

EUROPEAN UNIVERSITY INSTITUTE, FLORENCE

DEPARTMENT OF ECONOMICS

EUI WORKING PAPER No. 88/361

**REMONETISATION AND CAPITAL MARKETS
IN THE REFORM OF
CENTRALLY PLANNED ECONOMIES**

**by
DOMENICO MARIO NUTI**

BADIA FIESOLANA, SAN DOMENICO (FI)

WP

320

EUR



All rights reserved.
No part of this paper may be reproduced in any form
without permission of the author.

© Domenico Mario Nuti
Printed in Italy in November 1988
European University Institute
Badia Fiesolana
– 50016 San Domenico (FI) –
Italy

REMONETISATION AND CAPITAL MARKETS IN THE REFORM OF CENTRALLY PLANNED ECONOMIES

Domenico Mario Nuti,
European University Institute,
50016 Florence, Italy.

Third Annual Conference of the European Economic
Association, Bologna University, 27-29 August 1988.
Session on: "Introducing capital markets in Eastern Europe".

1. Introduction.

Since the mid-1950s there have been repeated attempts at reforming the Centrally Planned Economy (CPE) of the Soviet Union and other Soviet-type economies, i.e. decentralising economic decisions, activating markets to replace plans, using incentives geared to performance at market values. The frequency of these attempts and their reversals indicates both the intense pressure for reform and the difficulty of its successful implementation. The current round of economic reform involves the Soviet Union, with the "perestroika" launched by Gorbachev on his accession to power in March 1985; Hungary, where the process started in 1968 has entered a new phase in the last three years; Poland, in spite of a spell of military rule; Bulgaria and - from a higher achieved degree of marketisation - Yugoslavia. Reform appears to have restarted, more recently and slowly, in Czechoslovakia; in Eastern Europe the only countries without signs of reform are the GDR, where pressure for change is reduced by its privileged relationship with the FRG and by its more flexible vertically integrated structure, and Romania which is regressing towards the Albanian model. However significant reforms are also taking place in socialist countries outside East Europe, notably in China and Algeria.

The current round of reforms differs from earlier attempts in several respects. This time the lead comes from the Soviet Union; it is accompanied often by political renewal (see Soviet emphasis on glasnost); it is more widely understood that a technological and sectoral restructuring of the economies to be reformed is necessary, and that reform implies abandoning traditional policies of overambitious investment, unconditional commitment to price stability and protection of job rights (and perhaps full employment itself); there is greater opening to direct foreign trade with other economic systems and to foreign investment, while the burden of servicing a large external debt forces the maintenance of these conditions. However the most visible, sometimes spectacular aspect of the current round of economic reform is the revamping of money and monetary policy, followed or to be followed by more or less developed capital markets.

This paper characterises the traditional CPE monetary, and financial system (section 2), illustrates the extent of current changes (section 3) which will be discussed further in the papers presented at this session by Zsigmond Jarai and Ales Vahcic; retraces the steps in the argument for and the actual sequencing of monetary and financial reform (section 4); discusses some systemic constraints and their impact on feasible further developments (section 5). The paper by Wlodzimierz Brus and Kazimierz Laski considers whether the full-fledged model of market socialism might be able to avoid labour unemployment or handle fluctuations in the level of economic activity; Richard Portes considers the international aspects of introducing capital markets in Eastern Europe.

2. Money and finance under central planning

In the traditional CPE money is primarily an accounting instrument of aggregation and control; financial flows are compartmentalised between enterprises and households, with a bank money circuit for inter-enterprises transactions and cash (or cash-convertible accounts) for transactions involving households as sellers or buyers, i.e. wage payments and consumption purchases. These financial flows are adjusted passively to planned physical flows and to the degree of their implementation by a single bank monopolising the functions of commercial as well as central banking (therefore dubbed "Monobank" in Western literature). Households savings (whether voluntary or, when intended purchases exceed supply at centrally fixed prices, involuntary) can take the form of a small range of durables including some production goods, or cash or a limited range of financial instruments (deposits, bonds, insurance, lottery tickets); the balance of revenues and expenditures of the population is closely monitored and forms the basis of cash issues; ideally it is balanced ex ante through price and incomes policy. Enterprises can only use finance for purposes specified in plan documents; in this sense Berliner (1976) talks of "documonetary" economy.

Investment is centrally decided and allocated in real terms while finance is provided automatically and interest-free from the state budget to investors, who are subject to straight line amortisation charges on the historical cost of their investments and transfer back to the state budget any surplus which they may realise (or rely on further transfers from the budget to cover their planned losses; however official regulations for investment selection imply a shadow capital charge, see Nuti 1971b). Credit is mostly short term and is also automatically available to enterprises to finance their working capital requirements necessary to fulfill their planned tasks; it is granted by the Central Bank at an almost symbolic interest rate designed to cover banks' administrative costs. Trade credit between enterprises is forbidden. Thus money in the traditional system is the unit of account, a two-tier medium of exchange conditionally to plan conformity, a store of

value in competition with inventories of goods rather than with alternative financial or productive assets. Money is an instrument for monitoring and controlling plan implementation ("control by the rouble" is emphasised in Soviet literature), not an instrument for economic management, except when planners lose control over financial balances, in which case monetary policy can be an important instrument for restoring that balance. Fiscal policy takes the form primarily of diversified turnover tax rates or subsidies on commodities, and is indistinguishable from profit; income tax is spurned as an unnecessary internal transfer within the state sector; a modest government surplus is the customary budgetary stance; government deficits are effectively instantly monetised.

Traditionally CPEs are regarded as having a propensity for autarkic or quasi-autarkic structure (Wiles, 1968). In the process of plan construction, first the necessary import requirements of planned levels of gross output are estimated by commodity groups, then export plans are adapted to the foreign currency requirements of the import plan; if a deficit emerges, over what can be financed out of reserves or fresh borrowing, unless import substitution can fill the gap output plans are scaled down. Exports are regarded as a "necessary evil", as a withdrawal from the domestic market. Planned trade is undertaken through large import-export state enterprises, specialised by commodity group, not on behalf of producers but on their own account. Domestic currencies are not convertible into commodities (outside the sphere of consumer purchases by nationals), let alone other currencies; exchange rates have a purely accounting role, with equalisation subsidies and taxes tending to make all planned exports equally profitable to producers and imports competitive with domestic substitutes whenever they are available; the economy is effectively insulated from the fluctuations in international prices and exchange rate. There is planned trade integration within the socialist trading bloc - CMEA or Council of Mutual Economic Assistance (also called Comecon but only in Western literature; at present includes the USSR, the East European Six, Mongolia, Cuba and Vietnam) - as the result of the coordination of national plans. Even within CMEA, however, trade flows tend to be bilaterally cleared (moreover within groups of hard and soft commodities) and there is no common currency, balances in the so-called transferable rouble being neither convertible in Soviet commodities nor transferable to countries other than the Soviet Union, without prior mutual agreement; intra-CMEA trade prices are usually indexed to a moving average of international prices in convertible currencies. All in all, foreign trade transactions are administratively determined and there is no automatic mechanism transmitting to producers signals about trade opportunities and inducing them to take advantage of any such opportunities (see Brown and Neuberger 1968; Holzman 1974, 1976; van Brabant 1973).

In theory the CPE's Monobank is the custodian of economic equilibrium; in practice it presides over a regime

of almost permanent excess demand, internal and external, to the point of leading to the identification of the economics of socialist planning with "the economics of shortage" (Kornai 1980, 1982, 1986); this is the result of overambition at all levels and price downwards inflexibility but is ultimately made possible by the acquiescence of the banking system. Hence the move towards market discipline, including credit discipline instead of automatic credit.

3. The extent of monetary and financial reform.

Monetary and financial reform presupposes the prior dismantling of central planning as a set of detailed physical commands to enterprises and sectors, and the implementation of a degree of enterprise autonomy and financial identity, subject to government policy exercised through indirect instruments. Thus the monetary and financial institutions of Yugoslavia², which first moved away from central planning, are the most developed in Eastern Europe (see Dimitrievic and Macesich, 1973, 1983); but especially in the last two years the pace of monetary and financial reform has been fast and accelerating.

The Yugoslav banking system includes - beside the central bank NBY plus the national banks of the federation members - 166 basic banks and the associated banks formed by basic banks, other financial institutions such as the Post Office Savings bank, the Yugoslav Bank for International Economic Cooperation YBIEC and internal banks (i.e. closed financial institutions internal to enterprises accepting deposits from enterprise workers and BOALs). NBY controls commercial banks through liquidity ratios, reserve requirements, credit ceilings, refinancing. In 1972 the commercial banking structure changed from one consisting of commercial banks and investment banks to a mixed bank system engaged in both short and long term operations. Basic banks are formed by enterprises, internal banks of enterprises, and other non-government institutions; they are regulated by organs composed of representatives of founding enterprises; until recently founding members of banks had unlimited liability. Associated banks formed by basic banks pool resources and usually handle foreign exchange operations, and tend to operate along regional lines.

In 1985 a new law was introduced, with which banks were to comply before the end of 1986. The new law raises capital requirements of commercial banks, defines the limited liability of banks shareholder enterprises, requires the build up of reserves and encourages inter-regional competition. A new accounting law from 1-1-1987 eliminated the possibility of deferring current foreign exchange losses in enterprise budgets. The purpose of these reforms is that of eliminating the drawbacks of the Yugoslav banking system to date: the financial indiscipline in the enterprise and banking sectors, the taking over by the NBY of foreign exchange risk on enterprise foreign borrowing, the negative interest rates, the lending to enterprises at rates lower

than the cost of finance, the socialisation of enterprise losses all round.

In Hungary, with effect from 1-1-1987, first commercial banking has been separated from central banking by the Monobank - as it was done in Britain with Sir Robert Peel's Act of 1844, which abandoned the principles of the banking school in favour of those of the currency school); then competition has been introduced in commercial banking by turning the Monobank lending directorates and some regional departments into autonomous banks and creating additional commercial banks (competing commercial banks were already present in the USSR in the early stages of NEP, see Arnold 1937; Carr and Davies 1969). Three of the new banks have been set up with the participation of Western capital, namely Citibank Budapest, the Central European International Bank and Unicbank; commercial banks however do not yet compete for households deposits, reserved to the National Savings Bank. The change implies the gradual integration and connection of all financial flows, and the replacement of budgetary grants and automatic credit with contractual relations with banks based on credit-worthiness, and at an interest which is supposed to balance the loans market. Central Bank control of credit expansion is exercised through indirect instruments such as reserve and liquidity ratios, rediscounting scale and rates, open market operations (initially consisting of primary issues of short term securities); the way is paved for active monetary policy. At present it is felt that both the scale of refinancing and reserve ratios are high by international standards, two elements offsetting each other but perhaps adding up to a higher degree of direct central control than desirable or intended. A thorny question is the verification and treatment of the portfolio inherited by banks, some of which consists of doubtful loans made under the earlier financial regime. Another is the organisation of housing finance, which is precondition for the unification of the two monetary circuits of households and enterprises.

Hungarian style monetary reform has been adopted in Poland and Bulgaria (see Davididi 1987), and its necessity has been maintained in the Soviet Union by leading reformers; a first step in the USSR has already been made with the setting up of six new specialised banks, decreed in July 1987. Credit-worthiness and financial discipline requires strict procedures for the recovery, liquidation and bankruptcy of non financially viable enterprises; such procedures are now in force in Hungary, Yugoslavia, Poland and the Soviet Union, and a handful of bankrupt firms - mostly in construction - are proudly listed by reformers as a major achievement.

In Hungary since 1983, i.e. already before the banking reform, a bond market has operated with primary issues and secondary trading, for both enterprises (non state guaranteed) and households (guaranteed), with issues growing by over thirty times (100 times for households) in

five years to almost 30 bn Forint in 1987. Shares have also been issued and retraded though until now exclusively within state enterprises. The next tasks of the financial reform are the development of the role of financial investors (insurance companies, pension funds, savings association etcetera) and of an integrated money market with a unified interest rate structure, and the development of an equity market extended to households (announced for 1-1-1989); this will require a parallel development and generalisation of joint-stock companies, at present limited in number and scope.

Similar financial facilities have been available since 1986 on an experimental basis in China, where commercial banking has developed and the first stock exchange was opened on 1 September 1986 in Shanghai, followed by Guangdong and other provincial initiatives; there are eight "over the counter" centers in Shanghai and Shenyang (in the Liaoning Province; by November 1987 the value of bonds quoted had reached Yuan 300 mn, or US\$85 mn at the official exchange rate; see Ellman 1987; on early experiments see Xu Jing'an 1987). Shares are still illiquid, having to be held for substantial minimum periods, and do not carry a vote. At China's 13th Party Congress in October 1987 it was agreed that stocks and bonds have a positive role to play in the Chinese economy at its present stage of development (Ellman, 1987).

In Algeria, following liberalisation measures for enterprises and banks (maintained in existence by the 1962 nationalisation but otherwise operating as in a traditional CPE model), January 1988 legislation has decreed the financial restructuring of state enterprises, which have been given new capital and turned into state-owned joint stock companies; their shares are given a value calculated and revised by accountants and government officials. In May 1988 eight state-owned but independent Trust Funds ("Fonds de Participation") were established, partly but not completely specialised by sector (mining, investment goods, construction, petrochemicals, electronics, food processing, miscellaneous industries, services); they have the function of managing state ownership. In the Algerian approach Funds managers, rewarded according to the financial performance of their portfolio, which they can alter by trading with other Funds, are expected to effectively simulate the functioning of capital markets.

In mid-August 1988 a special Yugoslav commission headed by Mr Branko Mikulic, the Prime Minister, proposed a radical reform of enterprises and of socialist ownership, which would allow Yugoslav and foreigners to buy shares in them; the proposal will be considered in the autumn by the Federal Assembly (FT, 17 August).

Other countries have been more cautious in developing capital markets, but some have been bolder in other directions: for instance, since September 1987 once a fortnight the Polish Export Promotion Bank has been

auctioning foreign exchange worth millions of dollars, to importers on behalf of exporters, at a realistic rate of exchange increasingly close to the black market rate.

In the Soviet Union joint-stock companies are reported to have been set up "spontaneously" by state enterprises or agencies, seeing that inter-enterprise agreements of this kind are not actually forbidden by Law. For instance, in Leningrad there are now two "commercial joint stock" banks, set up by the Ministry of Chemical Equipment (Minkhimash) and that of Energy Technology (Energomash) to finance export promotion and domestic ventures, apparently empowered to issue bonds and accept deposits in foreign currencies as well as in roubles (FT, 12 August 1988). At the end of July 1988 Unesheconombank - the Soviet Bank of Foreign Economic Affairs - and the Eurocard/Eurocheque and Mastercard organisations signed a licencing agreement extending credit card and cheque facilities first to foreigners (in competition with Inturist which has signed a similar agreement with Visa) then, in the second year of operation, to 150,000-200,000 Soviet diplomats, business executives and technicians with convertible rouble accounts at the Foreign Economic Affairs Bank. Savings banks also have been involved in discussions about issuing credit cards on their own account - a step towards a cashless society but definitely not moneyless society. At the signing ceremony of the licencing agreement Mr Viktor Geraschenko, the Soviet Union first deputy chairman, took delivery of a three feet by five foot Eurocard (FT, 1 August). This is perestroika.

4. The "sequencing" of reform

The importance of money in the reformed socialist model was stressed by Brus (1964); a pioneering detection and analysis of the early stages of this process in the 1960s can be found in Garvy, 1966 and Grossman, 1966 and 1968; a great deal of attention has also been paid to monetary imbalance and the definition and measurement of "repressed inflation" (see for instance Portes 1983; Nuti 1986). Otherwise the role of money and financial institutions under market socialism has been conspicuously neglected both in the classical literature on market socialism and - until very recently - in the blueprints for economic reform in Eastern Europe. Yet there is a compelling logical sequence in the argument for monetary and financial reform, which can also be identified as an actual and indeed normative sequencing in reform implementation. It bears out Maurice Dobb's contention that elements of different economic systems cannot be mixed in just any proportions, as one can with a cake varying ingredients to taste: once limited markets for products are introduced, the argument escalates in favour of further extensions.

The starting point is the inefficiency of central allocation of production targets and given physical resources to enterprises in the consumption goods sector: it

soon becomes apparent that it is more efficient to let consumer indicate their preferences for the kind of goods that can be produced with those resources, by signalling demand prices, instead of leaving output structure to a central decision (even socially desirable and undesirable goods can be regulated by taxes and subsidies instead of direct commands). The second stage is the extension of this reasoning to inter-enterprise allocation of current inputs, still within an overall allocation of intermediate inputs to consumption; the third stage is the redeployment of a given amount of planned investment, allocated to consumption goods, between different sectors and enterprises. Gradually, in the fourth and fifth stages, both the level and the structure of investment are argued to be best decentralised to the level of enterprises. A parallel development opens enterprise purchases and sales to international suppliers and purchasers.

These piecemeal extensions of the basic efficiency of market redeployment of scarce resources towards their most productive uses trace a natural path and sequencing of economic reform of the CPES. First the market for consumption goods, then for production goods, demand remonetisation, i.e. the use of value indicators to measure enterprise performance and to take the given resources to their most productive uses. Then the market for factors of production, i.e. for labour, land and capital, both financial capital and productive assets; financial capital first between enterprises, then between enterprises and their own workers, then between enterprises and households as sectors; first for loan capital, then for risk capital. There is a tendency towards a cascade or domino effect from the acceptance of markets as i) automatic ii) self-regulating mechanisms iii) raising the productivity of resources. Of course the extension from micro to macro of the argument in favour of markets is not water-tight; taking investment out of the planning sphere raises the possibility of labour unemployment; indeed some labour unemployment becomes necessary to accommodate the structural change produced by decentralisation. This problem, tackled by Brus and Laski in their paper at this Session, is often easily forgotten, since the comparative macroeconomic performance of socialist countries in recent years has been so poor as to tip the balance in favour of markets even in the macrosphere; or at least experience has shifted the burden of proof.

In an economy such as Yugoslavia, where workers are entitled to a share of their enterprises' value added after deductions for interest, amortisation and reinvestment, the introduction of shares makes it possible to recognise - by means of free share issues - workers' contributions to self-financed investment and to entrepreneurial success (Uvalic, 1987). Without such a recognition, the Yugoslav-type enterprise seems subjected to a propensity to underemploy labour and respond perversely to short term price changes (Ward 1967; Vanek 1970), as well as underinvest in self-financed projects (Furobotn and Pejovich

1972, Furobotn 1980). Shares also enable the cooperative-style Yugoslav enterprise to tap outside risk capital, without which it is permanently dependent on central capital or relegated to small scale labour intensive sectors.

5. Systemic constraints and reform alternatives

Once the necessity of remonetisation and some kind of capital market is accepted two problems arise: i) systemic identity, i.e. whether a fully reformed market socialism is reconcilable with the systemic and ideological premises of socialism; ii) feasibility, i.e. whether it would be possible to develop further financial institutions while still satisfying systemic or ideological restrictions.

Can capital markets or quasi-markets be reconciled with socialism? The boldness of the Hungarian or the Chinese projects may suggest that this is an idle question. Yet we must take into account the small scale, experimental nature and unfinished implementation of these projects, which may still be opposed, suspended or reversed precisely in the name of systemic orthodoxy.

The question has a qualified positive answer. In all socialist economies there is a possibility of appropriating consumption goods for postponed consumption; why not then let people save in the form of money rather than hoarding goods, so that there is more to go round for those who wish to consume or for the state to undertake more productive investment or more social consumption. If there is money there is a positive nominal interest to induce people to part with their liquidity-yielding cash (too much liquidity in the hands of the population is potentially unstable); in all socialist economies there are also lotteries. If private shareholding is diffused, as in the capitalist ideal of a "property owning democracy", and if shareholders' voting powers were restricted or removed, private shareholding would be no different from a combination of fixed interest savings and lottery tickets, except that its yields would be more justifiable than those of a pure game of chance. If shares were regarded as conflicting with socialist principles then the very ability to save would have to be challenged on the same grounds. But suppose a further restriction - which will certainly remain at least for some time in a number of socialist countries - that shareholding should be public not private. Would it be feasible to replicate the functioning of capital markets under these restrictions?

There seem to be two ready made solutions. The first is the development of a German-type banking involvement in the management of enterprises; the second is the more specialised use of Algerian-type Fonds de Participation.

Banks control over companies is exercised in Germany through the appointment of representatives to the

Boards of borrowing firms, through direct shareholding (found to be 9 per cent of share capital in a study of 74 representative quoted companies, Eckstein, 1980) and above all through proxy voting on behalf of those shareholders (by and large the majority) who have lodged their shares with their banks (see for instance Cable 1985a and 1985b). This institutional pattern was introduced as a consequence of the underdevelopment of capital markets in late nineteenth century Germany and is naturally suited to the rudimentary capital market of a reforming socialist country. Public shareholders, possibly also private shareholders without voting rights, could entrust competing commercial banks with the task of overseeing their companies and monitoring and promoting their profitability. However, the merits of German-type supervision of industry by banks are controversial and the system has come under strong criticism recently, especially in Germany (Gessler Kommission 1979; Eckstein 1980; Vittas 1983). The system is widely regarded as a second-best option; the dominating rôle of banks in the stock exchange is resented, especially in view of conflicting interests vested in different functions of banks as lenders, shareholders and advisors to investors, their emphasis on short term performance and the dangers of monopolistic practices (which have attracted the attention of the Monopolkommission, see Cable, 1985a). Moreover the German system generates a certain insulation between the real world of production and the world of financial values, which prevents the fulfilment of one of the main functions of a capital market, that of stimulating efficient redeployment of assets. More to the point, the German system coexists with a full-fledged stock exchange and cannot possibly be expected to function as a substitute for a stock exchange.

The second feasible development involves exclusively state holding companies in market-making and the management of state investments; it is the Algerian solution. The establishment and the mode of operation of Fonds de Participation are very ingenious and original means of administering state ownership and simulating the operation of the wanted capital markets. Three problems can be anticipated, however: i) the arbitrary and necessarily accounting-oriented valuation of enterprise assets, which remains an administrative act divorced from market verification; ii) the understatement of profits if only cash flows are considered, ignoring the component of enterprise profits which is made up of capital gains brought about by enterprise success, with resulting conflicts between Fonds and enterprises as to the distribution or reinvestment of profits; iii) the incentive structure of individual administrators of the Fonds raises a dilemma: individual benefit can be seen as undue participation in the returns to national savings; yet without some form of participation the incentive/penalty structure of Fonds administrators is defective, and only too likely to be dominated by Ministerial presence in their shareholders' assemblies, leading to a perpetuation of central administrative control on enterprise capital.

A third possibility can be imagined, of relying on a competitive valuation of enterprise assets, generated within the state sector, as a basis for an implicit valuation of enterprise shares, with individuals barred from ownership but able to take risks and associated rewards and penalties by means of loans and deposits indexed to the performance of shares of their choice (or by means of bets such as can be taken today in capitalist economies on a share index). Such competitive valuation of enterprise assets would start from a self-assessed valuation by enterprise managers. Realistic valuations of assets would be obtained if managers were forced to sell them to other enterprises that might wish to buy them at the declared prices or to revise prices so as to make such transactions unattractive (capital taxation being used to avoid overvaluation by managers; for a more detailed description and account of the possible mode of operation of such a scheme see Nuti, 1987 and 1988).

Such simulation of capital markets would not violate any of the systemic-ideological restrictions indicated above, yet would have no side effects other than those of a true capital market. Although the effects on efficiency and distribution of such a simulated market would be qualitatively similar to actual capital markets with private shareholdings, the impact of individual gambling on share valuations would be regulated at will by government policy through the agency or agencies entering indexed transactions or taking bets with private individuals. The basic equivalence of actual and proposed capital markets has an important corollary; if capital markets can be replicated without violating the strictest systemic/ideological constraints, in this way or in some other way they ought to and most probably will be implemented.

REFERENCES

- ARNOLD A.Z. (1937), Banks, credit and money in Soviet Russia, New York
- BERLINER J. (1976), The Innovation Decision in Soviet Industry, MIT Press, Cambridge Mass.
- BROWN A.A. and E. NEUBERGER (eds.) (1968), International Trade and Central Planning, Berkeley & Los Angeles, University of California Press.
- BRUS W. (1964), Ogólne problemy funkcjonowania gospodarki socjalistycznej, PWE, Warsaw, translated into English under the title: The market in a socialist economy, Routledge and Kegan Paul, London 1972
- CABLE J.R. (1985a), "The bank-industry relationship in West Germany: performance and policy aspects", in Schwalbach (Ed.), Industry structure and performance, Edition Sigma, Berlin 1985
- CABLE J.R. (1985b), "Capital market information and industrial performance: the role of West German Banks", The Economic Journal, March, pp. 118-132

- CARR E.H. and DAVIES R.W. (1969), *Foundations of a planned economy, 1926-29*, Vol. 1, Macmillan, London.
- DAVIDDI R. (1987), "Monetary reforms in Bulgaria", Conference paper, EUI, Florence
- DIMITRIEVIC D. and MACESEICH G. (1973), *Monetary finance in contemporary Yugoslavia*, Praeger, New York
- DIMITRIEVIC D. and MACESEICH G. (1983), *Money and finance in Yugoslavia*, Praeger, New York
- ECKSTEIN W. (1980), "The role of the banks in corporate concentration in West Germany", *Zeitschrift für die gesamte Staatswissenschaft*, 136, pp. 465-482.
- ELLMAN M. (1987), "China's OTC markets", Conference Paper, SSEES, London; forthcoming in ACES.
- FUROBOTN E.G. (1980), "The socialist labor-managed firm and bank-financed investment: some theoretical issues" *Journal of Comparative Economics*, Vol. 4, n.2, pp. 184-191.
- FUROBOTN E.G. and PEJOVICH S. (1972), "Property rights and economic theory: a survey of recent literature", *Journal of Economic Literature*, vol. 10, n. 3-4, pp. 1137-1162.
- GARVEY G. (1966), *Money, banking and credit in Eastern Europe*, New York, Federal Reserve Bank of New York.
- GESSLER KOMMISSION (1979), *Bericht der Studienkommission - Grundsatzfragen der Kreditwirtschaft*, Schriftenreihe des BMF No. 28, (Report of the Study Commission: basic questions of credit economics, BMF Series n. 28), Fritz Knapp Verlag, Frankfurt.
- GROSSMAN G. (1966), "Gold and the sword: money in the Soviet command economy", in *Industrialization in Two Systems: Essays in Honor of Alexander Gerschenkron*, edited by H. Rosovsky, New York, John Wiley & Sons.
- GROSSMAN G. (1968) (Ed.), *Money and Plan*, University of California Press, Berkeley and Los Angeles.
- HOLZMAN F.D. (1974), *Foreign trade under central planning*, Harvard U.P., Cambridge Mass.
- HOLZMAN F.D. (1976), *International trade under communism: politics and economics*, Macmillan, London
- KORNAI J. (1980), *The Economics of Shortage*, 2 vols., Amsterdam, North Holland.
- KORNAI J. (1982), *Growth, Shortage and Efficiency*, Oxford: Blackwell.
- KORNAI J. (1986), "The soft budget constraint", *Kyklos*, vol. 39, n.1, pp. 3-30
- NUTI D.M. (1971), "The evolution of Polish investment planning", *Jahrbuch der Wirtschaft Osteuropas*, Band 3, Munich and Vienna, pp. 395-438.
- NUTI D.M. (1986), "Hidden and repressed inflation in Soviet-type economies: definitions, measurements and stabilisation", *Contributions to Political Economy*, Vol. 5, pp. 37-82.
- NUTI D.M. (1987), "Financial Innovation under market socialism", EUI Working Paper no. 87285, also in *Hungarian in Kozgazdasagi Szemle*, March 1988.
- NUTI D.M. (1988), "Competitive valuation and efficiency of capital investment in the socialist economy", *European Economic Review*, 32, pp. 2-6.
- PORTES R. (1983), "The theory and measurement of macroeconomic disequilibrium in centrally planned economies", Birkbeck College Discussion Paper, no. 161,

October.

UVALIC M. (1987), Shareholding in Yugoslavia: theory and practice, Conference paper, EUI, Florence

VAN BRABANT J.M. (1973), Bilateralism and structural bilateralism in intra-CMEA trade, Rotterdam UP, Rotterdam

VANEK J. (1970), The General Theory of Labor-Managed Market Economies, Cornell University Press, Ithaca.

VITTAS D. (1983), Banks' relations with industry, CLBC Research Group, London.

XU Jing'an (1987), "The stock-share system: a new avenue for China's economic reform", Journal of Comparative Economics, vol. 11, n.3, September.

WARD B. (1967), The Socialist Economy, A Study of Organizational Alternatives, New York, Random House.

WILES P.J.D. (1968), Communist international economics, Blackwell, Oxford.

9

WORKING PAPERS ECONOMICS DEPARTMENT

- | | |
|--|---|
| 86/206: Volker DEVILLE | Bibliography on The European Monetary System and the European Currency Unit. |
| 86/212: Emil CLAASSEN
Melvyn KRAUSS | Budget Deficits and the Exchange Rate |
| 86/214: Alberto CHILOSI | The Right to Employment Principle and Self-Managed Market Socialism: A Historical Account and an Analytical Appraisal of some Old Ideas |
| 86/218: Emil CLAASSEN | The Optimum Monetary Constitution: Monetary Integration and Monetary Stability |
| 86/222: Edmund S. PHELPS | Economic Equilibrium and Other Economic Concepts: A "New Palgrave" Quartet |
| 86/223: Giuliano FERRARI BRAVO | Economic Diplomacy. The Keynes-Cuno Affair |
| 86/224: Jean-Michel GRANDMONT | Stabilizing Competitive Business Cycles |
| 86/225: Donald A.R. GEORGE | Wage-earners' Investment Funds: theory, simulation and policy |
| 86/227: Domenico Mario NUTI | Michal Kalecki's Contributions to the Theory and Practice of Socialist Planning |
| 86/228: Domenico Mario NUTI | Codetermination, Profit-Sharing and Full Employment |
| 86/229: Marcello DE CECCO | Currency, Coinage and the Gold Standard |
| 86/230: Rosemarie FEITHEN | Determinants of Labour Migration in an Enlarged European Community |
| 86/232: Saul ESTRIN
Derek C. JONES | Are There Life Cycles in Labor-Managed Firms? Evidence for France |
| 86/236: Will BARTLETT
Milica UVALIC | Labour Managed Firms, Employee Participation and Profit Sharing - Theoretical Perspectives and European Experience. |
| 86/240: Domenico Mario NUTI | Information, Expectations and Economic Planning |
| 86/241: Donald D. HESTER | Time, Jurisdiction and Sovereign Risk |

- | | |
|---|--|
| 86/242: Marcello DE CECCO | Financial Innovations and Monetary Theory |
| 86/243: Pierre DEHEZ
Jacques DREZE | Competitive Equilibria with Increasing Returns |
| 86/244: Jacques PECK
Karl SHELL | Market Uncertainty: Correlated Equilibrium and Sunspot Equilibrium in Market Games |
| 86/245: Domenico Mario NUTI | Profit-Sharing and Employment: Claims and Overclaims |
| 86/246: Karol Attila SOOS | Informal Pressures, Mobilization, and Campaigns in the Management of Centrally Planned Economies |
| 86/247: Tamas BAUER | Reforming or Perfecting the Economic Mechanism in Eastern Europe |
| 86/257: Luigi MONTRUCCHIO | Lipschitz Continuous Policy Functions for Strongly Concave Optimization Problems |
| 87/264: Pietro REICHLIN | Endogenous Fluctuations in a Two-Sector Overlapping Generations Economy |
| 87/265: Bernard CORNET | The Second Welfare Theorem in Nonconvex Economies |
| 87/267: Edmund PHELPS | Recent Studies of Speculative Markets in the Controversy over Rational Expectations |
| 87/268: Pierre DEHEZ
Jacques DREZE | Distributive Production Sets and Equilibria with Increasing Returns |
| 87/269: Marcello CLARICH | The German Banking System: Legal Foundations and Recent Trends |
| 87/270: Egbert DIERKER
Wilhelm NEUEFEIND | Quantity Guided Price Setting |
| 87/276: Paul MARER | Can Joint Ventures in Hungary Serve as a "Bridge" to the CMEA Market? |
| 87/277: Felix FITZROY | Efficiency Wage Contracts, Unemployment, and Worksharing |
| 87/279: Darrell DUFFIE
Wayne SHAFER | Equilibrium and the Role of the Firm in Incomplete Markets |
| 87/280: Martin SHUBIK | A Game Theoretic Approach to the Theory of Money and Financial Institutions |

- | | |
|---|---|
| 87/283: Leslie T. OXLEY
Donald A.R. GEORGE | Perfect Foresight, Non-Linearity and
Hyperinflation |
| 87/284: Saul ESTRIN
Derek C. JONES | The Determinants of Workers' Participation
and Productivity in Producer Cooperatives |
| 87/285: Domenico Mario NUTI | Financial Innovation under Market Socialism |
| 87/286: Felix FITZROY | Unemployment and the Share Economy:
A Sceptical Note |
| 87/287: Paul HARE | Supply Multipliers in a Centrally Planned
Economy with a Private Sector |
| 87/288: Roberto TAMBORINI | The Stock Approach to the Exchange Rate:
An Exposition and a Critical Appraisal |
| 87/289: Corrado BENASSI | Asymmetric Information and Financial
Markets: from Financial Intermediation
to Credit Rationing |
| ★ 87/296: Gianna GIANNELLI | On Labour Market Theories |
| 87/297: Domenica TROPEANO | The Riddle of Foreign Exchanges: A
Swedish-German Debate (1917-1919) |
| 87/305: G. VAN DER LAAN
A.J.J. TALMAN | Computing Economic Equilibria by Variable
Dimension Algorithms: State of the Art |
| 87/306: Paolo GARELLA | Adverse Selection and Intermediation |
| 87/307: Jean-Michel GRANDMONT | Local Bifurcations and Stationary
Sunspots |
| 87/308: Birgit GRODAL
Werner HILDENBRAND | Income Distributions and the Axiom
of Revealed Preference |
| 87/309: Eric PEREE
Alfred STEINHERR | Exchange Rate Uncertainty and Foreign
Trade |
| 87/312: Pietro REICHLIN | Output-Inflation Cycles in an Economy with
Staggered Wage Setting |
| 87/319: Peter RAPPOPORT
Lucrezia REICHLIN | Segmented Trends and Nonstationary
Time Series |
| 87/320: Douglas GALE | A Strategic Model of Labor Markets
with Incomplete Information |
| 87/321: Gianna GIANNELLI | A Monopoly Union Model of the Italian
Labour Market: 1970-1984 |

- | | |
|--|--|
| 87/322: Keith PILBEAM | Sterilization and the Profitability of UK Intervention 1973-86 |
| 87/323: Alan KIRMAN | The Intrinsic Limits of Modern Economic Theory |
| 87/324: Andreu MAS-COLELL | An Equivalence Theorem for a Bargaining Set |
| 88/329: Dalia MARIN | Assessing Structural Change: the Case of Austria |
| 88/330: Milica UVALIC | "Shareholding" in Yugoslav Theory and Practice |
| 88/331: David CANNING | Convergence to Equilibrium in a Sequence of Games with Learning |
| 88/332: Dalia MARIN | Trade and Scale Economies. A causality test for the US, Japan, Germany and the UK. |
| 88/333: Keith PILBEAM | Fixed versus Floating Exchange Rates Revisited. |
| 88/335: Felix FITZROY
Kornelius KRAFT | Piece Rates with Endogenous Monitoring: Some theory and evidence |
| 88/337: Domenico Mario NUTI | On Traditional Cooperatives and James Meade's Labour-Capital Discriminating Partnerships |
| 88/338: Pietro REICHLIN
Paolo SICONOLFI | Government Debt and Equity Capital in an Economy with Credit Rationing |
| 88/339: Alfred STEINHERR | The EMS with the ECU at Centerstage: a proposal for reform of the European rate system |
| 88/340: Frederick VAN DER PLOEG | Monetary and Fiscal Policy in Inter-dependent Economies with Capital Accumulation, Death and Population Growth |
| 88/341: David CANNING | Optimal Monetary Policy in an Economy without a Forward Market for Labour |
| 88/344: Joerg MAYER | Intervention Mechanisms and Symmetry in the EMS |
| 88/345: Keith PILBEAM | Exchange Rate Management and the Risk Premium |

- | | |
|---|--|
| 88/348: Milica UVALIC | The Investment Behaviour of the Labour-Managed Firm: an econometric analysis |
| 88/351: Alan P. KIRMAN | On Ants and Markets |
| 88/352: Gianna GIANNELLI | Labour Demand, Pricing and Investment Decisions in Italy: An econometric Analysis |
| 88/353: Niall O'HIGGINS | The Progressivity of Government Taxes and Benefits in Ireland: a comparison of two measures of redistributive impact |
| 88/356: Mary McCARTHY
Lucrezia REICHLIN | Do Women Cause Unemployment? Evidence from Eight O.E.C.D. Countries |
| 88/357: Richard M. GOODWIN | Chaotic Economic Dynamics |
| 88/358: Fernando PACHECO
Eric PEREE
Francisco S. TORRES | Duopoly under Demand Uncertainty |
| 88/360: Domenico Mario NUTI | Economic Relations between the European Community and CMEA |
| 88/361: Domenico Mario NUTI | Remonetisation and Capital Markets in the Reform of Centrally Planned Economies |
| 88/362: Domenico Mario NUTI | The New Soviet Cooperatives: Advances and Limitations |

Spare copies of these working papers and/or a complete list of all working papers that have appeared in the Economics Department series can be obtained from the Secretariat of the Economics Department.



EUI WORKING PAPERS

EUI Working Papers are published and distributed by the European University Institute, Florence.

A complete list and copies of Working Papers can be obtained free of charge - depending on the availability of stocks - from:

**The Publications Officer
European University Institute
Badia Fiesolana
I - 50016 San Domenico di Fiesole (FI)
Italy**

Please use order form overleaf

PUBLICATIONS OF THE EUROPEAN UNIVERSITY INSTITUTE

To The Publications Officer
 European University Institute
 Badia Fiesolana
 I - 50016 San Domenico di Fiesole (FI)
 Italy

From Name

 Address

Please send me:

- ☐ a complete list of EUI Working Papers
- ☐ the following EUI Working Paper(s):

No.:

Author, title:

Date:

Signature:



- 87/315: Serge NOIRET Nuovi motivi per studiare i meccanismi delle leggi elettorali. Una riflessione metodologica a proposito della legge del 1919 in Italia
- 87/316: Alain GOUSSOT Les sources internationales de la culture socialiste italienne à la fin du 19e siècle et au début du 20e siècle. Problèmes de la composition de l'idéologie du PSI et ses rapports avec la circulation des idées en Europe
- 87/317: Eamonn NOONAN Württemberg's exporters and German protection, 1931-36
- 87/318: Jean-Pierre CAVAILLE Theatrum Mundi. Notes sur la théatralité du Monde Baroque.
- 87/319: Peter RAPPOPORT and Segmented Trends and Nonstationary Lucrezia REICHLIN Time Series
- 87/320: Douglas GALE A Strategic Model of Labor Markets with Incomplete Information
- 87/321: Gianna GIANNELLI A Monopoly Union Model of the Italian Labour Market
- 87/322: Keith PILBEAM Sterilization and the Profitability of UK Intervention 1973-86
- 87/323: Alan KIRMAN The Intrinsic Limits of Modern Economic Theory
- 87/324: Andreu MAS-COLELL An Equivalence Theorem for a Bargaining Set
- 88/325: Angela GROPPi "La classe la plus nombreuse, la plus utile et la plus précieuse". Organizzazione del lavoro e conflitti nella Parigi rivoluzionaria.
- 88/326: Bernd MARIN Qu'est-ce que c'est "Le Patronat"? Quelques enjeux théoriques et observations empiriques
- 88/327: Jean BLONDEL Decision-Making Processes, Conflicts, and Cabinet Government *
- 88/328: Ida KOPPEN The European Community's Environment Policy.
From the Summit in Paris, 1972,
to the Single European Act, 1987 *

- | | |
|---|--|
| 88/329: Dalia MARIN | Assessing Structural Change: The Case of Austria * |
| 88/330: Milica UVALIC | "Shareholding" in Yugoslav Theory and Practice |
| 88/331: David CANNING | Convergence to Equilibrium in a Sequence of Games with Learning |
| 88/332: Dalia MARIN | Trade and Scale Economies. A causality test for the U.S., Japan, Germany and the UK |
| 88/333: Keith PILBEAM | Fixed versus Floating Exchange Rates Revisited |
| 88/334: Hans Ulrich Jessurun d'OLIVEIRA | Die EWG und die Versalzung des Rheins |
| 88/335: Felix Fitzroy and Kornelius Kraft | Piece Rates with Endogenous Monitoring Some Theory and Evidence |
| 88/336: Norbert LORENZ | Die Übertragung von Hoheitsrechten auf die Europäischen Gemeinschaften - verfassungsrechtliche Chancen und Grenzen einer europäischen Integration erläutert am Beispiel der Bundesrepublik Deutschland, Frankreichs und Italiens - |
| 88/337: Domenico Mario NUTI | On Traditional Cooperatives and James Meade's Labour-Capital Discriminating Partnerships |
| 88/338: Pietro REICHLIN and Paolo SICONOLFI | Government Debt and Equity Capital in an Economy with Credit Rationing |
| 88/339: Alfred STEINHERR | The EMS with the ECU at Centerstage: A proposal for reform of the European Exchange rate system |
| 88/340: Frederick VAN DER PLOEG | Monetary and Fiscal Policy in Interdependent Economies with Capital Accumulation, Death and Population Growth |
| 88/341: David CANNING | Optimal Monetary Policy in an Economy without a Forward Market for Labour |
| 88/342: Gunther TEUBNER | "And God Laughed..." Indeterminacy, Self-Reference and Paradox in Law |
| 88/343: Jean BLONDEL | Ministerial Careers in Western European Governments |

* :Working Paper out of print

- | | |
|--|---|
| 88/344: Joerg MAYER | Intervention Mechanisms and Symmetry
in the EMS |
| 88/345: Keith PILBEAM | Exchange Rate Management and the Risk
Premium |
| 88/346: Efigio ESPA | The Structure and Methodology of
International Debt Statistics |
| 88/347: Francesc MORATA and
and Jaume VERNET | Las Asambleas Regionales en Italia
y España: Organizacion Institucional
y Reglas de Funcionamiento |
| 88/348: Milica UVALIC | The Investment Behaviour of the
Labour-Managed Firm: An Econometric
Analysis |
| 88/349: Massimo PANEBIANCO | Inter-Regional Co-Operation in the
North-South Dialogue
Latin America and the European
Community |
| 88/350: Gregorio ROBLES | La Cour de Justice des CE et les
Principes Généraux du droit |
| 88/351: Alan KIRMAN | On Ants and Markets |
| 88/352: Gianna GIANNELLI | Labour Demand, Pricing and Investment
Decisions in Italy: An Econometric
Analysis |
| 88/353: Niall O'HIGGINS | The Progressivity of Government Taxes
and Benefits in Ireland: A Comparison
of Two Measures of Redistributive
Impact |
| 88/354: Christian JOERGES | Amerikanische und deutsche
Traditionen der soziologischen
Jurisprudenz und der Rechtskritik |
| 88/355: Summary of Conference,
debates and abstracts
of selected interventions | The Future Financing of the EC Budget:
EPU Conference 16-17 October 1987 |
| 88/356: Mary MCCARTHY and
Lucrezia REICHLIN | Do Women Cause Unemployment?
Evidence From Eight O.E.C.D. Countries |
| 88/357: Richard M. GOODWIN | Chaotic Economic Dynamics |
| 88/358: Fernando PACHECO
Eric PEERE and
Francisco S. TORRES | Duopoly Under Demand Uncertainty |
| 88/359: Jaakko NOUSIAINEN | Substance and Style of Cabinet
Decision-Making |

- | | |
|-----------------------------|--|
| 88/360: Domenico Mario NUTI | Economic Relations between the
European Community and CMEA |
| 88/361: Domenico Mario NUTI | Remonetisation and Capital Markets in
the Reform of Centrally Planned
Economies |
| 88/362: Domenico Mario NUTI | The New Soviet Cooperatives: Advances
and Limitations |
| 88/363: Reiner GRUNDMANN | Marx and the Domination of Nature
Alienation, Technology and Communism |
| 88/364: Tony PROSSER | The Privatisation of Public
Enterprises in France and Great
Britain
The State, Constitutions and Public
Policy |

