



DEPLOYING OPPORTUNISTIC DATA TO IMPROVE ANTI-MONEY LAUNDERING NATIONAL RISK ASSESSMENTS

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PART 1: INTRODUCTION

The Financial Action Task Force (FATF) administers a jurisdictional mutual evaluation process, which is applicable to nearly every country in the world. One core element in this process is the National Risk Assessment (NRA)¹. The International Monetary Fund² and World Bank³ have integrated their jurisdiction assessment process with the FATF, creating a de facto global standard for NRAs.

Although the FATF has provided substantive guidance on the NRA, it is not yet the case that either the NRA's detailed format or its data sources are standardised across jurisdictions. This leaves considerable scope for each jurisdiction to go its own way on an NRA.

Such an open approach creates comparison challenges for AML researchers⁴, practitioners, and the officials in each jurisdiction who are responsible for creating NRAs in the context of a FATF jurisdictional evaluation.

This paper will outline how the Central Bank of The Bahamas (Central Bank), in conjunction with the private sector and other regulatory agencies, has sought to empirically improve our AML risk assessment, particularly in the context of the NRA. We have found and created better national datasets to form better risk assessments. Our sense is that the Bahamian experience is transferable to other jurisdictions wishing to take a more data-informed path to creating NRAs.

What is “risk”? What is the NRA’s purpose?

Under the relevant FATF guidance, “risk” arises from:

- *Threats*, essentially each jurisdiction’s actual and potential financial crimes⁵ and criminals;
- *Vulnerabilities*, meaning weaknesses in systems or controls, or characteristics of the jurisdiction’s financial system, society, or economy, that increase the likelihood and volume of financial crime; and
- *Consequence*, which is the potential harm from financial crime to affected stakeholders in the financial system, society, and the international community.

Per FATF guidance, an NRA’s purpose is:

Generally, a ML/TF risk assessment is intended to help a country to identify, assess and ultimately understand the ML/TF risks it faces. A country may set out more concrete goals for a particular risk assessment however, such as informing the development of policy or the deployment of resources by supervisors, law enforcement and other competent authorities. Understanding the scale and impact of identified risks can also assist in determining the appropriate level and nature of AML/CFT controls applied to a particular product or sector.

In the Bahamian experience, appropriate purposes for an NRA include, in order of importance:

¹ https://www.fatf-gafi.org/media/fatf/content/images/National_ML_TF_Risk_Assessment.pdf

² https://www.fatf-gafi.org/media/fatf/documents/reports/Risk_Assessment_IMF.pdf

³ https://www.fatf-gafi.org/media/fatf/documents/reports/Risk_Assessment_World_Bank.pdf

⁴ See for example Ferwerda and Reuter 2019: <https://link.springer.com/article/10.1007/s10610-018-9395-0>

⁵ In this paper, “financial crime” covers money laundering, terrorist financing, and proliferation financing.

- 1) It helps the public sector define the jurisdiction's financial crime threats, vulnerabilities, and consequences. This in turn guides matters such as legislative priorities, supervisory powers and resourcing, and engagement with the private sector on regulations and supervision.
- 2) The NRA is an essential element in a successful FATF mutual evaluation report (MER) process, under which "success" is defined as achieving a fair assessment result for the jurisdiction; and
- 3) The NRA helps guide the jurisdiction's engagement internationally.

All these purposes are better met by increased reliance upon data and empirical analysis, relative to unsupported opinion. The general international experience to date, as validated by the limited available research⁶, is that AML analysis suffers from undue reliance upon unbacked opinion, and insufficient reliance upon fact-based assessments.

Forming an empirical strategy for NRA purposes

In considering the NRA's "Threat, Vulnerability, Consequence" approach, it became apparent to the Central Bank that money laundering and financial crime threats are most amenable to empirical analysis. Threats arise from either illicit asset flows, or illicit asset stocks. In the Bahamian case and in our experience more generally, these stocks and flows are dominated by financial and near-financial assets.

Accordingly, the Central Bank considered the financial assets stocks and flows in the Bahamian economy, and then considered what data existed or could be easily created to examine these stocks and flows.

⁶ <https://www.centralbankbahamas.com/viewPDF/documents/2020-07-30-06-36-32-Conference-Proceedings.pdf>

PART 2: THE DATA STRATEGY FOR QUANTIFYING THREATS

The Central Bank is seeking to monitor cash flows both by type of payment method, and by potentially higher risk payers and receivers.

Table 1: National Cash Flows⁷

Payment Type	Approximate 2019 Payment Volume	Payment mechanism	Data Source
Cross border--SWIFT	\$11 trillion	Electronic	SWIFT estimate, later SWIFT Scope
Domestic Bank Deposits—Total and higher risk segments	\$50 billion	Electronic, cheque, currency	Central Bank collections from Domestic Banks
Credit union deposits	\$1 billion	Electronic and currency	Central Bank collections from Credit Unions
Money transmission businesses (MTBs)	\$220 million	Mainly currency	Central Bank collection from MTBs.
Gaming house net proceeds	\$200 million	Mainly currency	Gaming house reports to servicing bank, with servicing bank report to Central Bank
USD currency	\$155 million	USD currency notes entering the Bahamian banking system	Central Bank Currency Department report

It will be evident from Table 1 that cross border wholesale flows dominate in The Bahamas, which is unsurprising in a small country with a substantial international financial services industry. Larger and more domestically oriented economies will see a relative rise in bank and near-bank deposit flows relative to items such as SWIFT.

How to monitor cross border SWIFT flows?

As with most jurisdictions, the Central Bank examines cross border flow risk management from the bottom up, on a bank by bank basis.

In recent years, highlighted by an exceptionally nasty scandal involving the Estonian branch of a Danish bank⁸, it has become clearer that good AML supervision requires more effective monitoring of cross border wholesale cash flows. Some jurisdictions such as Australia⁹ seek to capture all cross border transfers, potentially resulting in hundreds of millions of transaction reports.

⁷ Amounts in this paper are expressed in USD. The Bahamian Dollar (BSD) is fixed at parity with the USD

⁸ <https://www.bloomberg.com/news/articles/2019-09-25/police-reassess-search-as-ex-danske-ceo-in-estonia-feared-dead>

⁹ <https://www.austrac.gov.au/business/how-comply-guidance-and-resources/reporting/money-sent-overseas-itfi>

In small jurisdictions, how should the supervisor balance the need to monitor cross border flows with the need to avoid becoming inundated in transaction reports? As it happens, SWIFT offers a product called Scope¹⁰ that addresses this need. The Central Bank has contracted with SWIFT to take up this product, which we understand has been deployed in several eastern hemisphere and Pacific jurisdictions, but has yet to feature in the Caribbean. We hope to be able to report on the efficacy of this data tool in a research paper around 2022.

Deposits by domestic industry sector

A folk wisdom has evolved in the AML industry that some industries are riskier than others. A sound NRA will consider whether these industries represent a threat or a vulnerability in a given jurisdiction. There is a risk in making an NRA too expansive. Mis-identifying immaterial or well-controlled economic segments as a threat or a vulnerability diverts scarce supervision and enforcement resources from segments that really are a threat or vulnerability.

To identify the industry sectors that are both material and immaterial, in 2019 the Central Bank requisitioned a special data collection from banks operating in the Bahamian domestic markets¹¹. This collection gathered all calendar 2018 deposit inflows at the aggregate banking system level, at the industry segment level by bank, and also for the largest depositors in each segment for each bank. The collection further broke down deposits by type, such as currency and electronic transactions. From the roughly \$50 billion in annual deposit inflows, \$6 billion was identified as belonging to 17 segments that often feature on lists of higher risk industries.

¹⁰ <https://www.swift.com/our-solutions/compliance-and-shared-services/business-intelligence/swift-scope/information-and-analysis-cross-border-flows-support-central-banks>

¹¹ <https://www.centralbankbahamas.com/viewPDF/documents/2019-07-01-05-24-05-Download-AML-Domestic-Segment-Review.pdf>

Table 2: 2018 deposit flow and composition in 17 high-interest industries

Total Deposits, all currencies			
Industry Segments	Total Deposits Received	Notes & Coins	Other Deposits
Auto dealers	\$ 123	\$ 24	\$ 98
Boat and maritime dealers	\$ 363	\$ 13	\$ 349
Real estate Brokers & Agents	\$ 305	\$ 16	\$ 288
Casinos	\$ 247	\$ 84	\$ 163
Non-casino gaming businesses	\$ 187	\$ 173	\$ 13
Money transmission businesses	\$ 108	\$ 80	\$ 28
Jewelry stores	\$ 116	\$ 15	\$ 100
Wholesale jewelers, precious metals, and loose stone dealers	\$ 3	\$ 2	\$ 1
Pawnshops	\$ -	\$ -	\$ -
Embassies, consulates, and other diplomatic posts	\$ 17	\$ 0	\$ 17
Attorneys and legal firms	\$ 2,775	\$ 21	\$ 2,754
Crypto-asset promoters or businesses	\$ -	\$ -	\$ -
Churches and religious organisations	\$ 155	\$ 77	\$ 78
Non-religious NGOs	\$ 127	\$ 12	\$ 114
Accountants and accountancy firms	\$ 115	\$ 7	\$ 109
Land and real estate developers	\$ 509	\$ 24	\$ 485
Insurance brokers and agents	\$ 1,021	\$ 227	\$ 794
TOTAL	\$ 6,170	\$ 777	\$ 5,392

The results for The Bahamas demonstrate:

- Many sectors (pawn shops, precious metals/loose stone dealers, diplomatic posts) are simply too small to constitute a material threat;
- Several larger sectors (auto dealers, jewelry stores) have greater deposit flow, but with little flowing in currency notes. The auto sector figures indicate vehicles purchased on credit, which is unlikely to constitute a money laundering threat. The jewelry store figures mainly represent tourists and locals making modest purchases on credit cards, again a minimal ML threat.
- The church and NGO sectors are modestly large, but a review of the large depositors in these segments reveal no practical threat of financial crime.
- Real estate, broadly defined, is far and away the largest potential domestic threat. Legal firm deposits, for example, are mainly real estate settlements.
- The domestic gaming sector's net winnings are about 2 per cent of GDP, with a substantial majority in cash. Casino gaming is somewhat larger, and mainly non-currency deposits.

- Money transmission businesses are a cash intensive but relatively small industry.

From this work, the Central Bank has concluded that there are only four domestic sectors that are sufficiently large to constitute a threat, and in two cases sufficiently cash-based to pose a threat of conversion of illicit assets from outside the banking system. These are:

- 1) Real estate, broadly defined;
- 2) Domestic gaming;
- 3) Casino gaming; and
- 4) Money transmission businesses.

As discussed later in this paper, we have also deployed opportunistic data techniques to help determine not only the vulnerability but the degree of threat associated with these vulnerabilities.

It is also worth repeating that the entirety of domestic deposit flows is about 0.5 per cent of cross border cash flows. From the rest of the world’s perspective, Bahamian financial crime risk resides in the cross border sector. The domestic sector constitutes a rounding error for aggregate Bahamian financial crime risk.

USD currency notes

Bahamian retailers and banks accept U.S. Dollar currency notes as equivalent to Bahamian Dollar notes, creating a de facto dual currency cash payments economy. The great majority of USD notes end up processed via the banking system to the Central Bank’s Currency Department, for return to the United States.

The Central Bank’s currency data was not collected with AML supervision in mind, but we have found it useful to assess the level of threat. The threat is happily quite low, as is evident in the following tables, extracted from Central Bank internal reports.

Table 3: USD Currency Report—Value of Notes Purchased (000s)

	2012	2013	2014	2015	2016	2017	2018	2019
\$1	5,535	6,054	6,501	6,920	6,601	5,776	6,039	6,980
\$2	20	36	26	10	42	32	24	58
\$5	8,975	9,745	10,030	10,350	9,530	8,455	9,330	10,270
\$10	10,860	11,960	11,970	12,180	10,920	9,240	10,290	11,820
\$20	117,500	133,860	122,820	127,680	125,660	99,540	122,520	111,620
\$50	4,905	5,680	7,100	10,525	6,455	5,450	9,600	5,050
\$100	14,820	13,710	15,400	14,730	13,330	13,400	13,900	9,400
Total	162,615	181,045	173,847	182,395,	172,538	141,893	171,703	155,198

Table 4: USD Currency Flow Report – Summary Statistics

	2012	2013	2014	2015	2016	2017	2018	2019	2020 (Jan-Jun)
Median Note Value (\$)	20	20	20	20	20	20	20	20	20
Ave. Note Value (\$)	11.18	11.20	10.76	10.76	10.67	10.41	11.15	9.69	10.09
Value/GDP (%)	1.5%	1.7%	1.6%	1.7%	1.6%	1.3%	1.6%	1.4%	N/A
Value Per Capita (\$)	437	480	455	472	441	359	445	399	149
\$100/Total Value	9%	8%	9%	8%	8%	9%	8%	6%	12%

The above tables depict USD currency note flow that is highly consistent with tourist spending, and highly inconsistent with money laundering. In particular, USD 100 notes constitute less than 10 per cent of notes by value, and around 1 per cent of notes by volume. The average note value is \$10, and the median \$20, which is consistent with U.S. ATM withdrawals being spent in The Bahamas.

As a point of comparison, about 80 per cent¹² of the value of USD currency outstanding globally is in the \$100 denomination. The U.S. has more \$100 notes on issue than the \$1 denomination, a very different position from USD note composition in The Bahamas.

For the much larger international banking sector, the Central Bank’s supervisory practice is to strongly discourage but not prohibit cash deposits and investments. In the past year, there were five such transactions, all dealing essentially with petty cash.

What about Bahamian Dollar currency notes?

The Bahamian Dollar is subject to exchange control restrictions administered by the Central Bank, so logic suggests that any sensible criminal would prefer USD notes, particularly for cross border transactions. We can revert to our Currency Department to check this logic. In reviewing the table below, readers may care to note that Bahamian ATMs dispense \$100 and \$50 notes, as well as smaller notes. Bahamian banks charge flat fees (such as \$2) for ATM withdrawals, so there is an incentive to make relatively few, relatively large withdrawals. Similar incentives apply for in-branch transactions. The following tables outline the stock rather than the flow of Bahamian Dollar notes.

¹² <https://fred.stlouisfed.org/release/tables?rid=311&eid=153785>

Table 5: B\$ Currency Report—Value of Notes Outstanding (\$000)

Figures as at 31st December

	2012	2013	2014	2015	2016	2017	2018	2019	Avg. Growth rate
\$0.50	653	668	669	676	737	767	773	870	2.48%
\$1	20,656	21,279	22,114	22,702	23,509	24,285	24,667 ,	25,232	2.85%
\$3	1,874	1,903	1,921	1,943	1,972	2,017	2,026	2,119	1.12%
\$5	10,018	10,451	10,731	11,036	11,503	11,918	11,978	12,164	2.72%
\$10	15,218	15,196	15,794	15,997	17,753	18,510	18,872	19,359	3.56%
\$20	51,997	54,189	57,060	57,299	59,900	61,349	54,216	54,402	-0.04%
\$50	93,668	96,746	102,994	108,690	116,723	123,722	141,702	159,240	8.21%
\$100	130,728	132,180	142,783	147,495	167,895	168,470	176,572	184,756	5.33%
Total	324,812	332,612	354,066	365,838	399,992	411,038	430,806	458,142	5.03%

Table 6: B\$ Currency Report – Summary Statistics

	2012	2013	2014	2015	2016	2017	2018	2019
Median Note Value (\$)	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Ave. Note Value (\$)	10.18	10.13	10.37	10.45	10.89	10.83	11.20	11.51
Value/GDP (%)	3.0%	3.1%	3.3%	3.4%	3.8%	3.8%	3.9%	4.0%
Value Per Capita (\$)	873	882	926	946	1022	1040	1116	1178
\$100/Total Value	40%	40%	40%	40%	42%	41%	41%	40%

The statistical story for Bahamian Dollar currency notes is one of stability, with slow growth over many years. Leaving aside AML issues, the Central Bank expects domestic note use to commence declining over time, as more electronic payments channels are enabled.

Given local payment patterns, we do not detect any strong evidence for large cash-based money laundering in these figures. It is doubtless the case that many petty criminals deploy cash from time to time, but much less clear that there is any wholesale money laundering based on large denomination Bahamian Dollar notes.

Domestic non-financial assets

Classically, criminals deploy some of their earnings on flashy cars and expensive houses.

On the automobile front, the Central Bank has been kindly assisted by the Department of Customs, in reviewing the value of vehicles imported into the country. Due to privacy restrictions, we are unable to publish this data here. We can however report that a review of the most expensive imported vehicles reveals few to no imports of very expensive private cars. In 2018, for example, the second most expensive passenger car imported into The Bahamas for private use was a Volvo. We can also observe that speed limits range from 20 to 45 miles per hour, and the state of Bahamian roads and traffic is not such as to encourage big spending on expensive and high maintenance cars.

The Customs data supports this inference. Most of the expensive vehicles imported into The Bahamas are for commercial purposes, such as heavy-duty trucks, livery vehicles, and luxury limousines for the leading resorts. This is all legitimate spending.

As noted previously, we also possess data on auto dealer bank deposit flow, and we separately have access to sales volumes of vehicles by Bahamian motor dealers. None of this data suggests vehicles as a substantial destination for illicit funds. Doubtless there are Bahamian criminals who have deployed illicit funds on a car, but that car will tend to be a used Honda Civic rather than a new Lamborghini.

The real estate story is rather different. There are substantial barriers to foreign criminals purchasing Bahamian real estate, but the state of our data governance requires improvement. Over the past two years the Central Bank has compared data gathered by our Exchange Control Department (which oversaw some aspects of cross border funds flow for real estate purchases) and sales data from the domestic Mutual Listing Service. There is not a full match between these datasets.

The Bahamian Inland Revenue Department is currently building with external consultant support a high-quality database to identify the beneficial owners of every property in The Bahamas. As this project approaches completion, the relevant Bahamian authorities will need to consider a Know Your Customer (KYC) exercise, to validate sources of wealth on (particularly) luxury properties purchased over the past several years. Few countries have undertaken such an extensive exercise, and it will be interesting to see the results.

Currently the Central Bank is working with the Compliance Commission (which supervises real estate agents and lawyers, among others) to build a better process map of the compliance steps for foreign and domestic real estate purchasers. We will refine our data strategy once this map is complete. Our current understanding on limited data is that there is no material evidence, at least in recent years, for Bahamian real estate as a money laundering destination, but it remains necessary to build the data and analytics to prove or challenge this understanding.

PART 3: DATA STRATEGY FOR VULNERABILITIES

The Central Bank's experience has been that using opportunistic data to identify (or more often, rule out) threats is reasonably straightforward. Aspects of the Bahamian economy that generate substantial assets or cash flow are potential threats, and those aspects generating very little cash flow or assets, and particularly if the cash or assets are already in the banking system, are low threat.

With vulnerabilities, we are seeking to use found or easily created data to assess the Bahamian risk control architecture. That is somewhat more challenging.

Bank deposit data

From time to time, the Central Bank asks its domestic banks to produce a list of large depositors. These lists are generally comforting in an AML sense, in that the Central Bank can see that the largest depositors are obviously licit legal entities (such as government agencies, large retailers, and the like), or well-known persons and families from the licit aspects of the Bahamian economy.

The Central Bank is currently conducting such an exercise on the credit union sector, which is much smaller than the banking sector, with smaller average balances. Nevertheless, it will be useful to confirm (or not) that the largest depositors in this sector are not worrisome.

In the international sector, the Central Bank's examination processes check large depositors and investors, but we currently lack a central database on such clients. We will need to consider whether such an approach is a good idea, given the data privacy and vulnerability risks associated with maintaining such a collection.

From its initial data gathering in this area, the Central Bank has concluded that it needs to also seek clarity on bank and credit union source of wealth and source of income analyses. Industry practice here is reasonably good, but the Central Bank considers that a more statistically robust analysis of "reasonably good" will be superior to current arrangements.

Is Central Bank supervision effective?

Supervisory agencies around the world litter their statements of performance with words like "effective" and "proactive", but few of these agencies are able to quantitatively demonstrate that they are doing a good job¹³. The Central Bank has over the past three years evolved an approach which seeks to demonstrate the absence of bad supervision, as opposed to attempting to prove the presence of good supervision.

Financial supervisors perform two core functions:

- 1) When we observe poor and possibly fatal risk management practices or other deficiencies, we intervene to elicit appropriate remediation from the errant supervised institution; and

¹³ For one exception, see from page 17: <https://www.apra.gov.au/sites/default/files/2020-10/APRA%20Annual%20Report%2019-20.PDF>

- 2) We strive to identify emerging problems before they become unduly serious. This requires a combination of on-site examination, offsite supervision and analysis, and maintaining risk ratings on regulated institutions.

Quantitative assessment of supervisory intervention

From 2017, the Central Bank clarified that intervention matters would be designated, from most to least substantial, as “Directives”, “Requirements”, and “Expectations”. The Central Bank tracks performance on identifying and clearing these measures from the institutional level through to supervisory portfolios.

Coincidentally, this new nomenclature was introduced at the same point that the Central Bank resolved to elevate financial crime supervision to equality of importance with financial soundness supervision. The table below gives the progression of supervisory Requirements in recent years. Similar tables, with similar results, are created internally for Directives and Expectations.

Table 7: Progress with supervisory Requirements

REQUIREMENTS	Starting Requirements			Added Requirements			Closed Requirements			Ending Requirements		
	AML		Non-AML	AML		Non-AML	AML		Non-AML	AML		Non-AML
31/12/17 to 31/03/18	76	216	140	33	44	11	17	38	21	92	222	130
31/03/18 to 30/09/18	92	222	130	74	88	14	57	116	59	109	194	85
30/09/18 to 31/03/19	109	194	85	74	115	41	47	87	40	136	222	86
31/03/19 to 30/09/19	136	222	86	30	57	27	88	140	52	78	139	61
30/09/19 to 31/03/20	78	139	61	57	70	13	72	102	30	63	107	44
31/03/20 to 30/09/20	63	107	44	27	54	27	38	58	20	52	103	51

This table cannot demonstrate the quality (or lack thereof) of supervisory intervention by the Central Bank. It does demonstrate, however, that:

- In recent years, across approximately 90 supervised institutions, the Central Bank and the industry started with 216 Requirements, added 428, and cleared 541, leaving 103 Requirements as of September 2020; and
- The balance of Requirements shifted from mainly non-AML (prudential) matters to about 50/50 AML and non-AML.

Other tables (not shown here) demonstrate that the average age of supervisory matters outstanding has reduced, and the average time to clear matters has reduced. Based upon these results, the Central Bank can state with reasonable quantitative backing that since 2017, its ability to elicit rapid and effective

remediation from the industry has improved. Furthermore, after three years of clean-up, the industry seems better placed in a risk management, financial soundness, and AML sense.

Quantitative assessment of supervisory analysis

The Central Bank’s supervisors conduct regular cyclical analyses on supervised entities, with the annual in-depth review of financial soundness among the most important review cycles. The following table gives the on-time performance of this annual review for the past two years.

Table 8: Annual Financial Soundness Review Coverage

In-depth Analyses	Dec 2018 / End of Year Review <i>(as at 30 September/20)</i>		Dec 2019 / End of Year Review <i>(as at 30 September/20)</i>	
	Total	%	Total	%
Expected	74	100%	78	100%
Completed	74	100%	65	83
In Process	0	0%	1	1
Routed for Approval	0	0%	3	4
Not started	0	0%	9	12
Total	74	100	78	100

This table demonstrates that the Central Bank in 2019 performed all its annual analyses on time, but fell short of that target in the period ended September 2020. The latter result was to some extent one of the artefacts of the need to devote considerable unplanned time to Covid operational and supervisory matters.

This table does not have anything to say about the quality of the annual in-depth analyses, but it does confirm that, by and large, these analyses are completed on time. The absence of that outcome would indicate that the Central Bank has defined an expected intensity of analysis—but failed to meet its own expectation.

This table relates to the annual in-depth analysis for financial soundness. The Central Bank is still building its infrastructure for a matching annual in-depth analysis for financial crime soundness. The absence of our ability to report this table indicates that the Central Bank is not yet mature in its approach to regular cyclical analyses of financial crime risks.

Where do we find empirical data for AML supervisory analysis?

Financial supervisors have for decades collected financial information in regular quantitative returns, but have usually focused their AML supervision on documents that are gathered ad hoc. From early 2020 the Central Bank inaugurated an annual collection for AML matters, which will allow time series and panel comparisons across our regulated flock. The Central Bank intends to publish an annual summary of the lessons learned from this collection, commencing in 2021.


This collection has allowed the Central Bank to confirm or challenge the received wisdom associated with some aspects of our regulated industries. For example, we expect the proportion of high-risk accounts to be about the same for the home and host-supervised segments of the international sector, and we expect

that proportion to be much higher than in the domestic sector. Per the table below, that expectation is confirmed. We also see, however, that the reported instances of high risk accounts in the credit union sector is three times higher than in the domestic banking sector, which makes little sense. Some digging in the data indicates that a minority of credit unions have overstated their high-risk position. This is a matter that once identified, is amenable to supervisory intervention. Similar inconsistencies apply across sectors and across institutions for production orders, fraud reporting, and suspicious transaction reporting. By quantifying and sharing these inconsistencies, the Central Bank expects that the Bahamian public and private sectors will over time achieve higher quality and more consistent financial crime risk controls.


We also see on the table below that the flow of production orders and suspicious transaction reports falls heavily upon the domestic sector. The international sector is much larger in balance sheet and cash flow terms, but much smaller in numbers of clients and accounts. Furthermore, we know from data (not reported here) that the average international client conducts only one transaction per month, which is considerably fewer than for the average domestic customer.

This balance of supervisory and industry attention needs a strategic consideration. Is it better to focus on finding, for example, 100 cases of money laundering at \$1,000 per item, or one case of money laundering at \$100 million? The former should be the priority if we wish to minimise the numeric incidence of financial crime, and the latter the focus if we want to limit the amounts of dirty money flowing within and through The Bahamas.

Table 9: Selected AML statistics across institution types

 The Central Bank of the Bahamas Bank Supervision AML Analytics Unit Key Figures						
	2019					
	Domestic Banks	Credit Unions	Money Transmission Businesses	Int'l Host	Int'l Home	Total
# of Licensees	8	7	5	48	23	91
Assets + Fiduciary (million)	15,213	476	18	333,634	76,783	426,124
Number of Accounts or Customers (000s)	498	40	166	26	8	738
High Risk Accounts or Customers (000s)	3	1	1	3	1	10
Deposits or Transfers Flows (\$000s)	10,309	340	193	53,493	1,869	66,204

Number of Transactions (000s)	N/A	N/A	616	N/A	N/A	616
Number of Unusual Transaction Reports	657	174	372	2,432	72	3,707
Number of Suspicious Transaction Reports	204	6	72	67	61	410
Identified Fraud	235	12	4	3	7	261
Fraud Attempts	12	14	77	3	3	109
Production Orders	1,143	166	67	77	33	1,486

 <p>The Central Bank of the Bahamas Bank Supervision AML Analytics Unit Key Ratios</p>	2019					
	Domestic Banks	Credit Unions	Money Transmission Businesses	Int'l Host	Int'l Home	Average
Assets + Fiduciary Per Licensee (\$000s)	1,902	68	4	6,951	3,338	4,683
Accounts/Customers Per Licensee (000s)	62	6	33	1	0.35	8
Assets + Fiduciary Per Account/Customer (\$000s)	31	12	0.11	12,724	9,458	578
High Risk Accounts/Total Accounts or High Risk Customers/Total Customers	0.66%	3.08%	0.65%	12.71%	13.30%	1.36%
Deposits Per Licensee (\$million)	1,289	49	N/A	1,114	81	728
Unusual Transaction Reports Per Licensee	82	25	74	51	3	41

Unusual Transaction Reports Per Account/Customer	0.13%	0.44%	0.22%	9.3%	0.89%	0.50%
Suspicious Transaction Reports Per Licensee	26	1	14	1	3	5
Suspicious Transaction Reports Per Account/Customer	0.041%	0.015%	0.043%	0.26%	0.75%	0.056%
Suspicious Transaction Reports Per Transaction	N/A	N/A	0.012%	N/A	N/A	0.067%
Identified Fraud + Fraud Attempts Per Licensee	31	4	16	0.13	0.43	4
Production Orders Per Licensee	143	24	13	2	1	16
Production Orders Per Account/Customer	0.23%	0.42%	0.040%	0.29%	0.41%	0.20%

Found data for the gaming industry

The Bahamian gambling industry is split into two sectors. Bahamian residents are not allowed to gamble in casinos, which are meant for foreign visitors. Bahamians instead gamble in gaming houses, sometimes known as “web shops.” These are internet-enabled establishments where gaming is conducted on electronic wagering machines.

The web shop industry was not legal, but widely practiced and tolerated, until 2014. At that point the industry was legalized. Part of this process was that the gaming house operators became regulated by the Gaming Board for The Bahamas (Gaming Board), and they also became subject to taxation.

The web shops were required to install international standard, fully electronic real time monitoring systems for patrons and transactions. These systems ensure that Bahamian domestic gambling is properly taxed, and is conducted in accordance with gambling regulations such as prevention of problem gambling.

The Central Bank and the Gaming Board identified that the web shop reporting systems also made an excellent tool to test the industry for money laundering vulnerabilities. The Central Bank, through the bank deposit collection discussed previously, had already identified that this sector’s threat is appreciable, with net fund flows around 2 per cent of GDP and mainly cash-based. But what about vulnerability?

Gaming houses in theory facilitate money laundering when they accept large “deposits” from patrons, who wash these funds by withdrawing them and claiming them as gambling winnings. Because gaming houses require patrons to maintain electronic accounts, it might also be possible to store substantial funds outside the banking system. To what extent can we see this outcome, in any material way, in Bahamian gaming houses?

To make a longer story short: not at all. The Gaming Board extracted all the industry’s account balances and transactions for the month of April 2019, to scan for money laundering patterns. The empirical findings included:

- 1) The average account balance was under \$5. The largest account held \$14,000, which was consistent with a patron having a moderate win in a lottery or the like. The fifth largest account held under \$5,000.
- 2) The average amount placed into a patron’s account, or withdrawn, ranged from \$30 to \$60 depending upon the gaming house in question. Gaming houses also maintain daily maximum transaction limits, typically ranging from \$200 to \$500.
- 3) All gaming patrons must be identified. Any patron wishing to withdraw funds from an account can do so in cash up to the daily transaction limit, but larger withdrawals (from patrons recording a big win) require a visit to the gaming house head office.

This very detailed examination of the industry demonstrated that a large minority of Bahamians gamble regularly, but in small amounts. Remembering that the banking system controls several hundred billion dollars in assets, a sector with a maximum account balance of \$14,000 and an average balance of \$5 is clearly not being used to hide money outside the banking system. The risk that illicit funds are being “washed” is in theory real—but in practice money is flowing in dribs and drabs around \$50 per transaction. This is far too small to constitute any material threat of wholesale or third party money laundering.

It is inevitably the case that some Bahamian criminals gamble in web shops—but there is no evidence that this engagement is associated with material money laundering.

The Gaming Board is currently conducting a similar exercise on the casino sector, using all the patrons and transactions for January 2020. It is too early to report results from that exercise.

The Gaming House/Banking system interface

The gaming houses report their net winnings and some other items such as tax payments monthly to the Gaming Board. All the gaming houses use the same commercial bank for their clearing accounts. The Central Bank has required that commercial bank to prepare a quarterly report comparing projected deposits with actual deposits. This has proven more complex in practice than in theory, as the bank in question and the Central Bank work through issues such as gaming house cash retention practices, the confidentiality of the data stream to the Gaming Board, and the like. The Central Bank is confident that this report will refine over time into a worthwhile check that the Bahamian retail gaming industry’s bank deposits match their licit revenue streams.

More found data—Money Transmission Businesses

As with gaming houses, Bahamian MTBs generally deploy modern and fully electronic monitoring systems for funds transfers. This industry conducts hundreds of thousands of transactions per year, with average amounts around \$300. MTBs typically limit daily transaction volumes in a \$1,000 to \$2,000 range, though special arrangements can be made for larger transfers. The great majority of money transmission business is international¹⁴. Some clients use the service to send money to and from the various Bahamian inhabited islands, not all of which have ready access to the banking system. The products and pricing on offer mean

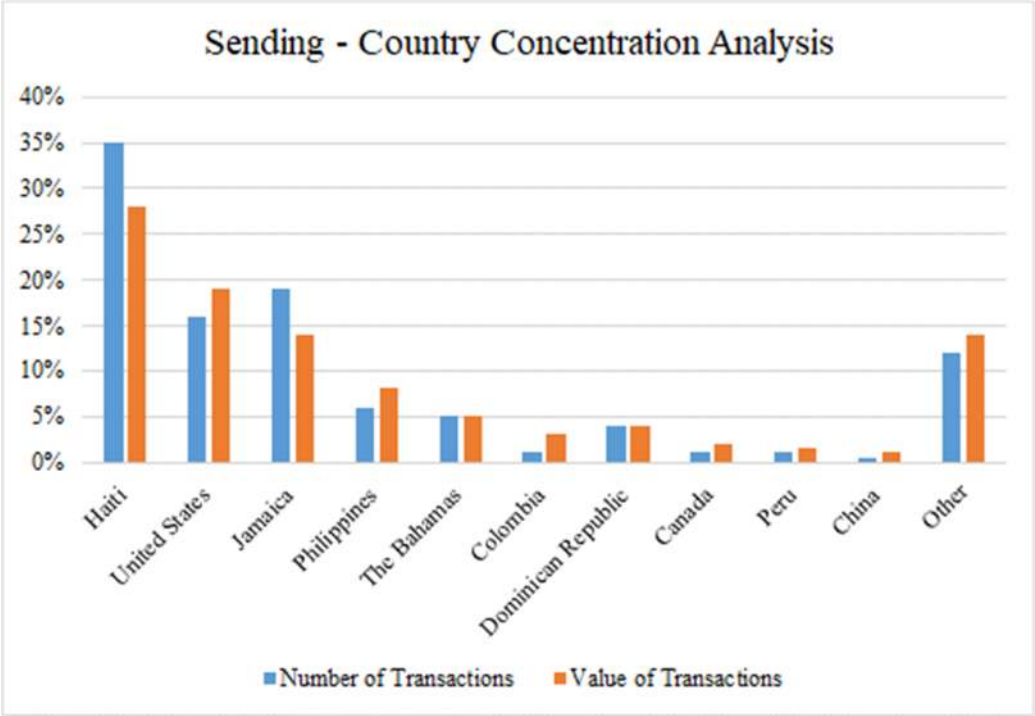
¹⁴ MTBs also offer domestic bill paying services, electronic wallets, and other payments services

that MTBs are competitive relative to banks for small cross border transfers, but less so for larger transfers.

The potential for legitimate use of outbound MTBs is focused upon three diaspora communities: people of Haitian and Jamaican descent living in The Bahamas, and Bahamians sending funds to the Bahamian diaspora communities in the United States and Canada. There are smaller non-concerning flows associated with the neighbouring Turks & Caicos Islands, the Philippines, and China. It would be more concerning to see large flows to countries associated with illicit narcotics production, or with the Russian and associated network of massive European illicit funds flows.

The data available to the Central Bank allows us to separate outbound MTB funds flows by country of destination.

Table 10: Outbound MTB flow

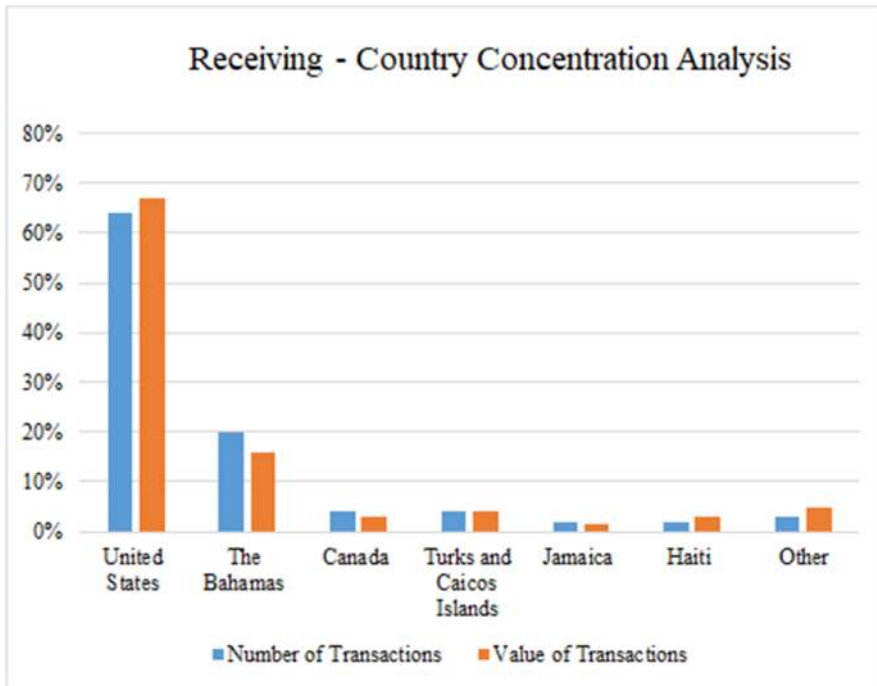


The above table largely matches our expectations for legitimate funds flows. The focus is nearly entirely on western hemisphere nations¹⁵, and heavily upon diaspora communities.

For inbound transactions, we would expect inflows from Bahamians employed in the United States and Canada to dominate, and this is indeed the outcome.

¹⁵ There are small Philippine and Chinese populations in The Bahamas

Table 11: Inbound MTB flow



Data in the corporate registry

The Bahamas has a registry of international business companies (IBCs). Currently there are approximately 30,000 IBCs, indicating that the Bahamian jurisdiction has a small market share in the global corporate registry market. The Central Bank and the Securities Commission consider AML and financial crime issues for the trust and corporate service providers of IBCs, as part of routine supervision.

In addition to supervisory findings, it would be useful to know more about these IBCs through consistent data collections. As a practical matter, however, the Bahamian corporate registry had fallen into some administrative disarray. The Bahamian government moved to reform registry practices with legislation in 2019, which is currently in place. We are perhaps two years away from being able to consider a central database strategy to augment current supervisory arrangements for IBCs.

PART 4: CONSEQUENCES AND CONCLUSION

The Central Bank has used the data to hand, plus several years of supervision and examination findings and information exchanges across several agencies, to reach the following threat and vulnerability conclusions for money laundering in the Bahamian financial sector.

- 1) The international banking, trust, and securities sectors are by several orders of financial magnitude the most threatening part of the economy, particularly from the perspective of an international observer. Vulnerability is substantially reduced by effective supervision and enforcement. This is not only the Bahamian self-opinion, but has been validated by, among other examples, the IMF's Financial Sector Assessment Program, and FATF Mutual Evaluations. The consequence of maintaining a large international sector is not necessarily that The Bahamas facilitates big-ticket international financial crime. To avoid that facilitation, however, the Bahamian authorities must continue effective supervision in perpetuity.
- 2) We don't yet know enough about our national real estate and international business company ownership. There are substantial projects in place to materially improve the available data in both sectors. Once that data is available, the Bahamian authorities will be able to robustly confirm that neither sector is a haven for dirty money.
- 3) The domestic gaming and money transmission sectors exhibit substantial currency flows and lots of small transactions. The Bahamian data indicates that the domestic gaming sector and the MTB sector both generate cash flows around 2 per cent of GDP. This is enough to worry about if the sectors are vulnerable.
- 4) The facts on the ground in The Bahamas are that both domestic gaming and MTBs benefit from modern compliance and monitoring systems. Furthermore, the average amounts flowing through these systems are derisory in national AML terms, with figures such as \$5 and \$300 typical. Contrary to the international viewpoint, the Central Bank views both sectors as requiring AML vigilance in perpetuity—but right now at least they are under good control.

We note that our views as expressed in point 4 above can be strongly challenged internationally. The U.S. State Department's 2020 assessment, for example, included the following in its introduction for The Bahamas¹⁶:

Although The Bahamas has taken significant steps towards strengthening its AML regime, potential vulnerabilities in the online gaming and money transfer business sectors are further exacerbated by certain regulators' reluctance to acknowledge them.

Or put more simply: "American opinions count for more than Bahamian facts." This highlights one of the challenges to a data-driven approach to NRAs, and AML risks more generally. The world's large countries are happy to impose their opinions on small countries, even contrary to the facts generated in those small countries. Hopefully this unattractive aspect of the international financial crime architecture will recede over time.

Summary

¹⁶ <https://www.state.gov/2020-incsr-volume-ii-money-laundering-and-financial-crimes-as-submitted-to-congress/>
See page 53

In this paper, we hope to have demonstrated that a jurisdiction's AML National Risk Assessment can be materially enhanced through judicious data application. Furthermore, this data can be gathered cheaply and creatively, rather than through comprehensive and expensive custom-built databases. Where expensive databases are built for other purposes, financial regulators should take the opportunity to use them for AML risk assessment as well.

In the Bahamian experience, data derived through the bank supervisor's ability to extract deposit and transaction information from the banking system is useful in narrowing the range of identified national threats.

To empirically assess vulnerabilities, a bit more imagination is required, and data from other agencies, originally gathered for purposes other than AML, may often prove useful.

Even in the absence of perfect or complete data, most national jurisdictions have already created, or could easily create, data sources that shed considerable light on their national money laundering and financial crime risks.