

OPERATIONAL REPORT 2017



CENTRALE BANK VAN ARUBA



© Centrale Bank van Aruba 2018

Website

www.cbaruba.org

Address

J.E. Irausquin Boulevard 8

P.O. Box 18

Oranjestad

Aruba

E-mail

cbaua@setarnet.aw

All rights reserved.

Telephone

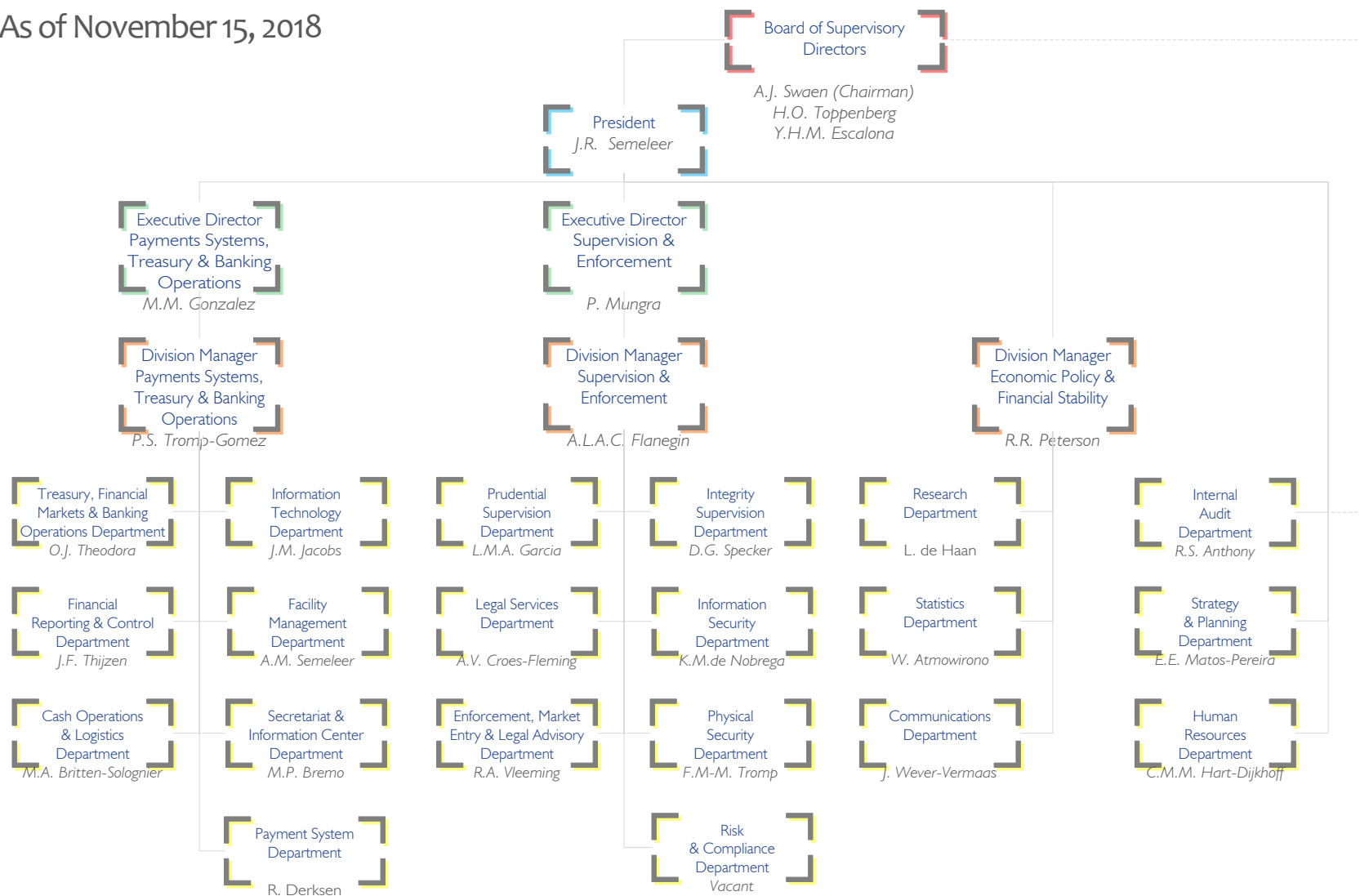
(297) 5252-100

Fax

(297) 5252-101

Organizational Chart

As of November 15, 2018





OPERATIONAL REPORT 2017

Table of contents

List of abbreviations.....	7	Clearing system	21
A glimpse at end-2017.....	8	Looking forward.....	21
1 CBA's mandate.....	9	5 Treasury management.....	23
2 Monetary policy and economic developments.....	11	Managing the foreign exchange reserves	23
Economic developments.....	11	GOA banker	24
Achievements to promote economic resilience.....	13	Foreign exchange regulations.....	25
Looking forward.....	14	Foreign exchange rates.....	26
3 Financial system.....	15	Foreign exchange transactions	26
Major achievements to further strengthen the financial system and support financial stability	16	Foreign exchange commission	26
Looking forward.....	18	Exchange Rate Margin Compensation.....	27
4 Payments system	19	Looking forward.....	27
Currency operations	19	6 Organizational affairs.....	28
Commemorative coin.....	20	Human Resources Management.....	28
Counterfeit florin bank notes	20	Operational and physical infrastructure and security	29
		Looking forward.....	29



7	Governance.....	31
	Management structure.....	31
	BoSD	31
	Looking forward.....	32
8	Risk management.....	33
	Financial risk.....	34
	Looking forward.....	35
9	Financial highlights for 2017	36
	Financial highlights	36

List of abbreviations

AC	Audit Committee
AML/CFT	Anti-money laundering and combating financing of terrorism
APFA	Stichting Algemeen Pensioenfonds Aruba (the civil servants pension fund)
BoSD	Board of Supervisory Directors
CBA	Centrale Bank van Aruba (the Central Bank of Aruba)
CBO	Central Bank Ordinance
CBCS	Centrale Bank van Curaçao en Sint Maarten (the Central Bank of Curaçao and Sint Maarten)
COA	Chart of Accounts
DIMP	Departamento di Impuesto (the Aruban Tax Authority)
DOF	Department of Finance
DNB	De Nederlandsche Bank (the Dutch Central Bank)
ERMC	Exchange Rate Margin Compensation
FATF	Financial Action Task Force
Fed	Federal Reserve System

FDA	Stichting Fondo Desaroyo Aruba (Foundation Development Fund Aruba)
GDP	Gross Domestic Product
GOA	Government of Aruba
HRM	Human Resources Management
IC	Investment Committee
IMF	International Monetary Fund
IFRS	International Financial Reporting Standards
ONCS	OnNet Clearing System
PSC	Payment System Committee
PRL	Prudential Liquidity Ratio
MPC	Monetary Policy Committee
RMC	Risk Management Committee
SOERMC	State Ordinance Exchange Rate Margin Compensation
SOFEC	State Ordinance Foreign Exchange Commission
SOFET	State Ordinance Foreign Exchange Transactions
SOSMTC	State Ordinance on the Supervision of Money Transfer Companies
USA	United States of America

A glimpse at end-2017

+1.2 percent



11.0 percent

Reserve requirement
rate

Afl. 2,436.5 million

Total value of foreign
exchange licenses issued

Afl. 8.8 million

CBA's 2017 net income

1.0 percent

Advance rate

80 financial institutions

Total number of financial
institutions under the CBA's
supervision

Afl. 1,673.7 million

Total assets and liabilities of
the CBA

3.0 percent

Legal interest rate

-0.5 percent

12-month average
consumer price index

Afl. 1,391.7 million

Total market value of the
foreign exchange reserves

30 publications

Total number of CBA's
publications relating to
the economy and
financial sector

Afl. 296.3 million

Total value of bank notes in circulation

Afl. 8.4 billion

Total value of funds
transferred through the
CBA clearing system

Afl. 36.7 million

Total value of coins in
circulation

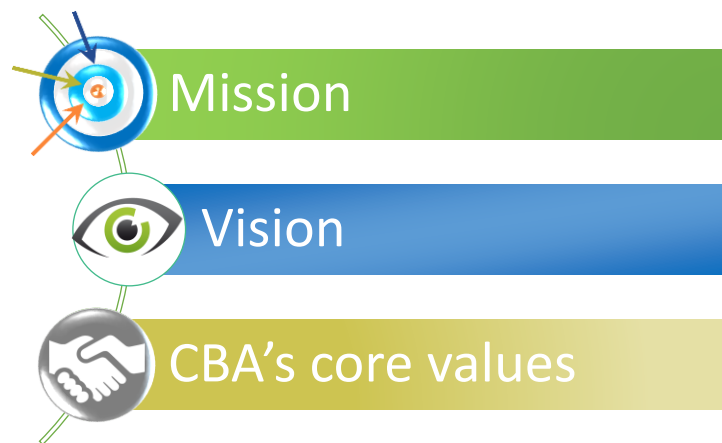


95
Total Employees at the CBA

1 CBA's mandate

In accordance with its mandate, the Centrale Bank van Aruba (CBA) determines the monetary policy to protect the stability of the value of the Aruban florin (florin), supervises the financial system to promote soundness and integrity in the supervised sectors and institutions, and issues florin banknotes, as well as florin coins on behalf of the Government of Aruba (GOA). Also, it regulates the flow of international payments, manages the foreign exchange reserves of Aruba, and supervises the spending thereof. Furthermore, the CBA acts as a banker to the GOA and gives the Minister of Finance both solicited and unsolicited advice on financial and economic matters.

Figure 1.1: CBA's mission, vision, and core values



Mission

The CBA contributes to the financial stability and economic well-being of the Aruban community by:

- maintaining the stability of the value of the Aruban florin vis-à-vis the US dollar,
- promoting financial soundness and integrity of the financial system, and
- promoting an efficient and reliable payment system.

Vision

In 2020, the CBA is a prominent central bank in the region, driven by a culture of integrity, excellence, and innovation.

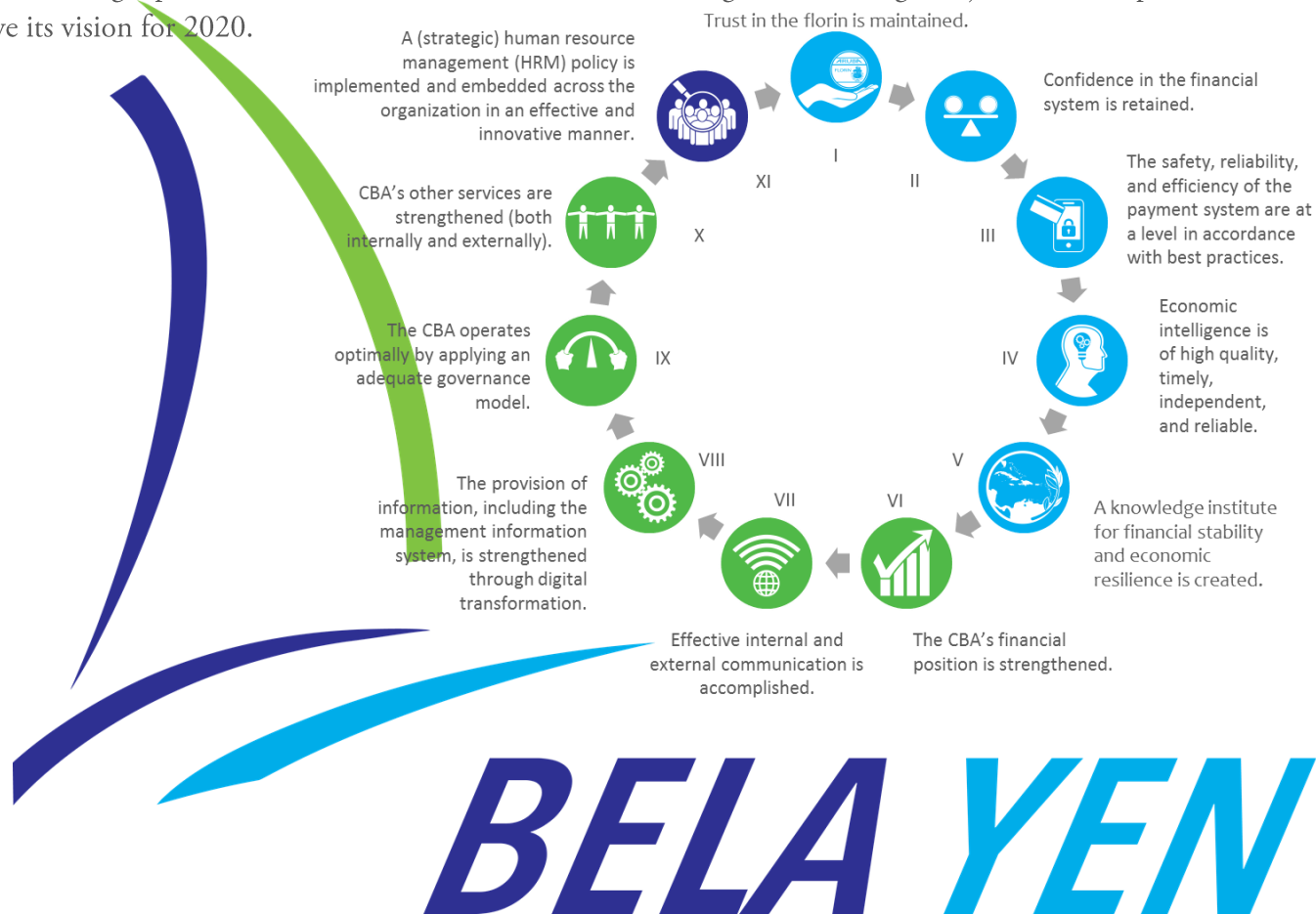
Core Values

Integrity, Excellence, Cooperation, Open Communication, Personal Responsibility and Willingness to Change are the core values of the CBA.

Strategic Plan:

- Ambitions:
1. The CBA is a prominent central bank in the region.
 2. The CBA executes its tasks in an efficient and results-oriented manner.
 3. The CBA is an attractive organization for top talent.

As outlined in its strategic plan “Bela Yen”, the CBA has set the following eleven strategic objectives to help realize these ambitions in order to achieve its vision for 2020.



2 Monetary policy and economic developments

The Monetary Policy Committee (MPC) of the CBA met seven times during 2017 to review recent monetary developments, and based on these to assess whether a change in monetary policy stance was required.



The frequent assessments of the adequacy of the monetary policy permit the CBA to respond swiftly to developments within the monetary sector and/or economic conditions. During 2017, the MPC assessed several indicators, including the level of net foreign assets (and official reserves), (core) inflation, and banking sector

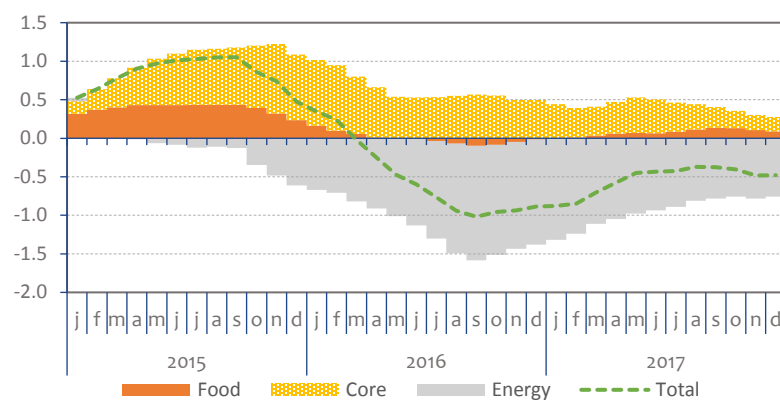
credit growth. The reviewed economic indicators remained adequate throughout 2017. Consequently, the MPC decided to uphold the following throughout 2017:

- The reserve requirement, the CBA's main monetary instrument, at 11 percent, and
- The advance rate at 1 percent.

Economic developments

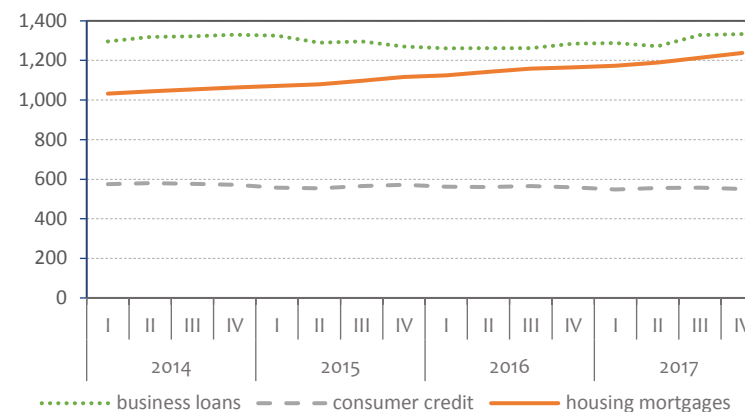
According to CBA estimations, Aruba's economy expanded by 1.2 percent in real terms during 2017, reflecting mainly the upturns in the tourism sector with substantial increases in tourism receipts, U.S. arrivals, and cruise visitors.

Chart 2.1: 12-month average rate of inflation
(in percentages)



During 2017, inflationary pressures remained minimal, induced by a reduction in the electricity tariffs in January 2016 and January 2017, and resulting in a deflation of 0.5 percent (Chart 2.1).

Chart 2.2: Credit components
(in millions)

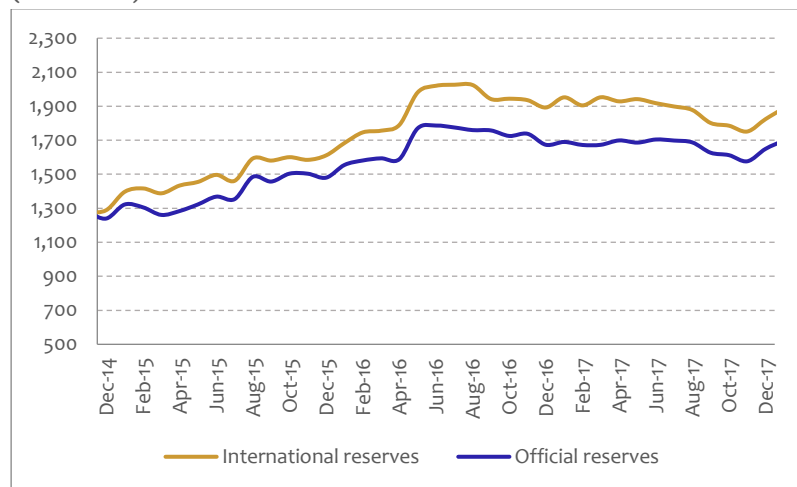


Domestic credit increased by 6.7 percent in 2017 driven chiefly by the purchase of GOA bonds by the commercial banks, an upturn in loans to individuals (+3.3 percent), and an increase in business loans (+3.7 percent).

On the other hand, consumer credit fell by 2.9 percent signaling that consumers were cautious about borrowing, as consumer confidence remained negative throughout 2017.

Net claims on the public sector rose by Afl. 113.0 million (39.4 percent) in 2017 compared to 2016, due to an increase in gross claims (Afl. 120.0 million or 30.5 percent) countered by a decline in GOA deposits (Afl. 7.0 million or 12.1 percent).

Chart 2.3: International reserves, net foreign assets
(in millions)



In terms of developments in the international reserves, net foreign assets (excluding revaluation differences of gold and foreign exchange holdings) fell by Afl. 92.7 million (–5.2 percent) in 2017, compared to 2016. This deficit was due mainly to net outgoing transfers from notified foreign accounts held by residents (Afl. 252.1 million), as well as a net outflow resulting from other capital and financial account transactions (Afl. 119.5 million), which was compensated for in part by a surplus on the current account (Afl. 293.1 million). More specifically, when compared to the same period of 2016, the current account registered an increase in the export of goods (+Afl. 24.7 million), while the import of goods remained relatively flat (+Afl. 1.5

million). The financial account had a net outflow of funds (Afl. 112.2 million), due mainly to repayments on foreign GOA bonds. Nonetheless, the level of the international reserves remained adequate throughout 2017, when benchmarked against the CBA’s critical norms.

For further details on the economic developments, please refer to the “State of the Economy 2017” on the CBA’s website.

Achievements to promote economic resilience

In 2017, the CBA submitted the report “Sustainable GOA policies: Recommendations to the GOA for the period 2017-2021” to the new Prime Minister of Aruba. In this report, the CBA presented policy recommendations to promote the soundness of Aruba’s public finances, sustainability of Aruba’s balance of payments, and good governance in the public sector. These three characteristics are prerequisites for macroeconomic and financial stability, as well as sustainable economic development and inclusive economic growth.

Also, during the RegTech Conference organized by the CBA in November 2017, the CBA presented the Innovation Policy Framework 2030 referred to as “Isla Innovativo”, led by the Isla Innovativo team. This team, together with contributions from the local stakeholders’ community, developed a new approach to framing innovation policy, drawing upon research, studies, and input from the public and private stakeholders in the community

via surveys. This approach resulted in a strategic framework for developing human-centered policies and best-practices to strengthen Aruba's innovation capacity and increase its economic resiliency.

Looking forward

Looking forward to 2018, a main monetary policy focus of the CBA is the continuous monitoring of the levels of the net foreign assets against international monetary benchmarks and recommendations by the International Monetary Fund (IMF). The adequacy of reserves may be challenged by several factors and undesirable developments, including the structural trade imbalance, arising largely from (a) outgoing payments for

imported goods & services, (b) transactions on the income account of the balance of payments related to interest payments on GOA debt, and (c) the absence of significant sources of foreign exchange inflows besides tourism receipts. As a small open economy, Aruba remains susceptible to external shocks and systemic risks.

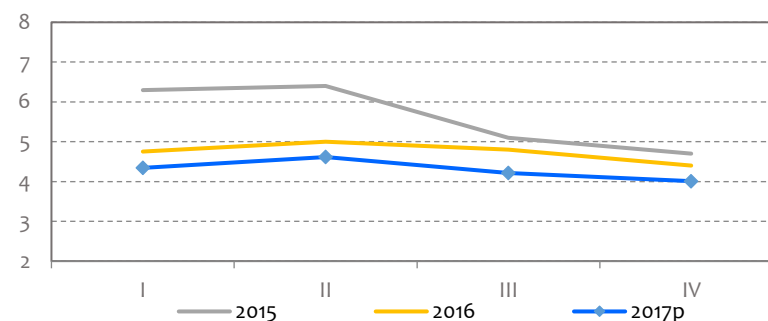
In addition, the CBA is in the process of implementing the IMF Balance of Payments and International Investment Position Manual 6th edition (BPM6). Preparations also are underway to conduct an extensive study on the economic resilience of Aruba, with the aim to produce an Economic Resilience policy report.

3 Financial system

The CBA is the sole supervisory authority in Aruba. In executing its supervisory task, the Bank seeks to safeguard confidence in the financial system by promoting (financial) soundness and integrity of the supervised institutions. The CBA, pursuant to the sectoral supervisory state ordinances, is responsible for the regulation and supervision of the credit institutions, insurance companies, insurance brokers, company pension funds, money transfer companies, trust service providers, and, as of January 1, 2017, the securities business. In addition, the CBA is entrusted with overseeing compliance with the State Ordinance on the Prevention and Combating of Money Laundering and Terrorist Financing (AB 2011 no. 28) (AML/CFT State Ordinance) and the Sanction State Ordinance 2006 (AB 2007 no. 27).

The financial sector as a whole remained adequately capitalized, liquid, and profitable. The nonperforming loans ratio of the commercial banking sector continued its declining path in 2017, reaching 4.0 percent at year-end 2017 (see Chart 3.1).

Chart 3.1: Nonperforming loans (gross) to total gross loans of the commercial banks
(in percentages)



Source: CBA: commercial banks; p= preliminary figures

Figure 3.1 highlights the most important achievements in 2017 in the areas of prudential supervision, integrity supervision, market entry, and supervisory enforcement, all of which contribute to the accomplishment of the strategic objectives set by the CBA, in particular with respect to the Strategic Objective II “Confidence in the financial system is retained”.

Figure 3.1: Major achievements to further strengthen the financial system and support financial stability

Overall financial system framework	Banking Sector	Other
<ul style="list-style-type: none"> • Establishment of a separate Enforcement, Market Entry, and Legal Advisory Department, • Creation of a framework for the implementation of risk-based supervision of credit institutions, insurance companies, and company pension funds, • Expansion of the supervisory scope of the State Ordinance on the Supervision of Money Transfer Companies (AB 2003 no. 60) (SOSMTC) to include money exchange offices, • Intensification of the enforcement of the supervisory laws and regulations, also evidenced by an increase in the number of administrative fines and other enforcement measures imposed by the CBA, • Strengthening of the AML/CFT risk-based approach, inter alia, by targeted and themed onsite examinations (e.g., anti-corruption and Panama Papers project), • Approval of the Financial Stability Framework, and • Development of the lending facilities to mitigate adverse developments in the financial system. 	<ul style="list-style-type: none"> • Strengthening of the policy rule on banking license and admission requirements for credit institutions, • Issuance of a final draft of the new Chart of Accounts (CoA) manual for the supervised credit institutions, which is based on the basic concepts and principles of, inter alia, the Monetary and Financial Statistics Compilation Guide issued by the International Monetary Fund (IMF) in 2008, as well as the International Financial Reporting Standards (IFRS) and Pillar I of the Basel II capital standards, • Increase of the minimum solvency requirement for the banking sector from 14 percent to 16 percent, • Establishment of stricter liquidity requirements for the banking sector, including a gradual increase in the Prudential Liquidity Ratio (PLR) from 15 percent to 20 percent over a period of 3 years, and • Conduct of a self-assessment of the legislative, regulatory, and supervisory framework vis-a-vis the Basel Core Principles for Effective Banking Supervision. 	<ul style="list-style-type: none"> • Strengthening of the method that insurance companies use to calculate their coverage ratio, • Release of a draft policy paper on outsourcing arrangements, • Conduct of a gap analysis vis-à-vis the 2012 Financial Action Task Force (FATF) recommendations, and • Submission of a revised legislative proposal for the introduction of a deposit insurance scheme to the Minister of Finance.

With due observance of the technological innovations in the financial services industry (“FinTech”) and the shift in supervisory approaches driven by “RegTech” and “SupTech”, the CBA realizes that the existing supervisory approach may no longer be adequate to address the fast changing financial landscape. Consequently, like most other central banks and supervisory agencies, the CBA has started looking into technological solutions (SupTech, Artificial Intelligence) to address the regulatory and supervisory challenges ahead. SupTech solutions include digitizing data and improving data analytics.

- Throughout 2017, the CBA proceeded with preparations for the launch of the (big) data warehousing and analytics framework called “FAME”. With the launch of FAME on January 1, 2018, the supervised financial institutions under the scope of the FAME project began submitting the regulatory reports through the web portal designed for this purpose.
- In November 2017, the CBA held its second annual conference on Regulatory Technologies and the Future of Digital Transformation. The conference titled “When regulators become innovators: Industries of the future and

the future of industries” included a first-time RegTech hackathon “Regathon”. During the conference, five (5) international speakers and two (2) panel discussions covered topics like Trends & Transformations in RegTech, The Future of Digital Transformation, and “Leading DX”.

In addition to the mentioned actions and following the advancement of information technology and the rapid changes these advancements have brought to the banking industry, in 2017 the CBA issued a policy paper for credit institutions on technology risk management. The CBA intends to intensify its oversight in this domain in the near future, also taking stock of the increased risks of cyberattacks targeted at financial institutions worldwide.

The regular onsite examinations at the supervised institutions and the ongoing offsite surveillance, which includes the desk-review of the required periodic financial and regulatory reports filed by the supervised entities, are the main pillars through which the CBA executes its oversight. They also serve as the primary source of information to feed the risk-based supervisory framework. The onsite and offsite activities are key to maintaining a close watch on the financial and nonfinancial developments at the supervised institutions, assessing their ongoing compliance with the relevant laws and regulations, and,

if and where considered necessary, taking appropriate measures to enforce compliance.

The risk-based approach, together with the strict enforcement policy of the CBA and its ongoing commitment to comply with international standards and best practices in the area of financial sector regulation and supervision, have been instrumental in maintaining a solid and reputable financial sector.

For further details on the supervision of the financial sector, please refer to the “Financial Sector Supervision Report 2017” on the CBA’s website.

Looking forward

- The CBA will host its annual conference on the interaction of macro-prudential and monetary policy and the CBA’s role in achieving financial stability.
- Development of a research framework for financial stability and macro-prudential policy.
- Issuance of a final draft of the New Chart of Accounts (COA) manual.
- Further development of the CBA’s vision to act as a knowledge institute for financial stability and economic resilience.
- Establishment of a Financial Stability Committee.
- The CBA will conclude the financial inclusion survey.
- Also, the CBA will lead the Project for National Risk Assessment AML / CFT.
- The CBA will continue to strictly review the applications of the enforcement policy as well as its market access policy.
- Lastly, the CBA intends to initiate its “harmonization sectoral supervision legislation” project in 2018.

4 Payments system

The CBA brings safe and secure bank notes and coins into circulation to meet the public's needs and operates a clearing system between the CBA, commercial banks, and a number of GOA-related institutions to facilitate the transfer of funds between the participants.

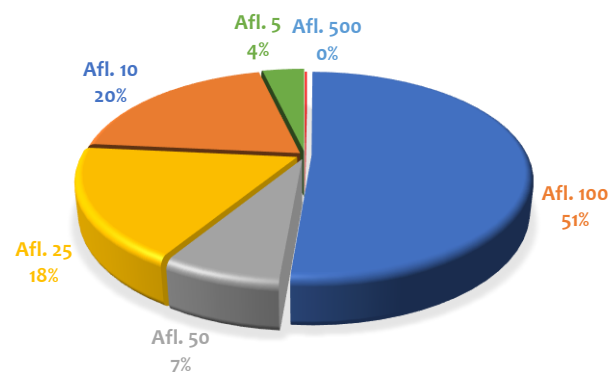
Key achievements in 2017, in line with the CBA's ambition to promote a safe, efficient, and reliable payment system at a level in accordance with best practices, included, inter alia:

- A case analysis focused on comparable challenges in other countries regarding payments system as well as their solutions, taking into consideration market best practices, in close cooperation with the DNB.

Currency operations

The CBA has the sole mandate to issue florin bank notes and coins in Aruba. As illustrated in Chart 4.1, the Afl. 100 denomination again represents the largest share of all bank notes issued, comprising 51 percent of the total number of bank notes in circulation at end-2017, while the Afl. 500 bank note remains underused (see).

Chart 4.1: Bank notes in circulation by denomination in 2017
(percentage share in total number of all bank notes in circulation)

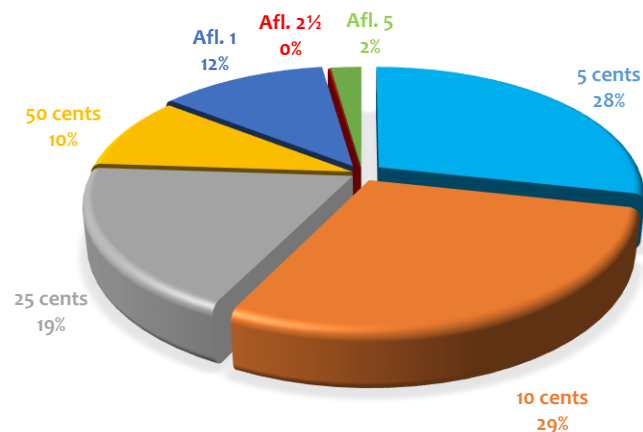


The total number of bank notes as well as the value brought into circulation reveal growth in 2017 by 7.4 percent and 9.6 percent, respectively, compared to 2016. Despite the widespread use of payment cards, including debit and credit cards, and electronic payments through online banking, the use of the florin bank notes to make payments continued to grow in 2017.

The CBA also is entrusted with issuing coins on behalf of the GOA, which are on the GOA's balance sheet. The total number of coins as well as the value of coins in circulation rose in 2017

compared to 2016 by 5.1 percent and 3.5 percent, respectively (see Chart 4.2).

Chart 4.2: Coins in circulation by denomination in 2017
(percentage share in total number of all coins in circulation)



As depicted in Chart 4.2, the two smallest coin denominations, the 5 cent and 10 cent coins, are the largest in circulation, followed by the 25 cent coin.

Commemorative coin

In 2017, the CBA issued 1 silver commemorative proof quality coin with a nominal face value of Afl. 5 on behalf of the GOA.

The coin was issued to commemorate that on February 7, 2017, the GOA declared the Aruban brown-throated parakeet, or in Papiamentu, the “prikichi”, an endemic subspecies named

“*Aratinga pertinax arubensis*” species, as the national bird of Aruba. Worth mentioning is that this brown-throated parakeet exists only in Aruba.



The parakeet has a length of 25 cm and weighs 90-100 grams; it is known for its beautiful feathers in different tones of green. The entire island is its natural habitat. These birds fly noisily in flocks of hundreds over the Aruban landscape and build their nests in termite mounds to hatch out their eggs.

Counterfeit florin bank notes

Over the years, the number of counterfeit florin bank notes has been quite low. Nonetheless, a few cases of counterfeit florin bank notes were registered in 2017. In all these cases, the CBA alerted the public promptly to mitigate the risk of proliferation of counterfeit florin bank notes.

For extensive information to help the public in verifying the authenticity of the florin bank notes, please refer to the CBA's website.

Clearing system

The CBA currently operates a network clearing system called the OnNet Clearing System (ONCS) (previously known as the Goldnet Clearing System) and processes the direct credit files (salaries, pensions, and tax returns) and direct debit files (standing orders from the utility companies) separately from regular transactions. These files are processed twice daily for further processing between the clearing members. Transfer times between the clearing members are unclear and can take up to 3 to 5 days.

In 2017, the volume and the value of funds transferred through the ONCS continued their upward trend compared to previous years, while the volume as well as the value of checks processed continued to drop. The expansion in electronic transfers together with the contraction in checks used are due predominantly to a growth in electronic payments through online banking and payments through debit and credit cards.

Furthermore, checks no longer will be accepted as a payment method following the Aruban Bankers' Association announcement that all domestic commercial banks will

transition into a "Check-Free" system for retail customers on May 1, 2018, and for corporate clients on November 1, 2018.

Looking forward

In line with its ambitions and strategic objectives, the CBA aims to innovate clearing and settlement services by introducing instant payment clearing and settlement services in 2019. The CBA's three high-level goals for this project arising from its ambitions and strategic objectives are as follows:

I. Leapfrog the state of Aruba's payment infrastructure

The CBA's goal is to upgrade the Aruban payment infrastructure and leapfrog it into a Caribbean frontrunner.

II. Be beneficial to all stakeholders

The modernized payment system must benefit all stakeholders/users of the Aruban payment infrastructure.

III. Transition the CBA's role into oversight

The CBA plans to reduce its current operational responsibilities and in exchange, assume an oversight role with respect to the payment system.

With the implementation of the new Instant Payments Clearing and Settlement Mechanism (IP CSM), Aruba will switch from a traditional payment processing to a new instant payments

infrastructure implying that all interbank payments in Aruban florin initiated in Aruba will be instantly processed 24/7/365.

To ensure that all objectives can be met, the CBA is in the process of proposing an amendment to the Central Bank Ordinance to introduce a legal mandate for the oversight of the payment system.

- In addition, plans are underway to prepare and present a National Ordinance on payment transactions to the Minister of Finance, and to implement the mentioned Ordinance as well as other required laws and regulations for modernization of the payment system.

5 Treasury management

The CBA provides treasury management services for the GOA by executing payment orders and intermediating in the issuance of GOA debt paper on the domestic capital market. The CBA also manages the foreign exchange reserves and regulates the flow of international payments. The mentioned reserves are invested in accordance with prudent guidelines aimed at preserving these reserves, thus fostering confidence in the peg of the Aruban florin with the US dollar.

The CBA has been converting the already issued GOA bearer bonds to electronic registered bonds¹ on a voluntary basis since 2016. This process is expected to be completed by the end of the first quarter of 2019.

Managing the foreign exchange reserves

The CBA manages Aruba's net foreign assets as stipulated in article 12, sub 1 of the CBO. The Bank also applies, among other things, the B-9 rule for commercial banks and the 40-60 percent investment rule for institutional investors to regulate the foreign

asset holdings of these sectors. The B-9 rule allows commercial banks to hold a certain amount of foreign exchange reserves as working balances for the settlement of the foreign transactions of their clients. The 40-60 percent investment rule requires institutional investors to invest part of their funds domestically.

The CBA closely monitors the funding needs of the banking sector and the GOA, and to be able to adequately meet these funding needs, it manages its foreign exchange reserve holdings prudently. To this end, it evaluates its foreign exchange investment strategy periodically against the investment guidelines, and developments on the international financial markets.

The CBA's policy regarding the management of the official foreign exchange reserves remained unchanged in 2017. It continued to pursue a prudent investment policy primarily to preserve its capital, while seeking diversification and

¹ As stipulated in the State Decree regarding government securities (AB 1988 no. 6), as amended by AB 2014 no. 64.

optimization of return by investing the foreign exchange reserves within the following strict parameters:

- Fixed income securities denominated solely in US dollars with short-term duration (1-3 years);
- US government and US agency securities (including mortgage-backed securities) limited to AA credit quality ratings;
- Asset-backed securities with a minimum credit quality rating of AAA;
- Corporate bonds that meet high standards in terms of credit quality (a minimum of single A or equivalent) and are limited to the financial services sector, specifically banks and financial institutions, as well as industrial companies;
- Sovereigns and supranational securities limited to AAA markets/entities only; and
- Money market instruments (short-term funds with maturities ranging from overnight to 1 year, e.g., certificates of deposit, time deposits, as well as treasury bills) with a minimum credit rating of A-1 or P-1 or F1.

The CBA investment portfolios are categorized by a duration position, which consist of a liquid portfolio managed internally, and two medium-term portfolios with an average duration of 1-

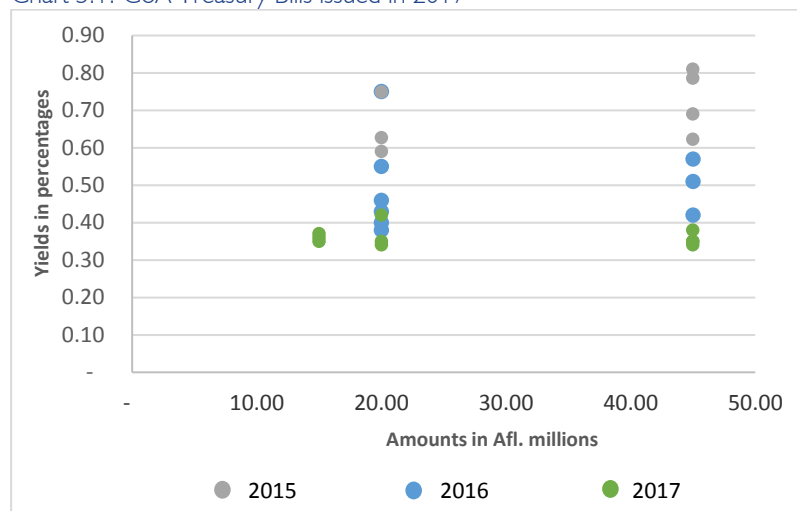
3 years managed by two external asset management investment companies.

GOA banker

The CBA also functions as banker for the GOA and advisor to the Minister of Finance, pursuant to the CBO. As part of its treasury services to the GOA, the CBA accepts deposits from the GOA, and carries out a portion of its foreign payment instructions as well as a portion of its local payments. The CBA does not charge any fee to the GOA on the domestic and foreign payments executed on its behalf. The mentioned domestic and foreign payments are cleared through the accounts of the Department of Finance (DOF) and the Departamento di Impuesto (DIMP), including the earmarked accounts of the DOF held at the CBA. In addition, the CBA provides services involving the issuance and settlement of local government securities on behalf of the GOA.

In 2017, the CBA assisted the GOA with the renewal of four 3-month Treasury Bills in tranches of Afl. 45 million and Afl. 20 million at each issuance; no cash loan certificates were issued in 2017.

Chart 5.1: GoA Treasury Bills issued in 2017



As depicted in Chart 5.1, the yield on the 3-month Treasury Bills fluctuated between 0.38 percent and 0.57 percent during 2017, significantly lower than the fluctuations in 2016 and 2015, hereby reflecting the temporary excess liquidity in the domestic market and the low interest rates on the international money markets.

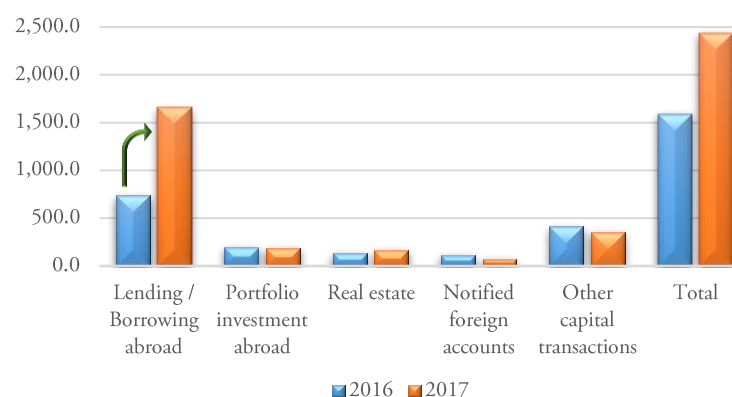
Besides the issuances of the 3-month Treasury Bills, in 2017 the CBA assisted the GOA with an electronic bonds issuance on the domestic market up to a maximum amount of Afl. 438.8 million, with a yearly coupon rate of 4.75 percent and a maturity of 10 years. The proceeds of this issuance were used to cover the GOA's financing needs ensuing from the execution of its 2017 budget.

Foreign exchange regulations

Payments related to current account transactions can be transferred without administrative restrictions in accordance with the State Ordinance Foreign Exchange Transactions (SOFET), except for some types of transactions. For the mentioned exempted transactions, please refer to the Foreign Exchange Regulations section on the CBA's website.

As illustrated in Chart 5.2, the volume as well as the value of the transactions for which licenses were granted by the CBA expanded to Afl. 2,436.5 million in 2017 compared to 2016. This was due to an increase of Afl. 922.2 million in the value of transactions related to large lending/borrowing abroad. These transactions included two infrastructure projects.

Chart 5.2: Value of foreign exchange licenses issued (Amounts in Afl. million)



Foreign exchange rates

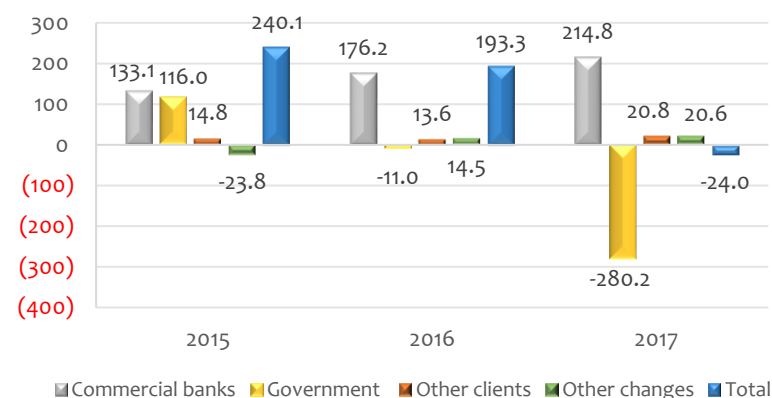
The CBA's official buying and selling rates for the US dollar from and to the commercial banks remained fixed at Afl. 1.7895 and Afl. 1.7905, respectively. Besides the daily exchange rate of the florin vis-à-vis the US dollar, the CBA also publishes daily quotations on its website for eight other foreign currencies based on data published by the European Central Bank (ECB).

Foreign exchange transactions

The foreign exchange transactions of the commercial banks and GOA effectuated through the CBA led to a net sale of foreign exchange of Afl. 44.6 million in 2017, compared to a net purchase of foreign exchange of Afl. 178.8 million in 2016 (see Chart 5.3).

This turnaround was caused mainly by the GOA's net use of foreign reserves for transactions, leading to a huge expansion of Afl. 269.2 million in net foreign exchange sale to the GOA. The latter occurred because no foreign exchange reserves were received from GOA bond issuances on the international capital markets, while higher foreign debt service transactions were paid on behalf of the GOA during 2017 when compared to 2016. In contrast, the net purchase of foreign exchange from the commercial banks increased by Afl. 38.6 million in 2017 when compared to 2016.

Chart 5.3: Foreign exchange transactions
(Amounts in Afl. million)

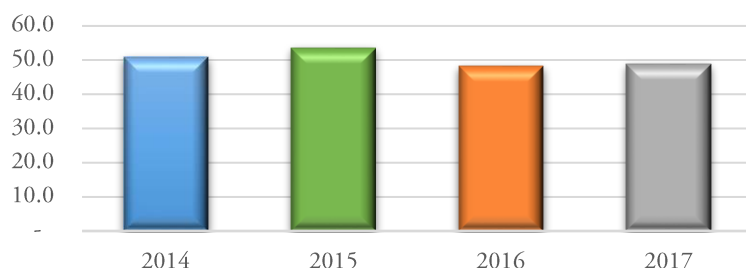


Foreign exchange commission

In 2017, the CBA collected approximately Afl. 48.7 million of foreign exchange commission on behalf of the GOA, pursuant to the State Ordinance Foreign Exchange Commission (SOFEC). This foreign exchange commission is a 1.3 percent commission due by residents on their payments to nonresidents. The total collected foreign exchange commission during 2017 remained more or less the same as the amount collected during 2016 (see Chart 5.4).

As illustrated in Chart 5.4, the higher collected foreign exchange commission in 2015 was related to the intensified activities by the CBA during 2015 to eliminate a partial backlog in the review process of submitted reports.

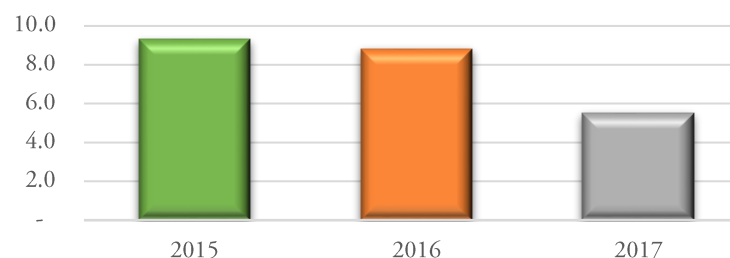
Chart 5.4: Collected foreign exchange commission on behalf of the GoA
(Amounts in Afl. million)



Exchange Rate Margin Compensation

Pursuant to the State Ordinance Exchange Rate Margin Compensation (SOERMC), the net Exchange Rate Margin Compensation (ERMC) recorded for the year 2017 amounted to Afl. 5.5 million. As shown in Chart 5.5, mentioned ERMC is a compensation resulting from the difference between the amount payable by the commercial banks to the CBA stemming from the sale of foreign currency to the public (tariff of 0.375 percent) and the amount paid by the CBA to the commercial banks for the buying of foreign currency from the public (tariff of 0.125 percent).

Chart 5.5: Collected exchange rate margin compensation
(Amounts in Afl. million)



Looking forward

In line with its ambitions and strategic objectives, the CBA aims for the following:

- Continuance of the conversion of the GOA bearer bonds to electronically registered bonds at the CBA.
- Continuance of the close monitoring of the liquidity needs denominated in foreign currency of the GOA as well as the commercial banks, with the aim of optimally managing the level of foreign exchange reserves and maximizing the income generation capacity of the CBA investment portfolio, while aiming to mitigate the risks related to its investment portfolio.
- Close monitoring of the collection of the FEC on behalf of the GOA.
- Close monitoring of the foreign exchange transactions in connection with the ERMC for the CBA.

6 Organizational affairs

The CBA has a strategic plan “Bela Yen: Nos Plan Strategico 2016-2020” (Bela Yen²). Bela Yen comprises the mission, vision, and strategic objectives of the CBA as discussed in chapter 1. Through the execution of this plan, the CBA has set its strategic course for the period up to 2020.

Figure 6.1: Strategic planning framework



The CBA has a strategic planning framework in place to implement Bela Yen (see Figure 6.1). In the first quarter of each year, the Executive Committee evaluates Bela Yen to determine whether it should be adapted considering the CBA’s constantly changing internal and external environments. Following the

² “Bela Yen” is a saying in Papiamentu meaning “full steam ahead”.

strategy review, the Executive Committee issues a policy letter indicating its priorities for the next year. Thereafter, the division and department plans and budgets for the following year are prepared, taking these priorities into account. Finally, the individual performance agreements for the upcoming year are drawn up taking into account the division and department plans. This planning framework ensures the necessary alignment with Bela Yen. In addition to this strategic planning framework, management reports are furnished regularly to adequately monitor the implementation of Bela Yen.

Human Resources Management

As part of the CBA’s commitment to continuously upgrade the skills of its staff and foster knowledge sharing, the CBA staff participated in a number of courses, seminars, and conferences held locally and abroad during 2017.

The CBA consists of
95 staff members



Moreover, in 2017, the CBA organized several training sessions for its personnel in the areas of leadership, strategic thinking, risk

management, information security, project management and effective communication.

The following are key successes accomplished in 2017 regarding Human Resources Management (HRM).

- Completion of the strategic HRM plan.
- Development of several policy documents, inter alia, HR introduction policy, internship policy, recruitment & selection policy, as well as the revision of the additional health insurance scheme.
- Advances on the new organization structure, job structure, and job descriptions project.
- Continued progress on the digitalizing of several HR processes pertaining to the employee self-service portal and digital personnel records.

Operational and physical infrastructure and security

In line with the CBA's ambition to perform its operational tasks in an efficient and results-oriented manner, various projects were successfully executed in 2017.

- Initial steps to replace the CBA's core IT infrastructure were taken, to culminate in 2018 by moving from Windows 7 to Windows 10.

- Initial rollout of SharePoint occurred to facilitate a 'paperless' working environment and stimulate collaboration.
- Implementation of a new Wi-Fi infrastructure was completed to facilitate modern ways of working within the CBA.
- Upgrades of various hardware components took place and will continue to take place in 2018 to ensure an up-to-date IT infrastructure.
- Big steps were taken to start the modernization of Aruba's payment system. Sessions were organized with various stakeholders and a position paper outlining the roadmap towards the future was launched at the end of 2017.
- To strengthen the information security posture of the banking sector, the Technology Risk Management (TRM) Guidelines were released for consultation at the end of 2017.

Looking forward

- Rollout of Windows 10, including a lot of applications to foster innovation and collaboration in the workplace.
- Initial move towards the cloud for some applications.
- Ongoing effort to increase the CBA's security posture.
- Implementation of the Technology Risk Management (TRM) Guidelines.



- Organization of the 28th Annual Conference of Regional Central Banks' Information Systems Specialists for Central Banks in the region by the IT Department together with the Information Security Department.
- Organization of the 6th Annual Conference for Regional Central Banks Security Chiefs for Central Banks in the region by the Physical Security Department.
- Evaluation of the applications and architecture is needed to facilitate the implementation of several projects, e.g. IP CSM.
- Standardization of processes and procedures between (data-intensive) departments through standard operating procedures and automated (data) systems.
- Further roll out of the lean approach within the organization, also to realize improvements in our processes.

7 Governance

The CBA strives to have a sound corporate governance system in place that supports proper and effective decision making through the implementation of appropriate checks and balances procedures to ensure accountability, due process, and transparency.

Management structure

The CBA is managed by a President and two Executive Directors, who together form the Executive Committee (EC), while the management team of the CBA consists of the EC, General Managers, and Department Managers. The members of the EC are appointed and dismissed by the Governor of Aruba. In addition to the CBO, the EC operates according to the general regulations set out in the State Decree giving directives to the President, the Executive Directors, and the Board of Supervisory Directors (BoSD) (A.B. 1992, no. GT 4).

Furthermore, the CBA has seven committees in place, i.e., the Audit Committee, the Monetary Policy Committee (MPC), the Investment Committee (IC), the Project Committee, the Budget Committee, the Risk Management Committee (RMC), the Strategic Committee, and the Payments System Committee described in Table 7.1.

Table 7.1: Committees of the CBA

Committee	Mandate
Audit Committee	Monitors compliance with BoSD's policies, applicable laws and regulations, and reviews financial and auditing matters.
Monetary Policy Committee	Formulates and implements measures to, inter alia, maintain the adequacy of the international reserves, and stability of the Aruban florin.
Investment Committee	Advises on matters related to investment strategy, policy, and instruments.
Project Committee	Advises on the feasibility, priority, planning, and implementation of projects.
Budget Committee	Prepares the CBA's draft budget for submission to the BoSD for approval.
Risk Management Committee	Ensures that sound policies, procedures, and practices are in place for the management of material enterprise-wide risks.
Strategic Committee	Provides effective strategic guidance to the CBA when implementing the Bela Yen.
Payments System Committee	Advises on the CBA's mission of contributing to financial stability and economic prosperity for the Aruban community by means of promoting an efficient and reliable payments system.

BoSD

At the end of 2017, the BoSD consisted of four appointed members (including the Chairman). The GOA Commissioner is the Chairman of the BoSD and is appointed and dismissed by

the Governor of Aruba. The Chairman of the BoSD is appointed for an undefined period. The other members of the BoSD are appointed for a term of 5 years, and their remuneration is determined by the Minister of Finance, after consulting with the members of said Board and the President.

The BoSD supervises the CBA's operations and oversees the management of its property as well as the funds entrusted to it. Upon request of the BoSD, the EC reports on policies implemented as well as administrative and management issues. The BoSD meets with the EC at least four times a year and exercises its duties according to the rules set forth in the State Decree giving directives to the President, Executive Directors, and the BoSD. Its tasks include, among other things, the approval of the budget and the adoption of the financial statements. The approved budget and the financial statements are sent to the Minister of Finance and the President of the Aruban Parliament. The adoption of the financial statements by the BoSD also serves to discharge the President and the Executive Directors from liability. The BoSD is responsible for appointing the CBA's external auditor.

In 2017, the BoSD and the EC held several scheduled meetings to discuss a number of matters, including but not limited to the 2016 annual report, the 2017 mid-year review, and the 2018 budget. In addition, the Chairman of the BoSD held weekly

meetings with the President to discuss matters related to the CBA.

Looking forward

- The CBA aims to strengthen its corporate governance in accordance with 'best practices'.
- The CBA plans to implement the new procurement policy.

8 Risk management

The CBA faces a number of risks with respect to the performance of its (main) tasks. Some of these risks are general, while others are unique to central banks. Risk management is an integral part of the CBA's daily operations, with management's efforts directed towards ensuring that detailed procedure manuals, proper segregation of duties, and clear delineation of roles and responsibilities are in place and integrated in departmental processes and procedures.

Figure 8.1: CBA's risk management cycle



The Risk Management Committee (RMC) is responsible for establishing a standardized risk management framework for the CBA. This committee monitors and provides advice on all

material risks and recommends the steps needed to mitigate these risks (see Figure 8.1). Based on its analysis of the identified risks, the risk matrix has been updated in 2017.

The most important risks for the CBA are the following:

- **Financial risk** relates to incurring financial losses when credit, market, and liquidity risks are not sufficiently contained. These risks are strictly monitored by the IC, which is chaired by the Executive Director responsible for the operations of the CBA.
- **Reputational risk** relates to the potential damage to the CBA caused by negative publicity or external reaction, leading to deterioration or loss of confidence in the CBA. More specifically, reputational risk could arise when policy errors occur regarding monetary policy or supervision of the financial system that could negatively impact the economy in general and the CBA's reputation in particular. Reputational risks entail, among other things, the risk associated with the dissemination of confidential information and the risk of publishing inaccurate data.



- **Compliance risk** includes the threat posed to the CBA's financial, organizational, or reputational standing from violations of the prevailing laws, regulations, code of conduct, or organizational standards of practice. The CBA has an incident-reporting policy in place to document, assess, and take appropriate actions with respect to, among other things, compliance risk.
- **Operational risk** refers to a negative impact on the CBA's assets, resources, or operational requirements induced by people, processes, systems/infrastructure, or external sources.

The CBA views risk management as an integral part of the day-to-day responsibility of the President, Executive Directors, General Managers, and Department Managers. The CBA has an Internal Audit Department (IAD) that independently supports the EC and the BoSD in matters related to the evaluation of the effectiveness of internal controls, risk management, and governance processes. The internal audit plan of the year 2016 provided assurance over the control frameworks that manage key financial risks and was undertaken as planned. Additionally, the IAD assisted the external accountants during the bi-annual review and year-end audit.

To further enhance and strengthen its risk management and internal audit tasks and activities, the CBA acquired an audit software solution in 2017.

Financial risk

The CBA is exposed to financial risk (i.e., credit, market, and liquidity risk) associated with the management of its financial assets and liabilities. More specifically, management of the official reserves has a direct effect on the size and structure of the CBA's balance sheet as well as its financial performance.

- **Credit risk**, which refers to the risk of incurring a loss if the counterparty fails to meet its financial obligations in accordance with agreed-upon terms, is the most important source of financial risk for the CBA associated with its holdings of foreign currency assets for investment and liquidity purposes. Credit risks includes four types of risk: default risk, bankruptcy risk, downgrade risk, and settlement risk. The CBA is most exposed to the downgrade risk. In this regard, the CBA has set high standards in terms of credit quality in its investment policy to partially mitigate this risk, as indicated in section 5.1.
- **Interest rate risk and commodity price risk** are the largest sources of market risk for the CBA with respect to its financial assets, when compared to foreign exchange risk,

which relates mainly to other foreign currency exposures besides the US dollars in the case of the CBA. In this respect, the accounting policies stated in the CBO require that changes in the valuation of the financial assets of the CBA are recorded on its balance sheet under its revaluations account. The CBA established investment guidelines instructing the asset managers that all the financial assets must be denominated in US dollars only, thereby containing the foreign exchange risks for the CBA with respect to its financial assets, as the Aruban florin is pegged to the U.S. dollar at a rate of Afl. 1.79.

- **Liquidity risk** is the risk that CBA encounters difficulty in meeting its obligations arising from its financial liabilities that are settled by delivering cash or another financial asset. Since the CBA is the ultimate source of liquid funds to the Aruban financial system and has the authority to provide ample Aruban florin liquidity, although within regulatory limits, liquidity risk is considered very low. As previously mentioned, the CBA's ability to provide ample Aruban florin liquidity is exercised with due regard to its policy objective of maintaining the trust in the Aruban florin. With respect to the role of the CBA in providing foreign currency to commercial banks and the GOA for transactional purposes,

this risk is classified as high since the CBA needs to keep a proper level of liquid foreign assets constantly at hand to be able to comply with the demand.

To minimize the mentioned financial risks, the CBA implements a prudent investment policy strategy, which is fully U.S. dollar fixed-income based. Any deviation from the investment guidelines requires prior written approval of the President. The IC verifies that investments are executed according to the stipulated guidelines.

The IC meets weekly to discuss, among other things, matters related to both current domestic and international market trends and economic developments that could impact the CBA's official reserve, as well as investment performance and related financial risks. The IC periodically discusses the monthly performance report of each asset manager and advises the President on strategic or tactical changes in the investment policy and/or guidelines, if deemed necessary.

Looking forward

- Roll out of the audit software solution acquired by the CBA to further enhance and strengthen its risk management and internal audit tasks and activities.

9 Financial highlights for 2017

In line with CBA's strategic plan "Bela Yen 2016-2020", a multi-year budget for 2016-2020 was finalized in 2016, providing the necessary guidance with regard to anticipated costs and revenues in the upcoming five years, and how to manage the associated risks for the CBA. This multi-year budget is monitored on a periodic basis, and will be amended, if necessary.

Financial highlights

The CBA's total assets decreased to Afl. 1,673.7 million at year-end 2017, from Afl. 1,696.3 million at year-end 2016. This decrease was attributed mainly to a drop of Afl. 54.6 million (- 3.8 percent) in the 'foreign currency assets' to Afl. 1,391.7 million. The drop in the 'foreign currency assets' was largely the result of a decline of Afl. 78.0 million (- 5.8 percent) in the 'Government and other papers', offset partially by a rise of Afl. 23.3 million (+ 21.7 percent) in 'due from banks and other financial institutions' compared to December 31, 2016. The reduction in the 'foreign currency assets' was offset in part by an increase of Afl. 27.4 million (+ 11.9 percent) in the value of the gold holdings. Refer to Table 9.1 'Assets of the condensed balance sheet'.

Table 9.1: Assets of the condensed balance sheet (before allocation of net result)
(Amounts in Afl.)

	<i>As of December 31, 2017</i>	<i>As of December 31, 2016</i>
<i>Assets</i>		
1. Gold	258,284,264	230,911,909
2. Foreign currency assets	1,391,655,391	1,446,250,066
2.1 Due from banks and other financial institutions	130,918,592	107,589,017
2.2 Government and other papers	1,256,589,678	1,334,532,021
2.3 Other	4,147,121	4,129,028
3. Other assets	23,771,834	19,103,125
3.1 Receivables	9,635,404	6,067,459
3.2 Stock of coins and printing cost bank notes	733,424	934,945
3.3 Fixed assets	11,091,649	11,212,937
3.4 Project in progress	2,311,357	887,784
Total assets	1,673,711,489	1,696,265,100

- **Government and other papers.** The decline in the CBA's government and other papers was attributed primarily to net cash transfers in the amount of Afl. 96.7 million to the CBA's current account held at its corresponding bank in the USA in order to meet the CBA's liquidity needs in foreign currency to execute payments on behalf of the GOA and to meet

foreign exchange demand by the commercial banks during the year 2017. In addition, the CBA's government and other papers were negatively impacted by the change in the market value of the CBA's investment portfolios (revaluation account) (- Afl. 3.0 million), as well as the net capital losses (- Afl. 0.1 million) realized during 2017. The net change in the market value of the CBA's investment portfolios (revaluation account) was the result of higher unrealized net capital losses resulting from the rise in both the yields on the 3-year US Treasury Notes and the 2-year US Treasury Notes during the year 2017. The mentioned negative impact on the CBA's government and other papers was offset partially by the interest income received (+ Afl. 21.3 million) during 2017.

- **Due from banks and other financial institutions.** The net rise of Afl. 23.3 million in the item 'due from banks and other financial institutions' was mainly related to net cash transfers received from the CBA's investment portfolios, as well as a net inflow of foreign currency sold by the commercial banks to the CBA in 2017. However, these inflows were offset in part by foreign currency outflows to cover the GOA's interest and capital payments of its external debt and operational expenses denominated in foreign currency.

- **Gold holdings of the CBA.** Gold price ended the year 2017 on a positive note closing at USD 1,296.50 per troy ounce (year-end 2016: USD 1,159.10 per troy ounce). This rise caused an increase in the value of the CBA's gold holdings, compared to 2016. Gold demonstrated its value as a safe haven asset, e.g., following the aftermath of the United Kingdom's vote to leave the European Union. Consequently, the value of gold holdings is expected to remain strong.

On the other hand, the contraction in the liabilities and equity of the CBA at year-end 2017 compared to the previous year-end was due mainly to a decrease in the 'deposits of residents' (- Afl. 71.1 million or 5.9 percent). This decline was offset partially by rises in the 'bank notes in circulation' and 'revaluation account' of, respectively, Afl. 25.8 million (+ 9.6%) and Afl. 24.4 million (+ 21.2%). Refer to Table 9.2 'Liabilities and equity of the condensed balance sheet'.

- **Deposits of residents.** The decrease in the deposits of residents was attributed mainly to drops in the deposits of the commercial banks and development funds of, Afl. 42.1 million and Afl. 38.1 million, respectively, which were offset in part by a rise of Afl. 10.9 million in the GOA's deposits. The drop in the commercial banks' deposits was attributed primarily to the payments made by these institutions to the

GOA for the purchase of bonds in 2017. The decrease in the development funds' deposits was mainly the result of local and international payments made by the CBA on behalf of this fund in 2017. Furthermore, the rise in the GOA's deposits was related largely to the proceeds received by the GOA in connection with the issuance of bonds on the local market during 2017.

- **Bank notes in circulation.** The rise in the bank notes in circulation resulted mainly from higher cash withdrawals by the commercial banks during the year 2017 compared to the prior year.
- **Revaluation account.** The revaluation account was positively impacted by the increase in the market price of gold by USD 137.40 per fine troy ounce or 11.9 percent compared to end-2016.

Table 9.2: Liabilities and equity of the condensed balance sheet (before allocation of net result)
(Amounts in Afl.)

	<i>As of December 31, 2017</i>	<i>As of December 31, 2016</i>
<i>Liabilities and equity</i>		
1. Bank notes in circulation	296,268,300	270,420,150
2. Deposits of residents	1,132,751,632	1,203,805,030
2.1 GOA	46,939,053	36,072,118
2.2 Commercial banks	1,073,767,167	1,115,853,165
2.3 Other	12,045,412	51,879,747
3. Deposits of nonresidents	741,829	3,921,202
4. Money in supply	1,812,900	1,812,355
5. Payables and accrued expenses	2,334,611	4,454,183
6. Revaluation account	139,365,720	114,945,382
7. Capital and reserves	91,609,840	86,312,882
7.1 Capital	10,000,000	10,000,000
7.2 General reserve	81,609,840	76,312,882
Net result for the year	8,826,657	10,593,916
Total liabilities and equity	1,673,711,489	1,696,265,100

The net result for the year 2017 declined by approximately Afl. 1.8 million (- 16.7 percent) compared to 2016. This decline was caused in large part by a decrease in the item 'other revenues' (-

Afl. 4.0 million, or – 27.1 percent). In addition, the CBA's **personnel expenses** increased by Afl. 1.6 million (+ 12.0 percent), thereby also contributing to the mentioned drop in the net result for the year 2017 compared to 2016. The effect of these transactions offset in part by an increase in the 'net interest revenues' (Afl. 4.7 million, or + 26.9 percent), during the same period. Refer to Table 9.3 'Condensed profit and loss account'.

- **Net interest revenues.** The CBA's net interest revenues, consisting primarily of earned interest on the CBA's investment portfolios and realized gains & losses, showed a significant increase in 2017 compared to the previous year. The interest income realized by the CBA's investment portfolio during the year 2016 included only seven months of revenue realized by the CBA's new medium-term investment portfolio, while the interest income realized during the year 2017 included realized revenues for all twelve months by both investment portfolios. In addition, the decrease in the realized losses on the CBA's investment portfolios (- Afl. 1.0 million) during the year 2017, when compared to the previous year, also contributed to the mentioned increase in the net interest revenues.
- **Other revenues.** The drop in this category in 2017 was attributed mainly to the CBA's exchange rate margin compensation. During 2017, the CBA recorded an

adjustment related to the collection of the exchange rate margin compensation over the period of April 2015 up to and including December 2016, which negatively impacted the CBA's other revenues, when compared to the year 2016.

Table 9.3: Profit and loss account
(Amounts in Afl.)

	2017	2016
1. Net interest revenues	21,309,250	16,639,993
2. Other revenues	10,663,999	14,629,406
Total income	31,973,249	31,269,399
3. Amortization of stock of bank notes	313,332	310,644
4. Personnel expenses	15,826,063	14,245,108
5. Operating expenses	5,765,087	4,954,684
6. Depreciation expenses	1,242,110	1,165,047
Total expenses	23,146,592	20,675,483
Net result	8,826,657	10,593,916

- **Personnel expenses.** The rise in this category in 2017 was attributed primarily to the CBA's salaries and social security expenses. The CBA employed 95 persons full-time by year-end 2017, a net increase of 3 staff members compared to the end of the previous year. The increased staffing to further support the CBA's team along with salary adjustments were the majors contributors to the rise in the CBA's salaries and social security expenses in 2017, compared to the previous year.



CENTRALE BANK VAN ARUBA

J.E. Irausquin Blvd 8, Oranjestad, Aruba

Phone: +297 525 2100

www.cbaruba.org