sector's credit activity relied on their own resources (own capital), deposits from the enterprise sector, and credits from international financial institutions and banks. When asked about this issue, the overwhelming majority, more than 90 percent, of the respondents said that banks' own sources (bank capital) was one of the most important sources of credit resources. Deposits of enterprises and households were also rated highly. In terms of overall importance, all the listed factors were ranked as follows: own resources; deposits of enterprises; household deposits; loans from international financial institutions; government funds; interbank credits (Table 7B.8).

In terms of enterprises' ability to obtain bank credit, undisputed preference is given to the main shareholders of banks which are mostly state-owned institutions ranging from ministries and ministry like associations to small and medium sized enterprises (Table 7B.9). It was also interesting to see creditworthy enterprises, regardless of their size and ownership structure, being rated so highly. 37.5 % and 37% of the respondents respectively believe that main shareholders of banks and creditworthy enterprises are *most likely* to obtain credit from banks. The rest of the findings in the table simply indicate that neither the size nor the ownership structure of an enterprise can be as determining a factor as the above-mentioned two in increasing likelihood of obtaining bank credit.

Now, the fact that banks also rate creditworthiness of their clients highly, shows that a market-type structural credit endogeneity is in place in the economy. However, we have to emphasise that the structure and working of the economy indicate that on overall credit creation is mostly influenced by political factors.

Although there are no official data available on non-performing loans of the banking sector, availability of politically-influenced soft and concessionary finance does signal the existence of this problem. To clarify the issue we asked bankers about the proportion of non-performing loans in their loan portfolio. Interestingly enough, more than three-fourths of the respondents said that bad loans exceeded 10 percent of their loan portfolio. Whereas, only a little more than one quarter of the respondents said that they did not have bad loans in their loan portfolio (Table 7B.10).

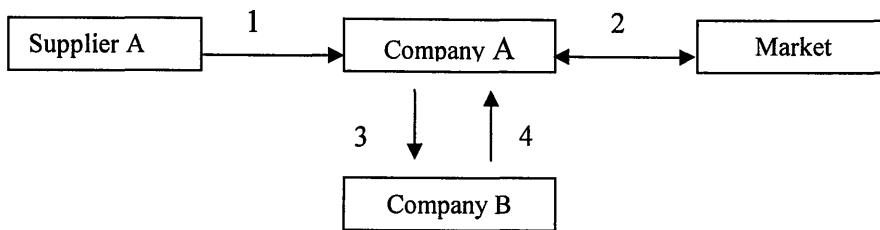
The last two sets of questions, raised in Table 7B.11 and Table 7B.12, complement each other in the sense that the former is an obstacle inhibiting further development of banking business, and the latter is about factors that will foster public's trust in the banking sector. On the former issue, bankers indicated that interventions from the governing bodies and the monetary authorities were one of the biggest obstacles. Although imperfections in current laws, lack of market expertise, and corruption were rated lower, on average, they remain one of the important problems to be tackled in the future (Table 7B.11).

As to the latter issue, bankers almost uniformly indicated (about 98% of the respondents) that creating conditions for households to withdraw their deposits from banks on first demand would be one of the most important factors in promoting public confidence in the banking sector. Lowering inflation and creating opportunities for

enterprises to become the true owners of their financial resources were next important factors on the list. Bankers also feel that enhancing application of electronic means of payment such as debit and credit cards, as well as telephone and internet banking services, and offering higher interest on deposits will promote confidence in the banking sector (Table 7B.12).

Examples of Converting Non-cash Money into Cash Money.*Example One*

Figure 7C.1 below depicts one of the methods of converting non-cash money into cash money – the process known as ‘*obnalichka*’ in the jargon. A numerical example will be helpful here. Company A buys goods from Supplier A in the wholesale market and pays for each item 95 cash *so`ms*. Company A sells these goods in the retail market and gets 100 cash *so`ms* for each item. Since Company A’s intention is to make extra profit by selling the cash money proceeds, the transaction is not recorded in its book yet. In the next stage, Company A finds Company B, which is in need of cash money, and the parties agree to discount the value of non-cash money in line with cash money premium prevailing in the market. In order not to be caught by the regulators Company A and Company B enter into a formal contract, and Company A ‘delivers’ the goods, which have already been sold in the retail market and as such do not exist, to Company B. Company B pays, through its bank account, for each ‘item’ 100 non-cash *so`ms*. In return Company A delivers cash money to Company B. (For instance, 80 cash *so`ms* for 100 non-cash *so`ms*.)



1 – Company A buys goods from Supplier A in the wholesale market and makes the payment in non-cash money; Company A's bank account is debited and Supplier A's bank account is credited.

2 – Company A sells goods in the Market for cash money but does not record this transaction in its book, as if Company A still holds the goods.

3 and 4 – Company B, which desperately needs cash money, makes a deal with Company A to 'buy' its cash money. Company B makes a non-cash payment to Company A's bank account. Now, the most interesting point here is that this payment is made for buying the goods which Company A has already sold in the Market for cash money. And finally, Company A delivers the 'real goods,' i.e. cash money to Company B.

Figure 7C.1 Converting cash money into non-cash money.

Example Two

Let us have a look at another example. A company that needs one million cash *so`ms* to pay wages of employees finds out that its bank is short of cash money and the problem is most likely to persist. The only immediate solution to the problem is to sell bank deposits (non-cash money) at a discount. To do that the company (i) makes an informal agreement with its bank, which in turn may involve some financial cost, that any cash money the company attracts to the bank through third parties will be given to it, and then (ii) finds a depositor who is willing to deposit cash *so`ms*. When the deal is struck with the bank, the company approaches a cash-abundant firm, like a petrol station for instance, and agrees a deal to pay a certain premium for cash money. If the value of non-cash money is priced 15 percent lower than that of cash money in the market, then the petrol station deposits to its bank account only 850,000 cash *so`ms*. However, the paperwork will be done for one million *so`ms*; as if the petrol station put into its bank account one million cash *so`ms* and exactly the same amount of money was withdrawn by the company from its bank account.

Example Three

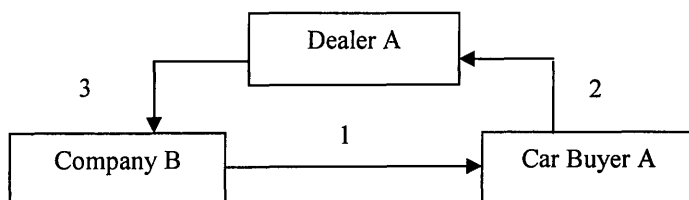
Another similar example can be the case when a company buys goods which do not exist, for non-cash money from a retail outlet. The retailer uses the non-cash money proceeds to buy consumer goods in the wholesale market, realises them in the retail market for cash money and only then returns cash money to the company. Again, from the accounting point of view the transaction is completed when the company 'buys' the goods and makes the corresponding payment. However, since the real intention from the transaction is to convert non-cash money into cash money, the deal is completed only when the retailer delivers the agreed of amount cash money to the company.

Example Four

The next example is a particular case of how non-cash money is converted into cash money by the official automobile dealers. Figure 7C.2 depicts this process. The official dealers, who can sell cars both in non-cash money and cash money, take advantage of the difference between the values of cash money and non-cash money and make extra profit by selling cash money. For instance, if non-cash price of a car is 10,000,000 *so`ms*, Dealer A offers the car to a Car Buyer A for 9,000,000 cash *so`ms*, provided the Car Buyer A agrees to collaborate in some additional paperwork. The extra paperwork involves the following. The Car Buyer A opens a bank account to which a third company, connected to the dealer, makes a non-cash payment of

10,000,000 *so`ms*; as if the payment is made for the goods bought from the potential buyer of the car. Next, the buyer makes two payments to the dealer to get the car: (i) 9,000,000 cash *so`ms*, and (ii) 10,000,000 non-cash *so`ms*, which actually does not belong to the potential buyer. The Dealer A keeps 10,000,000 non-cash *so`ms* and delivers the agreed amount of cash money to Company B, the original owner of that 10,000,000 non-cash *so`ms*.

Hence, although the official dealers sell their cars for cash money, almost all transactions will be recorded as deposit-based transactions because cash money will be sold to third parties. According to some estimates, in 2003 official dealers' sales figure reached 117.8 billion *so`ms*, of which about 77 percent was carried out in non-cash money (Holiqov and Olimjonov, 2004).



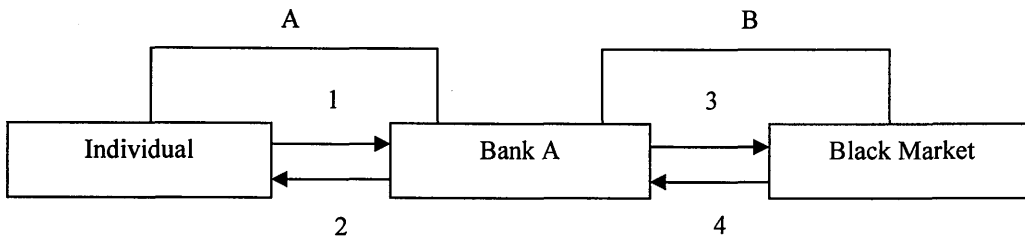
- 1 – Car Buyer opens a bank account to which Company A makes a payment of 10,000,000 *so`ms* for the payment of a fictitious contract.
- 2 – Car Buyer pays 10,000,000 non-cash *so`ms* plus the actual payment of 9,000,000 cash *so`ms* to the Dealership and gets the car.
- 3 – Dealership keeps non-cash money and delivers the agreed amount of cash money to Company A.

Figure 7C.2. Trading non-cash money for cash money in the car dealership market.

Generating Cash Money by Selling Foreign Exchange in the Black Market

Figure 7D.1 below shows how banks can generate cash money by selling foreign exchange in the black market. The process involves two transactions: the first transaction takes place just on paper for accounting purposes (A), and the second one is an actual transaction which generates cash money (B). The need for a third party's (an Individual in the diagram) participation in the transaction is explained by the fact that the bank must keep a record of those who buy foreign exchange. Since the black market speculator does not want to have his name in bank records, the third person, usually someone connected to bank employees, agrees to do this job.

In the end, banks actually lose from this type of transactions. As the numerical example in Figure 7D.1 shows, the bank lost 20,000 *so`ms* from the transaction. The real burden of this cost, however, will be borne by those who finally convert their non-cash money into cash money. In other words, although enterprises acknowledge receipt of cash money at a one-to-one ratio, in fact the amount of cash money they receive from the banking sector will be reduced in accordance with the described costs incurred by banks when exchanging foreign currency to cash money.

**Part A – Transaction on paper.**

1 – Individual pays the bank 1,040,000 cash *so`ms* for US\$1,000.

2 – Bank delivers US\$1,000 to the individual.

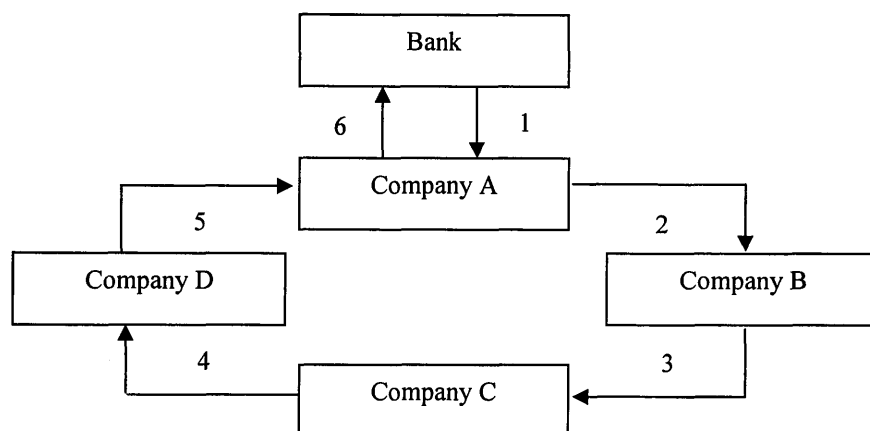
Part B – Transaction in reality.

3 – Bank delivers US\$1,000 to the speculator in the black market.

4 – The speculator pays the bank 1,020,000 cash *so`ms*.

In the end bank loses 20,000 cash *so`ms* ($1,040,000 - 1,020,000 = 20,000$), which will be borne by those who want to convert their deposits into cash money.

Figure 7D.1. Another way of converting non-cash money into cash money

The Scheme Programme to Deal with Inter-enterprise Payment Arrears

- 1 – Bank grants credit to Company A.
- 2 – Company A uses the credit to pay its debts to Company B.
- 3 – Company B uses this money to close its indebtedness to Company C.
- 4 – Company C uses this money to close its indebtedness to Company D.
- 5 – Company D in turn uses the proceeds to close its indebtedness to Company A.
- 6 – In the end Company A pays the loan back to the bank.

Figure 7E.1. Preventing accumulation of payment arrears through the mechanism of the scheme.

The Sample of the Questionnaire Format

***A SURVEY
ON THE ROLE OF BANKS IN FINANCIAL INTERMEDIATION IN THE
REPUBLIC OF UZBEKISTAN. A BANKERS' PERSPECTIVE⁴***

Main research objective:

To investigate nature of financial system development during transition in the economy of Uzbekistan with a particular emphasis on the role of banks in facilitating financial intermediation; the issue will be examined from bankers' perspective.

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⁴ The original was in Uzbek.

Dear respondent,

This survey is a part of a project that investigates the evolution of money and banks in Uzbekistan during transition. Questions that may explain generalised pattern of the banking sector development are included in the questionnaire. We would like to ask you to answer these questions honestly based on your knowledge and experience.

Thank you for your cooperation.

I. General Questions

1. How many years of banking experience do you have? _____ years.

2. In what area of banking do you consider yourself to be most experienced?

- Cash circulation department
- Credit Department
- Accounting Department
- Securities Department
- Deposit department
- Assets and Liabilities Management Department
- Other* _____

3. In which region of the republic is your bank located?
(For instance, Samarkand, Bukhara, Tashkent, etc.) _____

4. Please indicate the ownership structure of your bank. (Please choose only one answer.)

- State owned
- Joint Stock
- Joint Stock with Foreign Participation
- Foreign owned
- Private

II. Main Part

Q.1. Which of the following is the most popular means of saving for households? Please choose one answer for each question and mark an appropriate number accordingly.

	<i>Most popular</i> (1)	<i>Popular</i> (2)	<i>Somewhat popular</i> (3)	<i>Least popular</i> (4)	<i>Unpopular</i> (5)
National currency	1	2	3	4	5
Foreign currency (US dollars, British pounds, Russian roubles, etc.)	1	2	3	4	5
Consumer durables (TVs, VSRs, DVDs, Refrigerators, cars, etc.)	1	2	3	4	5
Real estate	1	2	3	4	5
Livestock (cattle, sheep, etc.)	1	2	3	4	5
Precious metals and sundry jewellery	1	2	3	4	5
Other* _____	1	2	3	4	5

*(Please specify any other activity that can be included in this list and rank them in order of importance accordingly.)

Q.2. In your opinion has the nature of non-cash money and cash money changed following the process of transition? (In the sense that non-cash money has become freely convertible to cash money as well as to tradable goods and services.) Please choose only one answer and mark it accordingly.

1. A lot of positive change
2. Somewhat positive change
3. No change
4. Little negative change
5. A lot of negative change

Q.3. Generally speaking, which of the following would best describe the average difference between the value of cash money and non-cash money over the years of transition? Please choose only one answer and mark it accordingly.

1. 0-5%
2. 6-10%
3. 11-15%
4. 16-20%
5. More than 20%

Q.4. Causes that are most likely to explain the reason for the emergence of the difference between the value of cash money and non-cash money are listed below. Rank them in order of importance. Please choose one answer for each question and mark an appropriate number accordingly.

	<i>Most important (1)</i>	<i>Important (2)</i>	<i>Somewhat important (3)</i>	<i>Least important (4)</i>	<i>Not important (5)</i>
Shortage of cash money	1	2	3	4	5
Excess supply of non-cash money	1	2	3	4	5
Cash is dearer because it is used to avoid taxes	1	2	3	4	5
Cash is dearer because it is faster to effect payments in it compared to non-cash transaction through banks	1	2	3	4	5
Too low rate of interest paid on bank deposits	1	2	3	4	5
Due to the existence of black economy demand for cash money is higher which makes it dearer	1	2	3	4	5
Other* _____	1	2	3	4	5

*(Please specify any other activity that can be included in this list and rank them in order of importance accordingly.)

Q.5. Please express your opinion on the following statement. Please choose only one answer and mark an appropriate number accordingly.

	<i>Strongly agree (1)</i>	<i>Agree (2)</i>	<i>Neutral (3)</i>	<i>Disagree (4)</i>	<i>Strongly disagree (5)</i>
'At present enterprises can freely convert their non-cash money into cash money when and if they wish to do so.'	1	2	3	4	5

Q.6. What proportion of enterprises that hold an account with your bank have the problem of late wage-payments? Please choose only one answer and mark it accordingly.

1. All of them
2. About 75% of them
3. About 50% of them
4. About 25% of them
5. None of them

Q.7. Among the enterprises that face late wage-payments problem what is the average length of late payments? Please choose only one answer and mark it accordingly.

1. None
2. 1-2 months
3. 3-4 months
4. 5-6 months
5. More than 7 months

Q.8. Below most important sources of bank credit are listed. Please rank them in order of importance as far as your bank is concerned. Please choose one answer for each question and mark an appropriate number accordingly.

	<i>Most important (1)</i>	<i>Important (2)</i>	<i>Somewhat Important (3)</i>	<i>Least important (4)</i>	<i>Unimportant (5)</i>
Own capital	1	2	3	4	5
Free resources (deposits) of enterprises	1	2	3	4	5
Interbank loans	1	2	3	4	5
Household deposits	1	2	3	4	5
Central bank funds	1	2	3	4	5
Loans from International Financial Organisations	1	2	3	4	5
Other* _____	1	2	3	4	5

*(Please specify any other activity that can be included in this list and rank them in order of importance accordingly.)

Q.9. Which of the following enterprises are most likely to obtain credit from banks? Please choose one answer for each question and mark an appropriate number accordingly.

	<i>Most likely (1)</i>	<i>Likely (2)</i>	<i>Neutral (3)</i>	<i>Unlikely (4)</i>	<i>Most Unlikely (5)</i>
State owned enterprises regardless of their size	1	2	3	4	5
Privately owned enterprises regardless of their size	1	2	3	4	5
Large enterprises regardless of the ownership structure	1	2	3	4	5
Small and medium enterprises regardless of their ownership structure	1	2	3	4	5
Enterprises which hold majority stakes in bank's stock capital	1	2	3	4	5
Creditworthy enterprises regardless of their size and	1	2	3	4	5

ownership structure					
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Q.10. Which of the following would best describe the extent of bad debt problem in your banks' credit portfolio? Please choose only one answer and mark it accordingly.

1. No bad loans
2. 10-20% of total extended credits are bad loans
3. 25-30% of total extended credits are bad loans
4. 30-40% of total extended credits are bad loans
5. More than 50% of total extended credits are bad loans

Q.11. Which of the following constitutes the worst obstacle for banking business? Rank in order of importance. Please choose one answer for each question and mark an appropriate number accordingly.

	<i>Most important (1)</i>	<i>Important (2)</i>	<i>Somewhat important (3)</i>	<i>Least important (4)</i>	<i>Not important (5)</i>
Imperfect legislation	1	2	3	4	5
Too much intervention from authorities	1	2	3	4	5
Too much regulation from monetary authorities	1	2	3	4	5
Lack of banking experience	1	2	3	4	5
Mistrust in banks	1	2	3	4	5
Imperfection of existing regulations	1	2	3	4	5
Other* _____	1	2	3	4	5

*(Please specify any other activity that can be included in this list and rank them in order of importance accordingly.)

Bibliography

Abarbanell, J. S. and A. Meyendorff (1997) Bank Privatization in Post-Communist Russia: The Case of Zhilsotsbank. *Journal of Comparative Economics*. Vol. 25, Pp 62-96

Abdullaeva, S. (2000) *Pul, Kredit va Banklar. (Money, Credit and Banks)* Tashkent: Moliya

Aganbegyan, A. (1988) *The Challenge: Economics of Perestroika*. Hutchinson: The Second World

Alam, A. and A. Banerji (2000) Uzbekistan and Kazakhstan. A Tale of Two Transition Paths. *The World Bank Policy Research Working Paper 2472*

Allen, F. and D. Gale (2001) *Comparing Financial Systems*. Cambridge: The MIT Press

Al-Yousif, Y. K. (2002) Financial Development and Economic Growth. Another Look at the Evidence from Developing Countries. *Review of Financial Economics*. Vol. 11, Pp 131-150

Amadeo, E. (1995) Causes for Persistent Unemployment and Fluctuations in Monetary Economics. In: Wells, P. (Ed.) *Post-Keynesian Economic Theory*. Boston: Kluwer Academic Publishers.

Aghion, P. and R. Burgess. (1993) Financing and Development in Eastern Europe and the Former Soviet Union: Issues and Institutional Support. In: Giovannini, A., (Ed.) *Finance and Development: Issues and Experience*. Pp. 303-339. Cambridge: Cambridge University Press

Arandelovic, N. and T. O'Rourke. From Hope through Turmoil to Uncertainty. *Discussion paper presented in the workshop 'The European Union and Southeast Europe after 2004' held at the University of Stirling between 19 and 20 of March 2004*

Arestis, P. (1988) Post Keynesian Theory of Money, Credit and Finance. In: Arestis, P. (Ed) *Post Keynesian Monetary Economics*. Aldershot: Elgar

Arestis, P. (1996) *Keynes, Money and the Open Economy. Essays in Honour of Paul Davidson: Volume One*. Cheltenham: Edward Elgar

Arestis, P and P. D. Demetriades (1993) Financial Liberalisation and Economic Development: A Critical Exposition. In: Arestis, P. (Ed.) *Money and Banking: Issues for the Twenty-First Century*. 2nd Edition. Hampshire: Macmillan

Arestis, P and P. D. Demetriades (1997) Financial Development and Economic Growth: Assessing the Evidence. *The Economic Journal*. Vol. 107, No. 442, Pp 783-799

Arestis, P. and P. Howells (1996) Theoretical Reflections on Endogenous Money: The Problem with Convenience Lending. *Cambridge Journal of Economics*. Vol. 20, Pp 539-551

Arestis, P. and P. Howells (1999) The Supply of Credit Money and the Demand for Deposits: a Reply. *Cambridge Journal of Economics*. Vol. 23, Pp 115-119

Arestis, P. and T. Skouras (1985) *Post Keynesian Economic Theory: a Challenge to Neo Classical Economics*. Sussex: Wheatsheaf Books

Asian Development Bank (ADB) (Various years) Key Indicators. [Online] Available: <http://www.adb.org/Statistics/ki.asp> [Last Accessed 21 February 2006]

Aukutsionek, S. (1998) Industrial Barter in Russia. *Communist Economies and Economic Transformation*. Vol. 10, No. 2, Pp 179-188

Auty, R. (2003) Natural Resources and 'Gradual' Reform in Uzbekistan and Turkmenistan. *Natural Resources Forum*. Issue 27, Pp 255-266

Baffes, J. (2004) Cotton. Market Setting, Trade Policies, and Issues. *World Bank Policy Research Working Paper 3218*. Development Prospects Group. The World Bank

Balino, T.J.T, et al (1994) Shortages Under Free Prices: The Case of Ukraine in 1992. *IMF Staff Papers*. Vol. 41, No. 3, Pp 411-434

Balino, T.J.T, et al (1996) Payment System Reforms and Monetary Policy. *Finance and Development*. March 1996, Pp 2-5

Banerji, A. (1997) *Merchants and Markets in Revolutionary Russia, 1917-30*. London: Macmillan

Bank for International Settlements (BIS) (2003a). *Payment System in Russia*. Prepared by the Central Bank of Russia and the Committee on the Payment and Settlement Systems of the central banks of the Group of Ten countries. September 2003

Bank for International Settlements (BIS) (2003b). *Payment System in Kazakhstan*. Prepared by the National Bank of the Republic of Kazakhstan and the Committee on the Payment and Settlement Systems of the central banks of the Group of Ten countries. November 2003

Bank for International Settlements (BIS) (2003c). *Payment Systems in the Euro Area*. The Committee on the Payment and Settlement Systems of the Central Banks of the Group of Ten countries – The Red Book - 2003

Bank for International Settlements (BIS) (2003d). *Payment Systems in the*

- Sweden. The Committee on the Payment and Settlement Systems of the central banks of the Group of Ten countries – The Red Book - 2003
- Basu, K. (1984) Implicit Interest Rates, Usury and Isolation in Backward Agriculture. *Cambridge Journal of Economics*. Vol. 8, Pp 145-159
- Baykov, A. (1946) *The Development of the Soviet Economic System*. Cambridge: Cambridge University Press
- Bazarov, K. and K. Rakhimova (2002) Platjoznaya sistema Respubliki Uzbekistan v razvitii. (Payment System of the Republic of Uzbekistan is in progress.) *Bozor, Pul va Kredit*. Vol. 63, Issue 8, Pp 27-32
- Beim, D. O. and C. W. Calomiris (2001) *Emerging Financial Markets*. New York: McGraw-Hill
- Bencivenga, V. R. and B. D. Smith (1991) Financial Intermediation and Endogenous Growth. *Review of Economic Studies*. Vol. 58, Pp 195-209
- Bewley, F. T. (1995) A Depressed Labor Market as Explained by Participants. *The American Economic Review*. Vol. 85, No. 2, Pp 250-254
- Bewley, F. T. (1999) *Why Wages Don't Fall during a Recession*. Boston: Harvard University Press
- Bhaduri, A. (1977) On the Formation of Usurious Interest Rate in Backward Agriculture. *Cambridge Journal of Economics*. Vol. 1
- Bhaduri, A. (1983) *The Economic Structure of Backward Agriculture*. London: Academic Press
- Blanchard, O. (2003) *Macroeconomics. Third Edition*. Upper Saddle River: Prentice Hall.
- Bonin, J. P. et al (2005) Bank Performance, Efficiency and Ownership in Transition Countries. *Journal of Banking and Finance*. Vol. 29, Pp 31-53
- Borak, N. (2000) Western Rules for Eastern Banking. *Post-Communist Economies*, Vol. 15, No. 4. Pp 293-306
- Bornstein, M. (1974) Soviet Price Theory and Policy. In: Bornstein, M. and D.R. Fusfeld (Eds.), *The Soviet Economy: A Book of Readings*. Pp 85-117. Fourth Edition. Homewood: Richard D. Irwin, Inc
- Bornstein, M. (1985) The Soviet Centrally Planned Economy. In: Bornstein, M (Ed.) *Comparative Economic Systems: Models and Cases*. Pp188-220. Fifth Edition. Homewood: Richard D. Irwin, Inc
- Borpujari, J. (1980) Production and Monetization in the Subsistence Sector. In: Coats, W. and D. Khatkhate (1980)

Broadman, H. G. (2000) Competition, Corporate Governance, and Regulation in Central Asia. Uzbekistan's Structural Reform Challenge's. *The World Bank Policy Research Working Paper 2331*

Bronfenbrenner, M. (1980) Davidson on Keynes on Money. *Journal of Post Keynesian Economics*. Vol. 2, Pp 308-314

Bukharin, N. I. and E. A. Preobrazhensky (1994) The ABC of Communism. In: Nove, A. and I. D. Thatcher (Eds.) *Markets and Socialism*. Aldershot: Edward Elgar

Calvo, G. A. and F. Coricelli (1993) Output Collapse in Eastern Europe. *IMF Staff Papers*. Vol. 40, No.1, Pp 32-53

Cameron, R. (1967) *Banking in the Early Stages of Industrialisation*. London: Oxford University Press

Carlin, W. *et al.* (2000) Barter and Non-Monetary Transactions in Transition Countries: Evidence from Cross-Country Survey. In: Seabright, P. (Ed.) *The Vanishing Rouble. Barter Networks and Non-Monetary Transactions in Post-Soviet Societies*. Cambridge: Cambridge University Press

Carvalho, F. (1988) Keynes on Probability, Uncertainty and Decision Making. *Journal of Post Keynesian Economics*. Vol. 11, Pp 66-81

Carvalho, F. (1995) Post Keynesian Developments of Liquidity Preference Theory. In: Wells, P. (Ed.) *Post-Keynesian Economic Theory*. Boston: Kluwer Academic Publishers

Central Bank of Uzbekistan (CBU) (2001) Tijorat Banklari Faoliyatining 2001 yil 1 yanvariga doir ayrim kursatgichlari. (Some indicators of commercial banks' activities as of 1 January 2001) *Bank Axborotnomasi*, No.7, February

Central Intelligence Agency (CIA). (2005) The World Factbook. [Online] Available: <http://www.cia.gov/cia/publications/factbook/geos/uz.html>. [Accessed 17 September 2005]

Cesaroni, G. (2001) The Finance Motive, the Keynesian Theory of the Rate of Interest and the Investment Multiplier. *The European Journal of the History of Economic Thought*. Vol.8, Pp 58-74

Cetorelli, N. and M. Gambarà (2001) Banking Market Structure, Financial Dependence and Growth: International Evidence from Industry Data. *The Journal of Finance*. Volume LVI, No. 2, Pp 617-625

Chandavarkar, A. (1977) Monetization of Developing Economies. *International Monetary Fund Staff Papers*. Vol. 24, Pp 665-721

Chick, V. (1977) *The Theory of Monetary Policy*. Oxford: Parkgate Books

Chick, V. (1983) *Macroeconomics after Keynes: a Reconsideration of the General Theory*. Oxford: Phillip Allan

Chick, V. (1992) *Money, Method and Keynes: Selected Essays of Victoria Chick*. Edited by Arestis, P. and S. C. Dow. London: Macmillan

Chick, V. (1993) The Evolution of the Banking System and the Theory of Monetary Policy. In: Frown, (Ed.) *Monetary Theory and Monetary Policy: New Tracks in the 1990s*. Basingstoke: St Martin's Press

Chick, V. (2000) Money and Effective Demand. In: Smithin, J. (Ed.) *What is Money?* London: Routledge

Chick, V. (2002) *Theory, Method and Mode of Thought in Keynes's General Theory*. Presented at the International Network for Economic Method (INEM) Biennial Conference in Stirling University. 1-2 September 2002

Chick, V. (2003) Theory, Method and Mode of Thought in Keynes's General Theory. *Journal of Economic Methodology*. Vol. 10, Pp 307-327

Chick, V. and S. C. Dow (1988) A Post Keynesian Perspective on the Relation Between Banking and Regional Development. In: Arestis, P. (Ed.) *Post Keynesian Monetary Economics*. Aldershot: Elgar

Chick, V. and S. C. Dow (1996) Regulation and Differences in Financial Institutions. *Journal of Economic Issues*. Vol. 30, No 2, Pp 517- 523

Chick, V. and S. C. Dow (1997) Competition and the Future of the European Banking and Financial System. In: Cohen, A. J. et al (Eds.) *Money, Financial Institutions and Macroeconomics*. Boston: Kluwer Academic Publishers

Chick, V. and S. C. Dow (2002) Monetary Policy with Endogenous Money and Liquidity Preference: A Non-dualistic Treatment. *Journal of Post Keynesian Economics*. Vol. 24, Pp 587-605

Chick, V. and S. C. Dow (2004) The Meaning of Open Systems. *Presentation to the INEM Conference, Amsterdam, 19-21 August 2004*.

Choe, C. and I. A. Moosa (1999) Financial System and Economic Growth: The Korean Experience. *World Development*. Vol. 27, No.6, Pp 1069-1082

Choudhury, M. A. (1994) The Muslim Republics of the CIS: Their Political Economy under Communism, Capitalism and Islam. *International Journal of Social Economics*. Vol. 21, No. 5-6, Pp 3-32

Claessens, S. et al (2001) How Does Foreign Entry Affect Domestic Banking Markets? *Journal of Banking and Finance*. Vol. 25, Pp 891-911

Clower, R. W. (1971) Theoretical Foundations of Monetary Policy. In:

Clayton, G., Gilbert, J., and Sedgwick, R., (Eds) *Monetary Theory and Monetary Policy in the 1970s. Proceedings of the 1970 Sheffield Money Seminar*. London: Oxford University Press

Coats, W. and D. Khatkhate (1980) *Money and Monetary Policy in Less Developed Countries. A Survey of Issues and Evidence*. Oxford: Pergamon

Coghlan, R. (1980) *The Theory of Money and Finance*. London: Macmillan

Commander, S. et al. (2000). Determinants of Barter in Russia: An empirical Analysis. *IMP Working Paper. WP/00/155*

Commander, S. and C. Mummsen (2000) The Growth of Non-Monetary Transactions in Russia: Causes and Effects. In: Seabright, P. (Ed.) *The Vanishing Rouble. Barter Networks and Non-Monetary Transactions in Post-Soviet Societies*. Cambridge: Cambridge University Press

Conway, P. (1997) Ruble Overhang and Ruble Shortage: Were They the Same Thing? *Journal of Comparative Economics*. Vol. 24, Pp 1-24

Cottrell, A. (1994) Post Keynesian Monetary Economics. *Cambridge Journal of Economics*. Vol. 18. Pp. 587-605

Davies, R. W. (1958) *The Development of the Soviet Budgetary System*. Cambridge: Cambridge University Press

Davies, R. W. (1974) Economic Planning in the USSR. In: Bornstein, M. and D.R. Fusfeld (Eds.), *The Soviet Economy: A Book of Readings*. Pp 17-43. Fourth Edition. Homewood: Richard D. Irwin, Inc

Davies, R.W. (1979) Economic Planning in the USSR, In: Bornstein, M. (Ed.) *Comparative Economic Systems: Models and Cases*. Fourth Edition Homewood: Richard D. Irwin, Inc

Davies, R.W. (1981) Economic Planning in the USSR, in Bornstein, M (Ed.) *The Soviet Economy. Continuity and Change*. Pp 7-39 Boulder: Westview Press

Davidson, P. (1972) Money and the Real World. *The Economic Journal*. Vol. 82, Pp. 101-115

Davidson, P. (1978) *Money and the Real World*. 2nd Edition. London: Macmillan

Davidson, P. (1980) On Bronfenbrenner and Mainstream Views of the "Essential Properties" of Money: a Reply. *Journal of Post Keynesian Economics*. Vol. 2, Pp 314-318

Davidson, P. (1982-83) Rational Expectations: a Fallacious Foundation for Studying Crucial Decision Making. *Journal of Post Keynesian Economics*.

Vol. 5, Pp 182-197

Davidson, P. (1991) Is Probability Theory Relevant for Uncertainty? A Post Keynesian Perspective. *The Journal of Economic Perspectives*. Vol. 5, Pp. 129-143

Davidson, P. (1994) *Post Keynesian Macroeconomic Theory. A Foundation for Successful Economic Policies for the Twenty-first Century*. Aldershot: Edward Elgar.

Davidson, P. and S. Weintraub (1973) Money as Cause and Effect. *The Economic Journal*. Vol. 83, Pp 1117-1132

De Brunhoff, S. (1976) *Marx on Money*. New York: Urizen Books

De Gregorio, J. and P. Guidotti (1995) Financial Development and Economic Growth. *World Development*. Vol. 23, Pp 433-448

De Meto, M. et. al. (2001) Circumstances and Choice: The Role of Initial Conditions and Policies in Transition Economies. *World Bank Economic Review*. Vol. 15, Pp 1-31

Demetriades, P. O. and K. A. Hussein (1996) Does Financial Development Cause Economic Growth? Time Series Evidence from 16 Countries. *Journal of Development Economics*. Vol.51, Pp 387-411

Denizer, C. et. al. (1998). *Political Economy of Financial Repression in Transition Economies*. Discussion Paper

Desai, M. (1979) *Marxian Economics*. Oxford: Basil Blackwell

De Soto, H. (2000) *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere else*. London: Bantam Press

Dilova-Kirkowa, S. (1999) Corporate Governance in Bulgarian State-owned Banks, 1992-1997. *Post-Communist Economies*. Vol. 11, No.32, Pp 253-265

Dillard, D. D. (1966). *The Economics of John Maynard Keynes: The Theory of Monetary Economy*. London: Butler and Tanner

Dobb, M. (1966) *Soviet Economic Development since 1917*. Sixth edition. London: Routledge & Kegan Paul

Dobb, M. (1973). *Theories of Value and Distribution since Adam Smith. Ideology and Economic Theory*. Cambridge: Cambridge University Press

Dorn, J.A. (1993) Monetary Reform in Ex-Communist Countries. *Cato Journal*. Vol. 12, No.3, Pp. 509-525

Dow, A. C. and S. C. Dow (1989) Endogenous Money Creation and Idle

Balances. In: Pheby, J. (Ed.) *New Directions in Post-Keynesian Economics*. Pp. 147-164. Aldershot: Edward Elgar

Dow, S. C. (1986-87) Post Keynesian Monetary Theory for an Open Economy. *Journal of Post Keynesian Economics*. Vol. 11, No. 2, Pp 237-257

Dow, S. C. (1993) *Money and the Economic Process*. Aldershot: Edward Elgar

Dow, S. C. (1995) Liquidity Preference in International Finance: The Case of Developing Countries. In: Wells, P. (Ed) *Post Keynesian Economic Theory*. Norwell, Mass: Kluwer

Dow, S. C. (1996a) *The Methodology of Macroeconomic Thought: A Conceptual Analysis of Schools of Thoughts in Economics*. Cheltenham: Edward Elgar

Dow, S. C. (1996b) Keynes's Philosophy and Post Keynesian Monetary Policy. In: Arestis, P. (Ed.) *Keynes, Money and the Open Economy. Essays in Honour of Paul Davidson: Volume One*. Cheltenham: Edward Elgar

Dow, S. C. (1996c) Horizontalism: A Critique. *Cambridge Journal of Economics*. Vol. 20, Pp 497-508

Dow, S. C. (1996d) Why the Banking System Should Be Regulated. *The Economic Journal*. Vol. 106, Pp 698-707

Dow, S. C. (1997) Endogenous Money. In: Harcourt, G. C. and P. A. Riach (Eds.) *A 'Second' Edition of the General Theory*. Volume II. London: Routledge

Dow, S. C. (1998) *Money and Banking*. Stirling: University of Stirling

Dow, S. C. (1999) The Stages of Banking Development and the Spatial Evolution of Financial Systems. In: Martin, R. (Ed) *Money and Space Economy*. Pp 31-48. London: Wiley

Dow, S. C. and P. E. Earl (1982) *Money Matters. A Keynesian Approach to Monetary Economics*. Oxford: Martin Robertson

Drake, P. J. (1980) *Money, Finance and Development*. 2nd Edition. Baltimore: Martin Robertson

Easterly, W. and P.V. da Cunha (1994) Financing the Storm: Macroeconomic Crisis in Russia. *Economics of Transition*. Vol. 2, Pp 443-465

Ellman, M. (1974) Consistency of Soviet Plans. In: Bornstein, M. and D.R. Fusfeld (Eds.), *The Soviet Economy: A Book of Readings*. Pp. 62-83. Fourth Edition. Homewood: Richard D. Irwin, Inc

Ellman, M. (1989) *Socialist Planning*. Second Edition. Cambridge: Cambridge

University Press

Engerer, H. (2001) *Privatisation and its Limits in Central and Eastern Europe. Property Rights in Transition*. Hampshire: Palgrave

Ericson, R.E. (1991) The classical Soviet-Type of Economy: Nature of the System and Implications for Reform. *The Journal of Economic Perspectives*. Vol. 5, No.4, Pp11-27

Esanov, A. et al. (2001) Nature's Blessing or Nature's Curse: the Political Economy of Transition in Resource-based Economies. *EBRD Working Papers*. No.65

European Bank for Reconstruction and Development (EBRD) (1995) *Transition Report 1995: Investment and Enterprise Development*. London: EBRD

European Bank for Reconstruction and Development (EBRD) (2000) *Transition Report 2000: Employment, Skills and Transition*. London: EBRD

European Bank for Reconstruction and Development (EBRD) (2003) *Transition Report 2003. Integration and Regional Cooperation*. London: EBRD

European Bank for Reconstruction and Development (EBRD) (2004) *Transition Report 2004: Infrastructure*. London: EBRD

European Central Bank (ECB) (2002). *Blue Book: Payment and Securities Settlement Systems in Accession Countries*. August 2002

Fallenbuchl, Z.M. (1974) How does the Soviet Economy Function without a Free Market? In: Bornstein, M. and D.R. Fusfeld (Eds.), *The Soviet Economy: A Book of Readings*. Pp. 3-17. Fourth Edition. Homewood: Richard D. Irwin, Inc

Fan, Q. and M.E. Schaffer (1994). Government Financial Transfers and Enterprise Adjustment in Russia, with Comparisons to Central and Eastern Europe. *Economics of Transition*. Vol. 2, Pp 151-188

Fischer, S. and A. Gelb (1991) The Process of Socialist Transformation. *The Journal of Economic Perspectives*. Volume 5, No.4, Pp 91-105

Fry, M. J. (1995) *Money, Interest, and Banking in Economic Development*. Baltimore: the John Hopkins University Press

Gardener, E. P. M. (1988) Innovations and New Structural Frontiers in Banking. In: Arestis, P. (Ed.) *Contemporary Issues in Money and Banking*. London: Macmillan

Gardener, E. P. M. (1993) European Banking Strategies Beyond 1992. In:

- Arestis, P. (Ed.) *Money and Banking: Issues for the Twenty-First Century*. London: Macmillan
- Gardener, E. P. M. and P. Molyneux (1994) *Changes in Western European Banking: An International Banker's Guide*. London: Routledge
- Garvy, G. (1968) Eastern European Credit and Finance in Transition. In: Grossman, Gregory (ed.) *Money and Plan. Financial Aspects of Eastern European Economic Reforms*. Pp 153-85. Berkeley: University of California Press
- Garvy, G. (1974) Finance and Banking in the USSR. In: Bornstein, M. and D.R. Furfeld (Eds.), *The Soviet Economy: A Book of Readings*. Pp. 117-147. Fourth Edition. Homewood: Richard D. Irwin, Inc
- Garvy, G. (1977) *Money, Financial Flows, and Credit in the Soviet Union*. Cambridge: Ballinger
- Ghaybullayev, R. (2000) Kichik va Xususiy Biznes Istiqbollari (Future of Small and Private Business). *Bozor, Pul va Kredit. (Market, Money and Credit)*. 2000 Issue 1, Pp 48-50
- Gedeon, S.J. (1985-86). The Post Keynesian Theory of Money: A Summary and an Eastern European Example. *Journal of Post Keynesian Economics*. Vol. 8, No.2, Pp 208-221
- Geraschenko, V.S. (1970) *Denejnoe obraschenie i kredit SSSR*. Moscow: Finansi
- Geraschenko, V. S. and O. I. Lavrushin (1982) *Organisatsiya i Planirovanie Kredita. (Organisation and Planning of Credit)* Moscow: Finansi
- Gerschenkron, A. (1962) *Economic Backwardness in Historical Perspective: A Book of Essays*. New York: Praeger
- Ghosh, D. (1986a) Savings Behaviour in the Non-monetized Sector and Its Implications. *Savings and Development*. Vol. 10
- Ghosh, D. (1986b) Monetary Dualism in Developing Economies. *Economies et Societes. Monnai et Plitique Monetaire dans les Pays du Monde*. Vol. 30
- Glaz'ev, S. (1998) The Central Bank Versus Russian Industry. *Problems of Economic Transition*. Vol. 41, No.1, Pp.72-92
- Goldsmith, R. W. (1969) *Financial Structure and Development*. London: Yale University Press
- Goodhart, C.A.E. (1975) *Money, Information and Uncertainty*. London: Macmillan

Government of Uzbekistan (2002a). *Uzbekistan: Letter of Intent, Memorandum of Economic and Financial Policies under the Staff Monitored Program*. [Online] Available: <http://www.imf.org/external/np/loi/2002/uzb/01/index.htm>. [Accessed on 25 April 2003.]

Government of Uzbekistan (2002b). *Republic of Uzbekistan: Letter of Intent*. [Online] Available: <http://www.imf.org/external/np/loi/2002/uzb/02/index.htm>. [Accessed on 25 April 2003.]

Gowland, D. H. (1992) *Finance in Eastern Europe*. (Ed.) Aldershot: Dartmouth

Green, D. and K. Petrick. (2001). The New Paradigm and a New Paradigm: The Transformed Role of State. In: Green, D. and K. Petrick. *Banking and Financial Stability in Central and Eastern Europe*. Cheltenham: Edward Elgar.

Greenwood, J. and B. Jovanovic (1990) Financial Development, Growth, and the Redistribution of Income. *Journal of Political Economy*. Vol. 98, Pp 1076-1107

Gregory, P.R. and Stuart, R.C. (1995) *Comparative Economic Systems*. Fifth edition. Boston: Houghton Mifflin Company

Gregory, P.R. and Stuart, R.C. (1998) *Russian and Soviet Economic Performance and Structure*. Sixth edition. Reading: Addison-Wesley Educational Publishers

Gros, D. and M. Suhrcke (2000) Ten Years after: What is Special about Transition Countries? *European Bank for Reconstruction and Development. Working Paper No. 56*

Gros, D. and Steinherr, A. (1995) *Winds of Change. Economic Transition in Central and Eastern Europe*. London: Longman

Grossman, G. (1966) Gold and the Sword: Money in the Soviet Command Economy. In: Rostovsky, H., (Ed.), *Industrialisation in Two Systems*. New York: John Wiley and Sons

Grossman, G. (1981) The "Second Economy" of the USSR. In: Morris Bornstein (Ed.) *The Soviet Economy. Continuity and Change*. Boulder: Westview Press

Gurley and Shaw (1970) *Money in a Theory of Finance*. Washington D. C.: Brookings Institution

Hahn, F. (1982) *Money and Inflation*. Oxford: Basil Blackwell

Hainz, C. (2004) Are Transition Countries Overbanked? The Effect of Institutions on Market Entry. *German Economic Review*. Vol. 5, Pp 237-256

- Hardy, D. C. and A. K. Lahiri (1996) Cash Shortage in the Former Soviet Union. *Journal of Comparative Economics*. Vol. 22, Pp 119-140
- Havrylychuk, O. and E. Jurzyk (2005) Profitability of Foreign and Domestic Banks in Central and Eastern Europe: Does the Mode of Entry Matter? *Working Paper*. CEPII, Paris
- Havrylyshyn, O. (2001). Recovery and Growth in Transition: A Decade of Evidence. *IMF Staff Papers*. Vol. 48, Special Issue, Pp 53-87
- Hawkins, P.A. (2000) *Financial Constraints and Small Open Economy*. Unpublished PhD dissertation. University of Stirling
- Hawkins, P (2003) *The Open Economy and Its Financial Constraints*. Northampton: Edward Elgar
- Hayek, F.A. (1985) The Price System As a Mechanism for Using Knowledge. In Morris Bornstein (ed.) *Comparative Economic Systems. Models and Cases*. Fifth Edition. Homewood: Richard D. Irwin, Inc
- Heffernan, S. (2005) *Modern Banking*. West Sussex: John Wiley and Sons
- Heinsohn, G. and S. Steiger (1984) Marx and Keynes – Private Property of Money. *Monnai et Production*. No. 1 (Cahiers de l'ISMEA, Paris)
- Heinsohn, G. and S. Steiger (1985) Technical Progress and Monetary Production: An Explanation. *Monnai et Production*. No.2
- Heinsohn, G. and S. Steiger (1989) The Veil of Barter: the Solution to 'the Task of Obtaining Representations of an Economy in Which Money is Essential.' In: Kregel, J. A. (Ed.) *Inflation and Income Distribution in Capitalist Crisis*. London: Macmillan
- Heinsohn, G. and S. Steiger (2000) The Property Theory of Interest and Money. In: Smithin, J. (Ed.) *What is Money?* London: Routledge
- Herr, H. and A. Westphal (1991). Economic Coherence and the Transformation of Planned Economies into Monetary Economies. *Journal of Post Keynesian Economics*. Vol. 13, No. 3, Pp 307-27
- Hicks, J. (1967) *Critical Essays in Monetary Theory*. Oxford: Clarendon
- Hicks, J. (1989) *A Market Theory of Money*. Oxford: Clarendon Press
- Hilferding, R (1981) *Finance Capital: a Study of the Latest Phase of Capitalist Development*. English Edition. London: Routledge and Kegan
- Howells, P. and K. Bain (1998) *The Economics of Money, Banking and Finance: a European Text*. Harlow: Addison Wesley Longman

- International Monetary Fund (IMF) (1996) *Uzbekistan – Selected Issues and Statistical Appendix*. IMF Staff Country Report No. 96/73
- International Monetary Fund (IMF) (2000a) *World Economic Outlook. Focus on Transition Economies*. Washington D.C.: IMF
- International Monetary Fund (IMF) (2000b) *Republic of Uzbekistan: Recent Economic Developments*. IMF Staff Country Report No. 00/36
- IMF, et al. (1991) *A Study of the Soviet Economy*. In two volumes. Paris: IMF.
- International Finance Corporation (IFC) (2002) *Business Environment in Uzbekistan As Seen by Small and Medium Enterprises. Survey Results Based on 2001*. Tashkent: IFC
- International Finance Corporation (IFC) (2003) *Business Environment in Uzbekistan As Seen by Small and Medium Enterprises. Survey Results Based on 2002*. Tashkent: IFC
- International Finance Corporation (IFC) (2004) *Business Environment in Uzbekistan As Seen by Small and Medium Enterprises. Survey Results Based on 2003*. Tashkent: IFC
- Ireland, P. N. (1994) Money and Growth: An Alternative Approach. *The American Economic Review*. Vol. 84, Pp 47-65
- Ivanenko, V. and D. Mikheyev (2002) The Role of Non-Monetary Trade in Russian Transition. *Post-Communist Economies*. Vol. 14, No. 4, Pp 405-419
- Jaffee, D. and M. Levonian (2001) The Structure of Banking Systems in Developed and Transition Economies. *European Financial Management*, Vol. 7, No.2, Pp 161-181
- Jevons, S. W. (1875) *Money and the Mechanism of Exchange*. London: Henry S. King
- Jumagaldiev, M. R. (2004) Zadachi Bankov na Novom Etape Reform. (Tasks of Banks in the New Stage of Reforms.) *Bozor, Pul va Kredit*. No. 9, Pp 3-8
- Kaldor, N. (1986) *The Scourge of Monetarism*. 2nd Edition. Oxford: Oxford University Press
- Karimov, I. (1995) *Uzbekistan on the Way of Deepening Economic of Reforms*. Tashkent: Sharq
- Karimov, I. (1998) *Uzbekistan on the Threshold of the Twenty First Century*. New York: Saint Martin
- Katsenelinboigen, A. and H. S. Levine (1981) Market and Plan, Plan and Market: The Soviet Case. In: Morris Bornstein (Ed.) *The Soviet Economy*.

Continuity and Change. Boulder: Westview Press

Keynes, J. M. (1937a) The General Theory of Employment. *The Quarterly Journal of Economics*. Vol. 51, Pp 209-223

Keynes, J. M. (1937b) Alternative Theories of the Rate of Interest. *The Economic Journal*. Vol. 47, Pp 241-252

Keynes, J. M. (1937c) The "Ex-Ante" Theory of the Rate of Interest. *The Economic Journal*. Vol. 47, Pp 663-669

Keynes, J. M. (1970) *The General Theory of Employment, Interest and Money*. London: Macmillan St Martin's Press

Keynes, J. M. (1971) *A Treatise on Money. The Applied Theory of Money. Collected Writings of John Maynard Keynes*. Vol. VI. London: Macmillan for the Royal Economic Society

Keynes, J. M. (1973a) *The General Theory and After: Part I Preparation. Collected Writings of John Maynard Keynes*. Vol. XIII. London: Macmillan for the Royal Economic Society

Keynes, J. M. (1973b) *The General Theory and After: Part II Defence and Development. Collected Writings of John Maynard Keynes*. Vol. XIV. London: Macmillan for the Royal Economic Society

Keynes, J. M. (1979) *The General Theory and After: a Supplement. Collected Writings of John Maynard Keynes*. Vol. XXIX. London: Macmillan for the Royal Economic Society

Keynes, J. M. (1983) *Collected Writings of John Maynard Keynes. Economic Articles and Correspondence*. Vol. XI. London: Macmillan for the Royal Economic Society

Kim, B. (1999) The Income, Savings, and Monetary Overhang of Soviet Households. *Journal of Comparative Economics*. Vol. 27, Pp 644-668

Kim, B. et al. (2001) Money, Barter and Inflation in Russia. *Bank of Finland Institute for Economics in Transition (BOFIT)*. Discussion Paper No 15

King, R. G. and R. Levine (1993a) Schumpeter Might Be Right. *The Quarterly Journal of Economics*. Vol. 108, No. 3, Pp 717-737

King, R. G. and R. Levine (1993b) Finance, Entrepreneurship, and Growth: Theory and Evidence. *Journal of Monetary Economics*. Vol. 32, No.3, Pp 513-542

Knight, F. (1935) *Risk, Uncertainty and Profit*. 2nd Edition. London: Percy Lund, Humphries

- Kolodko, G. W. (2000a) *From Shock to Therapy. The Political Economy of Postsocialist Transformation*. Oxford: Oxford University Press
- Kolodko, G. W. (2000b) *The Post-Communist Transition. The Thorny Road*. Rochester: University of Rochester Press
- Kopstein, J. S and D. A. Reilly (2000) Geographic Diffusion and the Transformation of the Post-Communist World. *World Politics*. Vol. 53. Pp 1-37
- Kornai, J. (1979) Resource-Constrained versus Demand-Constrained Systems. *Econometrica*, Vol. 47, No.4, Pp 801-820
- Kornai, J. (1982) *Growth, Shortage and Efficiency*. Oxford: Basil Blackwell
- Kornai, J. (1986) *Contradictions and Dilemmas. Studies on the Socialist Economy and Society*. Cambridge: The MIT Press
- Kornai, J. (1990). *The Road to a Free Economy. Shifting from a Socialist System: the Example of Hungary*. New York: W.W. Norton
- Kornai, J. (1995). Eliminating the Shortage Economy: a General Analysis and Examination of the Developments in Hungary. Parts 1 and 2. *Economics of Transition*. Volume 3, Issues 1 and 2, Pp 13-37 and 149-168 respectively
- Kornai, J. (2000) What the Change of System from Socialism to Capitalism Does and Does not Mean. *Journal of Economic Perspectives*. Vol. 14, No. 1, Pp 27-42
- Kraft, E. (1993) The Soft Budget Constraint and the Theory of Endogenous Money: A Note on Szego's Critique of Kornai. *Journal of Post Keynesian Economics*. Vol.16, No.1, Pp 153-161
- Kudat, A. et. al (2000) Social Assessment and Agricultural Reform in Central Asia and Turkey. *The World Bank Technical Paper No 461*
- Kuschpeta, O. (1978) *The Banking and Credit System of the USSR*. Leiden: Martinus Nijhoff Social Sciences Division
- Lavigne, M. (1999) *The Economics of Transition. From Socialist Economy to Market Economy*. Second Edition. Houndmills: Palgrave
- Lavoie, M. (1984) The Endogenous Flow of Credit and the Post Keynesian Theory of Money. *Journal of Economic Issues*. Vol. 18, No.3
- Lavoie, M. (1996) Horizontalism, Structuralism, Liquidity Preference and the Principle of Increasing Risk. *Scottish Journal of Political Economy*. Vol. 43, No. 3, Pp 275-300
- Lavoie, M. (1999) The Credit-led Supply of Deposits and the Demand for

- Money: Kaldor's Reflux Mechanism as Previously Endorsed by Joan Robinson. *Cambridge Journal of Economics*. Vol. 23, Pp 103-113
- Lavrushin, O.I. (1984). *Den'gi i Kredit v Sotsialisticheskoy obshestve*. Moscow: Finansi i Statistika
- Lavrushin, O. I. (1991) *Organizatsiya i planirovaniye kredita*. Moscow: Finansi i Statistika
- Lawson, T. (1988) Probability and Uncertainty in Economic Analysis. *Journal of Post Keynesian Economics*. Vol. 11, Pp 38-65
- Ledeneva, A. and P. Seabright (2000) Barter in Post-Soviet Societies: What does it look like and why does it matter? In: Seabright, P. (Ed.) *The Vanishing Rouble. Barter Networks and Non-Monetary Transactions in Post-Soviet Societies*. Cambridge: Cambridge University Press
- Lenin, V. (1938) *Extracts from Lenin's The State and Revolution (August-September 1917)* in Appendix III of Critique of the Gotha Programme: with Appendices by Marx, Engels and Lenin. Edited by Dutt, C.P. London, Lawrence & Wishart
- Lerner, A. (1947) Money as a Creature of the State. *The American Economic Review*. Vol. 37, Pp 312-317
- Levchuk, J. et. al., (1972) *Deneznoye Obrasheniye i Kredit (Money Circulation and Credit)*. Moscow: Finansi
- Levine, H.S. (1974) Pressure and Planning in the Soviet Economy. In: Bornstein, M. and D.R. Fusfeld (Eds.), *The Soviet Economy: A Book of Readings*. Pp 43-61. Fourth Edition. Homewood: Richard D. Irwin, Inc
- Levine, R. (1997) Financial Development and Economic Growth: Views and Agenda. *Journal of Economic Literature*. Vol. 35, No. 2, Pp 688-726
- Litwack, J. M. and D. Sutherland. (2000). The Demonetisation of the Russian Economy: Causes and Policy Options. *Paper presented in the Moscow seminar on Russian Economic Reform organised by the IMF on 5-7 April 2000*
- Luintel, K. B. and M. Khan (1999) A quantitative Reassessment of the Finance-Growth Nexus: Evidence from a Multivariate VAR. *Journal of Development Economics*. Vol. 60, Pp 381-405
- Machina, M. (1987) Choice under Uncertainty: Problems Solved and Unsolved. *The Journal of Economic Perspectives*. Vol. 1, Pp 121-154
- Makhmudov, E. and M. Isaqov (2004) Investitsionnaya osnova razvitiya ekonomiki. (Investment Base of the Economic Development.) *Bozor, Pul va Kredit. (Market, Money and Credit)* January, 2004. Issue 56, Pp 32-35

Marangos, J. (2001). A Post Keynesian View of Transition to Market Capitalism: Developing a civilized society. *Post Keynesian Journal of Economics*. Vol. 23, No. 2

Marin, D. et al. (2000) Barter in Transition Economies: Completing Explanations Confront Ukrainian Data. In: Seabright, P. (Ed.) *The Vanishing Rouble. Barter Networks and Non-Monetary Transactions in Post-Soviet Societies*. Cambridge: Cambridge University Press

Marx, K. (1938) *Critique of the Gotha Programme: with Appendices by Marx, Engels and Lenin*. Edited by Dutt, C.P. London, Lawrence & Wishart

Marx, K. (1893) *Capital*. Volume II, Chapter 18. From revised second edition in 1893. [Online] Available:
<http://www.marxists.org/archive/marx/works/1885-c2/index.htm> [Accessed 8 January 2003]

McKinnon, R.I. (1973) *Money and Capital in Economic Development*. Washington D.C.: The Brookings Institution

McKinnon, R.I. (1991) Financial Control in the Transition from Classical Socialism to a Market Economy. *Journal of Economic Perspectives*. Vol. 5, No.4, Pp 107-22

McKinnon, R.I. (1993) Macroeconomic Control in Liberalising Socialist Economies: Asian and European Parallels. In: Giovannini, A., (Ed.) *Finance and Development: Issues and Experience*. Pp. 223-257. Cambridge: Cambridge University Press

Minsky, H. (1975) *John Maynard Keynes*. London: Macmillan

Minsky, H. (1982) *Inflation, Recession and Economic Policy*. Sussex: Weatshef Books

Mishkin, F. S. (1989) *The Economics of Money, Banking and Financial Markets*. Second Edition. Glewview: Scott, Foresman and Company

Moore, B. (1983) Unpacking the Post Keynesian Black Box: Bank Lending and the Money Supply. *Journal of Post Keynesian Economics*. Vol. 5, Pp 537-556

Moore, B. (1998) *Horizontalists and Verticalists: The Macroeconomics of Credit Money*. Cambridge: Cambridge University Press

Moore, B. (1991) Money Supply Endogeneity: "Reserve Price Setting" or "Reserve Quantity Setting"? *Journal of Post Keynesian Economics*. Vol. 13, Pp 404-413

Mott, T. (1985-1986) Towards a Post-Keynesian Formation of Liquidity Preference. *Journal of Post Keynesian Economics*. Vol. 8, Pp 223-232

Mullajonov, F. (2001) *O`zbekiston Respublikasi Bank Tizimi. (The Banking System of the Republic of Uzbekistan)*. Tashkent: O`zbekiston

Mullajonov, F. (2004) Bank Tizimi – Iqtisodiy Islohotlar Yetakchisi. (The Banking Sector is the Facilitator of Economic Reforms.) *Bozor, Pul va Kredit*. No 7-8, July, Pp 3-8

Munting, R. (1982) *The Economic Development of the USSR*. London: Croom Helm Ltd

National Bank of Uzbekistan (NBU), (various years). *Annual Report*. Tashkent: NBU

Neale, C.W. and S. Bozsik (2001). How the Hungarian State-owned Banks were Privatised. *Post-Communist Economies*. Vol. 13, No. 2, Pp 147-169

Norčič, O. at el. (1996) Dual Money Endogeneity in Transition Countries. *Journal of Post Keynesian Economics*. Vol. 19, No.1, Pp 73-82

Nove, A. (1991) *The Economics of Feasible Socialism Revisited*. London: Harper Collins Academic

Nove, A. (1992) *An Economic History of the USSR. 1917-1991*. London: Penguin Books

Organisation for Economic Cooperation and Development (OECD) (1997) *The New Banking Landscape in Central and Eastern Europe. Country Experience and Policies for the Future. (OECD Proceedings)*. Paris: OECD Publications

Ould-Ahmed, P. (2003) Barter Hysteresis in Post-Soviet Russia: an Institutional and Post Keynesian Perspective. *Journal of Post Keynesian Economics*. Vol. 26, No. 1, Pp 95-116

Ozerova, N. (2003) Turkiston banklari va ularni davlat tassarrufiga o`tkazilishi. (Banks of Turkistan and Their Nationalisation.) *Bozor, Pul va Kredit*. October, 2003. Issue 77, Pp 64-65

Panago, M. (1993) Financial Markets and Growth. An Overview. *European Economic Review*. Vol. 37, Pp 613-622

Palley, T. (2002) Endogenous Money: What It is and Why It Matters. *Macroeconomica*. Vol. 53, Pp 152-180

Perotti, E. C. (1994) A Taxonomy of Post-socialist Financial Systems: Decentralized Enforcement and the Creation of Inside Money. *Economics of Transition*. Volume 2, Issue 1, Pp 71-81

Petrick, K. (1998). *Money Endogeneity in Hungary and the Czech Republic*. Unpublished PhD Dissertation

- Plyshevskii, B. (1995) Reforming the Economies of the CIS: Uzbekistan. *Problems of Economic Transition*. January 1995, Pp 84-95
- Pollin, R. (1991) Two Theories of Money Supply Endogeneity: Some Empirical Evidence. *Journal of Post Keynesian Economics*. Vol. 13, No. 3, Pp 366-396
- Poloucek, S. (2004) Concentration of Banking Sectors. In: Poloucek, S. (Ed.) *Reforming the Financial Sector in Central European Countries*. Hampshire: Palgrave Macmillan
- Pomfret, R (2000). The Uzbek Model of Economic Development, 1991-99. *Economics of Transition*. Vol. 8, No.3, Pp 733-748
- Pomfret, R. (2003). *Central Asia since 1991: Experience of the New Independent States*. OECD Development Centre Technical Papers No 212
- Pomfret, R. and K. H Anderson (1997). *Uzbekistan: Welfare Impacts of Slow Transition*. Centre for International Economic Studies Seminar Paper 97-15
- Poskonov, A. A. (1967) *Kreditno-Denezhnaya Sistema SSSR. (Credit-Monetary System of the USSR)* Moscow: Finans
- Powell, R. P. (1981) Plan Execution and the Workability of Soviet Planning. In: Morris Bornstein (Ed.) *The Soviet Economy. Continuity and Change*. Boulder: Westview Press
- Pringle, R. (1973) *A Guide to Banking in Britain*. London: C. Knight
- Preobrazhensky, E. A. (1966) *The New Economics*. Oxford: Clarendon
- Ranaweera, T. (2003) Alternative Paths to Structural Adjustment in a Three-gap Model: The Case of Uzbekistan. *Post-Communist Economies*. Vol. 15, No. 4, Pp 595-611
- Riese, H. (2004) *Money, Development and Economic Transformation. Selected Essays by Hajo Riese*. Edited By Holscher, J. and H. Tomann. Hampshire: Palgrave Macmillan
- Rochon, L. P. (1997) Keynes's Finance Motive: a Re-assessment. Credit, Liquidity Preference and the Rate of Interest. *Review of Political Economy*. Vol. 9, Pp 277-293
- Roland, G. (2001) Ten Years After ... Transition and Economics. *IMF Staff Papers*. Vol. 48, Special Issue, Pp 29-52
- Rostowski, J. (1995) *Banking Reform in Central Europe and the Former Soviet Union*. (Ed.) Budapest: Central European University Press

- Rothem, R. J. (1981) Keynes's Monetary Theory of Value. *Journal of Post Keynesian Economics*. Vol. 3, Pp 568-585
- Rousseas, S. (1992) *Post Keynesian Monetary Economics*. Second Edition. Armonk: M. E. Sharpe
- Rosenberg, C. B. and M. de Zeeuw (2000) Welfare effects of Uzbekistan's Foreign Exchange Regime. *The IMF Working Paper No 61*
- Runde, J. (1994) Keynesian Uncertainty and Liquidity Preference. *Cambridge Journal of Economics*. Issue 18, Pp 129-144
- Sanoatqurishbank (SQB) (various years). *Annual Report* (various years). Tashkent: SQB
- Sardoni, C. (1987) *Marx and Keynes on Economic Recession: The Theory of Unemployment and Effective Demand*. Brighton: Wheatsheaf
- Sawyer, M. (1996) Money, Finance and Interest Rates: Some Post Keynesian Reflections. In: Arestis, P. (Ed) *Keynes, Money and the Open Economy. Essays in Honour of Paul Davidson: Volume One*. Cheltenham: Edward Elgar
- Seabright, P. (2000). *The Vanishing Rouble. Barter Networks and Non-Monetary Transactions in Post-Soviet Societies*. (Ed.) Cambridge: Cambridge University Press
- Scholtens, B. (2000). Financial Regulation and Financial System Architecture in Central Europe. *Journal of Banking and Finance*. Issue 24, Pp 525-553
- Schoors, K. (2001) The Credit Squeeze During Russia's Early Transition. A Bank-Based View. *Economics of Transition*. Vol. 9, No.1, Pp 205-228
- Schumpeter, J. A. (1961) *The Theory of Economic Development. An Enquiry Into Profits, Capital, Interest, and the Business Cycle*. New York: A Galaxy Book
- Schumpeter, J. A. (1994) *History of Economic Analysis*. London: Routledge
- Shackle, G. L. S. (1971) Discussion Paper on Clower's "Theoretical Foundations of Monetary Policy." In: Clayton, G. et al (Eds.) *Monetary Policy in the 1970s. Proceedings of the 1970 Sheffield Money Seminar*. Pp. 32-35. London: Oxford University Press
- Shastri, A. M. (1999) Coin-forgeries during the Maurya Period. In: Bandyopadhyay, S. (Ed.) *Pracyasikhasini. Seventy-Fifth Anniversary Celebration Volume of the Department of Ancient Indian History and Culture*. Calcutta: Calcutta University Press
- Shaw, E. S. (1973) *Financial Deepening in Economic Development*. New York: Oxford University Press

Shenger, Y. (1983). *Problemi Denejnogo Obrasheniya i Kredita v Sotsialisticheskoy Obshestve*. Tashkent: Fan

Sichev, N. G. (1982) *Finansi Promyshlennosti. (The Enterprise Sector Finance)*. Moscow: Finansi i Statistika

Smith, A. (1993) (1776) *An Enquiry into the Nature and Causes and the Wealth of Nations*. Oxford: Oxford University Press

Stiglitz, J. E. (1999). *Wither Reform: Ten Years of Transition*. *World Bank Economic Review*

Sutela, P. (2001) *Russia: Rise of a Dual Economy*. *World Bank Online Newsletter*

Sweezy, P.M. (1970) *The Theory of Capitalist Development*. London: Modern Reader Paperbacks

Szego, A. (1991) *Logic a Shortage Economy: A Critique of Kornai from Keleckian Macroeconomic Perspective*. *Journal of Post Keynesian Economics*. Vol.13, No.3, Pp 328-336

Taube, G and J. Zettelmeyer (1998) *Output Decline and Recovery in Uzbekistan – Past Performance and Future Prospects*. *IMF Working Paper WP/98/132*

Taylor, L. (1983) *Structuralist Macroeconomics: Applicable Models for the Third World*. New York: Basic Books

Temkin, G. (1994) *On Economic Reform in Socialist Countries: The Debate on Economic Calculation Under Socialism Revisited*. In: Nove, A. and I. D. Thatcher (Eds.) *Markets and Socialism*. Aldershot: Edward Elgar

Temkin, G. (1998) *Karl Marx and the Economics of Communism: Anniversary Recollections*. *Communist and Post Communist Studies*. Vol.31, No.4, Pp.303-328

Thakor, A. V. (1996) *The Design of Financial Systems: An Overview*. *Journal of Banking and Finance*. Vol. 20, Pp 917-948

Torr, C. S. W. (1980) *The Distinction between an Entrepreneur Economy and a Co-operative Economy*. *The South African Journal of Economics*. Vol. 48, Pp 429-434

Torr, C. S. W. (1988) *Equilibrium, Expectations and Information*. Cambridge: Polity Press

Tsai, S. and C. Wu (1999) *Financial Development and Economic Growth of Developed versus Asian Developing Countries*. *Review of Pacific Basin*

Financial Markets and Policies. Vol. 2, Pp 57-81

Vernikov, A.V. (1994) Rossiiskii Rubl' i Valyuty Byvshikh Respublik SSSR: Problemy Vzaimnoi Konvertiruемости. (The Russian Ruble and the Currencies of the Former Republics of the USSR. Problems of Mutual Convertibility. *Dengi` i kredit*. No.5-6, Pp 30-36

Wells, P. (1983) A post Keynesian View of Liquidity Preference and the Demand for Money. *Journal of Post Keynesian Economics*. Vol. 5, Pp 523-536

Wiles, P. J. D. (1964) *The Political Economy of Communism*. Oxford: Basil Blackwell

Wilson, J. S. G. (1986) *Banking Policy and Structure: A Comparative Analysis*. London: Groom Helm

World Bank (1997) Uzbekistan: Creating Financial Markets: A Review of the Financial Sector. *World Bank Report No 15430UZ*

World Bank (1999) Uzbekistan: Social and Structural Policy Review. *World Bank Report No 19626*

World Bank (2000) Social Assessment and Agricultural Reform in Central Asia and Turkey. *World Bank Technical Paper No 461*

World Bank (2003a). *Republic of Uzbekistan. Country Economic Memorandum*. Report No 25625-UZ. Poverty Reduction and Economic Management Unit, Europe and Central Asia Region

World Bank (2003b). *Uzbekistan. Energy Sector: Issues, Analysis, and an Agenda for Reform*. Infrastructure and Energy Services Department, Europe and Central Asia Region

Wray, L. R. (1990) *Money and Credit in Capitalist Economies*. Hants: Edward Elgar

Wray, L. R. (1993) Money, Interest Rates, and Monetary Policy. *Journal of Post Keynesian Economics*. Vol. 15, Pp 541-568

Wray, L. R. (1998) *Understanding Modern Money*. Cheltenham: Edward Elgar

Wray, L. R. (2000a) Modern Money. In: Smithin, J. (Ed.) *What is Money?* London: Routledge

Wray, L. R. (2000b) The Neo-Chartalist Approach to Money. *Working Paper*. Center for Full Employment and Price Stability

Wray, L. R. (2001) Understanding Modern Money. *Paper presented in the Center of Full Employment and Equity (CofFEE). Workshop on Understanding Unemployment in Australia and the USA. 10 and 11 December 2001, the*

University of Newcastle, Australia

Yakovlev, A. (2000) Barter in the Russian Economy: Classifications and Implications (Evidence from Case Study Analysis). *Post-Communist Economies*. Vol. 12, No. 3, Pp 279-291

Yurovsky, (1994) Problems of a Moneyless Economy. In: Nove, A. and I. D. Thatcher (Eds.) *Markets and Socialism*. Aldershot: Edward Elgar

Zettelmeyer, J. (1998) The Uzbek Growth Puzzle. *IMF Working Paper WP/98/133*

Zwass, A. (1979) *Money, Banking, and Credit in the Soviet Union and Eastern Europe*. London: Macmillan