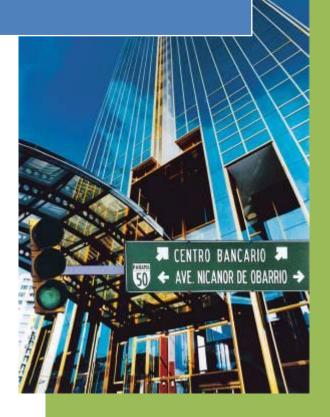


Financial Studies Division

Efficiency Analysis of the Panamanian Banking Center



August 2014



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Introduction

The changes in the progress of business, increase in competitiveness, market liberalization and technology innovation, among others, exert pressure on the industry to establish competitive strategies to cope with the new environment successfully.

The efficiency level is linked to the country's competitiveness level which, in our case, including the banking activities offered by the country, is considered sound.

The banking activity is seen as strong over its spectrum (liquidity, solvency, asset quality). However, the aim of financial intermediation is to collect liabilities as deposits and use them to derive income from productive assets, credits, investments in securities and liquid assets, etc. The optimal use of these resources will largely determine the sustainability of the described areas.

There is an intense dynamic of change that characterizes the global economic environment. In the particular case of Panama, which is a service economy, this presents significant challenges to financial institutions, as they are subject to market stress.

The development of the financial sector within the economic environment has not changed that much; however, some factors, such as globalization, the changing international standards (Basel, IFRS, others) in regulations, growing disintermediation, the emergence of new competitors, a focus on other services, and, above all, the narrow margins, especially the financial margins that make up the current environment in which banking is conducted.

• Efficiency and profitability

This paper will contrast the main indicators of efficiency and profitability.

An entity will be more efficient to the extent that it produces more using fewer resources. Thus, factors such as the size of the bank, the complexity of banking operations, the productivity or joint production of products and services, are related to its level of efficiency. The entity's organizational capacity, the staff's level of training and the technology used, among other aspects, also impact the bank's level of efficiency.

The Panamanian banking market has been developed as a competitive system, always aiming to meet shareholder, accountholder, employee goals as well as banking regulations. The IBC has maintained profitable banking operations consonant with elapsed economic cycles.

A summary of some elements closely related to the efficiency of banks in Panama can be found below.



Results

IBC results over the last 20 years have been affected by various financial crises in the region. The severest one was recorded in 2002 when the crisis in Latin American countries had a significant impact on the operations of large banks in our banking system, as well as the crisis at the end of the last decade (the Subprime crisis in which profits from 2007 to 2009 decreased by 34%). However, despite these crises, the IBC has continued to expand its operations.

In recent years, there have been changes in how business operations have driven income. Besides increases in operating income, there have been increases in non-recurring income from operations such as the purchase and sale of foreign currency, securities and others.

As for expenses, general expenditure levels have essentially equaled operating expenses. However, this behavior has been accompanied by bank growth requiring investment in infrastructure, the number of employees and technology that has provided greater market share and thus greater income.

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Chart 1: Income Breakdown 1998-2014 (in millions of US\$)

Source: Superintendency of Banks – Financial Studies Division Data from the first half of 2014 (on an annual basis)

Total Income

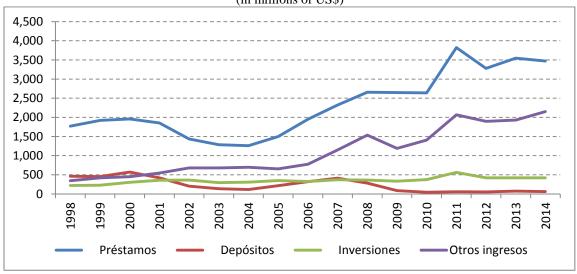
The structure of the IBC's yield and its evolution over time are worth considering. It is evident that profit margins in our banking market have changed over the past 20 years, mainly because of competition and market saturation in sectors such as commerce and consumption.

General Expenses

Operating Expensees



Chart 2: International Banking Center Income Distribution - 1998-2014 (in millions of US\$)



Source: Superintendency of Banks - Financial Studies Division

In 1999, interest income on deposits was 17% of total income and other income was 12%. As of June 2014, interest income on deposits was 1% (because of international rates dropping) and other income represented 35% of total income. This behavior could be largely explained by saturation of the personal consumption market (around 40 banks are competing in this segment), the main source of income. This situation has forced bankers to look for other profitability sources, such as the activities noted above.

Table 1: International Banking Center Accounts Share of Total Income

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Accounts/Years	1999	2005	2010	2012	2013	2014			
Loans	63	55	59	58	59	57			
Deposits	17	8	1	1	1	1			
Investments	8	13	8	7	7	7			
Other income	12	24	31	34	32	35			
Total income	100	100	100	100	100	100			

Source: Superintendencia de Bancos - Financial Studies Division

For the last seven years, assets income has increased an average of 6% per year, which is consistent with the ordinary margin, which, in turn, has followed the growth of operating and general expenses. Nevertheless, the growth in banking has been accompanied by significant investment, which has allowed it to take advantage of new business niches and other opportunities based on factors such as normal population growth and the country's economic development.



• Return on Assets (ROA)

As of the end of the first half of 2014, the Return on Assets (ROA) is around 1.6%, staying near the recent historical average for profitability. General license and international license foreign banks are at the top of the group on this indicator, largely because of lower funding costs by their parent companies. State-owned banking has shown a slight decline due to increases in expenses from administration, equipment and other areas.

(in %) 3.0% 2.5% 2.0% 1.5% 1.0% 0.5% 0.0% 2009/Dec 2010/Dec 2014/Jun 2011/Dec 2013/Dec Banca Internacional Banca Oficial Banca Panameña Privada Centro Bancario Banca Extranjera Sistema Bancario

Chart 3: International Banking Center ROA by type of Banking

Source: Superintendency of Banks – Financial Studies Division

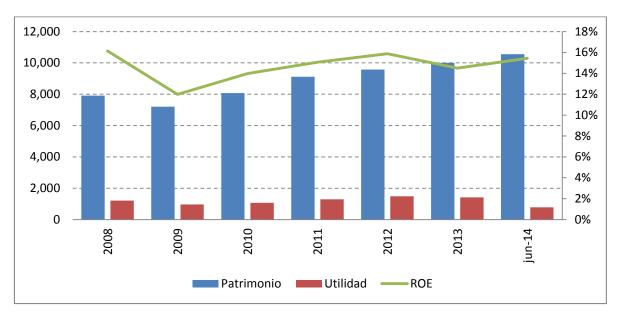
• Return on Equity (ROE)

As for the Return on Equity (ROE), which measures the return on equity, the IBC currently maintains a 15.44% ROE. This indicates a good return on shareholders' equity, showing stable growth between profits and capital in recent years.

The IBC has remained stable, thanks to the behavior of most of the types of banking (General licensed foreign, Panamanian and state-owned banks), however, international license banking shows a slight decrease due to lesser profits in recent periods. This decrease was sustained by diminutions in other income items, specifically on securities sales.



Chart 4: International Banking Center Comparison of ROE (%) to Profit-Equity (in millions of US\$)



Source: Superintendency of Banks - Financial Studies Division

• Efficiency Indicators

The main objective of efficiency indicators is to compare the aggregate income obtained by a financial institution in a given period of time to its operating costs. This ratio is expressed in percentages. For example, an efficiency ratio of 50% means that they spend 50 cents for each US dollar deposited in the bank.

It is an indicator widely used in the financial sector to determine an institution's profitability. Currently, it is an **increasingly valued ratio** for determining the health of an entity.

Superintendencia

70 70 60 60 50 50 40 40 30 30 20 20 10 10 2007/Dec 2008/Dec 2013/Dec 2009/Dec 2010/Dec 2011/Dec 2012/Dec Centro Bancario Sistema Bancario Banca Oficial Banca Privada Extranjera = Banca Privada Panameña -Banca Lic. Internacional

Chart 5: General Expenses / Operating Income

Source: Superintendency of Banks - Financial Studies Division

As of the end of the first half of the year, the efficiency ratio stood at 49.3% and shows appropriate expense vs. income management. If we analyze the ratio's behavior in recent years, general licensed banks have maintained higher percentages in the expense/income relationship. As for international licensed banks, the behavior is different due to the features of this type of banking, which operates with a smaller staff than in the national banking system (general license).

The theory with regard to efficiency ratio indicators is that with greater growth, total costs should be decreasing. This has not been clearly observed in previous years in the case of Panama, perhaps because of bank sales and mergers, changes to technology platforms and economic factors such as rent increases and inflation, among others.

As for the efficiency analysis measured by total assets, it is around 2%, showing and equilibrium between the growth in expenses and the volume of assets.

Table 2: IBC – Operating Expenses In millions of US\$

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Items/Years	2007/Dec	2008/Dec	2009/Dec	2010/Dec	2011/Dec	2012/Dec	2013/Dec	2014/Jun	
General expenses	1,025	1,320	1,375	1,535	1,851	2,005	2,181	2,027	
Administrative expenses	487	580	656	764	881	981	1,078	1,115	
General expenses	218	231	236	255	299	310	361	335	
Other expenses	320	509	483	516	673	714	742	577	

Source: Superintendency of Banks - Financial Studies Division



Administrative expenses, specifically staffing costs, show a trend similar to banking staff hiring. (Number of employees in the IBC).

Chart 6: IBC - Growth Rate (%) – Expenses and Number of Employees

Source: Superintendency of Banks – Financial Studies Division

The analysis of the behavior of efficiency vs. funding costs (paid interest/financial liabilities) shows that the latter has had a downward trend due to international rates dropping over the years. In our case, the deposit rate tends to lag Libor by around two percentage points.

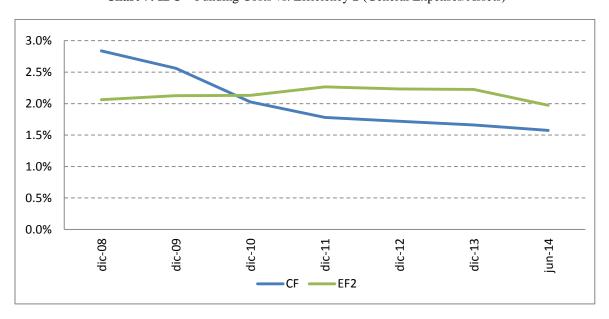


Chart 7: IBC – Funding Costs vs. Efficiency 2 (General Expenses/Assets)

Source: Superintendency of Banks – Financial Studies Division



As for efficiency management, it was noted that banks with greater operating volume registered a better cost/income relationship, thanks to greater economies of scale. As of June 2014, ten banks with assets over US\$3 billion had an average ratio of 47.5%, while banks with assets below US\$500 million registered a 62.9% ratio. This gap could be the result of inexperience in the business in some cases (banks that have been recently granted a license), of reduced margins of financial intermediation in other cases and a lack of productivity in yet others.

Table 3: International Banking Center General Expenses / Average Operating Income (Efficiency 1) Vs. Assets Size in (%)

Years	2012		2013		June 2014	
Banks with assets in millions of US\$:	Eff. 1	Number	Eff. 1	Number	Eff. 1	Number
Over 3,000	45.7	8	55.9	9	47.5	10
From 1,000 to 3,000	61.6	10	54.6	13	48.3	14
From 500 to 1,000	47.3	18	49.4	14	51.3	14
Below 500 mm	65.5	42	72.8	42	62.9	40

Source: Superintendency of Banks - Financial Studies Division

Analyzing the efficiency in Panama vs. neighboring countries, a solid financial efficiency margin was noted for Panama and Costa Rica as of March 2014. This ratio indicates that in Panama, for every US\$100.00 of income from productive assets, US\$25.00 is allocated to cover administrative expenses.

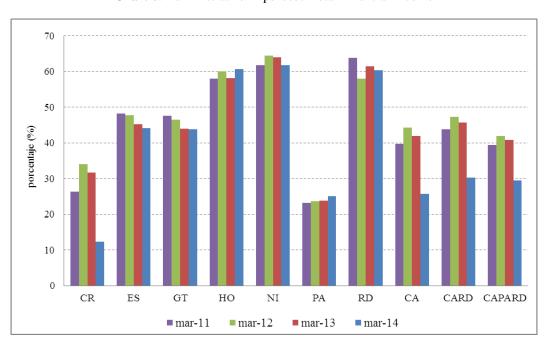


Chart 6: Administrative Expenses / Total Financial Income

Source: Central American Monetary Council



An increase of around 47% in the number of employees hired and an increase of 87% in new banking locales (branch offices, affiliates, ATM, others) over the last five years has been accompanied by large investments in technology, directly impacting bank efficiency and productivity.

Table 4: Productivity Indicators

Items/Years	2007/Dec	2008/Dec	2009/Dec	2010/Dec	2011/Dec	2012/Dec	2013/Dec	2014/Jun
Employees	16,661	18,249	18,311	20,034	21,395	22,506	23,911	24,486
Branch offices	416	434	445	462	476	454	558	557
ATM	796	905	1,007	1,153	1,254	1,444	1,576	1,641
Drive-thru banks	41	56	66	66	62	62	62	67

Source: Superintendency of Banks of Panama - Financial Studies Division

Proof of increases in staff and salaries over the last 30 years (1984-2014) is the number of employees hired, which increased 172% — 15,502 additional employees. The salary range with the greatest relative growth was from US\$2,000.00 to US\$3,000.00, which grew 1,850%; the one with the greatest decline was the range under US\$500.00, which dropped 93% (3,693 fewer employees).

Table 5: Chart IBC – Number of Employees Years: 1984, 1994, 2004 and 2014 (Units)

Range	1984	1994	2004	2014
Up to 499.99	3,959	3,820	4,027	266
From 500 to 999.99	3,064	3,137	5,605	11,526
From 1,000 to 1,499.99	934	969	1,710	4,914
From 1,500 to 1,999.99	429	435	1,031	2,857
From 2,000 to 2,999.99	154	206	704	3,004
Over 3,000	444	429	434	1,919
Total	8,984	8,996	13,511	24,486

Source: Superintendency of Banks - Financial Studies Division

• Final remarks

Overall, IBC efficiency has remained stable, with positive performances that we can consider efficient thanks to banking operations growth and prudent cost management, which has contributed to maintaining good levels of profitability.

The intense dynamic forces that characterize the Panamanian market pose a challenge for smaller banks, as well as those recently integrated into the IBC, because they are exposed to the competitiveness of the credit market's supply and demand. As can be seen in this paper, banks with greater volume maintain stability in the interest rates they offer, as well as a balanced relationship between operating income and financial and operating costs.



The use of electronic banking and the concentration of operations in larger banks somehow have an impact on the increase of administrative expenses. This is noticed in the indicators when they are compared to operating income.

On the other hand, a lower availability of funding sources puts pressure on the management of margins and the adequate use of operating expenses in some entities.

Besides size, the line of business is a factor that must be taken into consideration because it does not have the same effect on cost for banks allocating their resources to corporate banking and those providing consumer banking. The latter will require more staff, infrastructure and technology development, among others.

For the IBC, the level of competitiveness, coupled with appropriate efficiency levels achieved by each bank, will be a decisive factor. To ensure their survival in the banking system and their possible growth, factors such as the quality and cost of services provided, their reputation and user perception of these services will be decisive. Therefore, the areas that must be emphasized in order to satisfy the market will be focused on new products and services, improvement of current financial activity processes, good cost management (especially on resource employment) and enhancement of computer systems.