

NBER WORKING PAPER SERIES

CENTRAL PLANNING AND MONETARISM:  
FELLOW TRAVELLERS?

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Working Paper No. 782

NATIONAL BUREAU OF ECONOMIC RESEARCH  
1050 Massachusetts Avenue  
Cambridge MA 02138

October 1981

This paper was presented at the NBER 1981 Summer Institute in the International Studies program. Any opinions expressed are those of the author and not those of the National Bureau of Economic Research.

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ABSTRACT

We discuss the monetary institutions and macroeconomics of centrally planned economies (CPEs); objectives and techniques of monetary control; the relevance to CPEs of the neutrality property, the natural rate hypothesis, and the quantity theory; the roles of stock and flow variables and the stability of asset demand and expenditure functions; the relation between monetary policy, fiscal policy and incomes policy in CPEs; the CPE equivalent of a floating exchange rate and its implications for monetary policy; and "super crowding out." Many considerations suggest that monetarism as theory and policy might be more applicable under central planning than it is in market economies.

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Central Planning and Monetarism: Fellow Travellers?\*

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August 1981

The essential characteristic of central planning, or of a centrally planned economy (CPE), is the detailed allocation by a centralised hierarchy of goods and services among producing and distributing organisations. This entails that the allocating bureaucracy also issues binding targets (plans) to each separate organisation for its production of individual outputs and use of the inputs needed to make them. By contrast, in a market economy these decisions are taken in a decentralised way, at least partly in response to signals of demands, supplies and prices communicated between independent agents.

The economic institutions of central planning are unfamiliar to many in the West, but we all have more or less immediate experience with monetarism. To say that it shall be known by its works might be too harsh, but lengthy definition is unnecessary. Indeed, any attempt at precise characterization would have to be very lengthy. The controversies over monetarist theory and policy have been so extensive and its current influence so ubiquitous that numerous variants have been specified. There is no single monetarist model, however. We may therefore take monetarism as a general body of thought stressing the pervasive importance of the aggregate stock of money in macroeconomic relationships, especially those determining quantities denominated in money terms, such as

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\* I am grateful to John Burkett, John Muellbauer, Ron Smith and Dennis Snower for comments, to Stan Rudcenko and David Winter for many discussions in the course of our joint work, and to the SSRC (U.K.) for support under its Programme for Quantitative and Comparative Macroeconomics at Birkbeck. The final version of this paper was completed at the 1981 NBER Summer Institute.

money income.\*

I have no intention whatsoever to judge either central planning or monetarism in its potential or actual application to Britain, the United States, or anywhere else, either as theory or as policy. Nor is the title meant to tar monetarism with the brush of association with central planning, or indeed the converse. By "fellow traveller" I understand one who does not explicitly adopt a given doctrine nor even openly identify with it, but who acts as those who do. Here the metaphor suggests common analytical premises, methods and conclusions, albeit usually applied to very different environments.

The title's query, then, is: Along what road might central planners and monetarists travel together, and how far? Are monetarist principles applicable under central planning? Are there similarities between the macroeconomics of central planners and that of market economy monetarists, between their attitudes and intellectual predispositions?

A final disclaimer: when discussing the macroeconomics or monetary economics of central planning, I am not in general referring to Marxist monetary theory, whether applied to a CPE or a market economy. I am certainly not asking whether Marx's monetary theory is monetarist, although this too is by no means an absurd question.

Until quite recently, there was very little macroeconomics for CPEs, and virtually all of this centered on the supply side (aggregate production functions), ignoring aggregate demand and its components.\*\* A striking example is the best-known theory of investment "cycles" in CPEs, in which these fluctuations

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\*Mayer (1978) and Purvis (1980) are excellent general references.

\*\* Notable exceptions are Robert Campbell (1970), Frank Holzman (1968), and Peter Wiles (1969, 1977). My colleague, Carol Nussey, had also embarked on such work before her untimely death.

are entirely determined by supply-side forces (Goldmann, 1964).

Resistance to a theoretical and applied macroeconomics of CPEs arises from several distinct arguments, none of which I find convincing. First is the belief that if all quantities are planned and determined at the disaggregated, microeconomic level, macroeconomics simply cannot matter. But the planners themselves do not accept this, and they rightly carry out macroeconomic and financial planning, because at least some macroeconomic aggregates, like households' money balances, do play a role which cannot be planned centrally at the micro level.

A second reason for ignoring macroeconomics, or at least monetary economics, in CPEs is the widespread, long-standing belief that demand always exceeds supply under central planning, so supply must determine everything. For the household sector, I have challenged the factual premise on a wide variety of empirical grounds (1974, 1977) and, with David Winter, on econometric evidence (1980). Those who start from this assumption often find it hard to implement consistently (Green and Higgins, 1977, reviewed in Portes, 1979a).

It has also been contended that it is strictly impossible to deal with macroeconomic aggregates in CPEs, because relative prices are so distorted, and in practice the aggregates are meaningless, because any total of expenditures will include many items bought only because the buyers could not find what they really wanted. Such "forced substitution" is a consequence of both excess aggregate demand and distorted relative prices (Kornai, 1981). We find, however, that there will still be a natural correspondence between what is happening at the microeconomic level and what is measured by macroeconomic aggregates (Portes and Winter, 1980). Aggregation over quantity-constrained micro markets, some in excess demand and others in excess supply, can yield smooth behaviour and well-defined macro variables (Muellbauer, 1978).

Finally, there is a general scepticism about theoretical and econometric modelling of CPEs, applied most forcefully to macroeconomics. Thus a leading expert on Soviet money and banking says, "Standard Western analytical models for testing monetary aspects of economic processes are not applicable to Soviet reality" (Garvy, 1977, p. 8). He believes that the data are inadequate and that we cannot properly specify the rules of economic behaviour in CPEs. I reject both propositions. The analysis below presupposes that CPE households, enterprises and planners do exhibit stable behaviour which we can model, and that macroeconomic data in these economies are adequate to describe events both to the planners and to us as observers. Our empirical work fully justifies this maintained hypothesis.\*

A brief description of CPE macroeconomic institutions is necessary. This refers to the "standard system", as it has applied for many years in the USSR and the Six of Eastern Europe, ignoring economic "reforms" which have in any case made little change, except in Hungary.

The main difference from our own macroeconomic structure is that theirs is much simpler. We have a diverse and complex set of financial institutions, from the central bank to a range of separate commercial deposit banks, building societies, investment banks, and so forth, all performing different roles in the process of financial intermediation between lenders and borrowers, savers and investors. The CPE has a single, combined central and commercial bank with many branches. This monobank facilitates central control over enterprises and monitoring of households' financial behaviour. It also enforces a separation of the types of money used by these two sectors: transactions between enter-

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\*It does not, however, justify the use for forecasting or policy analysis of any of the existing large-scale macroeconomic models of CPEs. Before one will be able to take that activity seriously, much more work on small structural models and hypothesis testing will be necessary (e.g., Burkett, Portes and Winter, 1981).

prises are conducted entirely with deposit money, i.e., entries on the monobank's books; while those between enterprises and households, and within the household sector, are conducted with cash. Household financial assets are cash and savings deposits.

In the state productive sector, therefore, where resources are allocated centrally in physical terms, money is "passive". Although there is indeed generalized excess monetary demand here (resulting from excess real demand, or "over-full employment planning"), this has little effect or relevance. For producing enterprises, liquidity is offered by stocks of goods, which may be hard to get, rather than the passive money, which is all too easy to obtain. Producers do face a "soft" budget constraint (Kornai, 1981). But only if the bank permits can passive money finance wage payments and thereby "leak" into active money, that which circulates in the household sector.

Here money is active because wage labour and material incentives have been maintained in these CPEs. Thus although the planners set centrally the demand for labour and wage rates, there is a labour market on which workers are (relatively) free in offering their services; and while the supplies of consumer goods and their prices are also fixed centrally, there is a market on which households are free to use their money to purchase from among what is offered.

I have for some time argued that for the consumer goods market in CPEs since the mid-1950s, there is no clear evidence that generalized, macro-level excess demand or repressed inflation has prevailed for long periods (Portes, 1977; Portes and Winter, 1977, 1978, 1980). This is contrary to conventional wisdom, but many phenomena usually attributed to monetary disequilibrium, such as shortages and the "second economy" (unofficial, often unrecorded markets and production of various kinds), are in good part due to distorted relative prices and deficiencies of the distributive network. This distinction is important

here because monetary control cannot be used effectively to deal with relative price problems,\* and the planners' monetary and macroeconomic policies may still be adequate although we observe many microeconomic disequilibria. Moreover, to judge these issues we need macroeconomic analysis and evidence.

Prices are fixed by the planners for long periods. They can keep them that way while enterprise costs vary, by altering the turnover taxes (or subsidies) set at different rates for each good, or by altering their deductions from (subsidies to) enterprise profits. Thus a rise in wage costs, say, need not affect prices at all; just as a rise in prices can be met by a reduction in turnover taxes and therefore need not affect enterprise or household incomes and hence their expenditure. Moreover, if there were excess demand for goods, the planners' direct control over supply means that there might be no consequent effect on the demand for labour. All this makes macroeconomic control simpler by cutting the links and feedbacks along which disturbances propagate in the inflationary spirals of market economies. Recent consumer price rises in Eastern Europe are not primarily due to aggregate excess demand (except in Poland) or the effects of world inflation (Portes, 1980), and their repercussions have been contained.

Monetary control in CPEs is also much easier because of the structure of financial institutions and the very restricted range of financial assets. There are no equity shares or debentures, no stock or bond markets; there is little consumer credit; and trade credit from a supplier enterprise to its customer is in principle excluded as well. Thus the planners need not worry about the prices and yields of financial assets (i.e., interest rates) and their effects on

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\* How much reduction in household asset and income levels, or rise in the general price level, would be necessary to eliminate excess demand for housing, automobiles and meat in the East European CPEs (given current supplies)? How many other goods would then be in excess supply?



expenditure, nor about open market operations. There are no independent commercial banks, so the planners need not control their lending behaviour with reserve or liquidity ratios or interest rates; and there is no such thing as a secondary expansion of credit generated by an expansion of the monetary base.

Finally, the domestic monetary system is completely insulated from and unaffected by foreign sector transactions, whether on current or capital account. Transactions with non-residents are centralized in the foreign trade bank (another branch of the monobank), and there are no problems of control over the operations of international banks and multinational corporations.

It should already be evident that a basic empirical prerequisite for monetarism is met more clearly in CPEs than in market economies. The monetary authorities can indeed control and monitor the money supply quite precisely (see Rudenko, 1978, on how they do so operationally). That this control may not be fully effective when its consequences conflict with other objectives, policies and pressures does not invalidate this proposition, which emerges clearly from the comparison of monetary institutions outlined above.

We can now consider how monetarist thought might apply to the macroeconomics of central planning. We may start conveniently with the general monetarist proposition for market economies that money is neutral. One form of this is familiarly expressed by the notion that "money is a veil": in the long run, at least, real variables like production and employment are independent of monetary phenomena.\* Now in a CPE, no macroeconomic full employment policy is necessary, because full employment is assured at the microeconomic planning level (Ellman, 1979). Detailed manpower planning, the planners' (and enterprises') desire to maximise output by using all the labour which is supplied, and the difficulty which any enterprise with some temporarily excess workers would encounter in

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\* And in the short run as well, if expectations are rational, except for any unsystematic monetary shocks ("surprises").

trying to sack them, all guarantee that anyone desiring a job at the going wage is employed. The objective of monetary policy in CPEs is the control of inflationary pressures.

In a properly functioning market economy, too, macroeconomic policy for full employment is strictly superfluous, on a monetarist view. Hahn (1980) attributes to monetarism the belief that the economy will not be very often or very far out of a "rational expectations equilibrium", which for our purposes here can be taken to imply no involuntary unemployment. Thus output stays around the level given by full employment of labour (unemployment at the "natural rate"). In these circumstances, monetary policy should not seek to affect real variables, but rather to adjust to them, in a CPE, or to avoid perturbing them from their long-run paths, in a market economy. In both cases, provided these fundamental criteria are met, monetary policy has of course a legitimate independent role in pursuing the authorities' objectives for nominal variables such as the price level. With a vertical Phillips curve, macroeconomic policy should be concerned with inflation, leaving the reduction of the natural rate of unemployment to microeconomic measures.

All this is a straightforward coincidence of views. Note, however, that this aspect of monetarism is in the market economies based on the belief that markets work, that decentralised allocation can ensure coherence, even efficiency, but in the CPEs based on the belief that planning and centralized signals work, so monetary regulation need not be used to adjust for any mistakes. Regrettably, perfect administration is as rare as perfect markets.

Closely associated with monetarism in the public as well as the professional mind is the quantity equation,  $MV = Y = Py$ . The nominal stock of money outstanding times the velocity with which it circulates equals the value of national income, or the price level times real national income. As it stands, this is of

course a tautology, but there are at least two monetarist interpretations which share the title of the Quantity Theory of Money. One is that  $V$  is stable, at least in the medium to long run, so that changes in  $M$  will be the principal causes of changes in  $Y$ , subject perhaps to long and variable lags. A second is the strict version of the neutrality property: if  $V$  and  $y$  are determined by real (non-monetary) forces, then changes in  $M$  will determine changes in the price level; again, the causal processes through which this impulse is transmitted are complex, so that lags may be long and variable. Both versions ignore the problem of effective demand, essentially excluding it from the center of macroeconomic concerns; and central planners would certainly go along with that. But we can say more.

Milton Friedman once set up a model which, he argued, was common to monetarists and Keynesians, but was missing one equation to make it complete, or determinate. He then maintained that the difference between monetarists and Keynesians was that for the missing equation, monetarists chose to fix  $y$  at its full-employment (natural rate) level, while Keynesians chose to fix  $P$  at a level determined exogenously. In a CPE, both are fixed "exogenously", by the planners. What does that leave for the quantity equation? With velocity again taken as constant, it now gives us the stock of money required to finance transactions. (Here we are coming close to Marxist monetary theory's Law of Circulation, according to which  $P$ ,  $V$ , and  $y$  determine the quantity of money which will be drawn into circulation from hoards.)

The obvious relation, then, between the two cases is that in the market economy, the quantity theory becomes a theory of open inflation, while in the CPE, it is a theory of repressed inflation; or alternatively, in both, a guide to non-inflationary monetary policy. Either as theory or policy, the causal mechanism is likely to be quicker and more reliable in the CPE--or velocity

more stable--given the much simpler institutional and asset structures.\*

A strong similarity in analytical method emerges from the observation that monetarists center attention on stocks of assets more than on flows of expenditures or receipts. Central planners, too, emphasize in their analyses the stocks of currency and savings deposits held by the public, as well as inventories held by distributive trade enterprises, and ratios of these stocks to retail trade turnover, rather than any marginal propensities.

It has often been regarded as a basic tenet of monetarism that the stock demand for money function is more stable than the Keynesian flow consumption expenditure function. In a CPE, if we take household money to include both currency and savings deposits, then the absence of other financial assets and debts means that the two functions are virtually equivalent: Savings equals the increment to money stocks.

It might nevertheless be argued that in a CPE the demand for money is more fundamental, or more stable, for at least two reasons: The rate of interest paid on savings deposits does not vary in the short run; and prices are quite stable, so price expectations are not volatile. Nor are quantity expectations, either of employment or of aggregate consumption goods supplies. Thus although the planners are concerned about "monetary overhang" and the possibility that in some crisis households may suddenly and massively seek to convert their money savings into goods, in fact this does not appear to happen.\*\* Their concern may perhaps be traced to another residual influence of Marxist monetary theory,

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\*"...A planner in an almost totally controlled economy...should find the quantity theory more useful than the Keynesian theory"(Mayer, 1978, pp. 40-41).

\*\* Even the breakdown of the consumer goods market in Poland in 1981 was due mainly to wage increases exceeding 20% (with fixed consumer prices) and cuts in supplies, rather than massive dishoarding.

Marx's emphasis on hoarding, and his view that paper money will not be hoarded, so that amounts of paper money outstanding in excess of the needs of circulation cause paper money to depreciate relative to gold (commodities).

Both central planners and monetarists, of course, tend to attribute special significance to one type of asset: money. This is perhaps more understandable for the planners, since money is the only financial asset in CPEs. But its distribution between currency, demand deposits and time deposits would appear important, because only currency can be used for payment in the shops and between households (in particular, in the "second economy"), while time deposits are often tied to accumulation of the purchase price of specific durable goods.

In fact, it is notable that in those CPEs for which we have data, the ratios of currency to total household money have followed remarkably stable, secular trends downwards since the mid-1950s.\* Nevertheless, households have since the 1960s been able to purchase substantial quantities of durable goods, and it is surprising that the planners seem to be uninterested in household portfolio allocation between money and durables.

The stress on money by market economy monetarists and their attempt to draw somewhere a sharp line between it and other household assets is even less comprehensible, insofar as their view of the mechanism transmitting impulses from money rests on substitutability across a wide range of financial and real assets. But monetarists do often act as if there were only one condition for stock equilibrium, that of equality between the demand for and supply of money.

Despite the mutual analytical and policy emphasis on stocks, there is a major difference in styles of economic policy and monetary control. Whereas

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\* See Rudcenko (1979) for Czechoslovakia, the GDR, Hungary and Poland. For the U.S.S.R., Peebles (1981) shows the same picture, except for a temporary upwards jump in the mid-1960s.

market economy monetarists keep stocks at the forefront by making their policy targets the level of monetary aggregates, the central planners' actual monetary control is exercised on the flow of income.

This observation reveals a common misconception about monetary planning and control in CPEs. It is often said that although the main function of monetary planning in CPEs is to maintain macroeconomic equilibrium (in the household sector), this is implemented with controls which operate at the microeconomic level. These controls are applied directly by the bank, regulating credit to each enterprise on the basis of its plan.

In this view, the planning process starts with aggregate macroeconomic quantities (plans for real macro variables), which are then "broken down" (disaggregated) through the planning hierarchy down to the enterprise level. The resulting microeconomic quantities, targets for inputs and outputs for each enterprise, then imply microeconomic financial plans, which are summed to give the macroeconomic or aggregate monetary plan. There is in this scheme no aggregate-level control over monetary variables, not even a direct control over total currency emission.

If this were so, monetary policy in CPEs would be much less effective than it actually is. In implementation, the micro-level control over each enterprise's credit is unrelated to the aggregate monetary targets, and it would always be frustrated by the priority of production goals, the impossibility of suppressing trade credit (Podolski, 1972), etc. But the story so far omits a central character, incomes policy, which in CPEs plays a leading role opposite monetary policy and in harmony with it.

The primary tool of monetary control is the planning and prescribing of wage rates and wage fund targets. These too are "broken down" to enterprises from initial aggregates, just like output plans, and the aggregate wage and output

targets are intended to be consistent in both production and consumption. That is, the wage rates set are intended to draw a labour supply equal to the planned demand for labour; the wage fund plan corresponds to the total remuneration, at those rates, of the planned volume of employment; the production plan is related to an aggregate target for consumption goods supply; and at the given consumer prices, the aggregate value of this supply is planned to equal the demand which households will express, given their initial assets and the planned wage payments.

This then gives a much more direct relation between wages and the money supply than in any view of a market economy, monetarist or non-monetarist--but explicitly the other way round: wages determine the supply of money to the household sector. This relation is the key to the monetary economics of CPEs. The cash plan derives from wages, the essential elements of the credit plan derive from the cash plan, and at the center of monetary control is the balance of money incomes and expenditures of the population. Thus the actual control is over the flow of incomes rather than the aggregate stock of household money. The former is the instrument, the latter is the proximate target,\* with the ultimate targets being consumption demand and labour supply.

Here the planners part company with monetarism on an essential point: in market economy monetarism, there appears to be no long-run role whatsoever for incomes policy, because in the long run wages have no independent effect on prices or real output, and in the short run controls are aimed directly at the monetary aggregates. In the CPEs, monetary policy reduces to incomes policy (which in fact is fiscal policy as well, parallel to our income and payroll taxes--see below).

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\* Note that if they abjure changing the general price level, the planners have only a derivative control (flow) to regulate a stock.

This story of monetary control in CPEs has dealt with the intention and the process, rather than the outcome. The control over wages, and thus over the money supply, can break down. Whereas in a market economy, divergence from monetary targets may originate in either the public or the private sector, in the CPE there is only one fundamental source: the relation between the state enterprises and their branches of the monobank. The priority of output among the objectives of planners, enterprise managers and Party secretaries means that the bank will often have to concede finance for above-plan payments, either directly or by extending general credit to enterprises whose costs exceed plans and which consequently find themselves with liquidity problems (Kornai's "soft" budget constraint). Bank managers are understandably reluctant to bankrupt state enterprises, and this would in any case probably be useless. So violators of cost targets are "financed when they overshoot (Wiles, 1977, p. 372)". Even Stalin never used the monetary control technique of shooting the bankers when they overfinance, which doubtless would have been quite effective.

This weakness of monetary control in CPEs has its aggregate-level parallel in market economies. Here, an accommodating monetary policy has in the past permitted firms to pass on wage increases in price increases. Where this version of the soft budget constraint has not sufficed, often the state has directly intervened financially (e.g., Lockheed and Chrysler in the U.S.). Policy recently changed under the Conservative government in the U.K. But as in CPEs, the authorities still do not let public sector enterprises go bankrupt, whatever level of wage increases they grant. And it remains an open question whether the key weakness of applied monetarism will prove to be a reluctance to permit major, extensive private sector bankruptcies and consequent mass unemployment. Whatever the likelihood that this will lead to a



policy "U-turn", it is greater than it would be if, like the CPE, there were an incomes policy supporting monetary control.

From a fundamental issue we now turn to a minor but interesting analogy. It was once regarded as a principal tenet of monetarism that the demand for money is relatively insensitive to the rate of interest. Though this is now a less important part of the monetarist story, we should note that it is easily applicable to CPEs. Here the monetary control mechanism has never given any role to the interest rate. Although household saving or portfolio allocation behaviour might well vary with the interest rate, this is impossible to establish empirically, because the planners have altered the interest rate so seldom (and then in discrete steps, and practically always upwards) since the mid-1950s. They do not use the interest rate as a macroeconomic control variable, either in relation to households, or to affect aggregate enterprise investment demand, or aggregate inventory holdings. And the interest rate does not vary without an explicit planners' decision: it is not a flexible price in any market. Clearly, therefore, the central planners would follow market economy monetarists in regarding the price of money as the inverse of the price level of goods, rather than as the interest rate.

So far, I have ignored foreign trade and payments. But all existing CPEs except the U.S.S.R. are now relatively open economies, and even Soviet participation in foreign trade is not negligible. The standard CPE isolates the domestic monetary system and price level from the foreign sector and foreign prices\*; to do this, it uses the "price-equalisation subsidy (tax)". At the macroeconomic level, this is the equivalent of a continuously floating exchange rate, the means by which monetarists seek to preserve the autonomy of domestic

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\* See Wolf (1980) for details. This does not mean that domestic monetary policy cannot affect the foreign sector--see Portes (1979b).

monetary policy and its effects on the domestic price level. Conversely, a floating exchange rate eliminates the discipline exerted on domestic policy and inflation rates by the balance of payments constraint. It appears that for this discipline we must substitute either central planning or a suitably austere and restrictive monetary policy.

The alternative framework is that provided by fixed exchange rates and a gold or gold-exchange standard. This offers an external, autonomous form of control over the domestic money supply and macroeconomic policy (though some monetarists would now agree that even in the medium run, a considerable degree of sterilization of the effects of reserve flows on the domestic money supply is feasible--see Darby, 1980). The CPEs do have a doctrinal attachment to gold, both because of its importance in Marxist monetary theory, and more practically because the U.S.S.R. is the world's second-largest gold producer. But neither a foreigner nor a resident of any CPE could redeem rubles or zlotys or lei, however earned, for gold, at either the official or the market rate. Nor could a holder of the domestic currency buy dollars or sterling, except possibly in very limited quantities for authorized tourism.

This is not to say that convertible currencies are valueless in the CPEs--quite the contrary, as Mr. Honecker is said to have confirmed on his trip to West Germany, which he found really just like the East: he could buy anything there for Westmarks. Nevertheless, to go to a fixed exchange rate system, with consequent direct relations between domestic and foreign prices and money supplies, would be totally incompatible with central planning. Despite their acknowledgements to David Hume, in practice most monetarists have also favoured floating rates.

Central to the debate between monetarists and non-monetarists in the 1970s was the issue of "crowding out", which supplanted earlier arguments over the

relative size and stability of the effects on nominal income of monetary injections and changes in autonomous expenditures. Monetarists assert that government expenditure ultimately "crowds out" (displaces or substitutes for) an equivalent volume of private expenditure, through some combination of interest rate and price level changes. The consequence is that at least in the long run, fiscal policy cannot affect output.

In the centrally planned economy, with full employment and central physical allocation of resources, it is evident that an increase in the state sector's use of output (say for investment or military expenditure) must entail an equivalent reduction in the household sector's use (consumption). The only exception could be when the planners adjust net exports, but although there is some evidence they do this in the short run, it is not likely to be a feasible shift of the long run equilibrium.

Indeed, with prices fixed we have in the CPE a sort of "super crowding out", due to repressed inflation. Starting in full employment equilibrium with no excess demand and holding wages constant, a shift in output away from consumption causes excess demand for consumer goods, which discourages labour supply. As workers find they cannot spend as much as they would like, they will react at least partly by working less. The result will be a fall in output, hence in the amount available for consumption, hence perhaps a further fall in labour supply, until this "supply multiplier" process comes to rest (Barro and Grossman, 1974; Portes, 1981).

If however excess demand means that some individuals are now unable to purchase particular goods or services which they find sufficiently important, they may offer (instead of money) goods or services at their disposal which are also in short supply. Thus I may offer to fix your car if you paint my flat, because neither of us can find these services we want offered for money. If this

opportunity to barter results in additional labour supply (not merely an equal reduction of hours worked for money), we have a paradoxical result: the uselessness of money hoards means that some unsatisfied demands will create or evoke their own corresponding supplies. This is an unfamiliar side of Say's Law, which holds that if there is no hoarding, supply will create its own demand (in the sense that any offer of goods or services must constitute a demand for their equivalent in exchange). If barter were organised properly, and with no transactions costs or uncertainty, there could be no aggregate excess demand.

Paradoxical effects of excess demand extend to CPE foreign trade policy. The macroeconomic problems of CPEs are typically those of excess real demand, if not necessarily in the household sector, certainly in the state productive sector--"overfull employment planning". The macroeconomic problems of market economies are typically, though not always, excess supply and unemployment. In a market economy, one way to combat unemployment is to export it, by running an export surplus. This "beggar-my-neighbour" policy has its CPE counterpart, which is to export excess demand by running an import surplus. When the countries of Comecon seek to do this among each other, it is indeed a "beggar-my-neighbour" policy. When market economies and CPEs are in symmetrical circumstances and trade with each other, however, each will be willing to satisfy the other's policy objectives, provided there is some way of financing the centrally planned economies' deficits with the market economies. This is precisely what has been happening since the early 1970s (Portes, 1980).

Neither of these paradoxes is strictly relevant to the relations between central planning and monetarism, but the second does lead directly to an important parallel. It has been suggested (Purvis, 1980) that the "acid test" for a monetarist is the policy recommendation following an increase in the oil price

for a major oil importer. The monetarist would argue that this will require a reduction in real income and the real value of money holdings, so that the nominal stock of money should certainly not be increased; while a non-monetarist would argue that the oil price rise will have the deflationary effect of an indirect tax increase, so that monetary policy should be expansionary. On this test, the macroeconomics of central planning must be monetarist: the tax effect does not operate and full employment is not threatened (except insofar as the real income loss may induce bottlenecks in production); the only alternative to reducing real incomes and demand is to run an import surplus, exporting the excess demand created by the deterioration of the terms of trade.

Let us return to the roles of fiscal and monetary policies in a closed economy. The monetarist would say, in view of the relation between money stock and nominal income, the stability of the demand for money relative to consumption behaviour, and "crowding out", that fiscal policy has no independent status and should adjust to monetary targets. In fact, fiscal policy is implied by these targets and by the government budget constraint, given a stable private sector demand for money. Thus the monetarist experiment in the U.K. has stressed the (empirically weak) relationship between the government deficit, its borrowing requirement, and the monetary aggregates.

In the CPE, with no secondary credit expansion and no possibility for the private sector to create money, fiscal policy is equivalent to monetary policy. The relation is strong and direct. The planners always plan and normally achieve a balanced budget or slight surplus. A surplus would be deflationary, but it is more straightforward to place the responsibility for any inflationary pressures directly on the bank, where it belongs (since an excessive increase in the money supply to households can be identified with an excessive increase in credits to enterprises, net of their deposits with the bank).

Monetarism has long been associated with the case against "fine-tuning" the economy, using an activist or discretionary monetary policy. Friedman's early arguments rested on the authorities' lack of knowledge about the mechanism of transmission of monetary effects, the lags, etc., so that the private sector would be more stable if monetary policy were simply to follow a fixed rule. A more recent justification of a similar conclusion is the argument from the supposed rationality of private sector expectations: that agents use information efficiently in making their forecasts about the economy and taking decisions based on them, and that such information must include knowledge of any systematic policy pursued by the authorities. If so, it is argued, the path of real output is affected only by changes in the money supply which agents cannot anticipate, and so cannot be part of a systematic policy.

For the CPE, we have already seen that the planners do not want or need an active monetary policy, in the sense of one which seeks to influence output or employment. Hence the rule that the state budget should balance, so that any change in household cash will be the mirror image of a change in enterprises' aggregate net liabilities to the monobank. This in turn should be consistent with the material balances and wage plans.

The planners know, of course, that there will be some overshooting (and hence bank overfinancing of enterprises), and that they must compensate by some conscious underplanning of wages. The hypothesis that expectations are formed rationally is perhaps more plausible in the CPE than in the market economy, because the planners' policy rules are better defined, better known to agents; and their policies change less often.

Thus, a wide range of considerations suggest that monetarism as theory and policy might work better in CPE circumstances, with Soviet-style financial

institutions, than it does in our developed market economies. Our monetary system is excessively intricate, and this makes monetarist regularities less regular than they might be. These complexities appear to come at a high cost with relatively little benefit. Certainly bankers, particularly central bankers, could easily adjust to the changed circumstances. Indeed, the two major classes of economic agents whose behaviour seems system-invariant are central bankers and peasants. Soviet bankers would be quite at home at meetings of the BIS in Basle, and Polish bankers identified more with the outlook of the Western bankers with whom they dealt than that of their own economic planning, ministry and Party officials.

Successful monetary planning and control in a CPE requires a thoroughgoing, serious incomes policy, coordinated with the monetary targets. It is in this light ironic that if the current British experiment (1979-81) should fail, the country might react by going much further towards central planning than ever before. Should this occur, it might well involve a new structure for the banking system; and it is difficult to imagine such a set of policies without a serious policy for incomes, whatever the political opposition. But either consistent monetarism or consistent central planning is so painful a discipline that it may require a degree of political control impossible to realise in a pluralistic society.

The dictionary definition of "fellow-traveller" is one who supports or sympathises with the programme of an organised group without actually joining it; especially a supporter of the Communist Party. Thus there is an asymmetry, and clearly room for a final paradox: my title left open the question of who follows whom. Perhaps the dictionary definition suggests the wrong leader. Professor Friedman might be alarmed if he looked over his left shoulder.

REFERENCES

- Barro, R., and H. Grossman, 1974, Suppressed inflation and the supply multiplier, *Review of Economic Studies* 41, 87-104.
- Burkett, J., R. Portes, and D. Winter, 1981, Macroeconomic adjustment and foreign trade of centrally planned economies, NBER Working Paper No. .
- Campbell, R., 1970, Macroeconomic models and central price-setting in the Soviet economy, in: Gehrels, F., et al., *Essays in economic analysis and policy* (Bloomington: Indiana U.P.), 253-270.
- Darby, M., 1980, Sterilization and monetary control under pegged exchange rates: theory and evidence, National Bureau of Economic Research Working Paper No. 449.
- Ellman, M., 1979, Full employment--lessons from state socialism, *De Economist* 127, 489-512.
- Garvy, G., 1977, Money, financial flows, and credit in the Soviet Union (Cambridge, Mass: Ballinger).
- Goldmann, J., 1964, Fluctuations and trend in the rate of economic growth in some socialist countries, *Economics of Planning* 4, 88-98.
- Green, D., and C. Higgins, 1977, SOVMOD I: A macroeconomic model of the Soviet Union (New York: Academic Press).
- Hahn, F., 1980, Monetarism and economic theory, *Economica* 47, 1-17.
- Holzman, F., 1968, Soviet central planning and its impact on foreign trade adjustment mechanisms, in: Brown, A., and E. Neuberger, eds., *International trade and central planning* (Berkeley, Univ. of California Press).
- Kornai, J., 1981, *Economics of shortage* (Amsterdam: North-Holland).
- Mayer, T., et al., 1978, *The structure of monetarism* (New York: Norton).
- Muellbauer, J., 1978, Macro theory vs. macroeconometrics: the treatment of disequilibrium in macroeconomic models, Birkbeck Discussion Paper in Economics No. 59.
- Peebles, G., 1981, Money incomes and expenditures of the population of the Soviet Union: an East European comparison, forthcoming in *Hong Kong Economic Papers*.
- Podolski, T., 1972, *Socialist banking and monetary control* (Cambridge: C.U.P.).
- Portes, R., 1974, Macroeconomic equilibrium under central planning, Institute for International Economic Studies, University of Stockholm, Seminar Paper No. 40.



- Portes, R., 1977, The control of inflation: lessons from East European experience, *Economica* 44, 109-130.
- Portes, R., 1979a, Review article: SOVMOD, *Economic Journal* 89, 669-674.
- Portes, R., 1979b, Internal and external balance in a centrally planned economy, *Journal of Comparative Economics* 3, 325-345.
- Portes, R., 1980, Effects of the world economic crisis on the East European economies, *The World Economy* 3, 13-52.
- Portes, R., 1981, Macroeconomic equilibrium and disequilibrium in centrally planned economies, *Economic Inquiry*, forthcoming.
- Portes, R., and D. Winter, 1977, The supply of consumption goods in centrally planned economies, *Journal of Comparative Economics* 1, 351-365.
- Portes, R., and D. Winter, 1978, The demand for money and for consumption goods in centrally planned economies, *Review of Economics and Statistics* 60, 8-18.
- Portes, R., and D. Winter, 1980, Disequilibrium estimates for consumption goods markets in centrally planned economies, *Review of Economic Studies* 47, 137-159.
- Purvis, D., 1980, Monetarism: a review, *Canadian Journal of Economics* 13, 96-122.
- Rudcenko, S., 1979, Household money income, expenditure and monetary assets in Czechoslovakia, GDR, Hungary and Poland, 1956-1975, *Jahrbuch der Wirtschaft Osteuropas* 8, 431-450.
- Wiles, P., 1969, *Communist international economics* (Oxford: Blackwell).
- Wiles, P., 1977, *Economic institutions compared* (Oxford: Blackwell).
- Wolf, T., 1980, On the adjustment of centrally planned economies to external economic disturbances, in: Marer, P., and J.M. Montias, eds., *East European integration and East-West trade* (Bloomington, Indiana: Indiana University Press).