Why is Interest Rate Spread High in Fiji? Results from a Preliminary Study

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Abstract

Interest rate spreads (IRS) have been observed to be relatively high in the Fiji and other Pacific Island Countries (PICs) when compared to the ones prevailing in developed countries. The chief reason behind high IRS in PICs has been argued to be the presence of high intermediation costs, reflecting the weaknesses and inadequacies of their financial sectors. Despite the ongoing financial sector reforms, which are aimed at enhancing competition, the spread, instead of narrowing down, has been either stagnant or growing. This paper examines the factors behind the high IRS spread in Fiji. Based on data released under the mandatory annual disclosure statements of commercial banks required under the Banking Act 1995, the paper examines the trends of IRS from 1999 to 2002, and advances reasons for the high spread.

INTRODUCTION

The subject of interest rate spread (IRS), defined as the difference between average interest rate earned on interest earning assets (loans) and average interest rate paid on deposits, has

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been receiving attention for some time both in the popular press and among investors in the Pacific Island countries (PICs).[1] In the context of general decline in investment activities in the region as well as in Fiji, it was felt at one time, that high IRS could be the main reason adversely affecting private sector investment. However, it is now well understood that it is the perceived margin between the expected profitability of a proposed investment, which is primarily influenced by future uncertainties and risks, and the current borrowing cost, that determines private sector's investment behaviour (Seruvatu and Jayaraman 2001).

For a depositor, an increase in IRS causes a concern about banks' tendency to maximise profits in an oligopolistic market. The banking industry in PICs is characterized by a limited number of commercial banks. Further, most of the banks happen to be either fully foreign owned or controlled by foreign interests. The customer worry gets compounded if the commercial banks periodically raise fees and charges on banking activities. Consequently, fears of collusion among the banks, which are fanned from time to time by the media, continue to persist (*The Review,* 2002).

Such fears were, however, ruled out in the past by some well informed studies conducted by international agencies (Asian Development Bank 1997, 2001). These studies stressed the underlying problems in financial intermediation in PICs associated with their weak financial sectors. Similar studies conducted in the Caribbean region (Ganga, 1998) come to the same conclusion. Although financial sector reforms in PICs are now in full swing with complete deregulation of interest rates, their impact has not been seriously felt (Chand 2002, Jayaraman 2001). Remedies suggested in the media, with a view to controlling IRS, such as bringing fees and charges under direct monitoring by government, though appealing to bank customers, are likely to run counter to the ongoing efforts toward promoting competition.

So far there has been no definitive study in Fiji on actual causes of high IRS. This paper attempts to fill this gap by analysing the data now being collected in Fiji under the Banking Act 1995.

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[1] The Committee of Inquiry into Financial Services (1999) in its Report submitted to Fiji's Parliament, adopted the following procedure to measure the interest rate spread (IRS):

$$IRS = \frac{\text{Interest earned}}{\text{Average interest earning assets}} - \frac{\text{Interest paid out}}{\text{Average total deposits}}$$

In the above formula, non-performing loans and all deposits including non-interest bearing deposits are included. So measured, the resultant figure gives an accurate picture of the performance of banks' lending portfolio as well as the true average cost of funds.

The paper is organised into four sections. The first section provides a background to the study; the second provides a brief survey of literature on IRS; the third deals with the empirical analysis; and the fourth section presents some conclusions and policy implications.

BACKGROUND

Procuring a margin between average lending and average deposit interest rate in the banking system in any economy is not unusual. In fact, such a margin constitutes an incentive for a bank to continue to remain in the industry. The magnitude of the spread, however, varies across the world. It is actually inverse to the degree of efficiency of the financial sector, which is an offshoot of a competitive environment. The nature and efficiency of the financial sectors have been found to be the major reasons behind differences in IRS in countries across the world. In economies with weak financial sectors, the intermediation costs which are involved in deposit mobilisation and channelling them into productive uses, are much larger. They have been found to be responsible for high spreads.

Likely causes

Independent studies (Chand, 2002; ADB, 2001), as well as reports of government committees in various countries including that of the recent Committee of Inquiry into Financial Services set up by Government of Fiji in 1999, have listed the following reasons for high IRS:

- lack of adequate competition,
- scale diseconomies due to small size of markets,
- high fixed and operating costs,
- high transportation costs of funds due to expensive telecommunications,
- existence of regulatory controls, and
- perceived market risks.

These factors lead to high intermediation costs, which result in high spread. Specifically, these studies have identified one of the most obvious costs, which is associated with the ability to enforce debt contracts. Small borrowers with no property rights have no collateral to offer. As such, they are perceived as high risk borrow-

ers. Because of high transaction costs involved, such borrowers are charged punitive rates of interest. Further, Chand (2002) singles out issues of governance. The latter encompasses maintenance of law and order and provision of basic transport and social infrastructure, all impinging on security, a lack of which has been found to be a cause for high transaction costs resulting in large intermediation costs.

Particularly in Fiji, excess liquidity, reflecting poor investment climate and scarcity of bankable projects, has been identified to be responsible for high IRS. In the absence of any secondary market for government bonds and other securities, coupled with an undeveloped stock market, the public is left with no option but to keep their savings as bank deposits. Because of surplus funds, deposit mobilisation does not require any serious effort on the part of the banks. Consequently, deposit interest rates have remained low. Although lending rates in Fiji have fallen, reflecting the deteriorating investment climate, the change in the spread has not been sizeable.

Magnitudes of Spread

Tables 1 gives a comparative picture of magnitudes of IRS in some developed and developing countries. While developed countries have generally low IRS, developing countries in the Caribbean and the PICs have been experiencing large spreads. Among the PICs, IRS in Solomon Islands has been the highest, the second highest being in Vanuatu. The magnitude of the spread in Fiji has been around 5 percent during 1994-1999.

For Fiji, as shown in Table 2, there has been an upward trend in IRS, although lending and deposit rates of banks have both been declining over the years. In nominal terms, the weighted average lending rate has fallen from a high of 12.46 percent in 1992 to 7.89 percent in 2002, representing a decrease by 36.7 percent. In the same period, the weighted average deposit rate has come down from 8.5 percent to 0.78 percent, the fall being 90.8 percent. Adjusted for inflation, average real deposit rates have been negative during the last three years.

Despite the declining trends in both lending and deposit rates, IRS in Fiji has increased from 3.96 percent in 1992 to 7.21 percent in 2001. In 2002, there was only a slight fall in the spread, which stood at 7.11 percent.

Table 1: Average Bank Interest Rate Spreads in Selected Countries

Pacific Islands	**Spread (%)**
Fiji	5.0
Kiribati	7.0
Papua New Guinea	7.5
Samoa	6.2
Solomon Islands	10.4
Tonga	5.0
Vanuatu	8.8
Caribbean Region	
Barbados	4.9
Guyana	20.3
Jamaica	18.0
Trinidad & Tobago	8.0
Belize	10.0
Developed Countries	
Australia	3.0
Canada	1.3
New Zealand	3.8
United States	2.8

Note: For Australia and New Zealand: 1994-1996; for Canada and United States: 1992-1996; for Caribbean Countries: 1992-1996; for PICs: 1994-2002. (Sources: Government of Fiji (1999); Asian Development Bank (2001); Ganga (1998))

Table 2: Fiji: Interest Rates on Loans and Deposits and Spread

Year	Nominal Weighted Average Lending Rate	Nominal Weighted Average Deposit Rate	Nominal Interest Rate Spread (%)	Inflation (%)	Real Weighted Average Lending Rate	Real Weighted Average Deposit Rate
1992	12.5	8.5	4.0	4.9	7.6	3.6
1993	11.6	7.0	4.7	5.2	6.4	1.8
1994	11.3	6.7	4.6	0.6	10.7	6.1
1995	11.1	6.8	4.3	2.2	8.9	4.6
1996	11.6	5.6	6.0	2.4	9.2	3.2
1997	10.2	4.5	5.7	2.9	7.3	1.6
1998	9.1	3.3	5.8	8.1	1.0	-4.8
1999	8.5	1.8	6.7	0.2	8.3	1.6
2000	8.4	1.5	6.9	3.0	5.4	-1.5
2001	8.2	1.0	7.2	2.3	5.9	-1.3
2002	7.9	0.8	7.1	1.6	6.3	-0.8

Source: Authors' Calculations

LITERATURE ON IRS

Early investigation of factors behind large IRS began with the concern that a large spread was a serious impediment to expansion and development of financial intermediation by discouraging potential savers with low returns on deposits and potential investors with reduced feasible investment opportunities. A World Bank study (Hanson and Rocha 1986) was one of the initial studies, which attributed the high spreads to causes such as high operating costs, financial taxation or repression, lack of competition and high inflation rates.

In a more recent study on the subject, Barajas, Steiner and Salazar (1999) observed that most of the past studies were inadequate on the ground that they scarcely employed direct tests of relevance of the aforesaid factors. One should, however, recognise that the inadequacies of the past studies were more due to non-availability of consistent time series data on banking systems. In those developing countries with foreign owned banks dominating the industry, access to critical data on assets was not possible. Further, absence of legal measures including disclosure requirements, compounded the data problem.

With regulatory and supervision measures brought into existence in mid 1990s, a period which also saw the Asian financial crisis, data availability has increased enormously. This enabled the researchers to increasingly base their studies on statistical analyses. Further, in those countries such as Argentina, Canada and Chile where quarterly data were available, time-series based econometric studies, which are critically dependent on availability of high degrees of freedom for robust estimates, began in an earnest way. Furthermore, in a regional economy comprising a currency union, with a single common currency and with a common central bank, as in the Eastern Caribbean Currency Union (ECCU) which covers eight countries, there is an additional advantage. This is the luxury of undertaking a cross-country and time series analysis providing a much larger degree of freedom of observations than would be otherwise possible.

Because of these developments since mid 1990s, we now have a good number of studies. These include studies by Yu (1995) on Canada, Randall (1998) on the ECCU countries, Catao (1998) on Argentina and Barajas, Steiner and Salazar (1999) on Columbia. These studies, especially the one by Barajas, Steiner and Salazar (1999), examined the spread from the point of view of competitiveness in banking. Adopting the 'new empirical industrial organisation' approach of Bresnahan (1989), these authors, in their study on Columbia, allowed for certain peculiar characteristics

of banking systems in developing countries. They adopted both single equation and system of simultaneous equation models for explaining the causes of IRS.

In their models, Barajas, Steiner and Salazar (1999) employed the following variables: (i) a market power indicator for each bank in each of the two markets, namely for deposits and loans, which depend on interest elasticity of demand; (ii) reserve ratio; (iii) bank specific rates; (iv) cost function variables including wages; (v) non-performing loans; and (vi) industrial production index as a proxy for national income. Quarterly data for a 15-year period (1974-88) as well as monthly data from May 1992 to August 1996 were alternately used. In addition, a panel of data for 22 banks for the period March 1991 to August 1996 was used for a time series cross section analysis. Thus, adequate degrees of freedom of observations were available to arrive at robust estimates. The analysis showed that during 1974-1996, the average IRS spread among the state owned banks was 24.6 percent. It was contributed to by financial taxation, operating costs and loan quality, accounting for 28.07 percent, 36.69 percent and 35.24 percent shares, respectively, of the spread.

The study on the eight member countries in ECCU (Randall 1998) is likely to be of interest to policy makers in the South Pacific, since the Caribbean and the South Pacific island countries share many commonalties (Fairbairn and Worrell 1996). Using the consolidated income and balance sheets of commercial banks, an accounting framework was formulated to decompose IRS into shares of various determinants. Randall (1998) duly acknowledges that this framework provided only a descriptive analysis of the determinants of the spread without any behavioural content. For a behavioural content, one has to go beyond the accounting framework by building in the role of competitiveness for observing how the spread would respond to changes in determinants at the margin. The behavioural model has to be designed such that the roles of elasticities of loan and deposit demand in determining IRS are made explicit to enable the researcher to assess the impact of marginal changes in the known determinants. By so doing, the behavioural model will also have abundant predictive power.

There are certain behavioural assumptions made. These include the following: (i) banks seek to maximise profits in a national market when there are barriers to entry; (ii) all deposits, net of required reserves and payment of any deposit taxes, are placed in the domestic loan market; and (iii) individuals choose a level of deposits (the supply of loanable funds) giving consideration to alternative market rates and the level of income. Since there is simultaneity involved in the formulation of supply

and demand functions, Randall devised a system of simultaneous equations. Employing 24 quarterly observations for each country covering a six year period (1991-1996), for data on operating expenses, interest income, and expenses (which were based on the consolidated statements of the commercial banks in ECCB area), and by adopting a two-stage least squares methodology, the coefficients of parameters were obtained.

Randall (1998) also utilised an alternative approach, which sought to test the relevance of some policy variables which were expected, *a priori,* to have an effect on the spread. For this, a single equation model was employed with average spread as the dependent variable. There were five independent variables: (i) provision for doubtful debts; (ii) growth rate in gross domestic product (GDP); (iii) savings deposits as a percentage of total deposits; (iv) share of commercial bank public sector loans; and (v) operating expenses as percentage of average total assets. All the included variables explained the variation in the spread to the extent of 65 percent.

The shares of each factor were then estimated on the basis of the estimated equation. While the share of increase in loan loss provisioning was negative (-0.94 percent), the shares of savings deposits and share of government loans were positive and were 12.03 percent and 0.45 percent respectively. The contribution of operating costs to IRS was the highest (23.61 percent). The GDP growth rate's share was a negative one at -1.21 percent (Randall 1998).

The foregoing brief literature survey reveals that over the last two decades there has been considerable progress in IRS modelling techniques. Further, availability of time series data greatly enabled researchers to estimate the shares of each factor through both time series and panel data for cross section of countries. For those countries which have no long term database so as to arrive at a reliable time series, the methodology of accounting framework, given its limitations, appears to be the only alternative available for researchers to determine the factors causing the spread.

EMPIRICAL ANALYSIS

Although high IRS is generally suggestive of underlying problems in financial intermediation in Fiji, it has not so far been specifically explained in terms of components having roots in some identified sources. The requirement on commercial banks to disclose their financial statements as mandated under Banking Supervision Policy Statement No.5 on disclosure requirements for

Policy Statement No.5 on disclosure requirements for banks has provided free public access to some basic information about the banks. Based on the accumulated information over four years 1999 to 2002, the focus can be narrowed to certain specifics explaining the causal behaviour.

Sources of Spread

Table 3 lists sources of spreads. These sources can be categorised into two: (a) those widening the spread; and (b) those narrowing the spread (Ganga, 1998).

Table 3: Causes of Interest Rate Spread

A. Factors Adding to Spread
1. Administrative Cost
2. Loan Loss Provisioning
3.Tax Payments
4. After Tax Profit Margin
5. Required Reserves
B. Factors Decreasing Spread
1. Remuneration on Reserves
2. Other Sources of Income (net)

There are five basic sources which widen the interest spread. These are:

(i) *administrative cost*. This comprises wages and salaries and housekeeping costs, besides the newly emerging costs due to introduction of innovations. The latter involves computerisation, installation of ATM machines and debit card facilities and their annual operation. In fact, one of the offshoots of innovations is the rise in wage cost. Banks are now employing more qualified and skilled persons. Although computerisation has enabled retrenchment of clerical staff, higher salaries for technically qualified persons have given rise to higher wage bills. Further, banks which do not have sufficient number of branches tend to have high average fixed costs compared to those which have a large number of branches.

(ii) *tax payments.* Direct taxes, being the dominant item in this category, affects the spread positively. If taxation is imposed on accrued basis as opposed to actually received interest, it will be higher, as it overstates taxable profits and understates the level of taxation.

(iii) *accounting tax profit margin*. This would vary from bank to bank, depending on other net earnings, such as fees from trading and guarantees, and income from securities and other ser-

vices. This term refers to after tax profit, which is arrived at after netting out operating costs including administrative costs, interest paid out on deposits, additional loan provisioning amounts provided each year and tax payments, from total income derived which includes interest income as well as non interest income. This would also depend upon how accounts are drawn and finalised. Fiji's present regulations governing the submission of Key Disclosure Statistics do not probe further into accounting practices of the banks, which tend to differ from each other.

iv) *loan loss provisioning.* Adequate level of loan loss provisioning is considered necessary, since current recessionary conditions have been resulting in an increase in non-performing loans.

(v) *reserves.* There are two kinds of reserves: statutory reserve deposits known as SRD, (5 percent of total deposits), which is mandatory under Section 40 of Reserve Bank of Fiji (RBF) Act 1983; and excess reserves.

The two sources which decrease the spread are:

(i) *remuneration on reserves*: In keeping with the general trend in central banking practices, the reserves under SRD requirement are remunerated by RBF. The rate of interest paid is the prevailing indicator rate of interest (presently 1.25%) which is the yield to maturity rate of 91-day RBF Notes. Excess reserves kept by banks, which are purely discretionary, do not attract any interest even if kept with RBF as part of settlement balance or otherwise. The non-interest earning reserves, kept with RBF for settlement purposes, thus contribute to spread in full measure. Although reserves under SRD requirement earn the indicator rate of interest, there is some potential loss. This is because commercial banks have to pay deposit interest rate on all reserves, which is higher than RBF indicator interest (1.25%) and the average lending rate is also much higher than the indicator interest rate.

(ii) *Other sources of income*: Incomes derived by banks from other sources decrease the spread. The non-interest income is derived mainly through fees and charges levied on loans and other transactions, and income from foreign exchange businesses.

Methodology of Measurement and Limitations

Access to data on Fiji's bank assets and liabilities as well as their earnings in terms of interest and non-interest incomes on a consistent basis has been made much easier for each of the commercial banks from 1999 onwards because of the disclosure requirements under law. In the absence of time series data for a longer period, we could not resort to a single equation or a system of simultaneous equation modelling evolved by recent studies (Randall 1998, Barajas, Steiner and Salazar 1999). Our measurement effort has, therefore, to be restricted to a less sophisticated one. A simple methodology employed by Ganga for Guyana (1998) and Randall for the eight Caribbean states in ECCU (1998), known as accounting framework, was modified to suit Fiji's situation, where the required reserves are remunerated by RBF.

The modified methodology is given in Appendix I. This method does not have any predictive power since it is not based on any behavioural assumptions. Following the procedures indicated in Appendix I, the contributions of each component were worked utilising the key disclosure statistics (KDS) of each of the commercial banks operating in Fiji.

Appendix II gives details of KDS for Australia & New Zealand Bank (ANZ) for 1999-2002, Bank of Baroda (BOB) for 2000-2002, Bank of Hawaii (BOH, which discontinued its operations in 2001), for 2000-2001, Colonial National Bank (CNB) for 1999-2002, Habib Bank Limited (HBL) for 1999-2001, and Westpac Banking Corporation (WBC) for 1999-2002.

RESULTS

The results of the study are presented in Appendix III. The results for each bank are given in two sets of tables. Tables Aiii–1 to Aiii-6 present the magnitudes of interest rate spread, which are given rise to by sources of spread. The spreads contributed by each of these factors are calculated on the basis of the procedure indicated in Appendix I, by following the definition given by the Committee of Inquiry (Government of Fiji 1999). Interest amounts earned on loans and interest amounts paid out on deposits are respectively expressed as percentages of all income earning assets including non performing loans and all deposits, including non-interest bearing deposits. Similarly, contributions by the identified sources are expressed as percentages of either loans or de-

posits as defined. In each of these Tables (Aiii-1 to Aiii-6), components from 1 to 5 contribute to increases in the spread. Components 6 and 7 contribute to decreases in the spread. The eighth component is an arithmetical adjustment, which is necessitated by the algebraic treatment employed in the methodology. This could be attributed to the non-equivalence of loans and non-bank deposits, that is when deposits are used to finance non-lending operations or when lending operations are funded by non-bank deposit liabilities such as bonds or overseas borrowing (Ganga 1998). In Appendix I, this is covered by the second term in the formula.

Tables Aiii-1a to Aiii-6a in Appendix III present the shares of each factor in the total spread. While the shares of factors increasing the spread have a positive (+) sign and the shares of factors decreasing the spread have a negative (-) sign, the arithmetical adjustment has either a positive or negative (+ or -) sign.

Interpretation of these tables is on the following lines. Take, for example, Table Aiii-1, which presents the magnitudes of IRS for the ANZ bank. This shows the IRS in 1999 to be 5.33 percent. The factors responsible for increasing the spread, in terms of percent points are: administrative cost: 4.95, tax payment: 1.87, loan loss provisioning: 2.04, required reserves: 0.09; and after tax profit margin: 2.48. These total to 11.43 percent points. On the other hand, the two factors responsible for reducing the IRS contribute a negative sum of 3.85 percentage points (comprising interest income on required reserves kept with RBF: 0.10, and income from other sources including fees and charges: 3.75). When added together, we obtain the IRS as 7.58 percent. This figure is further brought down when we apply the arithmetical adjustment figure of a negative 2.25 percent points. The final figure of IRS is 5.33 percent. Thus, the total IRS is an algebraic sum of magnitudes of spread contributed by each individual factor and the arithmetical adjustment figure.

Table Aiii-1a shows the contribution of each factor to total spread, calculated as its share in IRS. In 1999, for example, for the ANZ, administrative cost's share in the total spread was 92.87% (4.95 as percent of 5.33); tax payment's share was 35.08%; loan loss provisioning's share was 38.28%; required reserves' share was 1.69%; and after tax profit margin's share was 46.53%. The total share of the factors, which are responsible for increasing the spread, was 214.45%. The total share of factors, which are responsible for decreasing the spread was 72.25%. This comprises the share of interest income from required reserves kept with RBF, being 1.88 percent (0.10 as percent of 5.33) and the share of income from other sources being 70.37 percent (3.75 as percent of

5.33). The arithmetical adjustment's share (-2.25 as percent of 5.33) is negative 42.20 percent. The algebraic sum of these contributions is 100 (i.e., 214.45 less 72.25 less 42.20). Thus, we see the operation of the forces and countervailing forces in the determination of IRS.

For ANZ, which dominates the banking industry, IRS during 1999-2002, has been hovering around 5.30 percent (Table Aiii–1) . While the share of administrative cost in IRS rose from 92.87% in 1999 to 114.51% in 2002, the countervailing fees and charges (income from other sources) increased its share in IRS from 70.37% in 1999 to 106.03%. This reduced the spread to a considerable extent.

Tables Aiii-2 and Aiii-2a present the results for WBC, which is the second major player in the banking industry. For this bank, administrative costs contributed 4.69 percentage points to an IRS of 5.90 percent in 1999. However, in 2002, it contributed only 3.31 percentage points to total spread of 6.51 percent. Contributions from after tax profit margin and tax payments went up over the period, while income from fees and charges brought down the spread significantly. In terms of shares of each factor in IRS, the proportion of administrative cost declined over time: from 79.49 percent in 1999 to 50.84 percent in 2002. On the other hand, after tax profit margin's share in IRS rose from 48.47% in 1999 to 72.05% in 2002.

Among the other banks, as shown in Table Aiii-3, Bank of Baroda recorded the lowest contribution of administrative costs to its spread. This declined from 0.92 in 2000 to 0.42 in 2001 and to 0.35 percentage points in 2002. In terms of shares in IRS, administrative costs were 16.91% in 2000, 7.22% in 2001 and 6.93% in 2002 (Table Aiii-3a).

On the other hand, CNB's administrative cost has been increasing steadily over time, contributing the highest (7.82 percentage points) to IRS in 2001 (Table Aiii-4). In terms of shares in IRS, administrative cost is the highest contributor for the CNB compared to the other banks; in 2000, it was 114.96%, in 20001, it was 116.30%, and in 2002, it was 140.65%. The share of after tax profit margin also rose from 18.56% in 2000 to 24.10% in 2002. Similarly, the share of income from other sources, including fees and charges, increased from 67.49% in 1999 to 81.29% in 2002 (Table Aiii-4a).

Tables Aiii-5 and 5a, and 6 and 6a present the results for the Habib Bank Limited (HBL) and the Bank of Hawaii (BOH), respectively. With regard to HBL, the share of loan loss provisioning in IRS recorded a big increase from 59.00% in 1999 to 110.21% in 2000 and to 208.40% percent in 2002 (Table Aiii-5a). For the BOH,

which terminated its operations in Fiji towards the end of 2001, the share of after tax profit margin in IRS rose from 2.09% in 2000 to 61.17% in 2001.

Overall picture

Table 4 presents an overall picture of all commercial banks. For the banking industry in Fiji, administrative costs contributed 2.51 percentage points to an IRS of 5.90 percent in 1999 and 2.69 percentage points to an IRS of 5.68 percent in 2002. Loan loss provisioning contributed 2.36 percentage point to the IRS in 1999 and 2.31 percentage point in 2002. However, after tax profit margin's contribution in terms of percentage points rose from 2.90 in 1999 to 4.34 in 2002. Income from non-interest sources such as fees and charges reduced the spread by about 2 percentage points in each year under review.

Table 4: Sources of Interest Rate Spreads: All Banks: 1999-2002 (percent)

Item	1999	2000	2001	2002
Spread Between Lending and Deposit Rates	5.90	5.67	5.96	5.68
Factors increasing Spread (+)				
Administrative Cost	2.51	3.00	2.84	2.69
Tax Payments	2.23	1.80	1.84	2.36
Loan Loss Provisioning	2.36	2.70	2.66	2.31
Required Reserves	0.09	0.09	0.08	0.06
After Tax Profit Margin	2.90	2.80	3.34	4.34
Factors Decreasing Spread (-)				
Remuneration from RR with RBF	0.10	0.13	0.06	0.07
Income From Other Sources (Net)	2.02	1.90	2.03	2.07
Arithmetical Adjustment (+ or -)	-2.07	-2.69	-2.71	-3.94

Source: Authors' Calculations

Table 5 presents the shares of different factors in total IRS. The factors increasing IRS accordingly make positive contributions and the factors decreasing IRS make negative contributions. Administrative costs' share in IRS, which rose from 42.54 percent in 1999 to about 53 percent in 2000, settled down at around 47

percent in the last two years. The share of loan loss provisioning in IRS registered its highest level at 47.62 percent in 2000. In 2002, its share in IRS fell to 40.67 percent. The share of required reserves in IRS has been nominal throughout. However, the after tax profit margin's share in IRS has been steadily rising, from 49.15 percent in 1999 to its highest at 76.41 percent in 2002.

Table 5: Contribution to Interest Rate Spreads by Different Factors: All Banks (percent)

Item	1999	2000	2001	2002
Factors increasing Spread (+)				
Administrative Cost	42.54	52.91	47.65	47.36
Tax Payments	37.80	31.75	30.87	41.55
Loan Loss Provisioning	40.00	47.62	44.63	40.67
Required Reserves	1.53	1.59	1.34	1.06
After Tax Profit Margin	49.15	49.38	56.04	76.41
Factors Decreasing Spread (-)				
Remuneration from RR with RBF	1.69	2.29	1.01	1.23
Income From Other Sources	34.24	33.51	34.06	36.44
Arithmetical Adjustment (-)	35.09	47.45	45.46	69.38
Total	100.00	100.00	100.00	100.00

Source: Authors' Calculations

With regard to factors responsible for decreasing the spread, income from other sources including fees and charges, has its share rising from 34.24 percent in 1999 to 36.44 percent in 2002. The share of remuneration from statutory reserves kept with RBF has been low in the last two years, though it rose to its highest at 2.29 percent in 2000 from 1.69 percent in 1999. The residual item or the arithmetical adjustment has been largely responsible for pulling down the spread in last three years with its highest share in 2002.

SUMMARY AND CONCLUSIONS

This paper examined some of the factors behind interest rate spread in Fiji. The IRS, measured as the difference between average interest rate earned on interest earning assets and average interest rate paid on liabilities, provides a major incentive for any bank to continue to remain in the industry. This is because the banking business is about channelling funds from surplus units (households) to deficit units (businesses) for investment in plant, equipment and technology. This process helps create employment and improve living standards.

Lack of access to adequate time series (annual or quarterly) data on a consistent basis in Fiji constrained our efforts to investigate the causes of IRS by adopting sophisticated econometric analyses along the lines of behavioural models with predictive power adopted by Randall (1998) and Barajas, Steiner and Salazar (1999). Further, as we had to rely on Fiji's key disclosure statistics, which are available only from 1999, we had to adopt the simple accounting framework approach.

The study shows that like the developing countries in the Caribbean region, Fiji has also been experiencing large interest spreads. Compared to some of the other PICs, the magnitude of the spread in Fiji is among the lowest. However, at this level, the spread is still higher than those of the developed countries.

For the industry as a whole, the study shows that after tax profit margin as an item contributes in a major way to the size of the industry interest spread. Its share in the size of the spread increased from 49 percent in 1999 to around 76 percent in 2002. Whilst the administrative cost and loan loss provisioning expense are also important causes of the interest rate spread, the size of their contribution over the period under review, has been relatively stable. The net effect of these two causes on the size of the spread has been neutral to minimal.

The study also reveals that whilst the industry income from non-interest sources is an important consideration involved in offsetting any increase in spread caused by the factors described above, it was not a significant consideration for the period 1999 to 2002. However, a closer examination of the factors involved in respect of individual banks shows a different picture. The results show that after tax profit margin is not the major cause of the interest rate spread for ANZ. In its case, the cause lies more in the rise in administrative costs. Increase in loan loss provisioning also contributes to much of the increase. What is also clearly seen is that ANZ's income from other sources increased quite substantially in 2002.

In the case of WBC, both the administrative cost and income from other sources fell over the period. It can be said that the bank relied heavily on after tax profit margin to compensate for the deterioration shown in loan loss provisioning expense to protect its interest margin. For CNB, in addition to the administrative cost and loan loss provisioning expense, after tax profit margin also affected the size of the interest spread. The after tax profit margin has been a major factor in spite of the counterveiling impact of falling income tax expenses. CNB also depended on income from other sources to protect the spread.

In the case of HBL, the major causes of the spread were loan loss provisioning and administrative cost. For the period 1999 to 2001, the bank's income from other sources had actually declined. It was similar for BOH except, in its case, after tax profit margin played a more important role than loan loss provisioning.

The results for BOB, which are unlike those of the other banks, are quite remarkable. BOB's interest spread has narrowed over the period 1999 to 2002. The picture shows a fall in the contributions of administrative cost, loan loss provisioning and also income from other sources while after tax profit margin remained at the same level, or increased marginally.

Looking at the trend observed for the magnitude of IRS, banks in Fiji can be classified into two categories. One category comprises those banks that have shown a decline in the interest spread over the period 1999 to 2002, and the other comprises banks that have shown an increase in the spread. A feature common to banks that have shown a widening of the spread has been the increased contribution of the after tax profit margin.

Fiji's banks are in a restricted oligopolistic market. As such, they have enormous scope to maximise profits. In fact, the after tax profit margin is now contributing a hefty 76% of the interest rate spread. The message to commercial banks in a market, to which there is no easy entry possible, is simple. The banks have a social responsibility. They have to reduce their administrative costs. The term, 'leaner and mean' organisational requirement, now made popular by the ongoing downsizing efforts of governments, is also applicable to banks. In that process the after tax profit margin, now contributing significantly to the high interest spread, could come down, and, aside from their own public spirited initiatives, if any, work to reduce the spread.

Appendix I: Decomposing the Interest Spread

A. Factors responsible for increasing the spread

(i) required reserves: deposit interest has to be paid on this. But though they earn Reserve Bank of Fiji's indicator interest (yield to maturity rate of 91-day RBF Notes), it is less than the deposit rate and lending rate.

Deposit interest, which is paid out on that portion of deposits kept with RBF as statutory reserves, is calculated as a percent of total lending. This is expressed as:

$r\ a\ i_d$ where r= ratio of required reserves to total deposits;
i_d = interest rate on deposits
a = ratio of deposits to total loans

(ii) reserves other than required reserves, as a percentage of total loans can be denoted as (1-r)a. Interest paid out on this as a percentage of total loans, is calculated as:

$(1\text{-}r)\ a\ i_d$

(iii) after tax profit margin is expressed as a percent of total loans, which is

? , (profit margin/total loans)

(iv) administrative costs as a percentage of total loans, which is expressed as

? , (administrative costs/total loans)

(v) provisioning for bad loans as a percentage of total loans

? , (provisioning for classified claims/total loans)

(vi) tax payments as percentage of total loans

T , (tax payments/total loans)

B. Factors responsible for decline in the spread

(i) income derived from non-interest sources. These are mostly fees, charges and earnings from foreign exchange transactions and others. The non-interest income earned as a percentage of total loans is denoted as ? .

? , (non-interest income /total loans)

(ii) Remuneration derived on statutory reserves kept by commercial banks with RBF. This is the interest paid out by RBF at the current indicator interest rate (yield to maturity on 91-day RBF Notes).

r r = remuneration received from RBF/total loans

C. Derivation of the formula

We can define i as interest earnings as a percentage of all loans (good and non-performing) in a given year. The factors affecting i_l are given as:

$$i_l = r\, i_d a + (1 - r)\, i_d a + ? + ? + ? + T \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (1)$$

The interest rate spread is obtained by subtracting i_d from both left and right hand sides

$$i_l - i_d = r\, i_d a + (1 - r)\, i_d a + ? + ? + ? + T - i_d \ldots\ldots\ldots\ldots\ldots\ldots (2)$$

This could be simplified as

$$i_l - i_d = r\, i_d a + i_d\, [(1 - r)a - 1] + ? + ? + ? + T \ldots\ldots\ldots\ldots\ldots (3)$$

When we include the factors responsible for the decrease in the spread in (3) we obtain the formula

$$i_l - i_d = r i_d a + i_d\, [(1-r)a - 1] + ? + ? + ? + T - ? - r\, r \ldots\ldots\ldots (4)$$

Thus, we have the spread depicted as an algebraic sum of two components, one increasing the spread and the other decreasing the spread.

While the first term on the right hand side of the equation refers to the contribution of the statutory reserves to the interest rate spread, the second term measures the contribution of other factors than the statutory reserves. It is non-zero when deposits differ from loans, that is, when deposits are used to finance non-lending operations or when lending operations are funded by non-deposit liabilities such as bond or foreign borrowing (Ganga 1998).

Appendix II: Key Disclosure Statistics from the Commercial Banks in Fiji

Table Aii-1: Key Disclosure Statistics: ANZ

Items	For the Financial Year Ended 30 September: figures in F$('000)			
	1999	2000	2001	2002
1. Ave.Interest Earning Assets	710,108	661,967	643,506	649,446
2. Interest Earned	50,424	49,469	44,418	40,025
3. Average Lending Interest Rate (%):(2/1)	7.10%	7.47%	6.90%	6.16%
4. Average Deposits	704051	661032	664420	701786
5. Interest Paid	12488	10376	8359	5967
6. Average Deposit Rate (%): (5/4)	1.77%	1.57%	1.26%	0.85%
Interest Rate Spread (%)	5.33%	5.90%	5.64%	5.31%
7. Required Reserve Ratio (%)	5%	5%	5%	5%
8. Ave. Required Reserves remunerated by RBF	35,203	33,052	33,221	35,089
9. Interest Earned on Req.Reserves	704	836	415	439
10. Average Excess Reserves kept with RBF unremunerated	-35,203	-33,052	-33,221	-35,089
11. Administrative Costs	35,151	33,706	36,115	39,490
12. Tax payments	13,270	15,121	8,329	7,792
13. Loan Provisioning	14,464	17,783	14,191	23,520
14. After Tax Profits (Accounting Profit Margin)	17,633	13,169	14,417	17,293
15. Other Sources of Income, Net	26,629	27,571	27,179	36,589

(Source: KDS of ANZ)

Table Aii-2: Key Disclosure Statistics: BOB (2000-2002)

Items	Figures in F$ ('000)		
	2000	2001	2002
1. Average Interest Earning Assets	163,657	163,656	175,979
2. Interest Earned	11,979	12,033	10,986
3. Average Lending Interest Rate (%) : (2/1)	7.32%	7.35%	6.24%
4. Average Deposits	165173	164719	178393
5. Interest Paid	3109	2620	2128
6. Average Deposit Rate (%): (5/4)	1.88%	1.59%	1.19%
Interest Rate Spread (%)	5.44%	5.76%	5.05%
7. Required Reserve Ratio (%)	5%	5%	5%
8. Ave.Required Reserves remunerated by RBF	8,259	8,236	8,920
9. Interest Earned on Required Reserves	209	103	111
10. Average Excess Reserves kept with RBF unremunerated	-8,259	-8,236	-8,920
11. Administrative Costs	1,507	695	633
12. Tax payments	3,339	2,721	2,395
13. Loan Provisioning	866	343	547
14. After Tax Profits (Accounting Profit Margin)	4,037	4,258	4,068
15. Other Sources of Income, Net	4,321	3,724	3,836

(Source: KDS of BOB)

Table A11-3: Key Disclosure Statistics: BOH (2000-2001)

	($'000) 2000	2001
1. Average Interest Earning Assets	139,453	103,632
2. Interest Earned	12,265	7,669
3. Average Lending Interest Rate (%) : (2/1)	8.80%	7.40%
4. Average Deposits	152,347	117,982
5. Interest Paid	5,391	1806
6. Average Deposit Rate (%): (5/4)	3.54%	1.53%
Interest Rate Spread (%)	5.26%	5.87%
7. Required Reserve Ratio (%)	5%	5%
8. Ave.Required Reserves remunerated by RBF	7,617	5,899
9. Interest Earned on Required Reserves	193	149
10. Average Excess Reserves kept with RBF unremunerated	-7,617	-5,899
11. Administrative Costs	5,950	5,685
12. Tax payments	1,898	2,051
13. Loan Provisioning	7,792	5,182
14. After Tax Profits (Accounting Profit Margin)	149	3,723
15. Other Sources of Income, Net	5,061	4,145

(Source: ICDS of BOH)

Table Aii-4. Key Disclosure Statistics: CNB (1999-2002)

Items	For the Financial Year Ended 30 June (Figures in F$('000)) 1999	2000	2001	2002
1. Average Interest Earning Assets	174,950	180,232	193,283	214,635
2. Interest Earned	17,710	7,885	16,052	15,768
3. Average Lending Interest Rate (%): (2/1)	10.12%	4.37%	8.30%	7.35%
4. Average Deposits	212870	203064	208302	229857
5. Interest Paid	4324	1553	4000	4119
6. Average Deposit Rate (%): (5/4)	2.03%	0.76%	1.92%	1.79%
Interest Rate Spread (%)	8.09%	3.61%	6.38%	5.55%
7. Required Reserve Ratio (%)	5%	5%	5%	5%
8. Av. Required Reserves remunerated by RBF	10,644	10,153	10,415	11,493
9. Interest Earned on Required Reserves	213	257	130	144
10. Average Excess Reserves kept with RBF unremunerated	-10,644	-10,153	-10,415	-11,493
11. Administrative Costs	0	7,485	14,347	16,793
12. Tax payments	8,043	665	966	340
13. Loan Provisioning	4,701	4,623	4,393	4,969
14. After Tax Profits (Accounting Profit Margin)	-1,020	1,216	2,523	2,884
15. Other Sources of Income, Net	9,558	3,865	7,681	9,702

Source: ICDS of CNB

Table Aii-5: Key Disclosure Statistics: HBL (1999-2001)

Items	For the Financial Year Ended 31 December. Figures in F$ ('000)		
	1999	**2000**	**2001**
1. Average Interest Earning Assets	25,907	31,634	27,529
2. Interest Earned	2,474	3,151	2,537
3. Average Lending Interest Rate (%) : (2/1)	9.55%	9.96%	9.22%
4. Average Deposits	30582	35084	34947
5. Interest Paid	712	1158	876
6. Average Deposit Rate (%): (5/4)	2.33%	3.30%	2.51%
Interest Rate Spread (%)	7.22%	6.66%	6.71%
7. Required Reserve Ratio (%)	5%	5%	5%
8. Ave. Required Reserves remunerated by RBF	1,529	1,754	1,747
9. Interest Earned on Required Reserves	31	35	35
10. Average Excess Reserves kept with RBF unremunerated	-1,529	-1,754	-1,747
11. Administrative Costs	793	974	1,051
12. Tax payments	308	389	319
13. Loan Provisioning	1,103	2,323	3,851
14. After Tax Profits (Accounting Profit Margin)	901	468	-428
15. Other Sources of Income, Net	1,032	1,057	810

(Source: KDS of HBC)

Table Aii-6: Key Disclosure Statistics: WBC (1999-2002)

Items	For the Financial Year Ended 30 September (Figures in F$('000)			
	1999	**2000**	**2001**	**2002**
1. Average Interest Earning Assets	402,575	419,940	451,062	456,601
2. Interest Earned	29,146	34,789	36,122	34,689
3. Average Lending Interest Rate (%) : (2/1)	7.24%	8.28%	8.01%	7.60%
4. Average Deposits	415892	425964	451216	451657
5. Interest Paid	5561	8170	7675	4930
6. Average Deposit Rate (%): (5/4)	1.34%	1.92%	1.70%	1.09%
Interest Rate Spread (%)	5.90%	6.37%	6.31%	6.51%
7. Required Reserve Ratio (%)	5%	5%	5%	5%
8. Av Required Reserves remunerated by RBF	20,795	21,298	22,561	22,583
9. Interest Earned on Required Reserves	416	539	282	282
10. Av. Excess Reserves kept with RBF unremunerated	-20,795	-21,298	-22,561	-22,583
11. Administrative Costs	18,863	16,160	14,861	15,101
12. Tax payments	6,525	4,462	8,823	9,009
13. Loan Provisioning	7,579	13,633	13,980	11,828
14. After Tax Profits (Accounting Profit Margin)	11,525	10,926	15,550	21,424
15. Other Sources of Income, Net	15,904	15,734	15,836	17,487

(Source: KDS WBC)

Table Aii-7: Key Disclosure Statistics : All Commercial Banks: 1999-2002

Items	For the Financial Year Ended 30 June Figures in F$(000)			
	1999	**2000**	**2001**	**2002**
1. Average Interest Earning Assets	1313,540	1596,883	1582,668	1496,661
2. Interest Earned	99,754	119,538	118,831	101,468
3. Average Lending Interest Rate (%)	7.59%	7.49%	7.51%	6.78%
4. Average Deposits	1363,395	1642,664	1641,586	1561,693
5. Interest Paid	23085	29757	25336	17,144
6. Average Deposit Rate (%):(5/4)	1.69%	1.81%	1.54%	1.10%
Interest Rate Spread (%)	5.90%	5.67%	5.96%	5.68%
7. Required Reserve Ratio (%)	5%	5%	5%	5%
8. Ave.Required Reserves remunerated by RBF	68,170	82,133	82,079	78,085
9. Interest Earned on Required Reserves	1363	2078	1026	976
10. Average Excess Reserves kept with RBF unremunerated	-68,170	-82,133	-82,079	98,292
11. Administrative Costs	32,926	47,197	44,968	40,319
12. Tax payments	29,340	28,536	29,071	35,264
13. Loan Provisioning	31,016	42,406	42,166	34,637
14. After Tax Profits (Accounting Profit Margin)	38,035	44,367	52,805	64,965
15. Other Sources of Income, Net	26,494	30,038	32,196	31,025

(Source: Authors' Calculations)

Appendix III: Interest Spread in Fiji's Commercial Banks

Table Aiii-1: Sources of Interest Rate Spread: ANZ: 1999-2002

		(percent)		
Item	**1999**	**2000**	**2001**	**2002**
Spread Between Lending and Deposit Rates	5.33	5.90	5.64	5.31
Factors Increasing Spread (+)				
Administrative Cost	4.95	5.09	5.61	6.08
Tax Payments	1.87	2.28	1.29	1.20
Loan Loss Provisioning	2.04	2.69	2.21	3.62
Required Reserves	0.09	0.08	0.07	0.05
After Tax Profit Margin	2.48	1.99	2.24	2.66
Factors Decreasing Spread (-)				
Interest on Reqd. Reserves kept with RBF	0.10	0.13	0.06	0.07
Income From Other Sources (Net)	3.75	4.17	4.22	5.63
Arithmetical Adjustment (+ or -)	-2.25	-1.93	-1.50	-2.60

Table Aiii-1(a): Contribution to Interest Rate Spread, ANZ: 1999-02

		(In Percent)		
Item	**1999**	**2000**	**2001**	**2002**
Factors Increasing Spread (+)				
Administrative Cost	92.87	86.27	99.47	114.5
Tax Payments	35.08	38.64	22.87	22.60
Loan Loss Provisioning	38.28	45.60	39.18	68.17
Required Reserves	1.69	1.36	1.24	0.94
After Tax Profit Margin	46.53	33.73	39.72	50.09
Factors Reducing Spread (-)				
Interest on Req.Reserves kept with RBF	1.88	2.20	1.06	1.32
Income From Other Sources (Net)	70.37	70.68	74.82	106
Arithmetical Adjust. (+ or -)	-42.20	-32.72	-26.60	-48.96
Total	100.00	100.00	100.00	100.00

Table Aiii-2: Sources of Interest Rate Spread: WBC: 1999-2002

	(in percent)			
Item	**1999**	**2000**	**2001**	**2002**
Spread Between Lending and Deposit Rates	5.90	6.37	6.31	6.51
Factors increasing Spread (+)				
Administrative Cost	4.69	3.85	3.29	3.31
Tax Payments	1.62	1.06	1.96	1.97
Loan Loss Provisioning	1.88	3.25	3.10	2.59
Required Reserves	0.07	0.10	0.09	0.05
After Tax Profit Margin	2.86	2.60	3.45	4.69
Factors Decreasing Spread (-)				
Remuneration from RR with RBF	0.10	0.13	0.06	0.06
Income From Other Sources (Net)	3.95	3.75	3.51	3.83
Arithmetical Adjustment (+ or -)	-1.17	-0.61	-2.01	-2.21

Table Aiii-2(a): Contribution to Interest Rate Spread, WBC: 1999-02

	(in percent)			
Item	**1999**	**2000**	**2001**	**2002**
Factors increasing Spread (+)				
Administrative Cost	79.49	60.44	52.14	50.84
Tax Payments	27.46	16.66	31.06	30.26
Loan Loss Provisioning	31.86	51.02	49.13	39.78
Required Reserves	1.19	1.57	1.43	0.77
After Tax Profit Margin	48.47	40.82	54.68	72.05
Factors Decreasing Spread (-)				
Remuneration from RR with RBF	1.69	2.04	0.95	0.92
Income From Other Sources (Net)	66.95	58.89	55.63	58.83
Arithmetical Adjustment (+ or –)	-19.83	-9.58	-31.86	-33.95
Total	100.00	100.00	100.00	100.00

Table Aiii-3: Sources of Interest Rate Spread, BOB: 2000-2002

(in percent)

Item	2000	2001	2002
Spread Between Lending and Deposit Rates	5.44	5.82	5.05
Factors increasing Spread (+)			
Administrative Cost	0.92	0.42	0.35
Tax Payments	2.04	1.66	1.36
Loan Loss Provisioning	0.53	0.21	0.31
Required Reserves	0.09	0.08	0.06
After Tax Profit Margin	2.47	2.60	2.31
Factors Decreasing Spread (-)			
Remuneration from RR with RBF	0.13	0.06	0.06
Income From Other Sources (Net)	2.64	2.28	2.18
Arithmetical Adjustment (+ or -)	2.16	3.19	2.90

Table Aiii-3(a) Contribution to Interest Rate Spread, BOB: 2000-2002

(in percent)

Item	2000	2001	2002
Factors increasing Spread (+)			
Administrative Cost	16.91	7.22	6.93
Tax Payments	37.50	28.52	26.93
Loan Loss Provisioning	9.74	3.61	6.14
Required Reserves	1.65	1.37	1.19
After Tax Profit Margin	45.40	44.67	45.74
Factors Decreasing Spread (-)			
Remuneration from RR with RBF	2.39	1.03	1.19
Income From Other Sources (Net)	48.53	39.18	43.17
Arithmetical Adjustment (+ or -)	39.72	54.82	57.43
Total	100.00	100.00	100.00

Table Aiii-4: Sources of Interest Rate Spreads: CNB: 1999-2002

(in percent)

Item	1999	2000	2001	2002
Spread Between Lending and Deposit Rates	8.09	3.61	6.38	5.56
Fact**ors increasing Spread (+)**				
Administrative Cost	0.00	4.15	7.42	7.82
Tax Payments	4.60	0.37	0.50	0.16
Loan Loss Provisioning	2.69	2.57	2.27	2.32
Required Reserves	0.12	0.04	0.10	0.10
After Tax Profit Margin	-0.58	0.67	1.30	1.34
Factors Decreasing Spread (-)				
Remuneration from RR with RBF	0.12	0.14	0.67	0.67
Income From Other Sources (Net)	5.46	2.14	3.98	4.52
Arithmetical Adjustment (+ or-)	6.84	-1.91	-0.56	-0.99

Table Aiii-4(a): Contribution to Interest Spread, CNB: 1999-2002

(in percent)

Item	1999	2000	2001	2002
Factors increasing Spread (+)				
Administrative Cost	0..00	115	116.30	140.7
Tax Payments	56.86	10.25	7.84	2.88
Loan Loss Provisioning	33.25	71.19	35.56	41.73
Required Reserves	1.48	1.11	1.57	1.80
After Tax Profit Margin	-7.17	18.56	20.38	24.10
Factors Decreasing Spread (-)				
Remuneration from RR with RBF	1.48	3.88	10.5	12.05
Income From Other Sources (Net)	67.49	59.28	62.38	81.29
Arithmetical Adjustment (+ or -)	84.55	-52.91	-8.77	-17.82
Total	100.00	100.00	100.00	100.00

Table Aiii-5: Sources of Interest Rate Spreads: HBL: 1999-2001

(in percent)

Item	1999	2000	2001
Spread Between Lending and Deposit Rates	7.22	6.66	6.71
Factors increasing Spread (+)			
Administrative Cost	3.06	3.08	3.82
Tax Payments	1.19	1.23	1.16
Loan Loss Provisioning	4.26	7.34	13.99
Required Reserves	0.14	0.18	0.16
After Tax Profit Margin	–	–	–
Factors Decreasing Spread (-)			
Remuneration from RR with RBF	0.12	0.11	0.13
Income From Other Sources (Net)	3.98	3.34	2.94
Arithmetical Adjustment (+ or -)	2.67	-1.72	-9.35

Table Aiii-5(a): Contribution to Interest Rate Spreads, HBL: 1999-2001

(in percent)

Item	1999	2000	2001
Factors increasing Spread (+)			
Administrative Cost	42.38	46.25	56.93
Tax Payments	16.48	18.47	17.29
Loan Loss Provisioning	59.00	110.2	208.4
Required Reserves	1.94	2.70	2.39
After Tax Profit Margin	-	-	-
Factors Decreasing Spread (-)			
Remuneration from RR with RBF	1.66	1.65	1.94
Income From Other Sources (Net)	55.12	50.15	43.81
Arithmetical Adjustment (+ or -)	36.98	-25..83	-139.3
Total	100.00	100.00	100.00

Table Aiii-6: Sources of Interest Spreads: BOH: 2000-2001		
	(in percent)	
Item	2000	2001
Spread Between Lending and Deposit Rates	5.26	5.87
Factors increasing Spread (+)		
Administrative Cost	4.27	5.49
Tax Payments	1.36	1.98
Loan Loss Provisioning	5.58	5.00
Required Reserves	0.19	0.09
After Tax Profit Margin	0.11	3.59
Factors Decreasing Spread (-)		
Remuneration from RR with RBF	0.14	0.14
Income From Other Sources (Net)	3.63	4.00
Arithmetical Adjustment (+ or -)	-2.48	-6.14

Table Aiii-6(a): Contribution to Interest Rate Spread, BOH : 2000-2001		
	(in percent)	
Item	**2000**	**2001**
Factors increasing Spread (+)		
Administrative Cost	81.18	93.53
Tax Payments	25.86	33.73
Loan Loss Provisioning	106.1	85.18
Required Reserves	3.61	1.54
After Tax Profit Margin	2.09	61.17
Factors Decreasing Spread (-)		
Remuneration from RR with RBF	2.66	2.39
Income From Other Sources (Net)	69.00	68.15
Arithmetical Adjustment (+ or -)	-47.16	-104.6
Total	100.00	100.00

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