Fair Trading Commission

Report on alleged collusion in the commercial banking sector

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PUBLIC VERSION

Confidential information omitted. The omissions are indicated by a note or by the symbol ✄.

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1. The Complaint

1.1 In April 2005 the Staff of the Fair Trading Commission (FTC) received two letters of complaint from the Jamaica Manufacturers Association (JMA) and the Jamaica Agricultural Society (JAS).

1.2 The first letter of complaint, dated April 14, 2005 and received by the Staff of the FTC on April 15, 2005, raised a number of concerns regarding operations in the commercial banking sector. Specifically, the Informants claim that lending rates offered by commercial banks are unjustifiably excessive when compared to the rates paid on deposits. They claim further that interest rate spread in Trinidad and Tobago (T&T) is approximately 7%, while the spread in Jamaica is 18%, resulting in a higher profit margin in Jamaica than what is obtained by commercial banks in T&T; and that this situation is stifling Jamaican businesses and renders them uncompetitive in the global market place.

1.3 The Informants requested that the Staff investigate the commercial banking sector as they believe commercial banks are engaged in price gouging with respect to lending interest rates. A further claim was made that there seems to be collusion with respect to bank charges.

1.4 By way of letter dated April 21, 2005 the JMA and the JAS requested a withdrawal of their complaint of April 14, 2005. No reason for the withdrawal was offered.

1.5 On April 21, 2005, the Staff received a further letter of complaint from the JMA and JAS. This letter bore the same date, April 21, 2005. In that complaint the Informants requested that the Staff conduct an investigation into whether or not there is collusion and price fixing among commercial banks in the setting of interest rates and bank charges. They claim that the banks operating in Jamaica are of varying sizes and must therefore have varying operating costs. The Informants say they are amazed that all the banks are charging rates that are so close; and they are left to believe that there is a plan among banks not to compete with each other in the granting of loans.

1.6 By letter dated May 11, 2005 the Staff acknowledged receipt of the complaints. The JMA wrote on June 1, 2005 to express dissatisfaction with the slow pace at which the Staff is handling the matter; and requested that the Staff indicate a completion date as such information is pivotal to the planning of its strategies in lobbying for policy changes regarding interest rate.

1.7 Given the limited and non-specific nature of the information provided in the Informants' letters of complaint, the Staff of the FTC, wrote on June 6, 2005, to request the following information from the Informants:

a. specific and detailed reasons why they believe that commercial banks are colluding on the level of fees which they charged; and

b. a complete list of the services which they believe are subject to price fixing by commercial banks, together with a list of the banks involved.

1.8 By letter dated June 10, 2005, the JMA promised that the information requested would be collected and forwarded to the Staff. That information was never provided. The JMA reiterated its concern that it continued to witness high interest rate spreads even though the Bank of Jamaica (BOJ) has been reducing base lending rates over time. The JMA claims that commercial banks have not been reducing the lending rates at a commensurate pace; and that bank charges on services tend to be very similar across commercial banks and it seems that the market is not working in a competitive manner.

1.9 Notwithstanding the insufficiency of the information provided by the Informants, the Staff took the decision to commence a formal investigation into the complaint given the seriousness of the alleged conduct and the importance of the sector to the economy. Further, *ex facie,* the industry exhibits some characteristics which have the potential to facilitate collusion.

2. Jurisdiction

2.1 The complaint addresses two distinct prices: interest rates and bank charges. Interest rate, which is normally expressed as a percentage, is the price a borrower pays for the use of money he does not own, and the return a lender receives for deferring his own consumption, by lending to the borrower. Interest rate is the rental price of money. Bank charges are the fees or prices consumers pay for services rendered by banks.

2.2 Section 2 of the Fair Competition Act (FCA), provides that "price" includes any charge or fee, by whatever name called. This means that interest rate is included in the definition of "price" under the FCA. The same section defines "goods" and "service". The definition of "goods" excludes *inter alia*, "money, securities and choses in action", but the definition of "service" contains no such exclusion. It is defined simply to mean "a service of any description whether industrial, trade, professional or otherwise".

2.3 In the 2000 case of <u>The Jamaica Stock Exchange v FTC</u>, two of the Judges of the Court of Appeal declared, among other things, that the FCA does not have jurisdiction over the Jamaica Stock Exchange. One of the reasons given is that, "goods" is defined in Section 2 of the FCA to exclude *inter alia*, money, securities and choses in action. They found, by what they seem to have considered to be necessary implication, that the definition of "service" is limited by the definition of "goods".

2.4 Notwithstanding the Court's ruling on the matter, the Staff of the FTC is of the view that without a specific exemption of services related to money from the definition of "service" under the FCA, the FTC has jurisdiction to deal with financial services, including the issuance of loans. Consequently, the Staff approached the investigation from the position that the FTC has the jurisdiction to deal with matters involving interest rates and bank charges.

2.5 Having sought and received certain types of information from all the commercial banks; the Staff decided that, based on the information received, it would assess the banks' behaviour in respect of interest rates on corporate loans, personal loans and bank charges in respect of services related to loans.

2.6 Collusive activities, including price fixing, fall within the ambit of the FCA. The relevant sections of the FCA under which this complaint falls are Sections 17-18, 34 and 35, which deal with coordinated activities by independent firms.

2.7 Prohibitions under the FCA fall into two main categories. These are 'rule of reason' prohibitions and *per se* prohibitions. Rule of reason prohibitions require that the net competitive effect of a conduct be demonstrated, while *per se* prohibitions do not require any proof of their effects on competition. Practices which fall under the latter category are considered to be unlikely to have any pro-competitive effects and are therefore proscribed without more.

2.8 Investigations carried out under Sections 17 and 35 of the FCA require a 'rule of reason' approach. To prove a breach of these sections the Commission is required to demonstrate that the conduct subject to the investigation has the effect of substantially or unduly lessening competition. By contrast, activities which fall within the ambit of Sections 18 and 34 are *per se* illegal. There is no need to demonstrate the effect of such activities on competition.

2.9 Parts of the relevant Sections are outlined below.

Rule of reason offences:

2.10 **Section 17**—this section proscribes agreements which "have as their purpose the substantial lessening of competition, or have or are likely to have the effect of substantially lessening competition in a market". Subject to Section 17(4) all such provisions are unenforceable. Under Section 17(4), the prohibition may not apply to an agreement which the Commission is satisfied "(a) contributes to the improvement of production or distribution of goods and services; or the promotion of technical or economic progress while allowing consumers a fair share of the resulting benefit; (b) imposes on the enterprises concerned only such restrictions as are indispensable to the attainment of the objectives mentioned in paragraph (a); or (c) does not afford such enterprises the possibility of eliminating competition in respect of a substantial part of the goods or services concerned".

2.11 In conducting investigations under Section 17, the Staff of the FTC must first be satisfied that the alleged agreement/arrangement exists or existed. The Staff would then examine the terms and conditions of the agreement/arrangement which is the subject of the investigation within the context of the following four-step approach:

a) *Definition of the relevant market*—this is necessary in order to establish the market(s) which may be affected by the arrangement and the players therein;

b) *Assessment of market power*—market share, entry barriers and general trading conditions are taken into consideration in assessing whether the firms in question have market power and therefore have the ability to effect an agreement that has a substantially negative effect on competition.

c) *Assessment of effect on competition*—Section 17(1) prohibits provisions which have as their purpose or effect the substantial lessening of competition in a market. It is therefore necessary to establish first, what the purpose of the provision is. If it is not clear that the purpose is to lessen competition then it would be necessary to consider whether it might have the relevant effect.

d) *Assessment of inapplicability*—if it is found that the purpose or effect is to substantially lessen competition in the relevant market, then the Commission will carry out an assessment in accordance with Section 17(4) to satisfy itself that the provision contributes to, or is exclusively directed to, improving the production or distribution of goods or to promoting technical or economic progress and consumers are allowed a fair share of the resulting benefit; is indispensable to the attainment of improved production or distribution; or does not afford an enterprise the possibility of eliminating competition in respect of a substantial part of the goods or services concerned. If the provision is found to satisfy Section 17(4) then it shall remain in force, despite its *ex facie* anti-competitive purpose or effect.

2.12 **Section 35**—the section states that "no person shall conspire, combine, agree or arrange with another person to—

(a) limit unduly the facilities for transporting, producing, manufacturing, storing or dealing in any goods or supplying any service;

(b) prevent, limit or lessen unduly, the manufacture or production of any goods or to enhance unreasonably the price thereof;

(c) lessen unduly competition in the production, manufacture, purchase, barter, sale, supply, rental or transportation of any goods or in the price of insurance on persons or property;

(d) otherwise restrain or injure competition unduly.

2.13 In conducting investigations under Section 35 of the FCA the Staff of the FTC must establish that persons who are supposed to be in competition with each other are "conspiring, combining, agreeing or arranging" to lessen competition unduly or to restrain or injure competition unduly.

2.14 Section 2 of the FCA states that "reference in this Act to the lessening of competition shall, unless the context otherwise requires, include references to hindering or preventing competition". No interpretation of "lessen competition unduly" or "injure competition unduly" is set out in the FCA.

2.15 Given that the primary objective of competition law is to foster efficiency, then any reference in the FCA to "substantial lessening of competition", "lessen competition unduly" and "injure competition unduly" should be interpreted as having a significant negative effect on competition or resulting in the stifling of efficiency or undermining the benefits of efficiency.

"*Per se*" offences:

2.16 **Section 18—**prohibits agreements containing exclusionary provisions. The section states that a provision contained in an agreement is an exclusionary provision if (a) the agreement is entered into or arrived at between persons of whom any two or more are in competition with each other; and the effect of the provision is to prevent restrict or limit the supply of goods and services to, or the acquisition of goods and services from, any particular person or class of persons either generally or in particular circumstances or conditions, by all or any of the parties to the agreement or, if a party is a company, by an interconnected company.

2.17 **Section 34—**this Section makes it illegal for individuals or firms to, directly or indirectly, by agreement, threat, promise or by any other means influence upward or discourage the reduction of the price at which any other person supplies or offers to supply or advertises goods or services.

Agreement

2.18 The four sections of the FCA that are relevant to this case require the existence of an agreement among the participants of the alleged collusive activity. Collusions are generally detected by observing some form of direct communication among the alleged colluders regarding firm specific information on prices or output; and/or by observing the end result of their coordination, from which direct communication may be inferred. In this case evidence of direct communication was neither provided by the Informants nor obtained by the Staff; and therefore the investigation focused on the examination of the competitive markers to determine whether or not those markers are the end result of effective competition or collusive activity. In other words, in the absence of hard evidence, economic analysis must be used to exclude any alternative economic explanation for the behaviour of the alleged colluders.

2.19 Collusion or coordination among firms can take place either through explicit means or through tacit recognition that vigorous competition is not in the best interests of each firm. Explicit coordination involves the formation and entering into of collusive agreements. Tacit coordination, also termed conscious parallelism, exists where in the absence of any formal attempts to implement a collusive outcome, firms, generally oligopolists, understand that if each firm competes less vigorously they might all be able to enjoy higher prices and profits. With repeated interaction, firms will take into account not only the possible increase in current profits but also the possibility of a price war and subsequent losses when deciding whether to undercut a given price. The threat of a vigorous price war would be sufficient to reduce the temptation to cut prices. Oligopolists may therefore be able to "collude" in a purely non-coordinated manner. This type of coordination is not proscribed under the FCA. It should be noted that policy prescription against tacit coordination is preventative rather than corrective.

2.20 In recognition that collusion can be either explicit or tacit, the assessment of competition requires an examination of whether market mechanisms prevent or alternatively facilitate coordinated behaviour which results in higher prices. The extent to which competitors can effectively coordinate - explicitly or tacitly - and sustain such coordination depends on the characteristics of the environment in which they operate.

3. Relevant Characteristics of a Collusive Market

3.1 The feasibility of coordination depends on a number of market characteristics. Those characteristics are:

(a) *The number of firms in the market*—the more firms competing in a market, the more difficult it is for those firms to reach a consensus and thus coordinate their activities successfully. This problem becomes more acute when firms have different cost structures.

(b) *Market concentration*—markets that have a large number of firms are still susceptible to collusive activities if only a few firms account for a large share of the market. It is possible for those few firms to act independently of the smaller firms. Whether or not this is feasible depends of the ability of fringe firms to gain market shares through price cutting.

(c) *The type of product*—it is generally easier for firms to agree on the appropriate coordinated price when their products are homogeneous rather than differentiated.

(d) *Coordinating mechanism*—the costs of forming and enforcing a collusive arrangement can be facilitated if an easy way exists for firms to meet and co-ordinate their activities. A trade association is one such mechanism. .

3.2 The preceding characteristics are necessary but not sufficient conditions for firms to be able to collude successfully. Once an agreement has been consummated, it is essential for it to be sustained over time. Although firms willingly enter into collusive agreement they will have incentives to deviate from the collusive path. In order for the cooperation to be maintained a monitoring system to detect cheating, along with a mechanism for punishing cheaters, must be established. Detection of deviation and the ability and incentive to retaliate are essential to the sustenance of any collusive agreement.

3.3 The following are some of the factors that can affect the sustainability of collusive agreements[1]:

(a) *The number of competitors*—where there are only a few firms in an industry, each member of a collusive agreement is better able to monitor the other's activities, than where there is a large number of firms in the industry. Further, since the colluding firms must share the profits resulting from the collusion an increase in the number of firms would result in each firm getting a smaller share of the profits, and the incentive to cheat would increase. Each firm has more to gain from deviating than by sticking to the collusive path.

(b) *The nature of the products*—where products are homogeneous, not only it is easier for firms to agree on the collusive price level but any deviation from the agreed path is more easily detectable. It is also more likely that changes in market shares are associated with price cutting than where products are heterogeneous.

(c) *Entry barriers*—collusion is very difficult to sustain if there are no or low barriers to entry. In the absence of entry barriers or where those barriers are low any attempt to maintain collusive prices and profits would invite entry, which would erode the profitability of the collusion. Further, where markets are contestable, the likelihood of entry reduces the effectiveness of punishment for any deviation thereby limiting the sustainability of collusion.

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[1] Some of these are the same factors which assist the establishment of the collusive agreement in the first place.

(d) *Interaction and market transparency*—the scope for collusion increases when the same firms interact repeatedly. It will become easier for those firms to sustain collusion when they interact repeatedly on a regular basis than when interaction is infrequent. This is because the time lag between cheating and retaliation is narrower. Before retaliation can take place, detection of deviation must occur. The ease of detecting deviation depends on market transparency. Collusion can be difficult to sustain in situations in which individual prices or market shares are not readily observable. The publication of disaggregated data of firms' transactions contributes to the sustainability of collusion.

3.4 The following is a list of the factors that facilitate successful collusion:

- Small number of competitors
- High market concentration
- Symmetry among firms
- High entry barriers
- Coordinating mechanism
- Frequent interaction among competitors
- Market transparency
- Publication of disaggregated data

4. Indicators of competitiveness

4.1 The structure of an industry is the main determinant of the form and level of competition in that industry. All other things remaining constant, industries with a low level of concentration are more competitive than those that are highly concentrated. Barriers to entry and relative size of firms influence the level of competitiveness in that industry.

Market concentration:

4.2 Economic theory suggests that the vigor of competition in an industry is related positively to the number of firms in that industry. The degree of inequality between the firms is equally as important. The most commonly used proxy for the existence of market power or the level of competition in an industry is some measure of concentration which takes into account the extent of inequality among firms. This concept of competition has its roots in the Structure-Conduct-Performance (SCP) model of competition. The SCP model holds that the structure of the industry (e.g., number of sellers and buyers, product differentiation, vertical integration etc) determines the conduct of firms (e.g. pricing behaviour) and this in turn determines their performance (e.g. production and allocative efficiency). The model holds that the more concentrated the market structure or the greater the inequality between firms, the less competitive will be the market which in turn leads to both higher prices and profits. In other words, the more concentrated the market is, the less likely it is to be competitive.

4.3 The two most commonly used measures of market concentration are the concentration ratio and the Herfindahl-Hirschman Index (HHI). Concentration ratios record the percentage of a market's sales accounted for by a given number of the largest firms in that market. It is possible to calculate a number of concentration ratios for a given market. The two firm concentration ratio (CR2), for example, is defined as the sum of the market shares of the leading two firms in the market. Similarly, the more commonly used four firm concentration ratio (CR4) is the sum of the market shares of the leading four firms in the market.

4.4 Concentration ratios have two significant deficiencies as proxies for the effectiveness of competition in an industry. Firstly, they do not take into account the relative sizes of the leading companies. For example, a market which has four firms each with a 20% market share will have the same concentration ratio as a market in which the leading four firms have respective market shares of 50%, 20%, 7% and 3%. Although in both instances the total market share of the four firms is 80%, it is likely that the competitiveness of the two markets will differ: it is more likely that the market with the four equally sized firms would be more competitive than the other market. Secondly, concentration ratios do not take into account the total number of firms in a market or the market shares of smaller companies.[2]

4.5 The HHI attempts to rectify some of the drawbacks of concentration ratios by taking into account the number and market shares of all firms in the market. The HHI is calculated by summing the squared market shares of all firms in the market. Thus a market consisting of only four firms with market shares of 50%, 25%, 20% and 5% has an HHI of 3550.[3]

4.6 The index attains its maximum value of 10,000 when the industry is supplied by only one firm. The value declines with increases in the number of firms and increases with rising inequality among firms. The HHI therefore ranges between a maximum of 10,000 (where there is only one firm) and a minimum of 0 (where there is a large number of equally sized firms).[4] The range of market concentration as measured by the HHI can be classified as follows:[5]

- Unconcentrated (HHI below 1000)—this HHI threshold would, for example, have 10 equally-sized firms;
- Moderately concentrated (HHI between 1000 – 1800)—at HHI equal to 1800, there may be about 5 equally-sized firms; and
- Highly concentrated (HHI above 1800)

[2] In many industries, the ability of existing firms to expand capacity can provide a more important competitive constraint than the potential for entry. If smaller firms have the capacity to increase output in response to a price increase by leading firms in the market, then they can provide an effective competitive constraint on market behavior.

[3] HHI = $(50^2 + 25^2 + 20^2 + 5^2) = (2,500 + 625 + 400 + 25) = 3550$

[4] The range of the HHI depends on how market share is expressed, for example 50% or 0.5. It could range between 0 and 10,000 or 0 and 1. One is merely a scale of the other.

[5] This classification is based on the US Federal Trade Commission and Department of Justice (DOJ) guidelines.

Barriers to entry and potential competition

4.7 Another indicator of the competitiveness of a market is the presence of barriers to entry. According to the "contestable markets theory", in markets where there are low barriers to entry, competitive pressures could come from the threat of potential entry, in addition to or instead of from existing firms. Therefore, even a firm with a large market share may be subject to competitive pressure from outside of the market where barriers to entry are low.

4.8 In summary, the competitiveness of the market may be assessed with reference to the concentration in the market and the barriers to entry. Market concentration is a function of the number of firms in the market, their respective market shares and the degree of inequality among them. The larger the number of firms and the lower the inequality among them in terms of their market shares, the less concentrated is the market. Conversely, the fewer the firms and the greater the level of inequality, the more concentrated is the market. Economic theory suggests that the more concentrated the market, the less competitive it is likely to be.

4.9 Where markets are unconcentrated or there are low barriers to entry, competition is likely to prevail. Where markets are concentrated and high barriers to entry exist, the level of competition may be low. Table 1 summarizes the competitiveness of a sector under various conditions.

Table 1

Indicators of competitiveness

Market concentration	*Low barriers to entry*	*High barriers to entry*
Unconcentrated	Competitive	Competitive
Concentrated	Likely to be competitive	Uncompetitive

5. Overview of the banking sector

Products offered

5.1 A bank is a type of financial intermediary, which facilitates the channelling of funds between lenders and borrowers. Specifically it is an institution that provides financial services, particularly accepting deposits and making loans. A bank raises funds by collecting deposits from individuals and businesses (lenders); and it makes loans from the pool of deposited money to individuals and businesses (borrowers). [6] The primary assets of a bank are loans and bonds and their primary liabilities are deposits.

5.2 Apart from accepting deposits and making loans, banks provide a number of related services. These include the issuance of credit cards and cheque books; and the facilitation of standing orders, direct deposits and transactions through the use of Automated Teller Machines (ATMs).

5.3 While there may be differences in the quality of services, the products offered by banks are considered to be homogenous.

Market participants

5.4 Commercial banks, merchant banks and building societies are the only licensed deposit-taking institutions in Jamaica. In 1999 credit unions, which are institutions providing products similar to those provided by the deposit-taking institutions, were designated specified financial institutions.

5.5 At the end of 2005, there were six (6) commercial banks, five (5) merchant banks, four (4) building societies and forty-seven (47) credit unions. Building societies and credit unions have specialised loan portfolios. Loans and Advances outstanding at merchant banks at the end of 2005 was only 6.7% of the amounts outstanding at commercial banks. The Staff's investigation will focus on commercial banks given that the allegation relates to these financial institutions and that other institutions play a negligible economic role with regard to loans disbursed to the business sector.

5.6 The six commercial six banks are the Bank of Nova Scotia (BNS), National Commercial Bank (NCB), RBTT Bank Jamaica Limited (RBTT), First Caribbean International Bank (FCIB), Citibank N.A. and First Global Bank (FGB). All banks, with the exception of Citibank and FGB, are publicly traded companies and are listed on the Jamaica Stock Exchange. FGB is an affiliated company of the Grace Kennedy Group of Companies, which is listed on the local exchange.

5.7 Tables 2 and 3 present the market position of the six banks in terms of deposits and loans, asset base and number of branches. The two largest banks are BNS and NCB. Together, they control over 70% of deposits and loans for the years 2003, 2004 and 2005. They also collectively control over 70% of the asset base for commercial banks in 2005 and number of retail banking outlets.

5.8 BNS has maintained the largest market share of the six banks. It controlled over 40% of deposits and loans over the three years, even though its share of loans has declined from

[6] A bank may also lend funds by purchasing corporate and government bonds

47.8% in 2003 to 43.65% in 2005. The second largest bank is NCB, which accounted for between 34% and 37% of deposits and between 30% and 34% of loans. Like BNS, NCB recorded a decline in its share of loans and advances outstanding in 2005. The combined market share of the other four banks in 2003 was less than 50% of BNS market share for that year. In 2005 the smaller banks gained market shares, which resulted in their combined market shares being approximately 60% of BNS share of loans.

5.9 The market positions of the banks in relation to deposits and loans are retained when asset base is used to rank the banks. In 2005 while the difference between BNS and NCB market shares was more than 10 percentage points with respect to loans, the difference was one percentage point with respect to asset base.

Table2

Market Shares in terms of deposits and loans and advances outstanding for the years 2003, 2004 and 2005

Commercial Banks	**2003**		**2004**		**2005**	
	Deposit (%)	**Loan (%)**	**Deposit (%)**	**Loan (%)**	**Deposit (%)**	**Loan (%)**
BNS	42.92	47.80	43.61	45.12	42.16	43.65
NCB	36.60	31.20	35.93	33.41	34.56	30.28
RBTT	8.75	11.71	8.74	11.44	9.20	12.99
FCB	7.37	6.67	6.69	7.10	6.57	9.48
FGB	0.71	0.73	1.88	2.13	3.82	2.30
Citibank	3.65	1.80	3.15	0.80	3.68	1.29
Total (JA$ ’000s)	198,774,798	95,273,701	228,425,427	110,262,425	246,264,962	129,497,596

Source: Bank of Jamaica, www.boj.gov.jm, last accessed June 15, 2006.

Table 3

Asset base and number of branches for the year 2005

Commercial Banks	**Asset base (JA$ ’000s)**	**Share of asset base (%)**	**Number of Branches**
BNS	139,148,835	37	41
NCB	135,897,797	36	47
RBTT	43,235,229	12	20
FCB	25,119,813	7	12
FGB	18,033,075	5	2
Citibank	14,423,536	4	1

Source: (i) Asset base: - Bank of Jamaica, www.boj.gov.jm, last accessed June 15, 2006.

(ii) Branches: - Cable & Wireless, 2006 Business Telephone Directory.

Concentration

5.10 The concentration indicators for the commercial banking sector are reported in Table 4. A two-firm concentration ratio (CR2) was calculated based on the market shares of the six banks for the years 2003, 2004 and 2005. The ratios of 76.72 for deposits and 73.93 for loans and advances outstanding in the 2005, which represent reductions over those which obtained in 2003 and 2004, mean that the two largest banks jointly control almost 77% of deposits and 74% of loans while the remaining 4 banks jointly control a mere 23% of deposits and 26% of loans outstanding. The decreased ratios however represent a marginal shift in market shares between the top two banks and the four smaller ones, in favour of the smaller banks. This suggests a slight reduction in concentration and possibly a miniscule improvement in the degree of competition.

5.11 The HHI figures of over 3000 mean that the commercial banking sector is highly concentrated. The figures of 3127.8 and 3087.77 represent a slight decrease in concentration in 2005 over 2004. Given that there has not been any change in the number of firms, this decreased concentration is as a direct result of a decrease in the level of inequality among the banks.[7] While the larger banks have lost market share to the smaller ones, the degree of disparity between the two groups is much too significant for there to be any impact on the state of competition within the sector.

Table 4

Concentration of Commercial Banking Industry

		2003	2004	2005
CR(2)	Deposit	79.52	79.54	76.72
	Loans & Advances outstanding	79.00	78.53	73.93
HHI	Deposit	3326.39	3327.40	3127.80
	Loans & Advances outstanding	3443.67	3338.50	3087.77

Barriers to entry and potential competition

5.12 Companies or individuals wishing to enter the commercial banking sector must obtain the necessary licence from the BOJ pursuant to the Banking Act. The banking sector is highly specialized and is subject to strict regulation. Entry is therefore unlikely to be quick, especially in the case where the potential entrant is not already a participant in the financial sector.

[7] An industry with six equally sized firms has an HHI of 1,667.

5.13 While there have been changes in ownership of existing commercial banks, there has not been any entry in the commercial banking sector, since the collapse of the financial market. At the end of 1995 there were 11 commercial banks operating in Jamaica. That number declined to nine by the end of 1998 and to six by the end of 1999. The number of banks has since been stabilized at six. In May 2006, however, the Pan Caribbean Financial Services received the necessary approval from the BOJ to convert Pan Caribbean Merchant Bank into a commercial bank.

5.14 While financial institutions – commercial banks, merchant banks, credit unions etc. – offer similar products, there are particular restrictions for each group. For instance, the product offerings of merchant banks are limited when compared to those of commercial banks. Merchant banks cannot offer overdraft facilities and they are required to keep deposits for a minimum of 14 days.

5.15 The amounts of loans and advances outstanding for merchant banks are substantially less than those for commercial banks. The six commercial banks are the primary source of credit in Jamaica.

Association among rival commerical banks

5.16 The Jamaica Bankers Association (JBA) is a representative body for commercial and merchants banks. The group holds regular meetings, where issues affecting the industry as a whole are discussed. The Minutes of twenty-one meetings of the Executive Council of the JBA were obtained for the period September 2003 to July 2005.

5.17 The following references relating to interest rates are contained in the Minutes:

(a) *January 21, 2005*—"BOJ Special Deposit: The President reminded the meeting that in January 2003 the Central Bank instituted a "Special Deposit" requirement for commercial banks and other institutions licensed under the Financial Institutions Act. Each institution has been requested to place cash equivalent to 5% of its Jamaica Dollars deposit liabilities with BOJ. The action was imposed as a deterrent to adverse movements in the foreign exchange market by tightening the Jamaican Dollar Liquidity. BOJ also indicated that the measure would be imposed until normalcy is restored. Based on empirical evidence the membership is of the view that the market has achieved and maintained this normalcy since May, 2003. The Secretariat was asked to draft a letter to the BOJ Governor seeking to revoke the requirements. Because of the liquidity implications the meeting agreed to recommend a phased/gradual withdrawal of the funds. The proposal received unanimous support."

(b) *March 17, 2005*—"Interest/Lending Rates: Council noted that the Ministry of Finance has been voicing concerns about interest rates in the sector. Members cited articles in the *Sunday Herald* calling for the reduction in these rates. Council agreed that it would be ill-advised to make any formal response at this time. It was noted too that individual institutions have started to adjust their base rates and that an overall reduction would eventually take place."

(c) *April 21, 2005*—"Interest/Lending Rates: Reference was made to an article appearing in the *Business Gleaner* about persons who continue to call for reductions in interest rates in the banking sector. It was thought that the issue has now become emotive and although the position of the bankers was relatively complex, Council agreed that there was a need for an industry response to this outcry. It was decided that Mr.

William Clarke would draft a response on behalf of the JBA to clarify the issues in an objective way and also to use the opportunity to strengthen the lobbying exercise for the establishment of a Credit Bureau in Jamaica. Mr. Clarke will forward the draft to the Secretariat."

5.18 The discussion surrounding the reduction of the Special Deposit requirement relates to the creation of market conditions which should lead to a reduction of interest rates. This Special Deposit of 5% was implemented in a single move. The banks all agreed, however, to propose to BOJ a phased reduction.

5.19 It should be noted that there is a direct relationship between this deposit requirement and liquidity and hence interest rates. A reduction in the special deposit requirement will increase the pool of funds available for unlending and should result in an increase in money supply. All things remaining constant, an increase in money supply would lead to a reduction in interest rate. The degree of interest rate reduction will depend on the degree of the reduction in the special deposit requirement as well as the sensitivity of the demand for loans with respect to interest rate.

6. Regulatory framework

6.1 Monetary policy is a government process of managing a country's money supply to achieve specific goals. In other words, it is the means by which a government, usually through its central bank, influences the demand, supply and thus the price of money and credit in order to direct the economic goals of a country. These goals include containing inflation, managing the exchange rate, achieving full employment and economic growth. There are two primary tools that are used to achieve these goals: open market operations and reserve requirements.

6.2 Open market operation is the buying and selling of government securities on the open market in order to expand or contract the amount of money in the banking system. Purchases inject money into the banking system thereby increasing the money supply while sales of securities do the opposite. Open market operation is an indirect means of managing the supply of money. Reserve requirements are the portion of deposits made by customers that banks must keep on hand or hold on deposit at the central bank. A reduction in reserve requirements leads to an expansion of the money supply, while an increase reduces the money supply.

6.3 Monetary policy is classified as being either an expansionary policy or a contractionary policy, where an expansionary policy increases the total supply of money in the economy and thus decreases interest rates, and a contractionary policy decreases the total supply of money and therefore increases interest rates. Expansionary policy is generally used to tackle unemployment by lowering interest rates, while contractionary policy is used to contain inflation by raising interest rates.

6.4 In Jamaica, the monetary policy is conducted by BOJ, the island's central bank, which has a supervisory role over the financial institutions, including commercial banks. BOJ has been targeting price stability using open market operations and reserve requirements. In addition to those tools, BOJ also controls money supply through the direct sales or purchases of foreign currency.

6.5 The central bank's reserve requirements comprise liquid assets ratio and cash reserve ratio. As at January 1, 2000, the liquid asset ratio applicable to commercial banks stood at 34% with respect to local currency, while the cash reserve ratio was 16%. Between January 2000 and March 2002, BOJ consistently reduced both ratios by one percentage point each time it changed the ratios. The last reduction in the cash reserve ratio, from 10% to 9%, was on March 1, 2002. The liquid assets ratio was last changed on August 1, 2002. That change amounted to a reduction from 27% to 23%.

6.6 In January 2003, BOJ introduced, in addition to the cash reserve ratio and the liquid assets ratio, a special deposit requirement of 5%. On March 1, 2005 it reduced the special deposit requirement by 2 percentage points to 3%, stating that the reduction was being instituted in the context of continued stability in the money and foreign exchange markets. The requirement was lifted on May 1, 2006.

6.7 A general trend of interest rate reduction on BOJ's repurchase agreements was evident for the review period of January 2000 to August 2005 (See Appendix D). Between March and August 2000, BOJ consistently reduced rates on its 30-day to 180-day instruments. Those rates however remained unchanged for the rest of the year. Interest rates applicable to the 270-day and 365-day instrument fluctuated during 2000; and were higher at the end of the year than at the beginning.

6.8 In contrast to 2000, up to early June 2001 BOJ had consistently reduced the interest rates applicable to the 270-day and 365-day instruments. No increase was recorded for the other five instruments. For the next four and a half months there were no changes in interest rates. The general trend of reduction was broken on October 30, 2001, when BOJ increased the rates applicable to all instruments, save for the 30-day instrument. Those increases ranged between 20 basis points and 410 basis points. The last rate change for the year resulted in a reduction of the previously increased rates. The reductions on the longer term instruments however were not sufficient to offset the increases.

6.9 Between January and August 2002, there were no increases in interest rates applicable to the seven open market instruments. For the last quarter of 2002 there were three occasions on which the central bank changed rates relating to the 90-day and 120-day instruments. These changes resulted in an overall increase in those rates.

6.10 The year 2003 witnessed the least number of occasions of rate change, though it was the year with the most significant rate increases. On February 10, 2003, BOJ introduced a special 5-month open market instrument at an interest rate of 30 percent, 11.6 percentage points above the rate applicable to the 120-day instrument, which at that time attracted the highest interest rate. The special instrument was subsequently withdrawn on February 14, 2003. At the end of March 2003 interest rates on all seven instruments were substantially higher than the rates obtained at the end of 2002. The increases ranged from a low of 1.75 percentage points to a high of 21.45 percentage points.

6.11 While there were some reductions in rates over the remaining months of 2003, at the end of the year interest rates applicable to five of the seven instruments were higher than the rates obtained in January 2003.

6.12 During the period January 2004 to March 2005, BOJ did not increase interest rates. In fact, since April 2004 it consistently reduced interest rates on all of its open market instruments. Despite the reductions, at the end of 2004 rates on all instruments were higher than those recorded in August 2002. There has not been any rate change since March 26, 2005.[8]

7. Analysis of rate changes and bank charges

7.1 The Informants did not name the banks they think are colluding. The Staff treated all branches of each commercial bank as a single economic decision-making unit as our investigation revealed that decisions on loans are effectively centralised. The investigation therefore focused on six commercial banks. As set out in Section 5 herein BNS and NCB were found to have the largest market shares in terms of deposits, loans outstanding, asset base and branches. Together they account for over 70% of the market. The smallest banks were found to be FGB and Citibank.

7.2 In order for a collusive agreement to have any appreciable effect on the market, parties to the agreement must collectively possess market power. If we use market share as a proxy for potential market power, then effective collusion in our commercial banking sector must involve at least one of the banks with the largest market shares.

7.3 The following analysis relates to corporate loans. A general trend of price reduction was exhibited during the review period of January 1, 2000 to August 31, 2005. RBTT, FCIB and FGB consistently reduced rates during the review period. BNS and NCB increased rates once, while Citibank's rates fluctuated throughout the period. Overall all banks had lower rates at August 31, 2005 than they had at January 1, 2000. See Appendix B for rates charged on corporate and personal loans and Appendix C for the dates when these rates were announced and/or made effective by BNS and NCB.

7.4 Table 5 sets out the number of interest rates changes for the period. During that period there were [✂] rate changes. Citibank, the smallest bank, reported the greatest number of rate changes, while RBTT recorded the least. Citibank and RBTT accounted for [✂] and 3 rate changes respectively. The year 2003 was the least active in terms of the number of rate changes. In that year only three changes were made. In contrast 2001, 2002 and the period January 1, 2005 to August 31, 2005 were the most active periods.

Table 5

Number of interest rate changes, January 1, 2000 – August 31, 2005

Commercial banks	***2000***	***2001***	***2002***	***2003***	***2004***	***August 2005***
BNS	1	2	4	-	1	2
NCB	2	3	2	1	1	2
RBTT	-	1	1	-	-	1
FCIB	1	2	2	-	-	1
FGB	-	1	1	1	1	1
Citibank	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

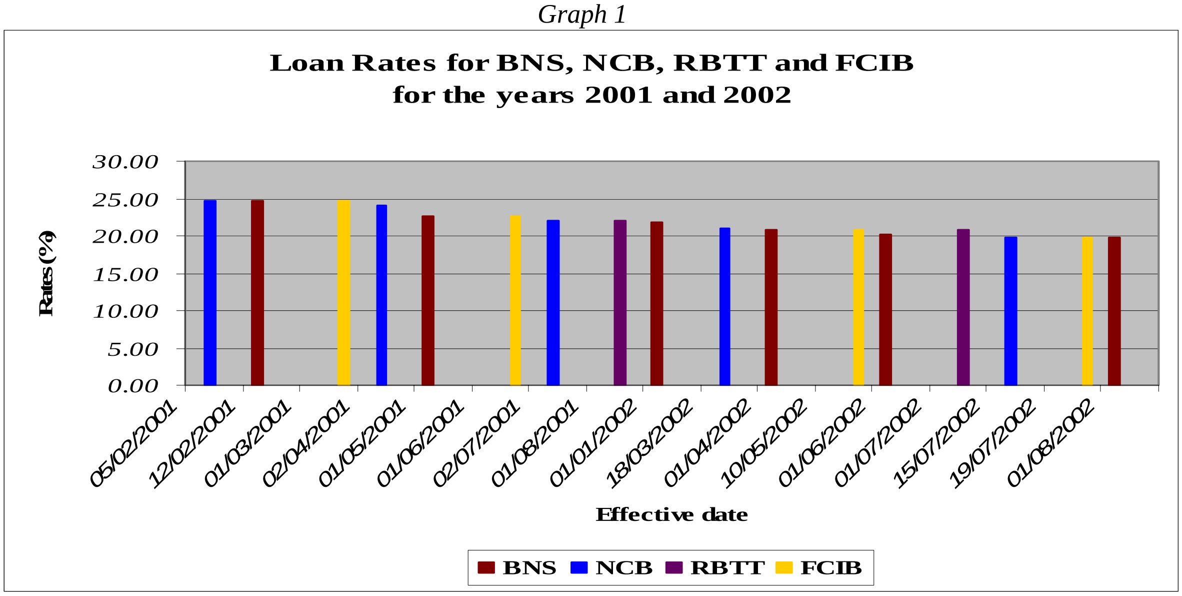
[8] The investigation covers the period January 1, 2000 to August 31, 2005.

7.5 The allegation of collusion was received by the Staff of the FTC in April 2005. Between April 2005 and August 2005 there were 5 rate changes implemented by five of the six banks. RBTT is the only bank that did not change its rate during that period. On June 1, 2005 both BNS and FCIB effected rate changes. Prior to those changes, BNS implemented a rate change on March 1, 2005; and FCIB changed its rate in July 2002. Citibank and NCB reported rate changes on July 1 and July 7, 2005 respectively. Their prior rate changes were on April 1, 2005.

7.6 Graph 1 illustrates interest rates levels for BNS, NCB, RBTT and FCIB for the period January 1, 2001 to December 31, 2002. These two years were singled out due to the relative frequent adjustments in interest rates. Citibank, while recording the greatest number of rate changes, is excluded along with FGB on the basis of their size.

7.7 The price changes recorded is suggestive of a period of competitive price cutting. Among these four banks NCB was the first bank to reduce its rate - a reduction that amounted to 25 basis points below BNS rate. Within a week BNS reduced its rate equalling the rate charged by NCB. FCIB then reduced its rate to match those of BNS and NCB. On April 2, 2001 NCB, again reduced its rate; and in less than a month BNS also reduced its rate. But, instead of matching NCB's rate it reduced its rate to an amount of 125 basis points below NCB's rate. Again FCIB reduced its rate to match that of BNS. This pattern of price cutting and matching continued into 2002. In the second half of that year NCB, BNS and RBTT all had the same rate of 19.75%. NCB moved to that rate on July 15, 2002; and within four days FCIB matched NCB's rate. On August 1, 2002, instead of undercutting the rates being offered by NCB and FCIB, BNS again chose to offer the same rate. This was the last rate change for 2002.

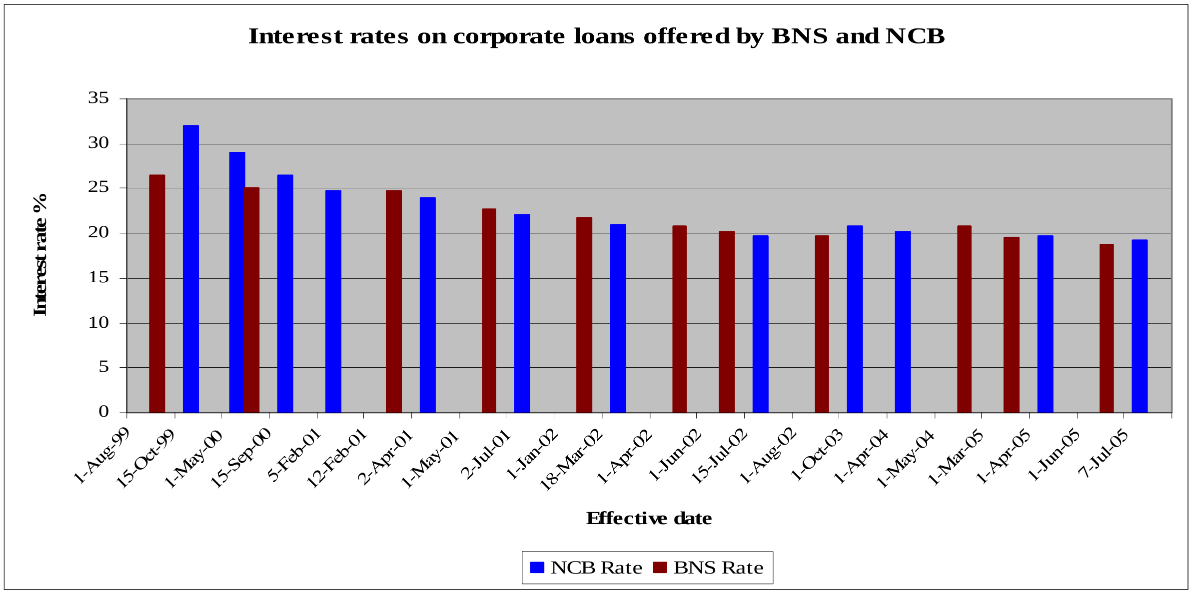
Graph 1



7.8 Graph 2 represents interest rates of the two largest commercial banks, BNS and NCB, during the period April 1, 1999 and August 31, 2005. At the beginning of the period NCB's rate was substantially higher than that offered by BNS. The two banks reduced their rates over the period with NCB effecting 12 changes – eleven reductions and one increase; while BNS effected 11 rate changes – ten reductions and one increase.

7.9 Up to 2002 both BNS and NCB consistently reduced rates. NCB appeared to be the more aggressive of the two banks. With the exception of its first two adjustments, each reduction amounted to a rate lower than BNS' prevailing rate. On two occasions BNS adjusted its rate to match NCB's rate. For the period 2003 to August 2005, the intensity of the apparent competition seems to have declined. During that period NCB implemented four rate adjustments, which were all above BNS' prevailing rate.

Graph 2



7.10 Table 6 summarizes the corporate loan rate changes by the two largest banks, BNS and NCB and by the central bank over the review period (see Appendix E). Between 2000 and August 2002, the adjustments by BOJ are suggestive of a positive economic environment represented by stability in both the foreign exchange and money markets. That period of general rate reduction was interrupted in the fourth quarter of 2002 and continued into 2003. Normality, in terms of rate reduction seemed to have returned in 2004, although the special deposit was still in place until the initial reduction in March 2005.

Table 6

Summary of BOJ, BNS and NCB rate adjustments, January 1, 2000 – August 31, 2005

Period	Actions by		
	BOJ	BNS	NCB
2000	Adjustments: Reductions in the cash reserve ratio from 16% to 13%; and liquid assets ratio from 34% to 31%. General reduction in interest rates on all open market instruments.	One adjustment: Increase in rate by 1 percentage point.	Two adjustments: Reduction in rate by a total of 5.5 percentage points.
2001	Adjustments: Reductions in the cash reserve ratio from 13% to 10%; and liquid assets ratio from 31% to 28%. General reduction in interest rates on all open market instruments.	Two adjustments: Reduction in rate by 2.25 percentage points.	Three adjustments: Reduction in rate by a total of 4.5 percentage points.
2002	Adjustments: Reductions in the cash reserve ratio from 10% to 9%; and liquid assets ratio from 28% to 23%. General reduction in interest rates on all open market instruments up to August. Significant increase in rates on 90-day and 120-day instruments.	Four adjustments: Reduction in rate by a total of 3 percentage points.	Two adjustments: Reduction in rate by a total of 2.25 percentage points.
2003	Adjustments: Introduction of special deposit requirement of 5%. Introduction of 150-day instrument at an interest rate of 30%. Significant increases in the rates applicable to longer term open market instruments.	No adjustment.	One adjustment: Increase in rate by 1 percentage point.
2004	Adjustments: General reduction in interest rates on all open market instruments.	One adjustment: Increase in rate by 1 percentage point.	One adjustment: Reduction in rate by 0.50 percentage point.
January – August 2005	Adjustments: Reduction in interest rates on all open market instruments. Last adjustment was on March 26, 2005. Reduction in special deposit from 5% to 4%.	Two adjustments: Reduction in rate by a total of 2 percentage points.	Two adjustments: Reduction in rate by a total of 1 percentage point.

<u>Assessment of corporate loan rates adjustments in the year prior to receipt of complaint</u>

7.11 The first complaint, alleging price gouging and excessive pricing, was received on April 14, 2005; and the second, alleging price fixing and collusion, was received on April 21, 2005. Between April 2004 and April 1, 2005, there was some amount of rate changes implemented by commercial banks. NCB changed its corporate loan prime rate twice. On April 1, 2004 it reduced its rate by 50 basis points; and exactly a year later that rate went down by another 50 basis points. Similarly, BNS implemented two rate changes during the period. On May 1, 2004 it increased its rate by 100 basis points; and on March 1, 2005 it reduced its rate by 125 basis points.

7.12 With the exception of Citibank, which changed its rate a number of times, there was very little movement in rates by the other commercial banks. FGB and RBTT each had only one rate change. Both banks reduced rates. FCIB did not change its rates.

7.13 Over the same period BOJ reduced, on a consistent basis, interest rates applicable to all its open market instruments. On April 2, 2004 it reduced its rates, which resulted in reductions ranging from 25 basis points on its 30-day instrument to 55 basis points on its 365-day instrument. The eighth rate change for the period took effect on March 26, 2005, resulting in the overall reduction over the one-year period ranging from 200 basis points on the shortest term instrument to 380 basis points on the longest one. It should be noted that at the beginning of March 2005, the rates on all seven instruments were higher than the rates recorded in August 2002.

7.14 In addition to reducing the rates applicable to its open market instruments, BOJ also reduced the special deposit requirement from 5% to 3% on March 1, 2005, thereby increasing the amount of loanable funds. There were no changes in the cash reserve ratio and the liquid assets ratio, which were last reduced on March 1, 2002 and August 1, 2002 respectively.

Interest rates on personal loans

7.15 The analysis of personal loans relates to four of the six banks. These banks are BNS, NCB, FGB and FCB. Citibank does not offer personal loans; and RBTT provided us with information relating to commercial loans only. As with interest rates on corporate loans, there was a downward trend in interest rates on personal loans. The banks with the highest rates at January 1, 2000 were FGB with a rate of 39% and NCB with a rate of 36%. At the end of the review period FGB's rate was 21.75% and NCB's rate was 24%.

7.16 During the period there were a total of 28 rate changes. Of that number, there were two increases implemented by NCB and BNS. FCIB which implemented five rate changes always reduced its rates so that its lowest rate falls below the rates of either NCB or BNS. Like FCIB, FGB implemented five rate reductions. Its last two rate changes resulted in an amount below NCB's prevailing rate.

7.17 The years 2001 and 2002 were the most active in terms of rate changes. During those two years NCB and BNS together implemented nine rate changes. On three out of five occasions, NCB adjusted its rate to amounts below BNS's lowest rates.

Table 7

Pattern of personal loans interest rates adjustments, January 1, 2000 – August 31, 2005

	2000	2001	2002	2003	2004	2005
January						
February		NCB	FGB			
March		BNS	NCB			
April		NCB			NCB	
May	NCB BNS	BNS			BNS FGB	
June	FCIB	FCIB				FCIB FGB NCB
July		NCB	NCB FCIB			
August	BNS					
September	NCB					
October		FGB	BNS	NCB	BNS	
November		BNS		FGB		
December			FCIB			

7.18 Table 7 shows the timing of interest rate changes for the period January 1, 2000 to August 31, 2005. From the table there are no discernible trends in terms of the timing of rate adjustments.

Bank charges

7.19 Commercial banks offer a number of services which attract a fee or charge. In their complaint, the Informants did not indicate what services they believe were the subject of the banks' alleged collusive activities. The analysis of bank charges relates to the two largest banks, BNS and NCB; and covers services relating to loan disbursement.

7.20 BNS has three categories of loan related fees. These are application, annual renewal and commitment/acceptance fees. Application and commitment/acceptance fees apply to both corporate and personal loans, while annual renewal fees apply to personal loans only. NCB has one type of loan related fee – commitment/renegotiation fee.

7.21 BNS has a tier structure for application and annual renewal fees with respect to loans below one million dollars. For those loans fixed fees are charged. For loans in amounts greater than one million, a percentage of the loan is charged as the fee.

7.22 During the review period, January 1, 2000 to August 31, 2005, BNS adjusted its fees five times – almost all the adjustments were increases. Each adjustment was implemented on November 1 of each year. NCB effected 4 rate changes. These changes took effect on December 1, 2002, January 10, 2003, November 1, 2004 and July 1, 2005. All adjustments were increases. There was only one occasion on which both banks adjusted their fees on the same date, November 1, 2004.

7.23 On that date, NCB increased it minimum commitment fee by 100%, while BNS increased its application and commitment fees by 14.12% and 12.5% respectively.

8. Summary

8.1 The Informants, JMA and JAS, alleged that commercial banks are colluding with respect to lending interest rates and bank charges. As previously stated, they did not indicate to the Staff of the Commission, the banks they believe are colluding. The complaint was lodged during the same period in which the Informants had been lobbying, through the print media, for the reduction of interest rates. See Appendix A for a summary of events immediately surrounding the date the complaint was received.

8.2 The conduct alleged in the complaint falls within several sections of the FCA which require the existence of an agreement among the alleged colluders. No agreement in the form of direct communication was obtained or provided. The investigation therefore focussed on the examination of the adjustments of interest rates and bank charges by the banks to determine whether those adjustments are the end result of effective competition or collusive activity.

8.3 Given that collusive activities are more likely to be found in markets that exhibit certain characteristics, the first step was to analyse the commercial banking sector. These characteristics being referred include high concentration, a small number of firms, homogeneous products, and a coordinating mechanism. The commercial banking sector comprises six banks and has an HHI of over 3000, making it highly concentrated, with the two largest banks accounting for more than 70% of loans and deposits. The sector has an active, sustainable and well organized trade association, the Jamaica Bankers Association – a vibrant coordinating mechanism.

8.4 Having determined that the sector has the structural conditions that favour collusion, an analysis of the interest rates and bank charges and interaction of the six banks was carried out. The examination of movements in interest rates applicable to corporate and personal loans did not reveal any trend that could be associated with an agreement among the banks. The timing of the rate adjustments is not inconsistent with the independent reaction of individual banks to the regulatory environment in which they operate. Interest rates tend to trend downward when BOJ reduces its rates on a consistent basis.

8.5 Generally when firms (suppliers) collude on prices, the result of that collusion is higher prices than what would obtain absent the collusion. The colluding firms would generally increase their prices. Contrarily, in this case there was an overall reduction in interest rates during the review period; and there is no evidence to suggest that the sizes of those reductions, implemented by each bank, are the subject of a collusive agreement among the banks.

8.6 In January 2003 BOJ introduced a special deposit requirement of 5% thereby reducing the pool of funds available for unlending. The BOJ implemented the 5% in a single move. Minutes of a meeting of the Banker's Association held on January 21, 2005 revealed that banks agreed to propose to BOJ a phased reduction of the special requirement. Between March 2005 and May 2006, BOJ reduced the special deposit requirement in three stages.

8.7 It should be noted that the three main sources of income of the commercial banks are interest income, fee and commission income and foreign exchange income. Depending on the sensitivity of the demand for loans with respect to interest rate, a reduction in rates could amount to a reduction in interest income. If the demand for loans is not very sensitive to changes in interest rates then a reduction in rates would lead to a reduction in interest income. On the other hand if demand is highly sensitive then a reduction in interest rates would result in an increase in interest income.

8.8 Since no direct or indirect evidence of a collusive agreement with respect to interest rate and bank charges among the six commercial banks was uncovered by the Staff, there is no need to conduct the market analysis outlined in section 2.11 since such analysis would be required only to determine the effect of said agreement on competition.

9. Conclusions

9.1 The structural conditions of the sector favour collusion.

9.2 There is no evidence that the observed behaviour of the commercial banks is the result of a collusive agreement. In fact the observed behaviour is not inconsistent with competition.

9.3 The observed rate changes implemented by the commercial banks are not inconsistent with independent reactions to the policies of the BOJ.

9.4 While BOJ reduced the interest rates on all its open market instruments during the period April 2004 to the end of March 2005, there were very little changes in rates implemented by the commercial banks. There were, however, noticeable interest rates reductions implemented by the banks following the reduction in the special deposit requirement. Based on Minutes of a meeting of the JBA, it was the bankers who requested the reduction of the deposit requirement.

9.5 While the banks agreed that the elimination of the special deposit requirement should be implemented on a phased basis, there is no evidence to indicate that they agreed on either the timetable or the amounts by which they would reduce their individual rates.

9.6 The investigation did not uncover any direct evidence of communication among commercial banks to enter into a collusive agreement to fix prices, allocate markets or engage in any activity geared towards reducing competition among them. Similarly, no indirect evidence of such an agreement was uncovered.

10. Recommendation

10.1 Based on the foregoing, the Staff recommends that the matter be closed.

Appendix A. Summary of Events Immediately Surrounding the Complaint

DATE		EVENT	
2005	January 21	Bankers agreed to write to BOJ requesting reduction of the Special Deposit Requirement on a phase basis.	
	February 7	BOJ reduced interest rates applicable to all its open market instruments.	
	February 23	Article in Gleaner: "***Scotiabank to stick to core banking***" Statement by Mr. Clarke, "The economic environment continues to be challenging and interest margins have contracted, due to the lower level of interest rates."	
	February 28	BNS announced that it would reduce interest rates on March 1, 2005.	
	March 1	BOJ reduced special deposit requirement from 5% to 3%.	
		BNS and Citibank reduced interest rates	
	March 7	BOJ reduced interest rates applicable to all its open market instruments.	
	March 13	Articles in the Sunday Herald "*Meeting fiscal target could help reduce bank spreads*"; "*BOJ interest rate reduction*"; "*Jamaican spreads way above international norm*"; "*Lack of competition in the sector*"; and "*Banking spreads still too high*" Editorial: "*Banks must lower lending rates faster*"	
	March 26	BOJ reduced interest rates applicable to all its open market instruments.	
	April 1	NCB, RBTT and Citibank reduced rates. NCB and RBTT reduced to same rate.	
	April 8	JMA and JAS placed a full page ad in the Gleaner. Title of ad "***Interest Rates Spread Still Too High"***	
		Article in the Financial Gleaner: "***Banks go on the offensive on lending rates***". The article contained quotes from President of the JMA, Mr. William Clarke of BNS and Mr. Patrick Hylton of NCB.	
	April 9	Article in the Gleaner: "***Local Farmers demand lower interest rates***"	
	April 14	**JMA and JAS complained to the Staff of the FTC.**	
	April 20	Article in the Gleaner: "***Interest rate battle heats up – JMA, JAS ask the FTC to probe price gouging by commercial banks***"	
	April 21	JBA monthly meeting	
		JMA and JAS withdraw first complaint and lodge another.	
		JMA held a special luncheon as a tribute to Mr. Seaga's public life.	
	April 22	Article in the Observer: "***JMA wants bank licence***"	
	April 27	Article in Gleaner: "***Brady defends banks' interest rate policies***"	
	April 28	Article in Gleaner: "***Paulwell backs call for lower interest rates***"	
	April 29	Article in the Financial Gleaner: "***JMA and JAS respond to bankers***"	
		Article in the Financial Gleaner: "***Bankers' association speaks on interest rate spreads"***	

DATE		EVENT	
	May 1	Article in Gleaner: "***Manufacturers desperately need lower interest rates***". Contributor is Mr. Edward Seaga.	
	June 1	BNS and FCIB reduced rates.	
	June 3	FGB reduced rates.	
	July 1	Citibank reduced rates.	
	July 1	NCB reduced rates.	
	September 1	FCIB reduced rates.	

Appendix B. Rates charged on corporate loans and personal loans

B1. Rates charged on corporate loans by the six banks during the period January 1, 2000 and August 31, 2005*

Year	Effective Date	Rate	Percentage point increase / (reduction)	Bank
2000	May 1	29%	(3.0)	NCB
	May 1	25%	(1.5)	BNS
	June 1	26%	(5.0)	First Caribbean
	September 15	26.5%	(2.5)	NCB
2001	February 5	24.75%	(1.75)	NCB
	February 12	24.75%	(0.25)	BNS
	March 1	24.75%	(1.75)	First Caribbean
	April 2	24%	(0.75)	NCB
	May 1	22.75%	(2.00)	BNS
	June 1	22.75%	(2.00)	First Caribbean
	July 2	22%	(2.00)	NBC
	August 1	22%	n/a	RBTT
	October 16	30%	(9.00)	First Global
2002	January 1	21.75%	(1.00)	BNS
	February 21	29%	(1.00)	First Global
	March 18	21%	(1.00)	NCB
	April 1	20.75%	((1.00)	BNS
	May 10	20.75%	(2.00)	First Caribbean
	June 1	20.25%	(0.50)	BNS
	July 1	20.75%	(1.25)	RBTT
	July 15	19.75%	(1.25)	NCB
	July 19	19.75%	(1.00)	First Caribbean
	August 1	19.75%	(0.50)	BNS
2003	October 1	20.75%	1.00	NCB
	November 3	27%	(2.00)	First Global
2004	April 1	20.25%	(0.50)	NCB
	May 1	20.75%	1.00	BNS
	May 3	24	(3.00)	First Global
2005	March 1	19.5%	(1.25)	BNS
	April 1	19.75%	(0.50)	NCB
	April 1	19.75%	(1.00)	RBTT
	June 1	18.75%	(0.75)	BNS
	June 1	19.5%	(0.25)	First Caribbean
	June 3	21.75%	(2.25)	First Global
	July 1	19.25%	(0.50)	NCB

* Information relating to Citibank was removed.

B2. Rates charged on personal loans by four banks during the period January 1, 2000 and August 31, 2005

Year	Effective Date	Rate	Bank
	May 1	33.00%	NCB
	May 1	30.24-32.10%	BNS
	June 2	29-33%	First Caribbean
	August 1	29.56-31.91%	BNS
	September 15	30.50%	NCB
2001	February 5	28.75%	NCB
	March 1	28.88-30.59%	BNS
	April 2	28%	NCB
	May 1	24.01-29.84%	BNS
	June 1	27.75-31.75%	First Caribbean
	July 2	26%	NBC
	October 16	30%	First Global
	November 25	24.01-28.30%	BNS
2002	February 21	29%	First Global
	March 18	25%	NCB
	July 15	23.75%	NCB
	July 19	22-23%	First Caribbean
	October 28	20.50-27.15%	BNS
	December 2	21-22%	First Caribbean
2003	October 1	24.75%	NCB
	November 3	27%	First Global
2004	April 1	24.25%	NCB
	May 1	23.10-28.90%	BNS
	May 3	24%	First Global
	November 1	22.50-31.75%	BNS
2005	June 1	20-22%	First Caribbean
	June 3	21.75%	First Global
	July 1	24%	NCB

Appendix C. Announcement and Effective Dates of Rates Charged by the BNS and NCB during the Period June 1, 1999 and September 1, 2005

Year	Announcement Date	Effective Date	Rate	Bank
2000		May 1	29%	NCB
	April 18	May 1	25%	BNS
		September 15	26.5%	NCB
2001		February 5	24.75%	NCB
	February 9	February 12	24.75%	BNS
		April 2	24%	NCB
	April 27	May 1	22.75%	BNS
		July 2	22%	NCB
2002	January 3	January 1	21.75%	BNS
		March 18	21%	NCB
	March 21	April 1	20.75%	BNS
	June 4	June 1	20.25%	BNS
		July 15	19.75%	NCB
	July 29	August 1	19.75%	BNS
2003		October 1	20.75%	NCB
2004		April 1	20.25%	NCB
	April 30	May 1	20.75%	BNS
2005	February 28	March 1	19.5%	BNS
		April 1	19.75%	NCB
	May 30	June 1	18.75%	BNS
		July 7	19.25%	NCB

Appendix D. Bank of Jamaica Open Market Operation for the Period March 10, 2000 to May 3, 2006

Effective Date	*30-day*	*60-day*	*90-day*	*120-day*	*180-day*	*270-day*	*365-day*
March 10, 2000	17.50	18.25	18.40	18.50	**19.00**		
March 28, 2000	17.30	17.95	18.10	18.20	**18.55**		
April 27, 2000	17.00	17.65	17.80	17.90	**18.25**		
July 28, 2000	16.75	16.95	17.05	17.20	**17.40**		
August 11, 2000	16.45	16.60	16.70	16.80	**17.05**		
September 18, 2000	16.45	16.60	16.70	16.80	**17.05**	17.60	18.00
October 4, 2000	16.45	16.60	16.70	16.80	**17.05**	20.00	22.00
October 23, 2000	16.45	16.60	16.70	16.80	**17.05**	17.60	18.00
November 24, 2000	16.45	16.60	16.70	16.80	**17.05**	20.00	22.00
December 28, 2000	16.45	16.60	16.70	16.80	**17.05**	20.00	21.00
February 14, 2001	16.45	16.60	16.70	16.80	**17.05**	19.25	20.00
February 20, 2001	16.45	16.60	16.70	16.80	**17.05**	18.75	19.50
March 8, 2001	16.45	16.60	16.70	16.80	**17.05**	18.25	19.00
March 12, 2001	16.45	16.15	16.25	16.40	**16.70**	17.75	18.50
March 22, 2001	15.50	15.60	15.70	15.80	**16.15**	17.00	17.75
April 11, 2001	15.50	15.60	15.70	15.80	**16.15**	16.75	17.50
May 21, 2001	14.75	14.85	14.95	15.05	**15.30**	15.70	16.50
June 8, 2001	14.50	14.60	14.70	14.80	**15.00**	15.35	15.90
June 25, 2001	14.25	14.35	14.45	14.55	**14.75**	15.35	15.90
October 30, 2001	14.25	14.55	14.75	15.00	**15.50**	19.45	19.90
December 28, 2001	14.25	14.35	14.45	14.55	**15.00**	18.40	18.90
January 9, 2002	14.25	14.35	14.45	14.55	**15.00**	17.00	17.90
February 6, 2002	14.00	14.10	14.20	14.30	**14.70**	15.90	16.70
February 14, 2002	13.75	13.85	13.95	14.05	**14.40**	15.00	15.80
March 11, 2002	13.25	13.35	13.45	13.55	**13.80**	14.20	15.00
July 11, 2002	12.95	13.05	13.15	13.25	**13.45**	14.00	14.90
August 7, 2002	12.95	13.05	13.15	13.25	**13.45**	13.85	14.50

Effective Date	*30-day*	*60-day*	*90-day*	*120-day*	*180-day*	*270-day*	*365-day*
September 9, 2002	12.95	13.05	17.25	17.05	**13.45**	13.85	14.50
October 9, 2002	12.95	13.05	19.25	19.40	**13.45**	13.85	14.50
October 28, 2002	12.95	13.05	18.25	18.40	**13.45**	13.85	14.50
March 19, 2003	12.95	13.05	18.25	18.40	**19.65**	21.50	24.00
March 26, 2003	15.00	15.30	20.00	24.00	**33.15**	34.50	35.95
April 25, 2003	15.00	15.30	20.00	24.00	28.00	32.50	33.00
July 8, 2003	15.00	15.30	20.00	24.00	**26.50**	27.50	28.00
August 4, 2003	15.00	15.30	18.00	22.00	**25.00**	25.75	26.00
September 9, 2003	15.00	15.30	18.00	21.00	**23.50**	23.75	24.00
December 10, 2003	15.00	15.30	17.00	20.00	**21.00**	22.00	23.00
January 9, 2004	15.00	15.30	16.00	18.00	**19.50**	21.00	22.00
January 21, 2004	15.00	15.20	15.50	17.00	**18.25**	20.00	21.00
January 26, 2004	14.85	15.00	15.10	16.00	**17.25**	18.75	20.00
February 16, 2004	14.85	15.00	15.10	15.50	**16.25**	17.75	19.00
February 27, 2004	14.85	15.00	15.10	15.50	**16.00**	17.25	18.50
March 10, 2004	14.85	15.00	15.10	15.50	**16.00**	16.95	17.95
April 2, 2004	14.60	14.70	14.80	15.10	**15.60**	16.50	17.40
April 19, 2004	14.40	14.50	14.60	14.85	**15.30**	16.00	16.90
May 5, 2004	14.20	14.30	14.40	14.55	**15.05**	15.65	16.40
September 3, 2004	14.00	14.10	14.20	14.35	**14.80**	15.35	16.00
December 28, 2004	13.80	13.95	14.05	14.15	**14.30**	15.00	15.50
February 7, 2005	13.50	13.65	13.75	13.85	**14.00**	14.50	15.00
March 7, 2005	12.95	13.10	13.20	13.30	**13.45**	14.00	14.50
March 26, 2005	12.60	12.70	12.75	12.85	**13.00**	13.25	13.60

Appendix E. Summary of BNS and NCB Rate Changes and BOJ's Adjustments to Reserve Requirements and Interest Rate Applicable to its 180-Day Open Market Instrument