CHAPTER 16 FINANCIAL DEVELOPMENT

Financial systems can encourage investment by mobilizing savings, identifying and funding adequate business opportunities, diversifying portfolio and reducing risks, and facilitating exchange of goods and services. These actions could result in reduction of transaction costs and a more efficient allocation of resources, which in turn would promote economic growth. This chapter tries to deal with different aspects of financial development, which is measured according to six themes, during the 3rd FYDP and the year 1384.

Financial depth [(1)] and the ratio of credit to private sector may not thoroughly reveal the significance and implication of financial development, which is a comprehensive concept, encompassing not only monetary and banking issues but also regulation and supervision, technological innovation, degree of competition, financial openness, institutional capacity, and the variety of markets and financial products that constitute the financial structure of a country.

Different Facets of Financial Development:

Financial development is a multifaceted concept, comprising six themes as follows [(1)]:

1. Banking sector development;
2. Non-bank financial sector development;
3. Monetary sector development and monetary policy;
4. Banking regulation and supervision;
5. Financial openness; and
6. Institutional environment.

Banking sector development: Banks are central to the financial and payment system of most economies, often playing a critical role in the process of mobilizing savings, funding investment opportunities, and diversifying risk. Consequently, the banking sector development theme examines the size, structure, and efficiency of the banking sector. Among other things, it investigates the profitability of banks, bank competition and concentration, payment systems, and ease of private sector access to bank credit. Drawing on recent empirical research, the presumption is that banks operating in competitive environments with less government intervention, low market concentration, and foreign bank entry, are likely to be more efficient and conducive to growth.

(1) Financial depth is the ratio of liquidity to GDP at current prices which is regarded as a measure of depth of financial system and size of financial intermediaries.

Non-bank financial sector development: The present theme explores development of alternative sources of capital as well as markets for financial products and services. These include share markets, mortgage or housing finance institutions, stock markets, insurance companies, and pension funds. They reflect the variety of products and markets that allow a financial system to fulfill its functions; namely, enabling firms and households to raise finance in cost-effective ways, to mobilize finance, to monitor managers, and to diversify risks.

Monetary sector development and monetary policy: This theme examines the extent to which the Central Bank uses indirect monetary policy instruments, rates of return, and also considers credit allocation and efficiency of the policy making institution.

Banking regulation and supervision: Owing to informational asymmetries and associated market failure inherent in financial sector transactions, appropriate regulation and supervision are important aspects of financial development. Regulatory authorities need to ensure that depositors' interests are protected and fraud is curtailed. The regulation and supervision theme assesses banks' performance. Among other items, it evaluates independence of the Central Bank, and transparency of financial and monetary data.

Financial openness: Another aspect of development is the degree to which the domestic financial system is able to intermediate funds across borders. This theme assesses the appropriateness of the exchange regime and examines whether there are significant restrictions on the trading of financial assets or currency by foreigners and residents.

Institutional environment: The legal and political environment within which the financial system operates is an important determinant of the range and quality of services offered by financial institutions. For instance, in many developing countries, banks are reluctant to extend loans because an inefficient judicial system or bureaucratic institutions hinder loan recovery. The present theme tries to judge the quality of institutions such as law and order, property rights, bureaucratic quality, and accountability of the government.

However, development of monetary, banking, and financial sectors does not merely lead to financial development, which depends on the extent of development with respect to banking supervision and regulation, the degree of capital market openness and the institutional environment as well.

(1) Creane, S., Rishi Goyal, A., Moshfigh Mobarak and Randa, S., 2004, "Financial Sector Development in the Middle East and North Africa" IMF Working Paper

Banking Sector Development

Banking sector development, as one of the significant facets of financial development, may be described through the following themes:

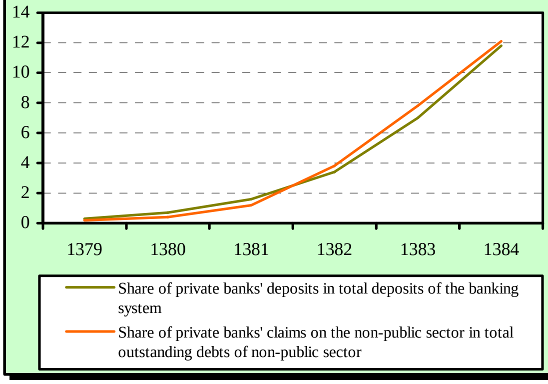
Share of Non-public Sector in Banking Industry

In order to increase banks' competitiveness, to expand financial markets, and to encourage domestic savings, the Act on Establishment of Private Banks was passed in Farvardin 1379. Therefore, four private banks and one non-bank credit institution named respectively as

Eghtesad-e-Novin, Karafarin, Saman, Parsian, and the Non-bank Credit Institution for Development were established by the end of the 3rd FYDP. Pasargad and Sarmayeh private banks started operation in 1384.

Figure 16.1. Share of Private Banks in Banking Industry

(percent)



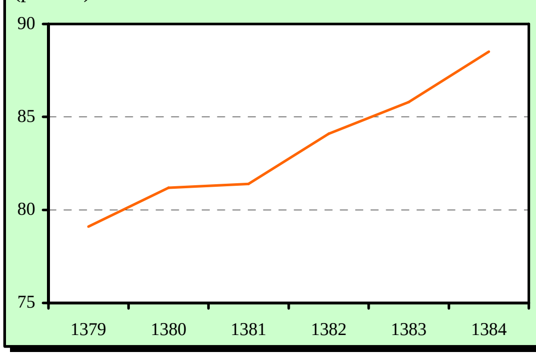
Since the establishment of non-bank credit institutions in 1379, the share of their deposits amounted to 0.3 percent, which, by the increase in their numbers and operation of private banks, picked up gradually to 7 percent in 1383 year-end and reached 12 percent at end-1384. This rise is indicative of banks' success in attracting public confidence and absorbing non-public sector deposits. High provisional profit rate of private banks' deposits against public banks', rise in public confidence, as well as the downward trend of stock indices were the main driving forces behind such increase and its growing trend. Furthermore, the share of private banks' claims on the non-public sector in total outstanding debts of this sector reached 12.2 percent in 1384 year-end, against 0.2 percent at end-1379.

Share of Non-public Sector in Banking Facilities

Most studies find a positive correlation between share of credits allocated to the non-public sector and the performance of the financial system. Therefore, the more credits extended to the private sector, the better the performance of the financial system with respect to evaluating performance of managers, identifying investment projects, managing risks and rendering financial services.

Figure 16.2. Share of Banks' Claims on the Non-public Sector in Total Outstanding Debts of Public and Non-public Sectors

(percent)



In order to evaluate methods of directing credits to the public and non-public sectors, share of banks' claims on the non-public sector in total outstanding debts of the public and non-public sectors is measured. The upward trend of such ratio represents the rise in the amount of banking facilities extended to the non-public sector in recent years. This ratio from 79.1 percent in 1379 reached 73 percent by the end of the 3rd Plan and rose to 88.5 percent in 1384 year-end.

Ratio of Banks and Non-bank Credit Institutions' Assets to Banking System's Assets

This ratio is indicative of a relatively crucial position of deposit taking financial institutions. Objectively, commercial banks are more active in rendering financial services such as risk sharing and information services as compared with the Central Bank. The correspondent index is the share of banks' internal assets (excluding the CBI) in total assets of the banking system (including the CBI), which rose sharply. This was following its sudden fall in 1381 which was in turn owing to increase in CBI's assets in the aftermath of implementation of exchange rate unification.

Ratio of Banks' and Credit Institutions' Reserves to Total Non-public Sector Deposits

This ratio is calculated by dividing sum of excess and required reserves of banks and credit institutions held with the CBI, as well as banks' cash amounts by total non-public sector deposits with banks. This ratio reflects the amount of banks' resources to raise and allocate credit, which would increase by reduction in the amount of banks' reserves held with the CBI. Despite the downward trend of this ratio from 26.5 percent in 1379 to 16.6 percent in 1383, representing greater ability of banks in financing economic firms and provision of credits, it reached 19.5 percent in 1384. This was due to increase in the open deposit account with the CBI.

Banks' Concentration Ratio

Theoretically, due to high cost of entering banking industry, it could not be considered as a perfect competition. Therefore, calculation and evaluation of concentration indices representing the extent of imperfect competition is a common practice. Concentration index is correspondent with the share of the first three banks' deposits–holding the highest share – in total deposits of the non-public sector with the banking system. High concentration index points to the lack of competition in the banking system and its inefficiency. Decrease in such index from 62.5 percent in 1379 to 49 percent in 1384 posted the competitive environment in the area of banking system, thanks to the establishment of private banks during the past years.

Bank Spread

The difference between banking deposit and lending rates is commonly referred to as the spread. The size of banking spreads serves

Figure 16.3. Ratio of Banks and Non-bank Credit Institutions' Assets to Banking System's Assets
(percent)

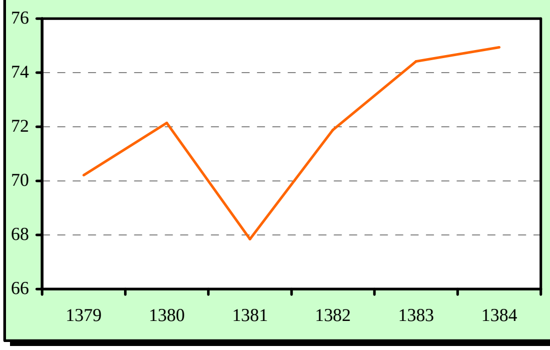


Figure 16.4. Ratio of Banks and Credit Institutions' Reserves to Total Non-public Sector Deposits
(percent)

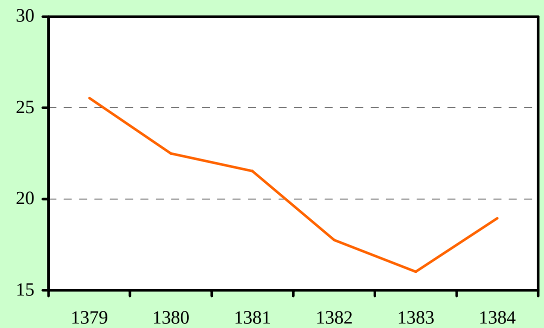
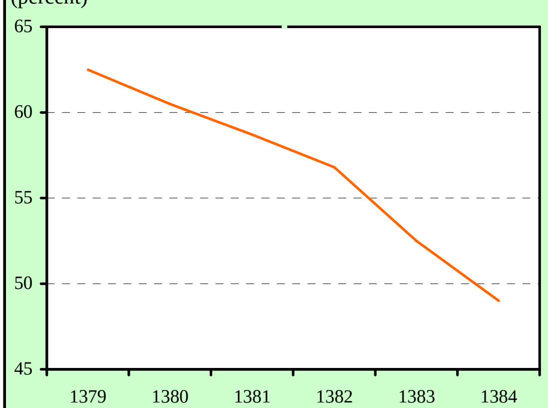


Figure 16.5. Banks' Concentration Ratio
(percent)



as an indicator of efficiency of the banking system, since it reflects the costs of intermediation that banks incur.

Rate of return on banking facilities is determined annually by the Money and Credit Council (MCC) which differed according to various sectors.(1) Despite fixed rate of return per annum, due to changes in the composition of deposits and facilities in various sectors, their effective average rate of return differs in different periods. Therefore, the difference between the weighted rate of return (provisional) on term investment deposits and that of the public banks' facilities is used to calculate the bank spread. Bank spread, following a rise from 4.9 percent in 1379 to 5.9 percent in 1380, faced a downward trend in the course of 1380-84 and was limited to 3.8 percent at the end of 1384.

Figure 16.6. Bank Spread

(percent)

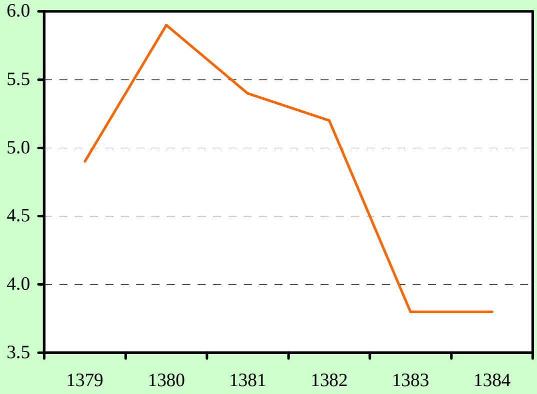


Figure 16.7. Share of the Value-added of Monetary and Financial Institutions' Services in the Value-added of Services Sector

(percent)

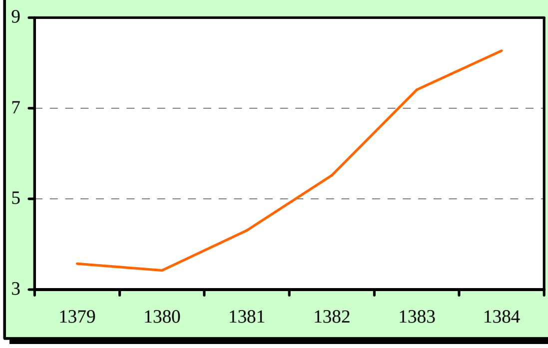
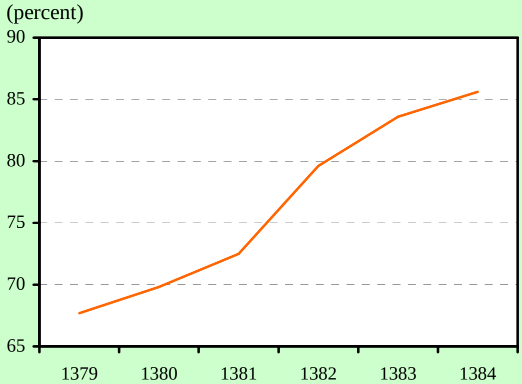


Figure 16.8. Efficiency Ratio of Banking System

(percent)



Value-added of Monetary and Financial Institutions' Services

The value-added of monetary and financial institutions' services consists of the value-added of banks and non-bank credit institutions, insurance services and financial intermediaries (the stock exchange). As 85 percent of the value-added of monetary and financial institutions' services is created by the banking system, the ratio of the value-added of monetary and financial institutions' services to that of the services sector may be used as an index for representing expansion of monetary and financial institutions' services in the economy. The upward trend in Figure 16.7 indicates such expansion as compared with other services. This ratio increased to 8.3 percent in 1384 against 3.6 percent in 1379.

Efficiency of the Banking System

Ratio of the facilities extended to deposits, an index for efficiency of the banking system, represents ability of banks in utilizing deposits for extension of facilities. Due to the paucity of data on the net amount of facilities

(1) Until 1384, this rate was determined on the basis of sectoral allocations, while in 1384 it was unified for all sectors.

extended, ratio of the outstanding claims of the banking system on the non-public sector (excluding profit and revenue receivables) to the non-public sector deposits is calculated to measure the efficiency of the banking system. This ratio, which is affected by changes in reserve requirement ratio and banks' overdraft from the CBI, rose to 85.6 percent in 1384 from 67.7 percent in 1379.

Non-bank Financial Sector Development

The non-bank financial sector consists of activities of stock market and other financial institutions such as pension funds, insurance and leasing companies as well as different procedures in non-bank financing of the housing sector. Due to the limited activities of these institutions and unavailability of data, only the activities of the TSE and insurance industry are discussed as follows:

Market Capitalization to GDP Ratio

The market capitalization to GDP ratio represents size of the stock market in percentage of GDP. Figure 16.9 depicts the upward trend of this ratio during the course of the 3rd FYDP which reversed in 1384. This ratio reached its maximum of 28 percent during 1382-83 and declined to 19.3 percent in 1384.

Value-traded to GDP Ratio

The value-traded ratio (total value of shares traded to GDP) represents the ability to easily trade securities, as well as the depth of financial market in terms of securities (equities). The higher this ratio, the easier the trading of securities. This ratio went up to 7.5 percent in 1383 against 1.6 percent in 1379 and declined to 3.3 percent in 1384. This sharp fall was largely due to the reduction in the value-traded from Rls. 103.7 trillion in 1383 to Rls. 56.5 trillion in 1384.

Value-traded to Market Capitalization Ratio

The value-traded to market capitalization ratio, namely the turnover ratio, measures the volume of trade against the size of stock

Figure 16.9. Market Capitalization to GDP Ratio
(percent)

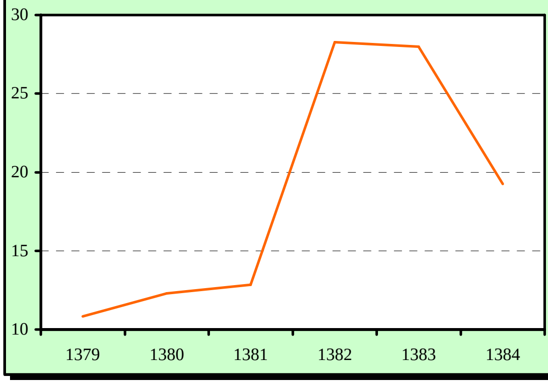


Figure 16.10. Value-traded to GDP Ratio
(percent)

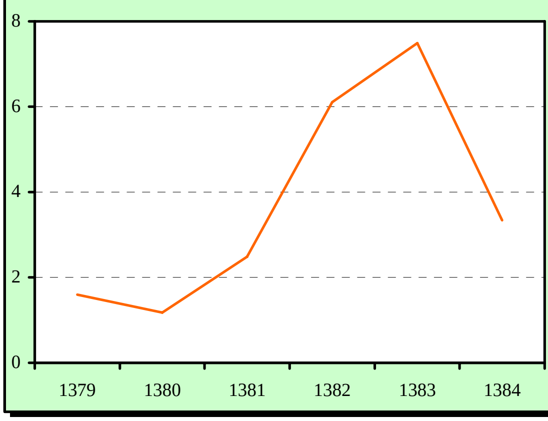
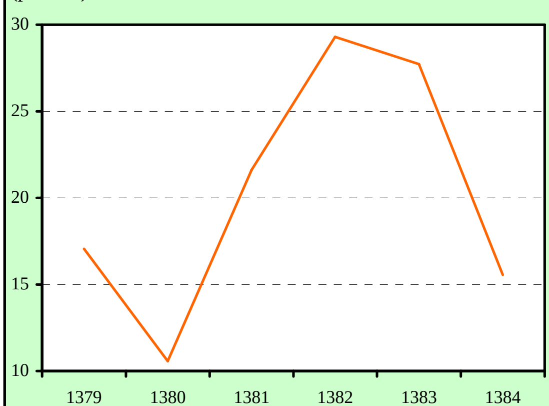


Figure 16.11. Turnover Ratio
(percent)



market and the current potential share value of the listed companies. The declining trend of this ratio in 1384 resulted from a sharp fall in the value-traded by 45.5 percent as compared with the preceding year.

Insurance Premium to GDP Ratio

The insurance premium to GDP ratio, insurance penetration coefficient, indicates development of the insurance market. This ratio rose to 1.3 percent in 1384 from 0.7 percent in 1379.

Share of the Value-added of Financial Institutions Services in the Value-added of Monetary and Financial Institutions' Services

The value-added of financial institutions' services consists of the value-added created by insurance companies and financial intermediaries (the stock exchange). Share of the value-added of insurance companies and stock exchange in the total monetary and financial institutions' services indicates the share of non-bank financial institutions. This ratio picked up to 14.5 percent in 1383 from 11.8 percent in 1379, and declined to 13.8 percent in 1384.

Monetary Sector Development and Monetary Policy

Monetary sector and policy, the third theme of financial development, elaborates on the role of monetary policy indices as follows:

Financial Depth

The ratio of liquidity to GDP at current prices is regarded as a measure of depth of financial system and size of financial intermediaries. Figure 16.14 indicates the trend of the mentioned ratio during the course of 1379-84. It went up to 54.4 percent in 1384 from 43.2 percent in 1379.

Ratio of Outstanding CBI Participation Papers to Monetary Base

In order to develop and expand open market operations and to implement monetary policies with respect to liquidity management,

Figure 16.12. Insurance Penetration Coefficient

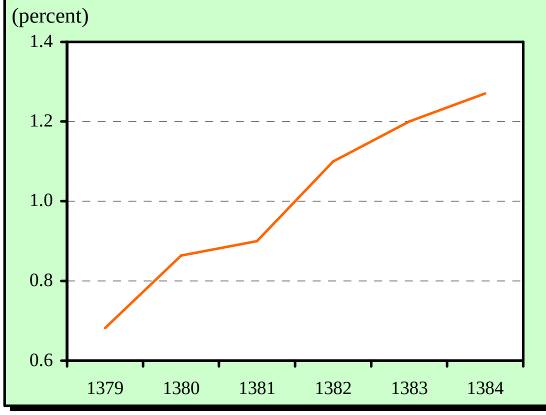


Figure 16.13. Share of the Value-added of Financial Institutions' Services in the Value-added of Monetary and Financial Institutions' Services

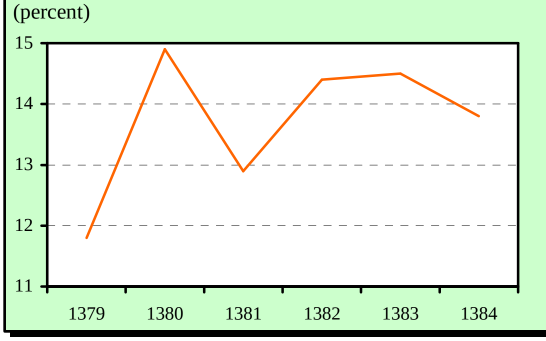
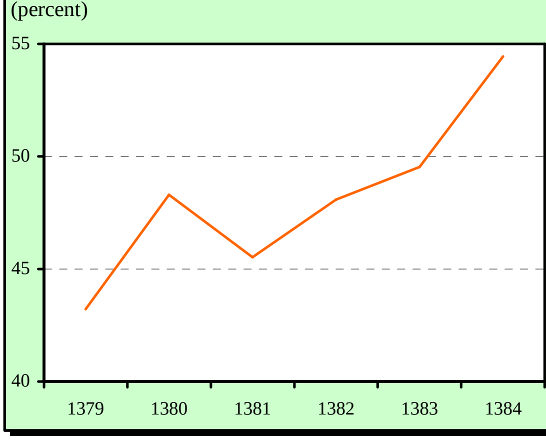


Figure 16.14. Financial Depth



the CBI has issued participation papers as of 1379 year-end.

The ratio of participation papers sold by the CBI to monetary base is considered as an indicator representing expansion of indirect monetary policy instruments. The upward trend of this ratio during 1379 to 1381 represents higher growth of sale of participation papers against growth of monetary base, which is a positive sign. However, this ratio was reduced in 1384, owing mostly to the reduction in the amount of participation papers sold by the CBI from Rls. 20,237.9 billion in 1383 to Rls. 10,768.3 billion in the review year. This was in conjunction with the constant growth of monetary base due to the problems related to issuance of participation papers.

Credit Controls

The effects of monetary policy conduct could be observed in real sector of economy through credit control. Credit policies, with channeling credits to certain sectors, are able to affect their growth rate.

During the years prior to 1379, allocation of banking credits to various sectors was through the Money and Credit Council (MCC). During the years following 1379, this responsibility was transferred to banks. This was to elevate pressures on banks' resources and pave the way to enhance competitiveness. To this end, banks were allowed to extend up to 20 percent of increase in the outstanding credits of non-public sector facilities free from sectoral allocations. This ratio increased to 25 percent in 1380 and 1381, 35 percent in 1382 and 45 percent in 1383. The proportion of free uses as an indicator representing reduction of direct controls on credits in respect of monetary policies over the review period rose sharply from 20 percent in 1379 to 75 percent in 1384.

Reduction in the ceiling of directed credits was another change observed in the credit policy since 1379. This is emphasized

Figure 16.15. Ratio of CBI's Outstanding Participation Papers with the Public to Monetary Base

(percent)

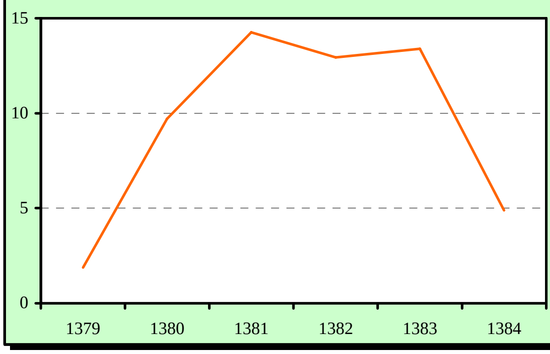


Figure 16.16. Stages of Relaxation of Sectoral Credit Allocation

(percent)

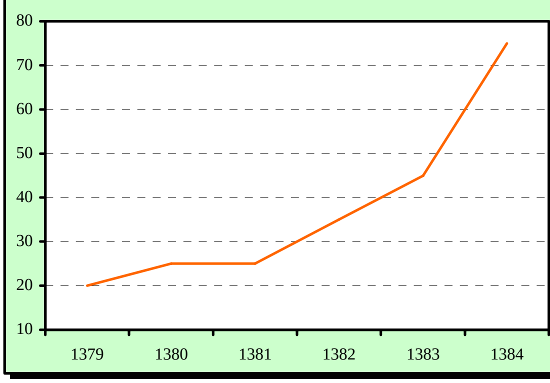
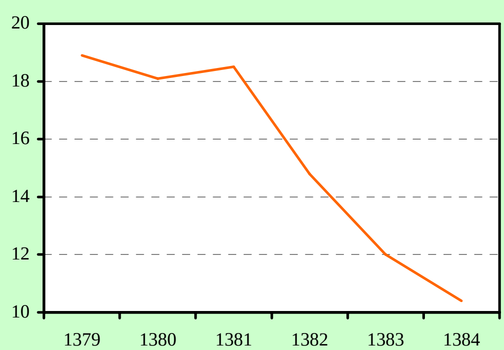


Figure 16.17. Ratio of Outstanding Budgetary Facilities to Total Outstanding Facilities

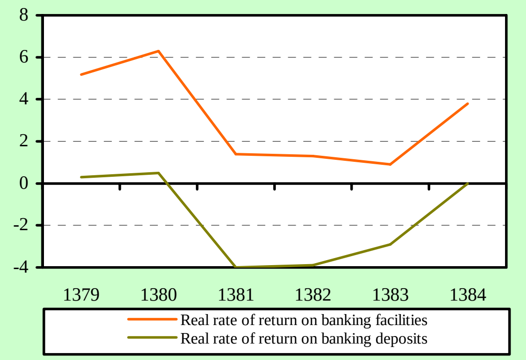
(percent)



in Article 84, 3rd FYDP Law and observed in the budget laws. Therefore, increase in the outstanding directed facilities had to be reduced by 10 percent per annum during the course of the 3rd FYDP against Rls. 6 trillion in 1378. As a result, this figure fell to Rls. 3 trillion by the end of 1383. During the course of the 4th FYDP, it has to be reduced by 20 percent per annum as compared with the approved figure for 1383.

To further depict the extent of government credit control, the ratio of outstanding budgetary facilities (1) to total outstanding facilities could be used. Since credit control may hinder optimal allocation of resources and financial development, reduction in the mentioned ratio signals further financial development. This ratio declined to 10.4 percent in 1384 against 18.9 percent in 1379.

Figure 16.18. Real Rate of Return on Banking Facilities and Deposits
(percent)

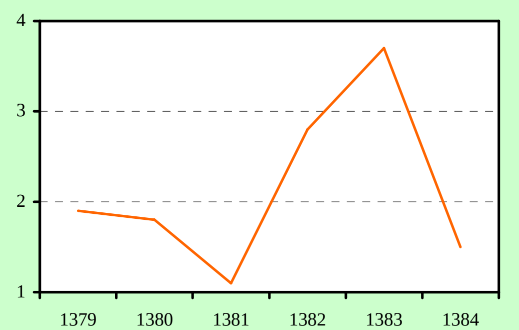


Rate of Return Liberalization

Governments generally tend to control rates of return on facilities, with the aim of further utilization of banking resources. This virtually assists them to offer banking resources in the form of credits with lower rate of return to target groups.

Policy of control on rate of return may lead to withdrawal of deposits by risk-taking depositors from banks into unorganized market. This may create excess demand for bank credits (which is due to the lower rate of return on banking facilities compared with that of unofficial market) and absence of optimal allocation of resources.

Figure 16.19. Share of Government Participation Papers in Government Financing
(percent)



To define the rate of return liberalization, real rate of return on facilities and banking deposits is taken into account. A positive real rate of return indicates higher liberalization. Real rate of return on banking facilities declined to 0.9 percent in 1383, against 6.3 percent in 1380, and rose to 3.8 percent in 1384. Real rate of return on banking deposits experienced a similar downturn, registering a negative rate during 1381-83.

Government Participation Papers

In order to benefit from new public finance instruments and to finance profitable projects, the government initiated issuance of participation papers as of 1376. To measure the impacts of this

(1) Includes facilities banks are obliged to extend according to Budget Notes. It is noteworthy that the figures mentioned herein are based on banks' ledgers, including budgetary facilities as well as profit and revenue receivables.

policy, the share of participation papers sold by the government in financing of its requirements, ranging within one to 4 percent during 1379-1384, is calculated per annum.

The following table indicates components of financial development according to three facets: banking sector development, non-bank financial sector development, and the monetary sector/policy development. The corresponding indices, as well as their annual average growth during 1379-84, represent positive growth over the 3rd FYDP period and in 1384:

COMPONENTS OF FINANCIAL DEVELOPMENT

	1379	1380	1381	1382	1383	1384	Annual average growth (1379-84)
Banking Sector Development							
Share of private banks in banking industry							
Share of private banks' deposits in total banks' deposits	0.3	0.7	1.6	3.4	7.0	12.0	110.3
Share of private banks' claims on non-public sector in total claims on non-public sector	0.2	0.5	1.2	3.8	7.9	12.2	133.8
Share of banks' claims on non-public sector in total claims	79.1	81.2	81.4	84.1	85.8	88.5	2.3
Ratio of banks and non-bank credit institutions' assets to banking system's assets	70.2	72.1	67.9	71.9	74.4	74.9	1.4
Ratio of banks' reserves to total non-public sector deposits	26.5	23.3	22.2	18.4	16.6	19.5	-5.2
Banks' concentration ratio	62.5	60.5	58.7	56.8	52.5	49.0	-4.7
Bank spread	4.9	5.9	5.4	5.2	3.8	3.8	-3.7
Share of value-added of monetary and financial institutions' services in the value-added of services sector	3.6	3.4	4.3	5.5	7.4	8.3	19.1
Efficiency of the banking system	67.7	69.8	72.5	79.6	83.6	85.6	4.8
Non-bank Financial Sector Development							
Market capitalization to GDP ratio	10.8	12.3	12.8	28.3	28.0	19.3	21.2
Value-traded to GDP ratio	1.6	1.2	2.5	6.1	7.5	3.3	39.6
Turnover ratio	17.1	10.6	21.6	29.3	27.7	15.6	10.6
Insurance penetration coefficient	0.7	0.9	0.9	1.1	1.2	1.3	13.6
Share of value-added of financial institutions' services in the value-added of monetary and financial institutions' services	11.8	14.9	12.9	14.4 (1)	14.5 (1)	13.8 (1)	4.1
Monetary Sector/ Policy Development							
Financial depth	43.2	48.3	45.5	48.1	49.5	54.4	4.9
Outstanding CBI participation papers to monetary base	1.9	9.7	14.3	12.9	13.4	4.9	78.4
Credit controls (share of outstanding budgetary facilities to total outstanding facilities)	18.9	18.1	18.5	14.8	12.0	10.4	-10.9
Liberalization of rate of return on facilities	5.2	6.3	1.4	1.3	0.9	3.8	45.6
Liberalization of rate of return on deposits	0.3	0.5	-4.0	-3.9	-2.9	0	-141.0
Share of governmental-budgetary participation papers in financing of the government	1.9	1.8	1.1	2.8	3.7	1.5	16.6

(1) Figures are preliminary.