Terms of Reference

JAMAICA: Assessing Competition in Banking

A. Background

A well-functioning financial sector is fundamental to support Jamaica's path towards enhanced competitiveness and private sector growth. In the absence of well-developed capital markets, firms largely depend on bank financing as a source of external funding. However, low levels of competition and high intermediation costs in the banking sector can retard economic activity and private sector development. Deep and wide of financial markets play an important role in the allocation of resources in the economy and ultimately investment and growth. Shallow markets and low access to basic financial services increase transaction costs, particularly for more vulnerable segments such as MSMEs and low income households.

Jamaica has experienced 30 years of low economic growth and high fiscal deficits, with a significant impact on the development of the financial sector. The combination of slow economic growth and high levels of sovereign debt has limited the evolution of the corporate and financial sectors. While the ratio of financial assets to GDP is relatively high, this is largely explained by the large, though declining and proportion of sovereign debt on the financial sector's balance sheet. Deposit Taking Institutions (DTIs) account for 40 percent of financial sector assets.[1] Non-Bank Financial Institutions include non-bank securities dealers (23 percent of assets), insurance companies (11 percent), credit unions (3 percent), and pension funds (12 percent). Commercial banks account for 70 percent of the total loan portfolio of DTIs, while credit unions account for 10 percent. Despite credit unions' small share of total lending, their client base consists of a third of the population. In addition, there is a small and largely unregulated microfinance sector (approximately 30,000 – 40,000 clients) that represents about 25 percent of the total lending of credit unions. Financial intermediation is weak. Credit to the private sector is well below its potential given the country's characteristics. Despite achieving growth rates above 10 percent over the last five years (real growth of 3.4 percent), overall credit to the private sector remains limited.[2] This is largely the result of banks' historical focus on providing low-risk financing to the public sector rather than lending to the private sector. Credit to the private sector accounts for only 29 percent of GDP, compared to total deposits representing 40 percent of GDP. Further, credit is concentrated in loans to households and medium/larger corporates. Lending to MSMEs is limited at 15 percent of the total portfolio of commercial banks. [3]The financial sector lags behind its regional peers in terms of competition.

[1] DTIs consist of seven commercial banks, two building societies, and two merchant banks. Commercial banks represent 76 percent of DTIs' assets, building societies 22 percent, and merchant banks less than 2 percent. There 29 credit unions (i.e. cooperative societies). While the total population of micro-finance institutions is not known, the Ministry of Finance and the Public Service has confirmed that 26 microfinance institutions have applied to the Ministry and obtained exemptions from the Money Lending Act.

[2] Of note, the increase in private sector credit to GDP for 2015 was 3.1 percent relative to an increase in private sector credit to GDP of 2.0 per cent for 2011. Further, the stock of private sector credit as a proportion of GDP was 30.7 percent as at end 2015 relative to 25.5 percent at end 2011.

[3] BoJ Credit Conditions Survey, 2013.

Competition in the banking sector is low, with high concentration levels as two banks hold over 75 percent of total assets and deposits. The banking sector was restructured following a severe financial crisis in the 1990s and this resulted in significant concentration. This is reflected by the H-statistic for Jamaica, which stood at 0.43 in 2010, well below its regional peers and the LAC average. Furthermore, the market power of banks, as measured by the Lerner index, has increased over time, reaching 0.40 in 2010, on the high end of its regional peers.[4]

Figure 1: H-statistic[5], 2010

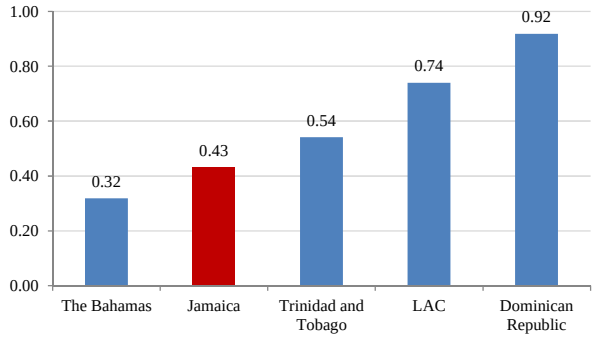
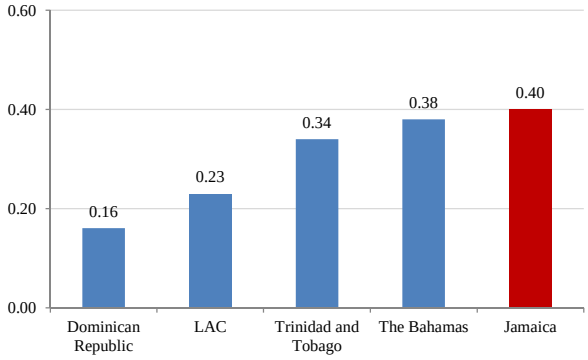


Figure 2: Lerner index[6], 2010



*Source: World Bank calculations, Global Financial Development Databas*Interest rates and spreads are well above regional peers and may be explained by a number of factors. The lending-deposit spread is 12 percent, compared to the 7.9 percent for the regional median, and 6.2 percent for the income group median. Historically, high sovereign borrowing needs have pushed up the lending rate and contributed to the observed high spread. The interest rate spread is further elevated by the high operating cost of the banking sector, which is likely the result of a combination of factors, including (i) high financial sector taxation

[4] In general, higher numbers for the H-statistic indicate higher levels of competition. The Lerner index directly measures market power. Higher values of this index indicate greater market power and lower levels of bank competition.

[5] The H-statistic is calculated by estimating the following equation: $\ln(P_{it}) = \alpha_i + \beta_1 \ln(W_{1,it}) + \beta_2 \ln(W_{2,it}) + \beta_3 \ln(W_{3,it}) + \gamma \ln(Z_{it}) + \delta D + \varepsilon it$. Where *i* denotes banks and *t* denotes years. P is the ratio of gross interest revenues to total assets (proxy for the output price of loans), *W1* is the ratio of interest expenses to total deposits and money market funding (proxy for input price of deposits), *W2* is the ratio of personnel expenses to total assets (proxy for input price of labor) and *W3* is the ratio of other operating and administrative expenses to total assets (proxy for input price of equipment/fixed capital). *Z* is a matrix of controls including the ratio of equity to total assets, the ratio of net loans to total assets, and the logarithm of assets (to control for bank size effects). *D* is a vector of year dummies, while αi denote bank-level fixed effects. The H-statistic equals β1 + β2 + β3.

[6] The Lerner index is computed using the formula (P-MC)/P, where P is the price of banking output prices and MC is the marginal costs. P is calculated as total bank revenue over assets and MC is calculated by taking the derivative from a translog cost function. More details can be found in Demirgüç-Kunt and Martínez Pería (2010): "A Framework for Analyzing Competition in the Banking Sector: An Application to the Case of Jordan."

(CIT and asset tax amounting to nearly 50 percent of bank revenue); (ii) high personnel cost due to unionized wage structure; (iii) high percentage of cash transactions and underdeveloped of electronic payment and transaction systems; and (iv) high operating expenditure including elevated security costs. In addition, high credit risk as a result of large information asymmetries in the market have contributed to high spreads. Given the incipient situation of the three credit bureaus, financial institutions have not been able to accurately assess borrowers' level of indebtedness and repayment capacity. As a result, credit activity is low and highly concentrated in existing customers.

Figure 3. Bank Operating Efficiency (Operating expense as percent of total assets)

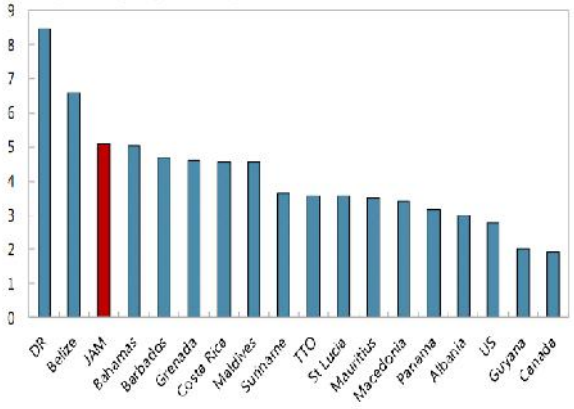
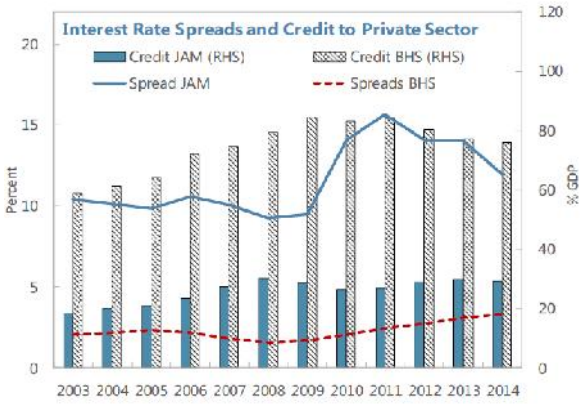


Figure 4. Interest Rate Spreads and Credit to the Private Sector



Source: IMF, Article IV, June 2016

Low levels of financial intermediation are further affected by the high level of informality, with cash largely dominating day-to-day transactions. While Jamaica has the highest proportion of formally banked adults among middle income countries in Latin America and the Caribbean (LAC) with 78 per cent of adults owning an account at a financial institution, usage is relatively low. Twenty-three per cent of Jamaican account holders have not made a deposit into or withdrawal from their account in the past year. This rate of account inactivity is higher than the average in the LAC region, or upper middle income country group, both at 11 per cent. Among wage earners, 65 per cent receive wages primarily in cash, as opposed to 35 per cent who report receiving wages through an account at a financial institution. Of those who report sending or receiving domestic remittances, 35 per cent use their account at a financial institution to do so, 28 per cent use an over-the-counter transaction (e.g., Western Union) and 37 per cent report doing so exclusively via cash. Among the 11 per cent of Jamaicans who have received a social transfer from the Government in the past year, 34 per cent report that this payment was made in cash. Agriculture-related payments (reported by 15 per cent of the population) are also made overwhelmingly in cash.

Development and usage of digital retail payments instruments is relatively low. Although there is an increasing range of retail electronic payments available, cheques remain the most widely used non-cash payment instrument. The use of digital payment instruments, including card-, mobile- and internet-based, is low. While 65 per cent of Jamaicans report owning a debit card, just 25 per cent have used it in the past

year. The penetration of non-traditional distribution channels, whether electronic or through mobile technology, remains limited.

Bank of Jamaica is providing a framework that can support and accelerate a shift towards the wider use of electronic payments. BoJ approved two pilot projects of non-bank payment service providers using mobile technology. In addition, the Bank is stepping up its regulatory efforts in order to facilitate financial inclusion and provide an impetus to the use of retail electronic payments. In 2013, BoJ issued "Guidelines for Electronic Retail Payment Services", permitting both banks and non-bank payment service providers to provide retail electronic payments, including through agents. Simplified KYC requirements have been prescribed for users to avail retail electronic services from non-bank service providers. The Guidelines require non-bank payment service providers to deposit customer funds in specialized trust accounts in deposit taking institutions regulated by BoJ, with bankruptcy remote provisions. They also provide BoJ the right to prohibit exclusivity arrangements in the interest of development, access and utilization of electronic retail payment services.

Objective

The objective of the proposed study is to assess competition in the space/market in which commercial banks operate, identify bottlenecks and impediments and propose policy recommendations for improved competition. The analysis will compare indicators internationally (regional and peer countries) and within the domestic market, with special attention to bank size, market potential and the prospects for sustainable growth of the banking sector. In particular, the analysis will: (i) analyze overall competition levels in the banking sector; (ii) analyze and identify the key components and drivers of interest rates and spreads in Jamaica; (iii) analyze competition issues affecting the usage of digital payment instruments; (iv) analyze the efficiency of commercial banks; (v) assess the factors affecting access to services by various segments of users and (vi) propose policy recommendations to foster greater competition having regard to financial stability and systemic risk considerations.

Scope of Work

The proposed analysis to assess competition in the banking sector will be based on a multipronged approach on the supply side. It is intended that a separate demand-side assessment will be conducted which will include inter alia, focus group testing, a demand-side survey and the assessment of customer complaints.

On the supply side, the following analysis will be conducted. First, an analysis of the structure of the banking system will be conducted, including ownership, concentration and balance sheet structure. Secondly, a contestability analysis will look at the regulations, procedures and practices affecting entry in the market. Thirdly, an efficiency analysis will be carried out, looking at indicators of revenues, costs, interest rates and spreads. A quantitative analysis will carry out a decomposition of interest rates (by sector if feasible) to identify the drivers of the spreads. Finally, relevant competition tests will be calculated. The study will go in depth into the analysis of banks' balance sheets, operational efficiency and productivity**.** The analysis will explore how commercial banks set their lending rates and what

explains the high spreads by: (i) analyzing commercial bank operations (business models, funding structure and costs) and the business environment over time;(ii) analyzing commercial banks products and accessibility; (iii) analyzing the behavior of the spectrum of interest rates across time; (iv) analyzing the decomposition of effective interest rate spreads of all banks in the system; and (v) conducting regression analyses on the determinants of spreads and margins to further elucidate the findings of the decomposition analysis. Key business enabling factors will be brought into the analysis, particularly macroeconomic variables and the impact of the legal and regulatory framework.

To the extent possible, the analysis will compare indicators internationally with peer and income group countries and also within the domestic market. If appropriate, the analysis should also make clear distinctions among groups of banks (classified mainly by size), since in many respects these groups may behave differently and respond to different incentives. This is particularly relevant given the fact that overall results for the Jamaican market would tend to be driven by the performance of the two largest banks. Results will be benchmarked against regional peer countries to highlight factors that are common to others and those that are unique to the Jamaican context.

Key questions to guide this study will focus on:

a. What are the main factors explaining low competition outcomes in Jamaica? What are the barriers to entry and exit for the banking sector, both in terms of the regulatory framework as well as features of the Jamaican economy?

b. What are the causes behind high interest rates and spreads in the country?

c. Are there any specific bottlenecks to deepen usage of digital retail payment instruments? How does technology affect competition for the delivery of services?

d. What are the issues related to a low domestic savings rate in the economy?

e. What are the factors which are affecting the volume of private sector credit, (i.e. credit to GDP ratio)? What are the constraints to financial intermediation?

f. Are there institutional arrangements such as ATM networks, robust credit ratings systems, good governance and risk management practices which could be leveraged to foster greater competition?

g. To what extent do the fee pricing policies for financial services offered by the banks affect competition? What are the factors which influence the manner in which banks set their fees or adjust their interest rates? Is there any evidence of anti-competitive behaviour by the commercial banks?

h. How can the authorities facilitate greater usage of financial products and services, technology and credit reporting?

i. What interventions can policy makers undertake to foster greater competition?

Methodology

The analysis will review the structure, development and competition in banking services. In particular, the study will analyze the volume of credit, sectoral allocations, interest rates and margins at a disaggregated level. The availability of detailed bank-specific data will, to a large extent, dictate the type of analysis that can be undertaken regarding the micro-drivers of interest rates and spreads. Detailed data will support a richer analysis of spread drivers, in particular for looking at the sectoral allocation of credit (e.g., consumer, large firms, small firms, etc.). In that framework, the study should aim at exploring the extent of banking competition at the disaggregated level and link such findings to structural features (e.g., public information availability) and industry structure that may hinder or enhance competition in the provision of credit. The study will build on recent financial sector diagnostic work done for Jamaica, including the already identified barriers, and will be supported by a review of the existing extensive literature on banking sector competition.

In terms of data collection, the analysis will include: (i) field interviews, (ii) fundamental analysis and (iii) regression analysis. Information will be directly collected from banks (with standard definitions to allow comparability) on types of products and costs of intermediation. Subject to availability of resources, a supply side survey of banks to assess current capacity, business model, lending practices and fee structures will be considered, subject to data availability.

Proposed Approach for the Supply Side

(a) Overview of Financial Intermediation in Jamaica and Access to Financial Services: Building on existing analytical work, a general overview on the level of financial intermediation and the factors that are hampering credit to the private sector and access to basic financial services for firms and individuals will provide context for the study.

(b) Market Analysis: This section will explore the characteristics of the current demand for financing; supply and demand for financial products and the current existing gaps. It will further focus on assessing whether banks capture savings and on-lend enough resources where it is necessary. This section will review banks' business models, products, target segments and market strategy. This will require:

- Review of existing portfolios by sector of individual banks
- Interviews with banks to understand their portfolio of products, business strategy and priorities for future growth
- Review of existing capacity, skills and lending practices/methodologies

(c) Banking Sector Structure: The analysis on the structure refers to the composition of the sector and banking activities. This section will analyze concentration, as measured by Herfindahl indices, as well as market share and the balance sheet structure of the sector by reviewing the evolution and composition of institutions' assets and liabilities.

(d) Contestability Analysis: This section will focus on assessing the ease of entry and exit for market participants. Contestability analysis includes reference to regulatory and other barriers to entry, as the numbers of players becomes of greater concern where there are high barriers to entry or restricted

access to essential infrastructure, such as the payments system. The analysis will need also to include an understanding of the supply location, ownership, technology and history of the industry, as well as regulatory conditions. This will include regulations that enable bank entry and operation, as well as those that promote transparency and disclosure bringing greater contestability to the market. This section will also analyze the role of credit bureaus, payment systems and regulations overall to support banking competition. A market is contestable if the threat of bank entry and exit exerts pressure on incumbent banks and helps keep the sector competitive, even in a highly concentrated banking sector.

(e) Efficiency Analysis: This section will assess cost effectiveness in the banking sector by:

- analyzing interest rates and margins (disaggregating all the revenues, costs and risks of the banking system into different lines) and
- conducting a decomposition of spreads and profits (fees from payments and accounts, fees for advisory services, income from deposits, etc.).

(f) Competition Measures and Factors explaining Intermediation Costs: This section will conduct:

- a regression analysis on the determinants of spreads and margins to further elucidate the findings of the decomposition and the analysis on margins,
- a productivity and cost analysis (distinguishing between funding costs, operating costs, delinquency costs, etc.),
- estimates of competition indicators and
- a country-level benchmarking exercise of financial sector outcomes with peer countries.

Policy Implications & Recommendations

This section will summarize findings and policy recommendations, including potential government policies and programme for promoting competition. This section will focus on analyzing: (i) existing constraints for increasing competition in financial services provided by banks, (ii) constraints for developing new products (if deemed relevant after market analysis), (iii) the role played by non-banks in the provision of finance and the role played by direct competitors of commercial banks (i.e. credit unions, building societies, microfinance institutions and merchant banks); (iv) the role of public policies to support increased access to finance; (v) the institutional capacities of the commercial banks; and (vi) regulatory and supervisory framework.

Deliverables

7.1. The following outputs are expected to be produced during the duration of the assignment. The Consultant will report and operate under the supervision of the Technical Coordinator with

responsibility for Component three. The Technical Coordinator will co-ordinate the review and approval of the deliverables prepared by the Consultant. The Steering Committee will have responsibility for the review and signing of key deliverables as listed below.

7.2.

Deliverables	**# of Weeks***	**%**
1. Implementation plan	5	10
2. Desk research report on availability of data and development of data requests	1	0
3. Data Collection, including development of questionnaires for experts, regulators, policy makers, bankers and small businesses – probing structure, contestability and effectiveness of competition.	3	0
4. Design and implement supply side survey of banks to assess current capacity, business model and lending practices report	2	20
5. Sector structure diagnostic	6	0
6. First Interim report with findings from the supply side survey	3	0
7. Revising the interim report based on comments received from the working group	3	20
8. Enabling Environment/Regulation and supervision	3	0
9. Spread decomposition	1	0
10. Competition Tests/Regression Analysis	1	0
11. Draft Final Report writing with Policy Recommendations	2	0
12. Revising the draft final report based on comments received from the working group	2	30
13. Finalisation of the report and submission to working group chair for his acceptance and approval	1.5	20
Total	**29**	**100**

*The number of weeks are indicative from activity start to end; however some activities may be done in parallel.

B. QUALIFICATIONS FOR THE FIRM AND FIRM'S TEAM COMPOSITION

Firm's qualifications

The successful candidate will be a firm which has the following qualifications:

- Minimum of 3 years international expertise in any of the following: (a) banking competition, (b) market development; or (c) economic research.
- Experience in doing similar projects in at least 2 developing economies or emerging markets within the last 10 years.
- A list of current and/or past clientele who had required similar expertise from the firm.
- Expertise in policy development and any of the following areas: (a) market competition, (b) banking, (c) finance.
- Expertise in both market competition and either banking or finance, is an asset.
- In addition to the foregoing, expertise in quantitative and qualitative analysis.

TEAM COMPOSITION – FINANCIAL SECTOR/COMPETITION EXPERTS

In addition to the above qualifications, the team members of the Firm must be financial sector/competition experts who shall be required to have, at a minimum, the following qualifications:

Key Expert 1 - Team Lead

- Graduate degree in finance, or, economics or related areas
- Minimum 5 years of financial sector experience, including work in data and business analytics and policy making
- Extensive international work experience in (a) financial sector regulation, or (b) banking regulation, (c) prudential supervision, or (e) commercial banking
- Extensive knowledge of best international standards and good practices in competition issues in the banking sector
- Extensive knowledge of payment systems and electronic/digital payment products and services would be an asset
- Experience with microfinance sector/non-bank financial institutions regulation and supervision is desired
- Proven experience in conducting assessments on competition and intermediation costs in developing countries (sample analytical pieces should be provided) would be an asset
- Extensive experience advising financial regulators and providing policy recommendations in developing countries
- Strong skills in data analysis and business analytics
- Fluency in English

- Excellent communication skills in both the oral and written format

Key Expert 2: Research Specialist

- Graduate degree in finance, or, economics or related areas
- Minimum 5 years of financial sector experience, including work in data and business analytics and policy making
- Participated or lead the development of at least 3 research in the areas of (a) financial sector regulation, or (b) banking regulation, (c) prudential supervision, or (e) commercial banking
- At least 2 years' experience with microfinance sector/non-bank financial institutions regulation and supervision is desired
- At least 2 years' experience in conducting assessments on competition and intermediation costs in developing countries (sample analytical pieces should be provided) would be an asset
- Certification in data analysis and business analytics
- Fluency in English
- Excellent communication skills in both the oral and written format

C. BUDGET AND TIMELINE

The assignment is expected to take up to 29 weeks from the signing of the contract.