

Edited by
José M. Fanelli and Rohinton Medhora

FINANCIAL REFORM IN DEVELOPING COUNTRIES



108341

**FINANCIAL REFORM IN
DEVELOPING COUNTRIES**

Financial Reform in Developing Countries

Edited by

José M. Fanelli

Senior Researcher – Economics

Centro de Estudios de Estado y Sociedad

Buenos Aires

and

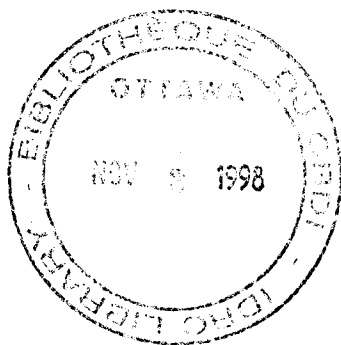
Rohinton Medhora

Senior Specialist – Economics

International Development Research Centre

Ottawa

Foreword by Lance Taylor



ARCHIV
MEDHUR
no. 12 34567



First published in Great Britain 1998 by
MACMILLAN PRESS LTD
 Houndmills, Basingstoke, Hampshire RG21 6XS and London
 Companies and representatives throughout the world

A catalogue record for this book is available from the British Library.

ISBN 0-333-69608-5 (hardcover)



First published in the United States of America 1998 by
ST. MARTIN'S PRESS, INC.,
 Scholarly and Reference Division,
 175 Fifth Avenue, New York, N.Y. 10010

ISBN 0-312-21494-4 (clothbound)

Library of Congress Cataloging-in-Publication Data
 Financial reform in developing countries / edited by José M. Fanelli
 and Rohinton Medhora.

p. cm.

Includes bibliographical references and index.

ISBN 0-312-21494-4 (cloth)

1. Finance—Developing countries. 2. Monetary policy—Developing
 countries. 3. Structural adjustment (Economic policy)—Developing
 countries. 4. Developing countries—Economic conditions.

5. Developing countries—Economic policy. I. Fanelli, José Maria.

II. Medhora, Rohinton, 1959—

HG195.F5358 1998

332'.09172'4—dc21

98-13605

CIP



First published in Canada 1998 by
INTERNATIONAL DEVELOPMENT RESEARCH CENTRE
 PO Box 8500, Ottawa, ON
 Canada K1G 3H9

Canadian Cataloguing in Publication Data

Financial reform in developing countries

ISBN 0-88936-856-2 (paperback)

ISBN 0-88936-857-0 (hardback)

1. Monetary policy—Developing countries.

2. Financial institutions—Developing countries.

I. Fanelli, José Maria.

II. Medhora, Rohinton Phiroze, 1959—

III. International Development Research Centre (Canada).

HG230.31'56 1998

332.46

C98-980091-1

© International Development Research Centre 1998

Foreword © Lance Taylor 1998

Paperback edition available in Canada only

All rights reserved. No reproduction, copy or transmission of this publication may be made without written permission.

No paragraph of this publication may be reproduced, copied or transmitted save with written permission or in accordance with the provisions of the Copyright, Designs and Patents Act 1988, or under the terms of any licence permitting limited copying issued by the Copyright Licensing Agency, 90 Tottenham Court Road, London W1P 9HE.

Any person who does any unauthorised act in relation to this publication may be liable to criminal prosecution and civil claims for damages.

The authors have asserted their rights to be identified as the authors of this work in accordance with the Copyright, Designs and Patents Act 1988.

This book is printed on paper suitable for recycling and made from fully managed and sustained forest sources.

10 9 8 7 6 5 4 3 2 1
 07 06 05 04 03 02 01 00 99 98

Printed and bound in Great Britain by Antony Rowe Ltd, Chippenham, Wiltshire

To my wife

José M. Fanelli

To my parents

Rohinton Medhora

Contents

<i>List of Tables</i>	ix
<i>List of Figures</i>	xi
<i>Foreword by Lance Taylor</i>	xiii
<i>Preface</i>	xv
<i>Acknowledgments</i>	xix
<i>List of Abbreviations</i>	xx
<i>Notes on the Contributors</i>	xxiii

PART I INTRODUCTION

1 Financial Reform in Developing Countries: An Overview <i>José M. Fanelli and Rohinton Medhora</i>	3
--	---

PART II COUNTRY CASE STUDIES

2 Argentina <i>José M. Fanelli, Guillermo Rozenwurcel and Lucio M. Simpson</i>	31
3 India <i>Kunal Sen and Rajendra R. Vaidya</i>	57
4 Nigeria <i>Melvin D. Ayogu, Chidozie Emenuga and Charles C. Soludo</i>	90
5 Turkey <i>Erol M. Balkan and A. Erinc Yeldan</i>	129
6 Uruguay <i>Nelson Noya, Carlos Casacuberta and Fernando Lorenzo</i>	156

PART III THEMATIC ISSUES

7	Micro- and Macro-Level Financial Reform in Canada <i>James Powell</i>	197
8	The 'Unforgiving' Market and the <i>Tequilazo</i> <i>Guillermo A. Calvo</i>	220
9	'Big Bang' versus 'Go Slow': Indonesia and Malaysia <i>Anwar Nasution</i>	245
10	Banking on the Transition <i>Rodney Schmidt</i>	296
11	Microeconomic Elements and Perspectives from Finance Theory <i>Varouj A. Aivazian</i>	328
	<i>Index</i>	353

List of Tables

2.1	Argentina: main macroeconomic indicators	34
2.2	Argentina: IV. 1991 financial matrix	36
2.3	Argentina: III. 1995 financial matrix	37
2.4	Argentina: leverage	40
2.5	Argentina: short-run debt/total debt	41
2.6	Argentina: dollar debt/total debt	41
2.7	Argentina: interest rates and financial spread: annual interest rates on 30-day deposits and loans	50
2.8	Argentina: non-performing loans net of provisions as proportion of net worth	51
3.1	India: selected macroeconomic indicators	62
3.2	India: distribution of assets, banking and financial institutions	64
3.3	India: financial surplus or deficit by sector	65
3.4	India: non-financial sectors' sources of external funds	66
3.5	India: uses of funds by non-financial sectors	67
3.6	India: financing of large, non-financial enterprises in the private sector	69
3.7	India: structure of bank lending rates	74
3.8	India: institution-wise details of financial assistance to the industrial sector	76
3.9	India: foreign investment inflows	83
3.10	India: India's balance of payments	83
4.1	Nigeria: key reform measures and main outcomes	97
4.2	Nigeria: growth profile in the financial services industry	103
4.3	Nigeria: flow of loanable funds in the reform period	111
4.4	Nigeria: dynamics of corporate financing profile	112
4.5	Nigeria: dynamics of domestic national debt financing and external debt burden	117
5.1	Turkey: main economic indicators	135
5.2	Turkey: financial assets and monetary indicators	136
5.3	Turkey: public sector balances	141
5.4	Turkey: speculative short-term capital (hot money) flows and financial indicators	144
5.5	Turkey: main indicators in securities markets	149

5.6	Turkey: interest rates on deposit and government debt instruments	150
6.1	Uruguay: main macroeconomic indicators	159
6.2	Uruguay: credit to firms and deposits from households	162
6.3	Uruguay: structure of financial system	166
6.4	Uruguay: main macroeconomic policy orientations after financial liberalization	182
9.1	Malaysia and Indonesia: key macroeconomic indicators	248
9.2	Malaysia and Indonesia: structure of the financial sectors	251
9.3	Malaysia and Indonesia: financial ratios	254
9.4	Indonesia: reform in the banking industry	259
9.5	Malaysia: reform in the banking industry	262
9.6	Indonesia: Herfindahl index of banking industries	265
9.7	Malaysia: concentration in the commercial banks	267
9.8	Malaysia and Indonesia: money market instruments	279
10.1	Central and Eastern Europe: deposits and claims of the commercial banking system	300
10.2	Poland, Hungary and the Czech Republic: non-performing loans of the banking system	302
10.3	Poland, Hungary and the Czech Republic: sources of investment finance in enterprises	302
10.4	Czech Republic and Poland: share of loss-making enterprises	310
10.5	Czechoslovakia, Czech Republic, Slovakia, Hungary and Poland: government expenditures, subsidies, and arrears	319
11.1	Various countries: tax advantage of investment income relative to equity income.	337

List of Figures

3.1	India: commercial bank real lending rate and spread between lending and deposit rates	73
3.2	India: real effective exchange rate – trade-weighted	85
4.1	Nigeria: financial reforms key performance indicators	109
4.2	Nigeria: real interest rate and financial savings	112
4.3	Nigeria: growth in private and public sector credit	113
4.4	Nigeria: financial reform and economic growth	114
4.5	Nigeria: net (public and private) capital flows through formal channels	119
4.A1	Nigeria: structure of the financial system	125
5.1	Turkey: short-term net capital inflows and central bank reserves	147
5.2	Turkey: speculative hot money inflows and ISE index	148
6.1	Uruguay: households assets in foreign currency	161
6.2	Uruguay: private banking offshore activity	167
6.3	Uruguay: banking spread on domestic currency	170
6.4	Uruguay: banking spread on dollars	171
6.5	Uruguay: long-run determinants – investment rate	179
6.6	Uruguay: spread between domestic and foreign assets	185
6.7	Uruguay: degree of dollarization	186
6.8	Uruguay: premium over national currency deposits	187
8.1	Uruguay: Krugman crisis	227
9.1	Malaysia and Indonesia: components of monetary base	283
9.2	Malaysia and Indonesia: developments of interest rates	284
9.3	Malaysia: market exchange rate, nominal exchange rate and real effective exchange rate	285
9.4	Indonesia: real effective exchange rate	287

10 Banking on the Transition

Rodney Schmidt¹

10.1 INTRODUCTION

In 1989–91 the centrally planned countries of Central and Eastern Europe (CEE)² liberalized most prices and international trade. These and other transition reforms revealed how little the physical capital of state enterprises is worth in a market economy.³ The low value of the capital assets is due to investment inefficiency under central planning and the decline in the investment rate preceding the transition, the abrupt change in relative prices that initiated the transition period, and the discontinuation of external subsidies when the Soviet trade bloc collapsed.

State enterprises were uniformly affected by these changes. Carlin *et al.* (1995) report that a review of enterprise-level surveys in CEE failed to turn up a single state enterprise that benefited from the transition reforms. As a result, the low capital value of individual enterprises is reflected in productive resource misallocation at the sector level.⁴ The combined impact of the low worth of state enterprises, macroeconomic resource misallocation, and the entry of new private enterprises manifests itself in a structural duality characteristic of transition economies in CEE. This duality is evident in the systematically low productivity rates in state enterprises relative to the new private enterprises.⁵ The goal of the transition in CEE is to eliminate the productivity differential and integrate the economy.

Recent advice on how to achieve this goal focuses on privatization of state enterprises, in the belief that establishing clear property rights over assets would encourage enterprise restructuring. However, this emphasis has been frustrated by the influence of insiders in the privatization process (Aghion *et al.*, 1994a; Blanchard and Aghion, 1996). As a result, privatization has had no systematic effect on state enterprise restructuring and productivity. Paradoxically, state enterprises have engaged in significant restructuring before being privatized, although it does not normally involve investment (Carlin *et al.*, 1995; EBRD, 1995; Grosfeld and Roland, 1995).

While the relative roles and optimal sequence of privatization and bank reform in the transition remain under-researched, two observations are evident. First, widespread defensive enterprise restructuring observed in state enterprises in the advanced transition economies is due largely to the

success banks have had in imposing financial control, or hard budget constraints, on enterprises.⁶ Second, the transition cannot succeed without significant investment in enterprises,⁷ which must be financed from outside sources. Moreover, the only potential outside capital market during the transition is one based on banks. Transitional securities markets have capitalization and liquidity levels lower than those in developing countries (Neave *et al.*, 1994), a situation that is likely to continue for the foreseeable future. These markets cannot price risk or generate information efficiently (Cashin and McDermott, 1995), or provide the control and governorship of enterprises necessary for raising investment by issuing minority equity.

This chapter assesses the role of banks in the transition to a market economy. We are interested in describing and explaining bank performance and identifying constraints that prevent banks from playing a more active role. Early opinion on this issue was sharply divided. Optimists tended to equate the transition with the achievement of decentralized credit allocation, without delving into sequencing issues (Calvo and Kumar, 1993; Fries and Lane, 1994; Long and Sagari, 1991). Pessimists questioned the ability of banks to control enterprises, where control is interpreted as the ability to select viable enterprises and liquidate non-viable ones (Bofinger, 1992; McKinnon, 1993; Perotti, 1993; Rostowski, 1993). More recent contributions focus on particular aspects of bank performance, including their ability to provide credit efficiently (Thorne, 1993), restrict enterprise credit (Dittus, 1996; 1994) and complete enterprise debt workouts (Baer and Gray, 1995; van Wijnbergen, 1992). There has also been a vigorous discussion of the merits of a universal banking structure (Corbett and Mayer, 1992; Grosfeld, 1994; Mayhew and Seabright, 1992).

Thus far there has not, however, been a systematic review of the performance and role of banks in the transition. This chapter attempts to fill the gap. We do so by reviewing, in Sections 10.1 and 10.2, bank credit performance and financial control over enterprises. In Sections 10.3 and 10.4 we explain this performance by identifying bank incentives individually and the way they, as a package, condition bank behaviour. Our conclusions are tentative, because the evidence is often spotty and sometimes conflicting. We end the chapter with policy recommendations and suggestions for further research.

10.2 BANK PERFORMANCE

This part reviews aspects of bank credit performance characterizing bank lending to enterprises and financial control over enterprises during the

transition. These aspects are, first, the path of real enterprise credit in the months immediately after the initial transition reforms and the years following, and the divergence in real credit provision between the advanced and the less advanced economies of CEE; second, the large quantity of non-performing loans on bank balance sheets inherited from the central planning era, and the recurrence of such loans during the transition; third, the general shortening of loan maturities and the possible effect on enterprise investment; and finally, the infrequency and limited success of intervening in the affairs of defaulting enterprises.

Credit to Enterprises

Monetary reform is a central component of the transition strategy, and consists of a shift from passive to non-accommodating monetary policy. In the early months and years of the transition this shift was achieved by imposing bank-specific credit ceilings. As a result, and owing also to unexpectedly steep price climbs, real enterprise credit initially fell sharply (Table 10.1; bank claims on non-government are mostly claims on enterprises). The fall in Hungary was more gradual, possibly because of the earlier partial introduction of bank reforms.⁸

In subsequent years, enterprise credit performance in the less advanced and the advanced transition countries diverged. In Bulgaria and Romania enterprise credit as a percentage of GDP declined dramatically. This was due to a fall in the ratio of deposits to GDP, and, via the balance sheet relation of deposit-taking banks, total claims outstanding. The Bulgarian figures are not as dramatic as the Romanian, but the effect is similar, given the very high percentage of deposits denominated in foreign currency (about 50 per cent). In the Czech Republic, Hungary and Poland, deposit growth actually improved in the years following the transition reforms, and total bank claims held steady or, in the Czech Republic, rose substantially. Real credit to enterprises in these countries recovered from the initial shock, and then rose substantially in the Czech Republic, where fiscal deficits were eliminated by 1993, declined slightly in Poland with an increasing share of credit going to finance large fiscal deficits, and declined significantly in Hungary, owing to sharply rising fiscal financing requirements.

Although there is evidence of fiscal crowding out of enterprise credit in various countries, it does not explain the different paths of credit in the two country groups (compare fiscal deficits in Hungary and Romania). The different outcomes are related to inflation performance, but, again, inflation is not consistently correlated with fiscal developments. This,

together with the high share of bank credit allocated to enterprises, suggests that a main channel of inflation in CEE is through nominal enterprise credit. If such credit is non-discriminatory then it is a hidden subsidy to enterprises (Bofinger, 1992). A central challenge posed by bank credit performance during the transition is to explain why the advanced countries have succeeded in controlling inflation and increasing real enterprise credit while the less advanced countries have not.

Non-Performing Loans

At the beginning of the transition, banks were burdened with a high share of non-performing loans in total enterprise lending (Table 10.2). This share fell significantly in the following year, owing to bank recapitalization and debt restructuring schemes in most countries. However, non-performing loans rose again to significant levels during the transition, at least in the Czech Republic and Hungary (data are not available for Bulgaria and Romania).⁹ This is worrying, because it indicates the failure of banks to control lending to enterprises which, if widespread and systematic, would lead to loss of control over the money supply.

Investment Finance

Another prominent feature of bank performance in CEE during the transition has been shortening of maturities of lending to enterprises:

The reality is that the main element of banks' lending policies is the restructuring of the maturity compositions of their loan portfolios by reducing the shares of longer term loans (with maturity longer than a year) and substituting short-term loans, or securities issued by the state (Székely, 1993, p. 31).

Long-term loans, common prior to the transition, have all but disappeared, and it is difficult to obtain loans with a maturity of more than one year in the Czech Republic, Hungary and Poland (Dittus, 1994). In the Czech Republic, 73 per cent of bank lending in 1993–4 had a maturity of one year or less, with 18 per cent having a maturity of between 1 and 4 years. This compares with about 20 per cent short-term lending in industrial countries (EBRD, 1995). In Hungary and Poland, over 80 per cent of total enterprise debt, including that held with banks and other enterprises, is short-term, defined as having a maturity of less than a year (Baer and Gray, 1995). This abrupt change in bank lending practices has had an

Table 10.1 Central and Eastern Europe: deposits and claims of the commercial banking system (% of GDP)

	1987-89	1990	1991	1992	1993	1994	1992-4
Bulgaria^a							
Broad money	—	—	76.1 ^b	63.8	64.8	60.0	62.9
Total claims	—	—	132.0	112.0	114.0	91.5	105.8
Non-government	—	—	85.0	66.7	59.4	43.2	56.4
Private sector	—	—	9.6	7.7	9.0	10.3	9.0
(% priv. VA) ^e	—	—	(57.8)	(30.4)	(25.1)	(25.6)	(27.0)
Memorandum items							
General Government balance	-1.4 ^c	-12.8	-14.7	-15.0	-15.7	-7.0	-12.6
Inflation	6.4 ^c	26.3	333.5	82.0	73.0	96.3	83.8
Czech Republic							
Deposits	—	—	60.3 ^b	60.5	66.0	70.1	65.5
Total claims	—	—	67.7	70.4	69.5	71.1	70.3
Non-government	—	73.6 ^b	63.7	66.8	68.7	69.8	68.4
Private sector	—	9.0 ^b	10.5	19.4	30.9	38.6	29.6
(% priv. VA) ^e	(—)	(73.2) ^b	(60.7)	(70.0)	(68.5)	(68.6)	(69.0)
Memorandum items							
General Government balance ^d	-2.8 ^c	0.1	-2.0	-3.3	1.4	1.0	-0.3
Inflation ^d	2.3 ^c	10.8	56.7	11.1	20.8	10.0	14.0
Hungary							
Deposits	28.4	29.2	34.7	37.1	38.2	33.9	36.4
Total claims	44.2	44.6	43.7	41.2	41.7	40.5	41.1
Non-government	42.2	42.6	39.0	33.1	27.9	24.9	28.6
Private sector	—	—	—	—	—	—	—
Memorandum items							
General government	-1.4 ^c	0.5	-2.2	-5.6	-6.4	-8.2	-6.7
Inflation	17.0 ^c	28.9	35.0	23.0	22.5	18.8	21.4

Table 10.1 (continued)

	1987-89	1990	1991	1992	1993	1994	1992-4
Poland							
Deposits	42.0	17.2	20.7	22.6	25.1	26.2	24.6
Total claims	34.2	14.2	24.2	27.7	28.8	28.7	28.4
Non-government	31.5	12.7	18.9	19.2	18.7	17.7	18.5
Private sector	2.8	1.6	6.5	9.6	10.3	10.4	10.1
(% priv. VA) ^e	(—)	(5.1)	(14.3)	(19.9)	(19.3)	(18.6)	(19.3)
Memorandum items							
General government balance	-7.4 ^c	3.1	-6.5	-6.7	-2.9	-2.5	-4.0
Inflation	251.1 ^c	585.8	70.3	43.0	35.3	32.2	36.8
Romania							
Deposits	27.6	34.2	30.1	17.7	8.5	8.4	11.5
Total claims	—	67.8	52.4	30.2	19.7	16.1	22.0
Non-government	64.0	67.8	46.8	27.5	18.1	15.1	20.2
Private sector	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum items							
General government balance	8.4 ^c	1.2	0.6	-4.6	-0.1	-3	-2
Inflation	1.1 ^c	5.1	174.5	210.9	256.1	131.0	199.3

Deposits: demand, savings, time and foreign currency deposits.

^a Domestic credit basis. Approximately 50% of credits are denominated in foreign currency.^b End of period. Period average elsewhere.^c 1989.^d Czechoslovakia to 1992.^e private Value AddedSource: IMF staff estimates; IMF, *International Financial Statistics*; EBRD (1995).

Table 10.2 Poland, Hungary and the Czech Republic: non-performing loans of the banking system (% of total loans)

	1991	1992	1993	1994
Poland	40	28.0/16.0 ^a	0.12 ^b	—
Hungary	50	16.9/11.1 ^a	17.5/22.2 ^c	25.8
% of enterprise loans	—	35.9/27.4 ^a	46.2/71.7 ^c	68.9
Czech Republic	55 ^d	19.0	23.8	37.7

^a Before/after loans consolidation.

^b Sample of six state banks.

^c 1991/1993 classification rules.

^d Czechoslovakia.

Source: National sources as reported by the IMF; Baer and Gray (1995); Dittus (1994); Thorne (1993).

Table 10.3 Poland, Hungary and the Czech Republic: sources of investment finance in enterprises (% of total investment)

	Poland ^a		Hungary	Czech Republic
	1992	1993	1993	Jan-Jun. 1993
Internal sources	58.1	63.3	54.2	72.7
Subsidies	5.6	4.7	26.1	4.8
Bank credit	10.8	8.7	3.4	16.8
Other ^b	25.5	23.3	16.3	5.7

^a Excluding housing cooperatives.

^b Poland: includes incomplected investment and foreign investment (9.8% in 1993). (Hungary: includes credit from international financial institutions. Czech Republic: includes foreign investment 2.0%).

Source: Grosfeld and Roland (1995).

effect on the maturity structure of the outstanding stock of bank credit. There is a significantly higher proportion of medium and long-term credits in the debt stock which, in view of the composition of current new lending, must have been made prior to the reforms.

There is also evidence that the shortening of bank credit maturities during the transition has constrained investment. Table 10.3 shows that in 1993 bank credit accounted for 10 per cent or less of investment finance in Poland and Hungary, and about 17 per cent in the Czech Republic. Most enterprise investment during the transition, which is low relative to levels in the era of central planning or in industrialized countries (EBRD, 1995), is financed from enterprise savings. Moreover, enterprise-level survey evidence suggests that this constraint is binding:

The overwhelming impression from the case studies is that major investment in new capital equipment is a form of restructuring only available to enterprise managers where profits have been accumulated in the enterprise (Carlin *et al.*, 1995, p. 435).

Bankruptcy

Early analyses of the role of banks during the transition emphasized the need for banks to intervene when enterprises fail to service their debts (Bofinger, 1992; Calvo and Kumar, 1993). Such intervention might be to liquidate the enterprise in an attempt to recoup the value of the debt, or, where the liquidation value is low, owing to the low quality or value in alternative use of the capital assets, to reorganize the enterprise to increase its profitability (before debt service). In the event, however, intervention has not been an important instrument of control despite the adoption of a variety of legislative approaches (Dittus, 1994; EBRD, 1995; Grosfeld and Roland, 1995).

Hungary and Poland were among the first to implement market-based bankruptcy and debt workout procedures (for details see Baer and Gray, 1995, and references therein). In Poland, a bank conciliation law adopted in February 1993 shifted power from the courts and the borrower to banks to negotiate a workout agreement on behalf of all creditors. Furthermore, under the law, responsibility for monitoring the enterprise-restructuring programme is delegated to the lead bank. If the lead bank does not terminate an agreement when the restructuring plan is violated then it becomes liable for any additional losses incurred by the other creditors. The range of possible workout options is broad, and includes exchanging debt for equity.

The conciliation record has had mixed success. Agreements were reached by the April 1994 deadline with only about a third of the affected enterprises accounting for about half of the bad loans. Another 25 per cent of enterprises were placed under liquidation or bankruptcy proceedings, accounting for only 13 per cent of the relevant loans. The remaining enterprises repaid their debts, had them auctioned by the banks or had their

collateral executed. Only 13 per cent of all affected enterprises (19 per cent of affected loans) actually resumed debt service during the period from 1991 to 1994 (Baer and Gray, 1995). There was also little response to the option to swap bad loans for equity in the enterprise.

In Hungary, an automatic trigger mechanism for initiating bankruptcy or liquidation proceedings was adopted in 1992. The debtor enterprise was required to file for reorganization or liquidation after being in arrears for more than 90 days, failing which managers were personally liable. Creditors could file for liquidation after payment was 60 days overdue. Managers of bankrupt enterprises have the first opportunity to present a reorganization plan, and retain their jobs after filing. Creditors then vote on the plan, and can present alternatives. If an agreement cannot be reached then the procedure reverts to liquidation. The courts have relatively little involvement in the process. In the first two years of operation over 22 000 cases were filed, including over 5000 reorganization cases and over 17 000 liquidation cases. Only a very small number of these cases have been completed to date. The number of reorganization filings declined dramatically in 1994, possibly because of an amendment to the law in September 1993 to remove the automatic trigger.

These results are due in part to major problems with liquidation procedures in these countries. These problems include the low priority given to bank creditors in both Hungary and Poland, and poor information and accountability. Procedural costs and government (especially social security obligations), as well as employees' claims, often consume more than the entire estate. It is also hard to prevent enterprise managers from fraudulently disposing of assets before filing for or being forced into bankruptcy. Although debt workouts are becoming more common, creditors in both countries are still quite passive when it comes to initiating and overseeing enterprise liquidation.

In the Czech and Slovak Republics, revised bankruptcy laws were implemented in 1993. Between 1993 and mid-1995, 4500 petitions were filed, but only 600 bankruptcies had actually been declared, owing largely to a lack of judges and administrators. In Bulgaria and Romania bankruptcy laws have been in force only since 1994, and enforcement is cautious.

10.3 MONEY, CREDIT AND HARD ENTERPRISE BUDGET CONSTRAINTS

Banks tend to avoid intervening in enterprises that default on bank debt. They prefer instead either to refinance those enterprises or to cut them off

from further long-term credit and impose a discipline of inside or self-finance. This represents a failure of monitored lending throughout the CEE.

Thus, the stylized facts of bank credit performance in the transition to explain are enterprise refinance and self-finance. Before attempting an explanation, however, we devote this section to a deeper characterization of bank performance. In particular, we would like to address the difference in monetary impact of enterprise refinancing between the advanced and the less advanced transition economies and the consequent divergence in real enterprise credit performance. We would also like to comment briefly on the impact of the banks' performance on the pattern of enterprise restructuring and the transition dynamic.

We accomplish these goals first by discussing further the concepts of and relationship between refinancing and self-financing, and their motivations. We also present more evidence on the extent of refinancing behaviour. We then show how these concepts and behaviour patterns are related to inside and outside money systems. Next, we suggest that the achievement of an inside money system is equivalent to creating a banking sector that generally succeeds in imposing financial control or hard budget constraints on enterprises. Finally, we refer to the nature of hard budget constraints, which depends on the depth and fragility of the inside money system, to interpret the impact of bank credit performance on the transition itself.

Enterprise Refinance

Enterprise refinance is likely to be realized in the form of short-term operational or commercial credit, designed to allow the defaulting enterprise to survive. Contrary to normal commercial lending, short-term refinancing credit will tend to be rolled over. Because such credit is extended in order to avoid liquidating or closing the enterprise, thereby retaining an option value on long-term non-performing debt, it is effectively equivalent to long-term lending. Self-finance refers to the refusal to extend long-term credit or investment finance, either directly and independently of the enterprise's history of debt service, or by automatically rolling over unserviced short-term credit. Self-finance is consistent with the existence of a commercial credit line which is ended as soon as the enterprise falls behind on debt service. Both self-finance and refinance are inconsistent with monitored lending. In particular, monitored lending does not necessarily follow refusal to refinance.

The monetary impact of enterprise refinance depends in part on whether it is done by rolling over principal due and/or capitalizing interest, or by providing new cash disbursements. While both methods imply a degree of

softness in enterprise budget constraints, the latter comprises operational financing of known money-losing enterprises, a practice that may determine a lower limit on money supply growth. Whether it does so depends on the pervasiveness and scale of cash refinancing. General refinancing is likely to be the chief reason for differences in inflation and real enterprise credit performance between the advanced and less-advanced transition countries in CEE.

One indicator of refinancing behaviour allowing direct comparison between these country groups is a revealed preference for lending to enterprises with large bank debt or non-performing loans (Berglöf and Roland, 1995, claim this is the case in Hungary). Absent bank and enterprise-level data,¹⁰ a proxy for this indicator can be constructed by comparing lending to enterprises of different owner types (Table 10.1). When we normalize enterprise credit by the owner-type share in value added, we find that, in the advanced transition economies, banks are applying similar treatment to state and new and privatized enterprises. In the Czech Republic, bank credit has been consistently distributed evenly between state and private enterprises. In Poland, a larger share of credit went to state enterprises until 1991. Then credit to private enterprises caught up, and credit has been evenly distributed thereafter. In the less advanced transition economies, however, banks show a strong preference for lending to state enterprises. In Bulgaria and, in the extreme, Romania, the private sector has consistently obtained a lower share than the state sector throughout the transition. However, banks have withdrawn long-term credit from enterprises of all owner types in all these countries.

Other evidence on refinancing behaviour is available from enterprise surveys in the advanced countries. These suggest that, for the most part, banks in these countries have proven capable of withholding new credit from defaulting enterprises. Pinto *et al.* (1993) show that in Poland banks as well as profitable enterprises are refusing to lend to enterprises that are unlikely to be able to repay. Baer and Gray (1995) report that, since early 1993, a sample of seven Polish treasury-owned commercial banks have made no new loans to non-performing enterprises. (Such loans would be illegal under the Law on Financial Restructuring of Enterprises and Banks). Bonin and Schaffer (1994) report less comprehensive evidence that Hungarian banks, while continuing to roll over bad loans and capitalize some unpaid interest, are not offering new money to problem firms on a large scale. Dittus (1994) reports that enterprises place a high priority on servicing commercial bank debt.

In the advanced transition countries, non-performing debt is limited to a small core of non-viable enterprises. Polish and Hungarian enterprises

carry a significant amount of bank debt. However, average ratios of debt to total assets are moderate, while average ratios of bank debt to total assets are low (Baer and Gray, 1995). Most of the loans are held by a small number of enterprises, from particular industrial sectors and regions (Bofinger, 1992). In Poland, 10 per cent of state-owned enterprises account for nearly all of banks' non-performing loans (Gomulka, 1994), while in Hungary bank debt is more evenly spaced among a larger number of firms (Bonin and Schaffer, 1994). This concentration of debt and non-performing loans in a few enterprises in the advanced countries may permit banks to exercise restraint in lending to most enterprises, while still posing a significant threat to aggregate monetary control and credit misallocation.

Money, Outside and Inside

The key difference in bank credit performance between the advanced and less advanced transition countries is the degree to which enterprise refinance is systemic. Recall that refinancing credit is non-discriminatory. An environment that permits extensive enterprise refinance is equivalent to an outside money system with accommodating monetary policy. It will be characterized by periodic bank bailouts and rescue packages that do not conform to deliberate and well-planned recapitalization schemes (see Perotti, 1994b, for evidence of this in Bulgaria and Romania). By contrast, a financial environment that succeeds in containing refinancing behaviour to isolated instances, with limited resort to indiscriminate new cash credit, is equivalent to an inside money system, based on discriminatory lending to enterprises.

The connection between refinancing behaviour and the nature of the monetary system is useful, because it provides a link between individual bank behaviour and aggregate credit performance. Credit creation with outside money is inherently inflationary. Only inside money can create non-inflationary credit. Given the balance sheet relation of commercial banks, inside money creation as real credit to enterprises depends on deposit mobilization. Indeed, one of the key impacts of the transition reforms was to introduce dependence of enterprise credit on demand for deposits: Calvo and Coricelli (1994, 1993) show formally that a regime shift from passive to tight money results in a sharp reduction in real credit to enterprises. However, in their model, accommodating the money supply to the credit needs of individual enterprises would merely create inflation, and reduce overall real enterprise credit. The reason is that in that model real credit is equivalent to outside money.

Maintaining a non-accommodative monetary stance in an outside money system imposes high real costs, for two reasons. First, substantial real enterprise credit is needed to support the restructuring and resource reallocation process. Second, banks may prefer to lend to enterprises that carry a large amount of non-performing debt, in order to avoid writing it off, thereby crowding out credit to viable enterprises (Perotti, 1993). Hence, non-accommodative monetary policy in an outside money system is less likely to be sustainable or, if it is sustained, is costly in real terms. The solution, as argued by Perotti (1994b), is to provide enterprise credit selectively, with real credit backed by inside money, since inside money is built on discriminatory lending backed by deposit mobilization. This selectiveness in lending is the main mechanism by which banks exercise control over enterprises in the transition, and is therefore the essence of the bank role in imposing hard budget constraints on enterprises.

Hard Budget Constraints

That hard enterprise budget constraint as an institution is equivalent to inside money has not been universally perceived in the literature. Both Dittus (1996, 1994) and Baer and Gray (1995) assume that the hard enterprise budget constraints that are indicative of good bank behaviour are demonstrated by declining real credit to enterprises. They assert that declining real credit is evidence of the exercise of bank control over enterprises. Such a view implicitly equates real enterprise credit with outside money, in which case the role of banks is merely to deliver base money to enterprises. During the transition, a developing inside money system, manifested in deposit mobilization, and based on bank discriminatory lending to enterprises, would rather be characterized by growing real credit to enterprises. We argue here that the diverging enterprise credit performance in the advanced and the less advanced transition economies, based on differences in general refinancing behaviour and the corresponding spillover effects onto monetary policy, corresponds to the realization of inside money in the former and outside money in the latter (Perotti, 1994a).

Our final concern is over the impact of hard budget constraints on enterprise restructuring and, in particular, the nature of the resulting incentive to restructure. Our interpretation of hard budget constraints exclusively in terms of the incidence of bank refinancing is incomplete. Hard budget constraints are also affected by the failure of monitored lending, or self-finance. In so far as inside money is based on short-term commercial lending, to the exclusion of long-term or investment finance, it is inherently fragile. That is, the overall transition dynamic, in which resources

are reallocated at the macroeconomic level, is the same for both the advanced and the less advanced transition economies, regardless of the nature of the money system. Whether the money system is an inside or an outside one does matter, in terms of the speed and efficiency with which resources are reallocated (Ruggerone, 1996). However, the transition dynamic itself, similar for both advanced and less advanced countries, does not derive from success or failure in achieving hard budget constraints via an inside money system, but rather from the failure of monitored lending.

Hard budget constraints with self-finance imply that enterprise restructuring occurs by financial distress (Carlin *et al.*, 1995; Pinto *et al.*, 1993). This fosters an arbitrary, backward-looking and defensive posture to enterprise restructuring, in which only enterprises with historical surpluses obtained in the central planning and transition periods can invest. Bank lending is limited to a commercial credit line that cannot support deep restructuring projects involving investment, product development and active marketing strategies. Ultimately, while hard budget constraints based on self-finance can establish monetary stability and defensive restructuring, they do not promote resource reallocation at the enterprise level, within state enterprises. They therefore address the economic duality of transition only indirectly, by altering the rate of change in the shares of the state and private sectors over time.

10.4 MONITORING INCENTIVES

In this section we seek to explain the stylized facts of bank credit performance, namely refinance and self-finance, with reference to the incentives facing individual banks in their lending decisions. We address the failure to achieve monitored lending by identifying disincentives to monitor. These include high monitoring or agency costs, deriving from the diverse incentives that borrowers and lenders have in pursuing the investment project, and perverse incentives to refinance failing enterprises, deriving largely from poor credit policy design. Our discussion of perverse incentives deals with refinancing behaviour directly, but we treat them here primarily as disincentives to monitor lending.

Our coverage of monitoring disincentives is comprehensive. However, that banks have withdrawn from the market for long-term credit in both advanced and less advanced transition economies suggests that it is monitoring costs rather than perverse incentives that currently underlie enterprise self finance. Furthermore, that banks have withdrawn long-term

lending from both state and private enterprises suggests that monitoring costs are not limited to enterprises that require restructuring, or in which insiders retain a strong influence. We therefore direct the discussion to monitoring costs that are common to all types of enterprise owner.¹¹

Diverse Incentives of Borrowers

This section focuses on monitoring costs associated with the diverse incentives facing borrowers and lenders. We begin by identifying the sources of such costs, emphasizing those that are distinct to the transition, and then consider how they affect bank lending decisions.

Sources of Monitoring Costs

There are two sources of exceptional agency costs in CEE. The first is the large amount of unsecured outside finance required for enterprise restructuring, which intensifies the diversity in borrower-lender project incentives. The second is severe informational asymmetries, coupled with incomplete lending contracts.

Lending in the transition on the scale required to implement long-term enterprise restructuring projects with investment will consist mostly of unsecured outside finance. This is because enterprise net worth and liquidity are limited relative to the size of the restructuring and investment project. A crude indicator of the capital and financial status of enterprises in CEE is the share of enterprises that continue to make losses. Table 10.4 shows that, five years into the transition, this share remains very high. Low net worth is characteristic of state and new private enterprises alike, although possibly for different reasons. The latter do not need to restructure, but are mostly small- and medium-scale, labour-intensive and family-owned (EBRD, 1995).

Table 10.4 Czech Republic and Poland: share of loss-making enterprises (%)

	1991	1992	1993	1994
Czech Republic	—	32.7	42.8	—
Poland	46.3	49.2	45.3	39.6

Source: National sources as reported by IMF staff.

The impact of the outside finance requirement for monitoring costs in the transition is exceptional for two reasons. First, low enterprise net worth primarily derives not from a debt overhang, as may be the case in developing or industrial countries hit by a systemic macroeconomic, financial or external shock, but from the low value of capital assets realized with the transition shock. Hence, monitoring costs cannot be fully addressed by debt restructuring.¹² Second, to the extent that monitoring costs are negatively correlated with net worth, they will be particularly large in the transition.

Informational asymmetries during the transition are also severe. These derive from the transition reforms themselves, which resulted in a systemic change that reduced the value of prior information; from poorly developed accounting systems and reporting requirements; high tax rates that encourage misrepresentation; weak institutions, including poorly skilled bank employees and bank supervisors, and poor enforcement (Baer and Gray, 1995; Calvo and Kumar, 1994, 1993). These informational asymmetries create a wide scope for secret, non-contractual behaviour on the part of the borrower.

Nature of Monitoring Costs

Monitoring costs come from the diverse incentives borrowers and lenders have in choosing and implementing restructuring and investment projects. The borrower has an ownership or equity stake in the project. If the project succeeds then the borrower gets the full return from the project, less the cost of debt service. If the project fails then the borrower incurs no loss (aside from possible transactions costs), because the debt is unsecured. So, the borrower is primarily concerned with the upside potential of the project, and is inclined to choose riskier projects, or to expend less cost and effort in evaluating the project. The lender, however, has a fixed-return, contractual stake in the project. The lender is therefore conservative in outlook, wishing primarily to protect the project against failure, regardless of the upside potential of the project. The standard Stiglitz and Weiss (1981) framework for assessing monitoring costs is not adequate for the transition economies. In that framework, individual projects have exogenous risk-return characteristics known only to the borrower. The bank's problem is to select the desired project types. Because there is a monotonic relationship between project risk and the macroeconomic interest rate, banks avoid excessively risky projects by rationing credit at below market interest rates. However, a major challenge in the transition is to identify and evaluate viable investment projects (Grosfeld, 1994). It is not

therefore suitable to treat the search for good ideas as a problem of selecting from a pool of projects with given characteristics. Furthermore, real interest rates are low, often negative, suggesting that perverse project selection due to high interest rates cannot explain rationing leading to the complete collapse of the long-term credit market.

It is more appropriate to view the nature of monitoring costs in transition in terms of enterprise failure to engage in costly project identification and evaluation. When informational asymmetries are significant, enterprises have a comparative advantage in project evaluation. The less effort expended on project evaluation, the lower the quality of the project, since it is more likely to fail. Therefore, borrower-lender incentive divergence depends on the expected net return to enterprises to evaluating projects. The lower the enterprise's investment stake in the project, the lower its incentive to evaluate, since the enterprise does not bear the consequences of project failure. The bank incurs the cost of project failure by virtue of the loss of its investment. This analytical framework has been formalized by Bernanke and Gertler (1990), who show that there is a positive correlation between enterprise net worth, and therefore the share of the project financed from internal enterprise savings, and the enterprise's stake in the project. That is, where enterprise net worth is low, and therefore investment co-financing is limited, bank monitoring costs will be high. When enterprise net worth falls below a critical threshold, bank credit for investment finance may collapse.

Universal Banks

In general, monitoring costs derive from the excessive willingness of enterprises to take risks, by failing to evaluate projects sufficiently. Enterprises would be more conservative, that is, more like banks in outlook, were more of their own capital to be invested in the restructuring project. We emphasized above that this option is largely precluded because of the structurally low net worth of enterprises in the transition. However, there is potentially an alternative approach to reducing the diversity of borrower-lender incentives. That is to make banks less cautious, at least in the sense of being more willing to undertake project evaluation themselves. It could be achieved by giving banks equity stakes in enterprises, and thus an interest in the full project return. In the transition economies, this idea has often been raised in proposals for a universal banking structure (Corbett and Mayer, 1992; Grosfeld, 1994 and references therein).

A universal banking structure has two advantages with respect to monitoring costs. First, as noted above, the bank earns a stake in the upside

potential of the project, and therefore has a greater incentive to monitor or evaluate the project. Second, the bank becomes an insider, gaining increased access to information, as well as rights of discretionary intervention, including residual rights of control over non-contractual enterprise actions.

Universal banks are not, however, a panacea for bank reform in the transition. The increased incentives to monitor projects and to accept higher risk depend for effect on the capacity to monitor and evaluate projects. But banks in transition have limited risk assessment skills and experience. Furthermore, unless the bank becomes like an enterprise, concentrating its investment resources in one enterprise or project, it will have to evaluate or monitor numerous projects. This may spread its scarce resources too thin. For instance, encouraging banks to intervene in defaulting enterprises may mean that fewer resources are available to monitor new lending (Aghion *et al.*, 1994b). In addition, the equity position of the bank in the enterprise may introduce a conflict of interest. If enterprise equity has low value, or the enterprise is not viable, banks may be tempted to extend refinancing credit to avoid writing down its own net worth. This is similar to the effect of non-performing loans on bank balance sheets (see below).

Reformers have encouraged banks to move towards a universal structure by programming voluntary debt-equity swaps into bank recapitalization and enterprise debt restructuring schemes, primarily in Poland (Grosfeld and Roland, 1995; van Wijnbergen, 1992). However, take-up of the option has been disappointing. In the Czech Republic an unforeseen form of universal banking has developed through unregulated trading in secondary equity markets. Investment funds have emerged to diversify equity ownership. The six largest of these are owned by banks, which have a controlling interest in the associated enterprises. However, it remains to be seen whether the banks intend to take an active role in enterprise control. Evidence to date suggests not. In particular, the new equity position of banks in enterprises has not encouraged investment financed with long-term debt.

Dittus (1996) reports from interviews with bank managers on attitudes toward taking equity interests in enterprises. Managers see the enhanced monitoring role as too costly in terms of human capital and management time, yielding a low payoff relative to traditional commercial lending practices. Bank managers have a strong sense of the scarcity of their monitoring resources (which are in any case, they say, better spent on traditional lending). Banks can only effectively control three or four firms. Banks also believe that commercial and investment banking require

completely different skills, and do not want to use their loan officers for restructuring activities. One major Polish bank prefers to invest with a strong partner (ideally foreign) to take care of corporate control. Hence, banks resist taking a direct equity position in enterprises because it would require a greater investment in monitoring activity to protect their interests.

Perverse Incentives of Lenders

Perverse incentives of banks to refinance enterprises unconditionally arise from credit market imperfections and poor policy design. Refinancing incentives raise the opportunity cost of monitoring, and refinancing crowds out loanable funds available for alternative uses. In this section we identify three sources of perverse incentives to refinance. The first is the static effect of a large stock of non-performing loans on bank balance sheets. The second is moral hazard arising from poorly designed or non-credible bank recapitalization programs. The third depends on the hesitance of governments to terminate money-losing enterprises, which can be strategically exploited to the banks' advantage.

Outstanding Non-Performing Loans

The earliest warnings that transitional banks would not be able to resist refinancing enterprises stemmed from the observance that banks carried a large quantity of outstanding non-performing loans on their balance sheets, inherited from pre-transition days (Begg and Portes, 1993; McKinnon, 1993). Many, if not most, of the banks were technically insolvent as a result of these loans. The issues are the same when non-performing loans accumulate again during the transition. They affect both incentives to monitor and incentives to refinance. In the former case, non-performing loans on bank balance sheets immediately reduce the incentive to intervene in defaulting enterprises, because the return to intervention in the form of resumed debt service must be shared with depositors or the deposits guarantor (Aghion *et al.*, 1994b).

In the latter case, refinancing incentives come from the option value of waiting for the enterprise to resume debt service (Perotti, 1993). The option value exists as long as the bank is the residual claimant on the debt and there is a positive probability that the enterprise, through good luck or costly restructuring effort, will one day generate an operational surplus (before debt service). The incentive to refinance also depends on the consequences of failing to refinance, in three respects. First, if it means that the enterprise

will close or be liquidated then the option value of the stock of bad debt will be lost. Second, it may imply loss of reputation, or bring down regulatory sanctions on the bank, which may then be required to undergo its own costly restructuring effort. Finally, the higher is the liquidation value of the enterprise then the lower is the bank's incentive to refinance.

Neutralizing the negative incentive effects of non-performing loans on bank balance sheets requires debt restructuring (Begg and Portes, 1993). To be effective, such schemes must be large enough to reduce problem loans below a critical incentive threshold. Some of the bank recapitalization programmes in CEE, described briefly below, may have been insufficiently comprehensive for this purpose, and therefore partly to blame for the resurgence of non-performing loans in some countries (Aghion *et al.*, 1994b). Partial recapitalization programmes were implemented in Bulgaria and the former Czechoslovakia and Poland, usually by specifying a cut-off date for eligible loans.

Recapitalization Schemes

Each of the advanced transition economies has initiated bank recapitalization schemes designed to deal with non-performing loans. However, many of these schemes are poorly designed, offered without conditions attached and without a convincing commitment not to recapitalize again in the future. They thus introduce a moral hazard incentive for banks to refinance enterprises. The anticipation of an unconditional bailout is like a loan guarantee, which removes any incentive for costly monitoring. This reduces the quality of projects financed, and the quality of the loan portfolio over time, thus raising the level of debt restructuring required (Aghion *et al.*, 1994b).

The anticipation of a bank bailout is strengthened when they occur repeatedly. Hungarian banks have been recapitalized four times, once each year between 1991 and 1994. These schemes varied slightly in their details. Early ones depended on loan guarantees, while the later ones employed swaps with government bonds to raise capital asset ratios. In all cases bank recapitalization was to a large extent unconditional. In Poland, by contrast, bank recapitalization was conditioned on conciliation agreements being reached between banks and defaulting enterprises. Bank managers were actively discouraged from making new loans to problem debtors, with an outright prohibition eventually enacted into law. The law also required banks to set up workout departments and to take actions to resolve those loans that had been classified as non-performing at the end of 1991. Treasury-owned banks underwent repeated portfolio evaluations by outside auditors, and had to create management information systems.

Recapitalization also included a plan to privatize the 9 treasury-owned banks. So far, 3 have been transferred to private hands. Poland shows the least evidence of refinancing behaviour of all the transition economies.

Strategic Behaviour

Even when there is no intrinsic incentive for banks to refinance non-viable enterprises, stemming either from an outstanding stock of non-performing loans or from the moral hazard effects of recapitalization programmes, banks may wish to exploit the government's own unwillingness to close enterprises (Berglöf and Roland, 1995). Banks may therefore commit capital to enterprises beyond their own lending capabilities. If such a capital commitment is a sunk cost *ex post* then the government will be forced to bail out the bank to rescue the enterprise. In this way, the bank forces the government to bear some of the cost of refinancing the enterprise. The potential for strategic behaviour by the bank depends on the level of bank liquidity, the quality of the loan portfolio and the degree of undercapitalization of the bank.

10.5 EXPLAINING BANK BEHAVIOUR

Having examined both disincentives to provide monitored investment finance and incentives to refinance defaulting enterprises facing banks, we now take an overall view of the combined impact of these incentive structures on bank refinance and self finance lending behaviour and the resulting transition dynamic. In particular, we attempt to explain both the general withdrawal of banks from the market for long-term credit in all transition economies in CEE, and the different monetary outcomes stemming from refinancing behaviour in the advanced and the less advanced transition economies. We begin by treating the hesitance of banks to intervene to liquidate or reorganize defaulting enterprises. We then discuss the alternatives to failing to intervene, namely refinancing the enterprise or withdrawing. Finally, we address the feedback effects of the withdrawal from long-term lending on the refinancing decision, and call on these effects to explain differences in monetary outcomes and the hardness of budget constraints.

Liquidating Enterprises

Banks do not, in general, intervene to liquidate or reorganize enterprises that are not servicing their debts. This is due in part to high transactions

costs, including lengthy and costly court procedures, relative to the effective value of collateral or liquidation. More importantly, however, is the option value of the non-performing loans to the bank, deriving from a variety of sources, as already discussed. Writing off the problem loans puts to an end any possibility that a positive event affecting enterprise liquidity will enable the enterprise to resume debt service. For example, distressed enterprises may shrink to a profitable core, making waiting a reasonable strategy. Or, waiting may pay off in the event of a government bailout of the enterprise or the bank. Even when there is no hope that debt service will be resumed, and the enterprise cannot survive without refinancing, banks may simply abandon the enterprise when the liquidation value is low, rather than pay the transactions costs associated with liquidating it through the court system.

We are primarily interested in the behaviour of banks when they choose not to liquidate defaulting enterprises. If perverse incentives arising from poorly designed recapitalization schemes and government unwillingness to see enterprises terminated are strong then banks will tend to refinance such enterprises. These incentives are similar to moral hazard arising from government loan guarantees. In those circumstances, refinance is viewed as an alternative to monitored lending, a relationship we return to later. In the following paragraphs, however, we analyse refinance as an alternative to liquidation.

Liquidating versus Refinancing Enterprises

For Perotti (1993), who formally analyses the option value of non-performing debt on bank balance sheets, the only alternative to liquidation is refinancing. This linkage between liquidation and refinancing is based on the implicit assumption that, in the absence of refinancing, the enterprise will fail. However, in CEE enterprise liquidation or closure due to the pressure of market forces is rare. Furthermore, refinancing may itself introduce moral hazard into the enterprises' incentive structure, and increase the static disincentive to restructure because part of the reward accrues to the bank. Hence, having decided not to liquidate a defaulting enterprise, the bank will be less likely to refinance the enterprise if it is probable that the enterprise will survive without refinancing. Conversely, banks will be less willing to liquidate the enterprise if the alternative does not require refinancing to keep the enterprise alive. The crucial issue is separability of the liquidation and refinancing decision (see below), which is related to the probability of shutdown, or, equivalently, the probability of shrinking to a profitable

core as a result of financial distress following from bank-imposed self-finance.

A major implication of the separability of the decision to liquidate or refinance enterprises is that the option value to the bank of non-performing loans is retained even without refinance. Hence, with separability, there is no intrinsic incentive for the bank to refinance. The bank can merely cut off the enterprise from further credit, and put loanable funds to alternative uses. This adjustment via financial distress may be cheaper for banks than either direct intervention or new monitored lending, because it enables the bank to pass monitoring or restructuring costs on to the enterprise because banks compete with each other and with foreign banks, they do not take into account the aggregate effects of their decisions not to intervene actively in enterprises. These aggregate effects include the failure of enterprises to undertake deep, forward-looking restructuring with investment, with the result that the overall transition follows a sectoral resource reallocation pattern.

If failing to liquidate requires refinancing, then monitored lending will be crowded out, unless monitoring costs are so high that the alternative to refinancing is withdrawal. However, liquidation and debt write-off may require provisioning to meet capital adequacy requirements, which would also crowd out monitored lending.

The separability of the decision to liquidate or refinance depends on at least two things. First, it depends on the flexibility of production technology and organization, at both enterprise and aggregate levels. At the enterprise level, production flexibility entails the ability to separate money-losing production units from profitable units, and organizational flexibility entails the ability to prevent adversely affected employees from building protective coalitions. Such flexibility is necessary for an enterprise in need of restructuring to become profitable (Aghion *et al.*, 1994a). At the aggregate level, production rigidity, determined by a core of money-losing enterprises that cannot adjust, may cause even viable enterprises to bet on a general bailout, and therefore to collude with non-viable ones by extending inter-enterprise credit and accumulating inter-enterprise arrears (Perotti, 1994b). This, in turn, increases the cost to the government of refusing a bailout by implicating non-viable and viable enterprises, as well as creditor banks, alike. The less advanced transition economies, Bulgaria and Romania, have more rigid production arrangements at both enterprise and aggregate levels than do the advanced transition economies (Bruno, 1992; Perotti, 1994b).

Second, the separability of the decision to liquidate or refinance depends on whether defaulting enterprises can find operational subsidies

elsewhere. If so, banks can pass on the cost of refinancing enterprises to government, primarily via accumulation of tax arrears. This is also an example of the banks exploiting the soft attitude of government to enterprise termination, although it does not depend on strategic bank behaviour. On government's role in supporting enterprises, Schaffer (1995) reports that fiscal subsidies have shrunk significantly since the transition, and are now small in the aggregate at between 3 and 5 per cent of GDP (Table 10.5). Furthermore, the remaining subsidies are highly sector-specific, with almost none in manufacturing. However, tax arrears are significant, and are growing at an annual rate of two percentage points of GDP (one or two percentage points in manufacturing). Since most tax

Table 10.5 Czechoslovakia, Czech Republic, Slovakia, Hungary and Poland: government expenditures, subsidies, and arrears (% of GDP)

		1986	1992	1993
Czechoslovakia	General government	65.9	60.1	—
		25.4	5.0	—
	Subsidies	—	—	—
	Fiscal arrears			
Czech Republic	General government	—	47.5	47.5
		—	5.0	4.4
	Subsidies	—	2.0	4.0
	Fiscal arrears			
Slovak Republic:	General government	—	64.0	55.1
		—	5.4	4.8
	Subsidies	—	—	5.4
	Fiscal arrears			
Hungary	General government	65.9	63.4	60.5
		25.4	5.8	4.8
	Subsidies	—	5.8	6.9
	Fiscal arrears			
Poland	General government	49.7	50.7	48.4
		16.3	3.3	2.5
	Subsidies	—	3.8	4.6
	Fiscal arrears			

Note: Fiscal arrears are tax and social security arrears.

Source: Schaffer (1995).

arrears will not be recovered, they are a non-cash fiscal subsidy. Tax arrears tend to be concentrated in a small number of financially distressed enterprises in the advanced transition economies. Recall that fiscal subsidies do not have direct monetary implications, in contrast to credit subsidies provided through unconditional refinancing, which may prevail in the less-advanced transition economies.

Even without refinancing, choosing not to liquidate has adverse consequences for bank behaviour. Problem loans remain on the books, reducing the incentive to restructure at the enterprise level, and to monitor at the bank level. They also increase the incentive for strategic behaviour by banks (Berglöf and Roland, 1995). As noted above, poor recapitalization policy will in addition raise the incentive to refinance as an alternative to monitored lending, rather than as an alternative to liquidation.

Cutting off versus Refinancing Enterprises

If monitoring costs are very high then banks may withdraw from the market for long-term credit, regardless of recapitalization programme design or separability of the liquidate or refinance decision. However, the effective impact of monitoring costs on monitoring behaviour depends on the return to alternative uses. Relevant alternative uses of loanable funds are those that do not require monitoring, including commercial lending, purchases of government bonds, and lending that is effectively guaranteed by government recapitalization policy or a soft government attitude to bank budget constraints. That is, as noted earlier, perverse incentives to refinance are also disincentives to monitor.

At the same time, monitoring costs leading to a general bank withdrawal from long-term investment finance affects incentives to refinance through its aggregate effect on the economy. In particular, self-finance ensures that the reallocation of resources that defines the transition will occur between state and private enterprise sectors, rather than within enterprises. The transfer of resources entails the slow decline of the state enterprise sector and growth of the new private sector (Aghion and Blanchard, 1994). The success of this model requires coordinated speed of adjustment in the respective sectors, depending on the size of the productivity differential between the two sectors and on various constraints on the resource transfer of a political or fiscal nature, or arising from imperfect operation of aggregate markets, especially the labour market (Chadha and Coricelli, 1994; Rodrik, 1995).

Very little is known about the determinants of the speed of adjustment in the two sectors when capital markets are absent. However, it appears

that it depends greatly on the inherent dynamism of the new private sector and production rigidities in the state sector, both stemming from structural conditions and features of the economy present at the beginning of the transition (Bruno, 1992; Johnson and Loveman, 1994). When, as in the less advanced countries of the transition, the initial private sector is small and underdeveloped and production in the state enterprise sector is rigid both within enterprises and in the aggregate, the resource transfer process will be slow. This in turn increases enterprise incentives to collude, and decreases the incentive for government to adopt a hard attitude to enterprise termination.

With a more rigid production structure, and limited dynamism in the private sector in the less advanced transition economies, then, the alternative to failing to refinance enterprises is a greater likelihood of enterprise shutdown. That is, in the less advanced countries, the bank decision to liquidate or to refinance the enterprise is not in general separable. In the advanced transition economies, by contrast, production structures, at both the enterprise and sectoral levels, are more flexible, and self-finance is a viable option. Hence, the former countries are likely to experience greater incidence of refinancing behaviour, and show greater spillover effects onto monetary policy. We believe that this may be the main explanation for the achievement of inside money systems in the advanced transition economies of CEE and the retention of outside money systems in the less advanced transition economies. Furthermore, the achievement of an inside money system itself affects the speed of transition in the macroeconomic adjustment model.

10.6 CONCLUSION

In this chapter we have examined the role banks have played thus far in the transition to a market economy in CEE. Our approach has been to identify the main aspects of bank lending to enterprises during the transition, and to explain that performance with respect to bank incentives to monitor lending. We conclude that banks have played a more important role in the transition than generally recognized, given the preoccupation of the literature with enterprise privatization. However, that role has been a largely reactive and unintended one, stemming primarily from the failure to provide long-term investment finance leading to a macroeconomic resource reallocation model. In such an environment, where capital markets are absent, the ability of banks to establish an inside money system and a hard budget constraint regime, crucial to the success of the

macroeconomic transition model, itself depends in part on structural givens of the economy.

The crucial issue regarding the bank role in the transition is whether monitoring costs leading to collapse of the market for long-term credit are a structural feature of transition economies, or whether they are responsive to policy. Indeed, some disturbing implications of the fact that long-term credit withdrawal is common to all the transition countries, even though financial policy and monetary performance differ, are that perverse incentives are not the primary source of the failure to monitor, and that monitoring costs are a structural feature of transition, and cannot be addressed by policy. If this is so then banks can have only a marginal role in the transition, restricted at best to imposing self-finance on enterprises and thus supporting the sectoral adjustment model. At worst, if for structural reasons a sectoral adjustment model is not feasible, as may be the case for the less advanced countries, then banks will not even be able to impose self-finance on enterprises, and the system reverts to outside money one with centralized allocation of credit.

In addition to perverse incentives to refinance, we have identified low enterprise net worth stemming from low asset values and severe information asymmetries as the primary sources of high monitoring costs in transition economies. These sources, and the contributions of poor credit policy leading to perverse incentives to refinance, are likely to vary in intensity across countries. Nevertheless, if these critical factors fall below the critical threshold then banks will withdraw long-term credit in all the countries. Hence, the suggestion in the previous paragraph that monitoring costs are impervious to policy may be overly pessimistic. We therefore offer the following policy recommendations, which are divisible into two parts: those intended to eliminate perverse incentives and those intended to reduce monitoring costs directly.

First, there are measures to deal with the outstanding stock of non-performing loans. This has been the subject of a great literature, and will not be dwelt on here. It is essential to remove the moral hazard effect of such measures, which act as a guarantee on lending, and therefore a disincentive to monitoring. Such schemes should be sufficiently comprehensive, not repeated, and conditional on bank behaviour. Conditionality may include changing bank management, and investing in monitoring or investment banking capabilities. Bank recapitalization should occur before the government eliminates fiscal subsidies and otherwise hardens its own attitude toward enterprise termination, and before measures to increase the liquidation value of enterprises, such as streamlining procedures and raising the seniority of bank claims. This is so as not to increase the net

refinancing incentive associated with the option value of problem loans by reducing the separability between the liquidation and refinancing decisions.

Second, there are measures to reduce monitoring costs. These include measures to reduce informational asymmetries, such as more adequate accounting systems and disclosure requirements, and transactions costs, such as reforming legislation governing use of collateral, involving the effective seniority of bank claims. In addition, the government may provide incentives or assistance in upgrading the monitoring capabilities of banks. It may be useful to centralize arrears collection and enterprise liquidation in a state agency, to avoid spreading bank monitoring and intervention resources too thin.

The role of venture capital should be enhanced (Grosfeld and Roland, 1995), ideally in partnership with bank-based investment finance. Venture capital would concentrate personnel skilled in long-term credit issues, specialize in monitoring capabilities, and play a role in numerous enterprises, with financing supplemented by bank resources. This is the role played by the European Bank for Reconstruction and Development, which provides counterpart financing to enterprises, thereby raising effective enterprise net worth and lowering monitoring costs as far as banks are concerned. However, the agency providing the counterpart funds for the enterprise would have to have the incentive and capability to monitor the project, and thus play the part of the enterprise's stake in the project. This may then release long-term bank credit.

Further research should focus on the potential for a more proactive role for banks in the transition, by inquiring some more into the nature of agency costs in transition. A particularly interesting question is whether monitoring costs differ by enterprise ownership type. As noted earlier, present evidence suggests not: banks are not lending long-term to either state or new private enterprises. However, given that state enterprises are largely owned or controlled by insiders, it is not clear that insiders will borrow to invest in a restructuring project and accept bank monitoring even if such lending were available. The answer to this question implicates both the sequencing of policy as between bank reform and privatization, and potential differences in policy approaches toward obtaining monitored lending to state or new privatized enterprises. If so, bank lending may be a substitute for failed privatization. It would also be worth while to pursue this issue with respect to the role of banks in the source of persistent productivity differentials during the transition. Is the absence of bank-based investment finance the binding constraint on enterprise-level restructuring?

Notes

1. Thanks to José María Fanelli and Rohinton Medhora for helpful comments on earlier drafts.
2. The countries studied in this chapter are Bulgaria, the Czech and Slovak Republics (formerly Czechoslovakia), Hungary, Poland and Romania.
3. Borensztein and Montiel (1991) estimate on the basis of world prices that at the time of the reform shock, between 50 and 75 per cent of the inherited capital stock in Czechoslovakia, Hungary and Poland should have been written off. Sinn and Sinn (1992) calculate that under West German accounting rules between 50 and 66 per cent of the capital stock of East Germany at reunification would be written off. Hughes and Hare (1994) estimate that at the beginning of the transition, with immobile capital, between 20 and 25 per cent of production in the tradable industry sectors of Bulgaria, Czechoslovakia and Hungary (3.5 per cent in Poland) added negative value to output measured at world prices. The *Financial Times*, 21 November 1995, reports that between 70 and 80 per cent of the enterprises in CEE are insolvent by Western accounting standards.
4. See Berg (1994) for a discussion and evidence of macroeconomic resource misallocation in CEE.
5. In this chapter the term 'state enterprise' refers to enterprise ownership at the beginning of the transition, unless otherwise specified. Hence, it includes enterprises privatized during the transition.
6. Transition countries are often ranked by the depth of their transition reforms (EBRD, 1994, 1995). The advanced countries in CEE are the Czech Republic, Hungary and Poland. The less advanced ones are Bulgaria and Romania.
7. Berg (1994), disagrees, arguing that a sectoral resource transfer pattern from state to private enterprises will eventually eliminate resource misallocation. However, he does not account for endogenous changes in the productivity differential through this process, nor for macroeconomic constraints (fiscal and political) on the transfer process (Chadha and Coricelli, 1994; Rodrik, 1995).
8. See Thorne (1993), for a detailed account of bank reform measures in CEE.
9. It is not easy to compare the quantity of non-performing loans across countries, because of differences in accounting systems and classification and disclosure rules. For example, there is a substantial difference in the reported share of non-performing loans in Hungary in 1993 before and after a change in loan classification rules. Also, the economic significance of the non-performing loans is not apparent from these data, because of differences in bank capitalization and provisioning. Finally, assessing data over time is hard, because the rules change. However, abrupt shifts in the share of loans that are non-performing or persistent trends, combined with survey evidence (reported in a later section) are informative.
10. Thorne (1993), provides evidence that private banks prefer to lend to private enterprises.
11. Aghion *et al.* (1994a) and Blanchard and Aghion (1996) discuss insider resistance to privatization, which may have a counterpart in monitoring costs. This is a promising area for future research; see the conclusion.

12. Debt consolidation is relevant to monitoring costs, however, since the inherited debt stock is a disincentive to enterprise managers to embark on costly restructuring, as some of the return accrues to the creditor.

Bibliography

- Aghion, P. and O. Blanchard (1994) 'On the Speed of Transition in Central Europe', *NBER Macroeconomics Annual* (Cambridge, Mass.: MIT Press) 283–320.
- Aghion, P., O. Blanchard and R. Burgess (1994a) 'The Behaviour of State Firms in Eastern Europe, Preprivatisation', *European Economic Review*, 38: 1327–49.
- Aghion, P., O. Blanchard and W. Carlin (1994b) 'The Economics of Enterprise Restructuring in Central and Eastern Europe', Centre for Economic Policy Research Discussion Paper, 1058 (London: Centre for Economic Policy Research).
- Baer, H. and C. Gray (1995) 'Debt as a Control Device in Transition Economies: The Experiences of Hungary and Poland', (unpublished manuscript) (Washington, DC: World Bank).
- Begg, D. and R. Portes (1993) 'Enterprise Debt and Financial Restructuring in Central and Eastern Europe' *European Economic Review*, 37: 396–407.
- Berg, A. (1994) 'Does Macroeconomic Reform Cause Structural Adjustment? Lessons from Poland', *Journal of Comparative Economics*, 18: 376–409.
- Berglöf, E. and G. Roland (1995) 'Bank Restructuring and Soft Budget Constraints in Financial Transition', Centre for Economic Policy Research Discussion Paper, 1250 (London: Centre for Economic Policy Research).
- Bernanke, B. and M. Gertler (1990) 'Financial Fragility and Economic Performance', *Quarterly Journal of Economics*, 105(1): 87–114.
- Blanchard, O. and P. Aghion (1996) 'On Insider Privatization', *European Economic Review*, 40: 759–66.
- Bofinger, P. (1992) 'The Experience with Monetary Policy in an Environment with Strong Microeconomic Distortions', *Economic Systems* 16(2): 247–68.
- Bonin, J. and M. Schaffer (1995) 'Banks, Firms, Bad Debts, and Bankruptcy in Hungary 1991–94', Centre for Economic Performance, London School of Economics, Working Paper No. 657 (London: Centre for Economic Performance).
- Borensztein, E. and P. Montiel (1991) 'Savings, Investment, and Growth in Eastern Europe', IMF Working Paper, 91/61.
- Bruno, M. (1992) 'Stabilization and Reform in Eastern Europe', *IMF Staff Papers*, 39/4 (Washington, DC: International Monetary Fund) 741–77.
- Calvo, G.A. and F. Coricelli (1994) 'Credit Market Imperfections and Output Response in Previously Centrally Planned Economies', in G. Caprio, D. Folkerts-Landau and T. Lane (eds), *Building Sound Finance in Emerging Market Economies* (Washington, DC: International Monetary Fund and World Bank) 257–94.
- Calvo, G.A. and F. Coricelli (1993) 'Output Collapse in Eastern Europe: The Role of Credit', *IMF Staff Papers*, 40: 32–52.
- Calvo, G.A. and M. Kumar (1993) 'Financial Markets and Intermediation', in *Financial Sector Reforms and Exchange Arrangements in Eastern Europe*,

- International Monetary Fund Occasional Paper, 102 (Washington, DC: International Monetary Fund).
- Calvo, G.A. and M. Kumar (1994) 'Money Demand, Bank Credit, and Economic Performance in Former Socialist Economies', *IMF Staff Papers*, 41/2: 314–49 (Washington, DC: International Monetary Fund).
- Carlin, W., J. Reenen and T. Wolfe (1995) 'Enterprise Restructuring in the Transition: An Analytical Survey of the Case Study Evidence From Central and Eastern Europe', World Bank Working Paper, 14 (Washington, DC: World Bank).
- Cashin, P. and C.J. McDermott (1995) 'Informational Efficiency in Developing Equity Markets', IMF Working Paper, 95/58 (Washington, DC: International Monetary Fund).
- Chadha, B. and F. Coricelli (1994) 'Fiscal Constraints and the Speed of Transition', Centre for Economic Policy Research Discussion Paper, 993 (London: Centre for Economic Policy Research).
- Corbett, J. and C. Mayer (1992) 'Financial Reform in Eastern Europe: Progress with the Wrong Model', *Oxford Review of Economic Policy*, 7/4: 57–76.
- Dittus, P. (1994) 'Corporate Governance in Central Europe: The Role of Banks', BIS Economic Papers, 42 (Basil, Switzerland).
- Dittus, P. (1996) 'Why East European Banks Don't Want Equity', *European Economic Review*, 40: 655–62.
- EBRD (1994, 1995) *Transition Report* (London: European Bank for Reconstruction and Development).
- Fries, S. and T. Lane (1994) 'Financial and Enterprise Restructuring in Emerging Market Economies', in G. Caprio, D. Folkerts-Landau and T. Lane (eds), *Building Sound Finance in Emerging Market Economies* (Washington, DC: International Monetary Fund) 21–46.
- Gomulka, S. (1994) 'The Financial Situation of Enterprises and its Impact on Monetary and Fiscal Policies, Poland 1992–93', *Economics of Transition*, 2/2: 189–208.
- Grosfeld, I. (1994) 'Financial Systems in Transition: Is There a Case for a Bank Based System?', Centre for Economic Policy Research Discussion Paper, 1062 (London: Centre for Economic Policy Research).
- Grosfeld, I. and G. Roland (1995) 'Defensive and Strategic Restructuring in Central European Enterprises', Centre for Economic Policy Research Discussion Paper, 1135 (London: Centre for Economic Policy Research).
- Hughes, G. and P. Hare (1994) 'The International Competitiveness of Industries in Bulgaria, Czechoslovakia, Hungary, and Poland', *Oxford Economic Papers*, 46: 200–21.
- IMF, *International Financial Statistics*, various issues (Washington, DC: International Monetary Fund).
- Johnson, S. and G. Loveman (1994) 'Private Sector Development in Poland: Shock Therapy and Starting Over', *Comparative Economic Studies*, 36: 175–84.
- Long, M. and S. Sagari (1991) 'Financial Reform in Socialist Economies in Transition', World Bank Working Paper, 711 (Washington, DC: International Monetary Fund).
- McKinnon, R. (1993) *The Order of Economic Liberalization Financial Control in the Transition to a Market Economy* (Baltimore: Johns Hopkins University Press).

- Mayhew, K. and P. Seabright (1992) 'Incentives and the Management of Enterprises in Economic Transition: Capital Markets are not Enough', Centre for Economic Policy Research Discussion Paper, 640 (London: Centre for Economic Policy Research).
- Neave, E., L. Johnson and B. Pazderka (1994) 'Financial Governance in Transition Economies', Queens University School of Business Working Paper, 94-13 (Kingston, Ontario: Queens University).
- Perotti, E. (1993) 'Bank Lending in Transition Economies', *Journal of Banking and Finance*, 17: 1021-32.
- Perotti, E. (1994a) 'A Taxonomy of Post-socialist Financial Systems: Decentralized Enforcement and the Creation of Inside Money', *Economics of Transition*, 2/1: 71-81.
- Perotti, E. (1994b) 'Collusive Arrears in Transition Economies' (unpublished manuscript).
- Pinto, B., M. Belka and S. Krajewski (1993) 'Transforming State Enterprises in Poland: Microeconomic Evidence on Adjustment by Manufacturing Firms', *Brookings Papers on Economic Activity: Macroeconomics*, Vol. 1.
- Rodrik, D. (1995) 'The Dynamics of Political Support for Reform in Economies in Transition', Centre for Economic Policy Research Discussion Paper, 1115 (London: Centre for Economic Policy Research).
- Rostowski, J. (1993) 'Creating Stable Monetary Systems in Post-Communist Economies', Centre for Economic Performance Discussion Paper, 141 (London: Centre for Economic Policy Research).
- Ruggerone, L. (1996) 'Unemployment and Inflationary Finance Dynamics at the Early Stages of Transition', *Economic Journal*, 106: 483-94.
- Schaffer, M. (1995) 'Government Subsidies to Enterprises in Central and Eastern Europe: Budgetary Subsidies and Tax Arrears', Centre for Economic Policy Research Discussion Paper, 1144 (London: Centre for Economic Policy Research).
- Sinn, H. and G. Sinn (1992) *Jumpstart* (Cambridge, Mass.: MIT Press).
- Stiglitz, J. and A. Weiss (1981) 'Credit Rationing in Markets with Imperfect Information', *American Economic Review*, 71: 393-410.
- Székely, I. (1993) 'Economic Transformation and the Reform of the Financial System in Central and Eastern Europe', Centre for Economic Policy Research Discussion Paper, 816 (London: Centre for Economic Policy Research).
- Thorne, A. (1993) 'Eastern Europe's Experience with Banking Reform: Is There a Role for Banks in the Transition?', *Journal of Banking and Finance*, 17: 959-1000.
- van Wijnbergen, S. (1992) 'Enterprise Reform in Eastern Europe', Centre for Economic Policy Research Discussion Paper, 738 (London: Centre for Economic Policy Research).