USIP: PeaceTech

Analyzing relationships between violence, financial corruption, and public opinion

Jackson Institute of Global Affairs
Capstone Project
December 21, 2016

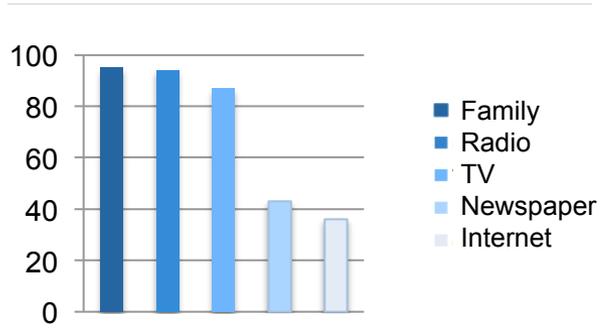# Presentation contents

1. **Background**

2. Public opinion on governance and conflict

3. Nigerian Financial Intelligence Unit reform

4. Final Takeaways

1a

Third party pollsters track media usage, demographics, and state-by-state public opinion, compiled in Book 1
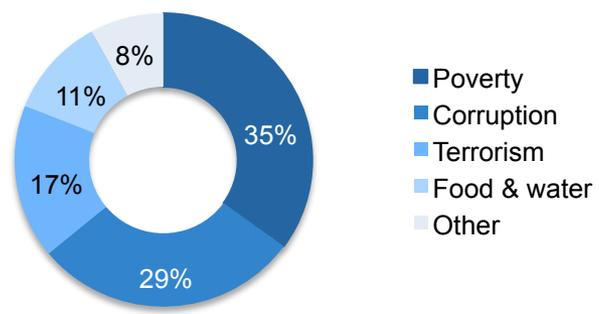
### % Nigerians with access to channels of information and communication

- Family
- Radio
- TV
- Newspaper
- Internet

Top issues for constituents in certain groups and states (i.e. Northeast)[1]

- 8%
- 11%
- 35%
- 17%
- 29%

- Poverty
- Corruption
- Terrorism
- Food & water
- Other

Percent of residents living comfortably on present income

Percent of residents finding is very difficult to live on present income
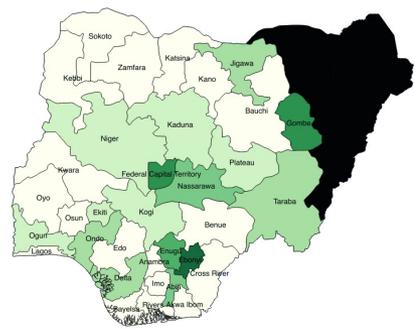
- **Recent surveys provide valuable information** about demographics, policy approval ratings, and top issues on a state-by-state basis

- **This information is static** and cannot be analyzed over time or in relation to drivers like violence

1. ACLED and Global Terrorism Database
2. Internal Displacement Monitoring Centre

1b

PeaceTech and its clients require analyses with broader scope and ability to evaluate drivers of opinion

Numerous questions from governors and NGOs remain unanswered

How does public opinion about the federal government, military, and state governors change over time?

How does violence change public perceptions of governors and good governance?
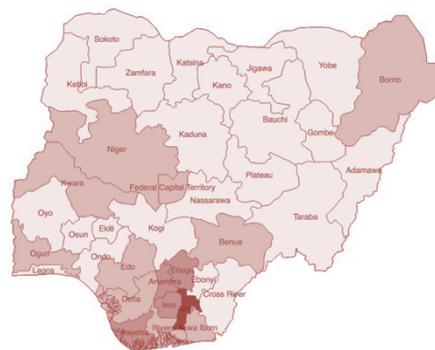
How do military interventions change public opinion about state and federal officials?

To what extent do citizens associate different kinds violence with the government—positively or negatively?

Example of changing sentiment toward a government official over time
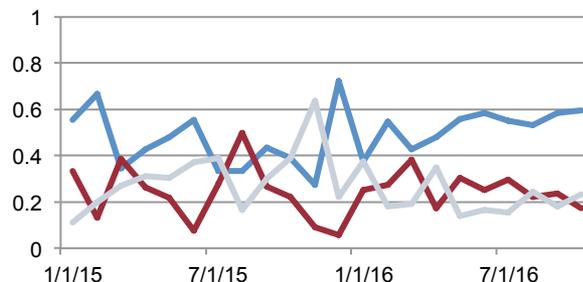
Example of negative opinions of the federal government in a given year, by state

- **Existing literature on public opinion is insufficient** to answer key questions for governors or NGOs like PeaceTech

- **We need innovative techniques** to aggregate and analyze public sentiments

1. ACLED and Global Terrorism Database
2. Internal Displacement Monitoring Centre

Social media can augment third party assessments of public opinion on violence, issues, actors, and events
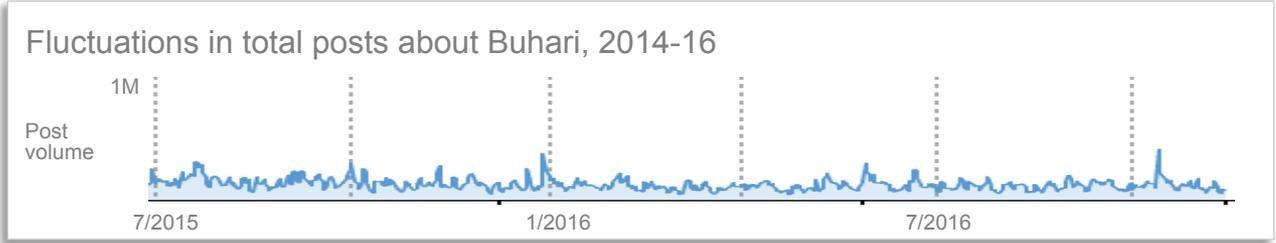
1c

- Public opinion analysis normally requires SMS, in-person, or paper surveys

- Social media can collect **millions of opinions** and can be **filtered by date and topic** based on lexicons built with expert input and media analysis

- Although the demographics of social media users is not perfectly representative, **as media penetration improves, so does representativeness**[2]

Example: social media tracks changes in opinion of Buhari over time[1]

President Buhari

5.9 million posts
about Buhari in Nigeria
2015-2016

% Nigerians using internet for news weekly

Fluctuations in total posts about Buhari, 2014-16

1M

Post volume

7/2015   1/2016   7/2016
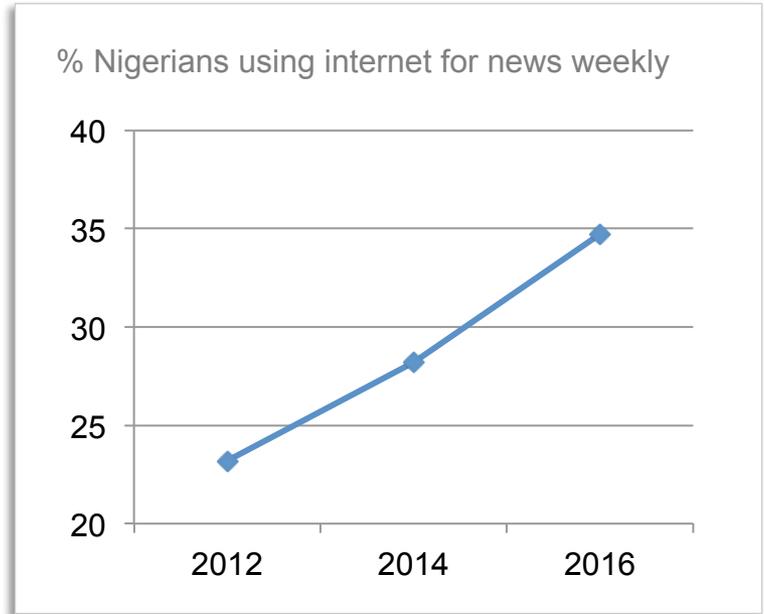
1. Crimson Hexagon social media post aggregator
2. Regression analysis of BBG/Gallup data shows small but significant differences in education, income, and urbanicity of social media users

Preliminary social media analysis illuminates shifts in sentiment related to federal government, military, governors
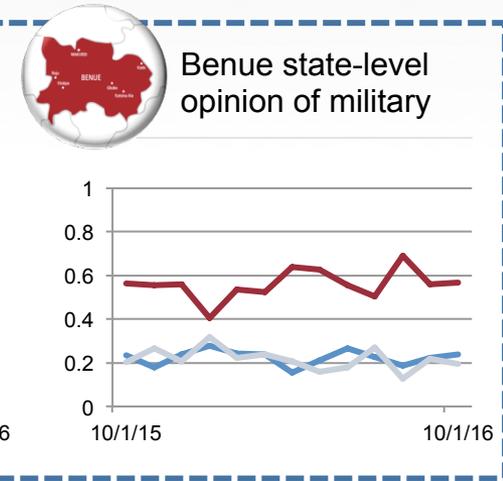
1d

- Comparing sentiments from local and federal levels illuminates significant **differences in opinion, trends, and spikes among constituent groups**

- Posts can be **classified as positive, negative, and neutral** based on tested, scientific algorithms[2]

Ex: Differences in opinion on federal military
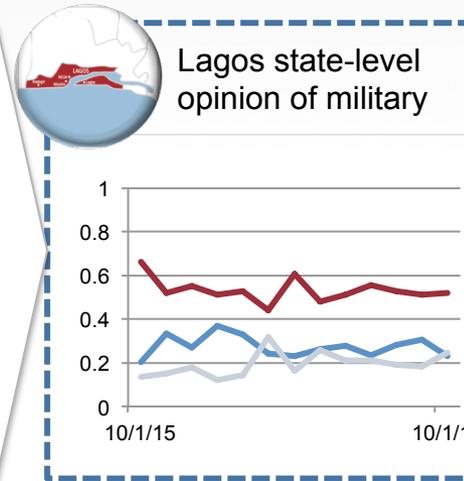
— Positive   — Negative   — Neutral

National level opinion of military

Lagos state-level opinion of military

Benue state-level opinion of military

Change in positive posts about military, 2015-16

- -0.46 – -0.40
- -0.40 – -0.20
- -0.20 – 0.00
- 0.00 – 0.20
- 0.20 – 0.40
- 0.40 – 0.60
- 0.60 – 0.75

Change in negative posts about military, 2015-16

- -0.50 – -0.40
- -0.40 – -0.20
- -0.20 – 0.00
- 0.00 – 0.20
- 0.20 – 0.40
- 0.40 – 0.60
- 0.60 – 0.80
- 0.80 – 1.00
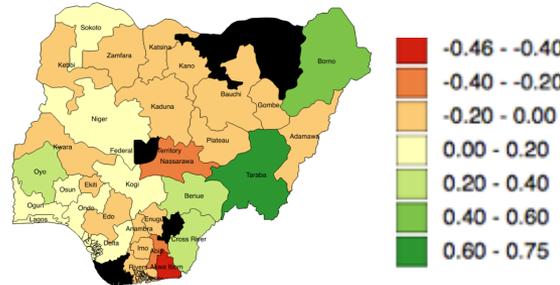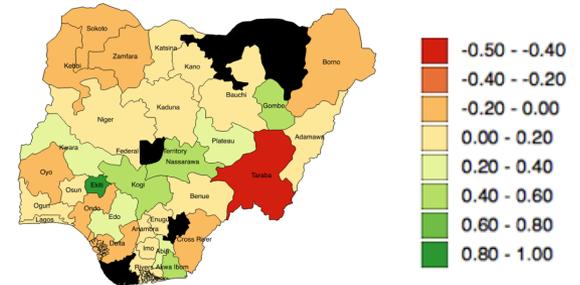
1. Crimson Hexagon social media post aggregator
2. Based on the National Research Council - Word-Emotion Association Lexicon, 2011

Can sentiment analysis of social media correlate changes in opinion about government or military with terrorist, riot/protest, and state violence?

1e

Mapping opinion of governors and government after terrorist violence, riots and protests, and government interventions
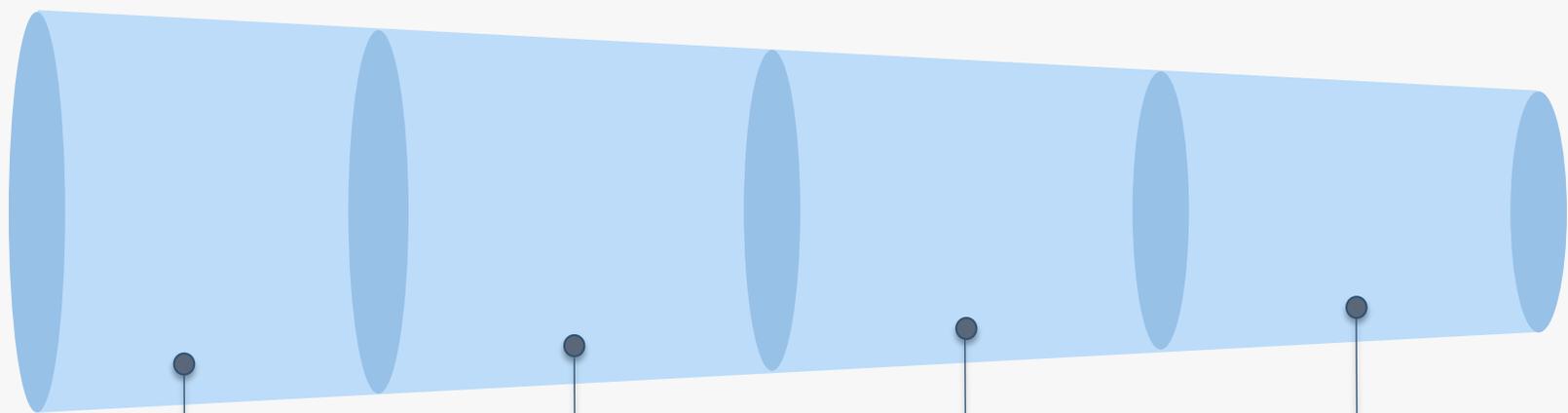
Collect social media data to capture raw public sentiment

By date, determine ratio of positive, negative, and neutral posts about state and federal governments

Map the shifts in public sentiment onto incidents of violence or protest

Determine correlation between terrorist violence and changing public sentiment about….
- Federal government
- State governors
- Military

Presentation contents

1. Background

2. Public opinion on governance and conflict

3. Nigerian Financial Intelligence Unit reform

4. Final Takeaways

2. According to the Internal Displacement Monitoring Centre

Violence is primarily linked to four actors and concentrated in specific states, providing clear case study examples

2a

Total violent incidents, by identifiable perpetrator[2]

■ Riots/protests ■ Nigerian military ■ Boko Haram ■ Fulani Herdsmen □ Other[1]

Bar chart (values approximate):
- Riots/Protests: ~1850
- Nigerian military: ~690
- Boko Haram: ~500
- Fulani Herdsmen: ~300
- Other: ~510

(x-axis: 0, 200, 400, 600, 800, 1000, 1200, 1400, 1600, 1800, 2000)

Distribution of riots/protests[2]
% of total, 2016   Higher %
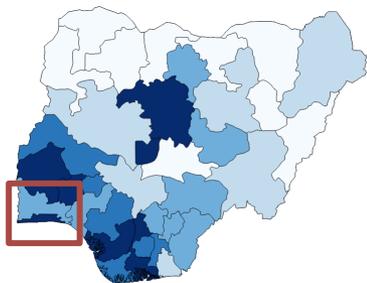
Distribution of Boko attacks[3]
% of total, 2016   Higher %
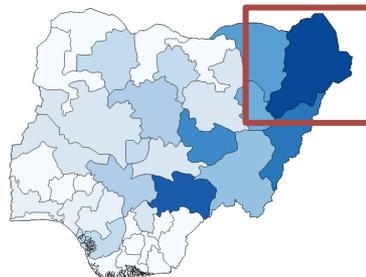
Distribution of Fulani attacks[3]
% of total, 2016   Higher %

- **Four actors account for the majority of incidents, and a handful of states bear the brunt of this violence**

- **Boko Haram** is concentrated in the Northeast states, particularly **Borno**

- **Fulani Herdsmen** are prevalent in the Middle Belt states, especially **Benue**

- **Riots and protests** concentrate in urban centers like **Lagos**

1. 380 observations by 80 different actors, 129 observations by police forces
2. ACLED, 2015-2016
3. Global Terrorism Database

12/21/16

Social media analysis can determine significance of shifts in opinion after incidents of violence

2b

- Sentiment analysis **classifies each social media post** as positive, negative, or neutral

- **Analyze shifts in opinion** relative to incidents or violence and **regress to identify significant trends**

- A significant result could indicate that **citizens blame state or federal government for lack of security** or have little faith in governance

PROCESS MAP

1 Map social media sentiment in given state (example)

ILLUSTRATIVE — Positive, Negative, Neutral
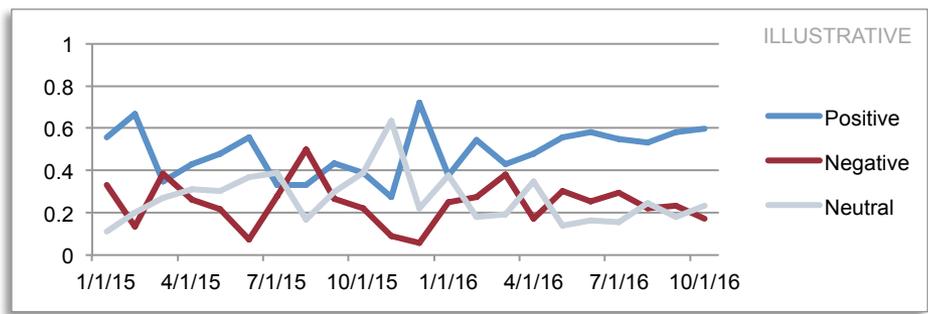
2 Overlap incidents of riots and protests (or other event type)

ILLUSTRATIVE — Positive, Negative, Neutral, Riot/protest
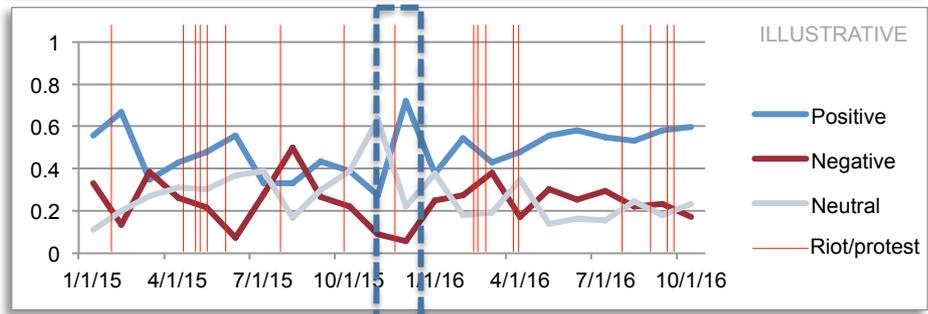
3 Aggregate % change in sentiment after an incident[1] and evaluate pattern
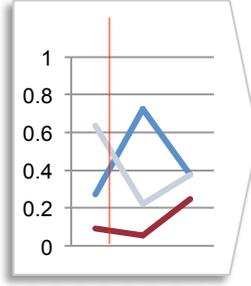
	% change in positive posts	% change in negative posts
Day of	12.7	-3.4
1 Day	22.6	-5.4
2 Days	5.2	-0.4

1. Using an OLS regression

Borno does not exhibit significant changes in sentiment toward the state government following any violent incidents

2c

Borno Take-aways

- Violence has **no statistically significant impact on public opinion** about the state governor or federal government

- Violence by non-state actors leads to a **spike in negativity about the military**

Changes in sentiment toward the governor and state government

— Positive
— Negative
— Neutral
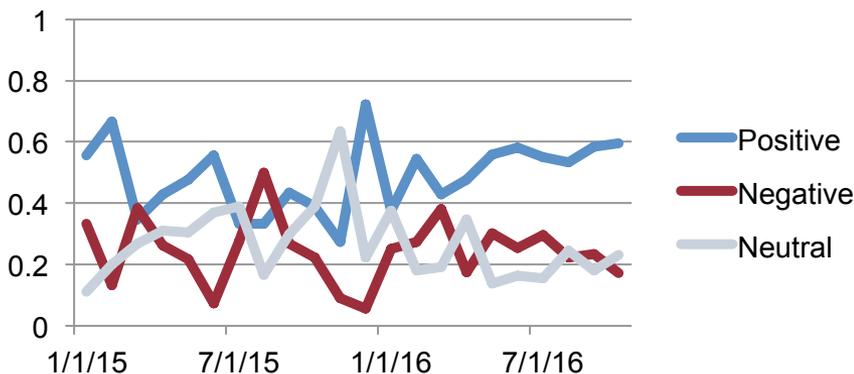
861 posts
2015-2016

Group	Incidents
Military	376
Boko Haram	170
Riots/Protests	10
Attacks	583

% increase of positive posts about the governor

significant at $p<0.05$ = ▢

	MIL[1]	BH	R/P	ATT
Day of	-2.5	-9.0	15.8	-5.3
1 Day	-8.2	-1.1	27.1	-5.7
2 Days	4.4	-0.8	0.0	3.4

% increase of negative posts about the governor

significant at $p<0.05$ = ▢

	MIL[1]	BH	R/P	ATT
Day of	3.5	5.5	-9.3	7.8
1 Day	7.7	6.1	-18.2	6.8
2 Days	-6.3	8.0	2.6	-2.2

1. MIL = military intervention, BH = Boko Haram attack, R/P = riot or protest, ATT = attack

Borno does not exhibit significant changes in sentiment toward the federal government following violent incidents

2d

Borno Take-aways

- Violence has **no statistically significant impact on public opinion** about the state governor or federal government

- Violence by non-state actors leads to a **spike in negativity about the military**

Changes in sentiment toward the federal government

Legend:
- Positive
- Negative
- Neutral
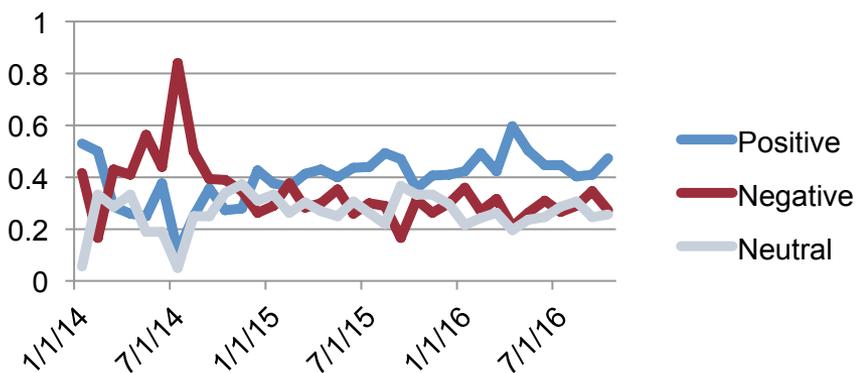
7,566 posts
2014-2016

Group	Incidents
Military	460
Boko Haram	315
Riots/Protests	19
Attacks	855

% increase of positive posts about the federal gov

significant at p<0.05 = ☐

	MIL[1]	BH	R/P	ATT
Day of	2.8	0.7	-4.0	1.2
1 Day	3.2	1.1	-9.4	1.0
2 Days	0.5	-1.4	4.9	-1.2

% increase of negative posts about the federal gov

significant at p<0.05 = ☐

	MIL[1]	BH	R/P	ATT
Day of	-3.5	0.5	4.3	-2.0
1 Day	-1.6	0.4	10.4	1.4
2 Days	-1.4	1.0	4.0	0.8

1. MIL = military intervention, BH = Boko Haram attack, R/P = riot or protest, ATT = attack

Borno does not exhibit significant changes in sentiment toward the military following any violent incidents

2e

Borno Take-aways

- Violence has **no statistically significant impact on public opinion** about the state governor or federal government

- Violence by non-state actors leads to a **spike in negativity about the military**

Changes in sentiment toward the military

- Positive
- Negative
- Neutral

4,201 posts
2014-2016

Group	Incidents
Military	460
Boko Haram	315
Riots/Protests	19
Attacks	855

% increase of positive posts about the military

significant at p<0.05 = ☐

	MIL[1]	BH	R/P	ATT
Day of	-3.5	-1.8	1.0	-3.3
1 Day	-0.3	-0.2	5.3	-0.1
2 Days	-6.6	-2.8	-6.1	-5.4

% increase of negative posts about the military

significant at p<0.05 = ☐

	MIL[1]	BH	R/P	ATT
Day of	2.3	-4.8	-6.5	-0.8
1 Day	3.1	2.9	-7.2	3.6
2 Days	7.6	4.4	6.2	6.7

1. MIL = military intervention, BH = Boko Haram attack, R/P = riot or protest, ATT = attack

Benue demonstrates significant negative changes in opinion toward the governor following violence attacks

2f

Benue Take-aways

- Any kind of incident **negatively shift sentiments about state governor**, but **does not change in views of the military or federal government**

Changes in sentiment toward the governor and state government
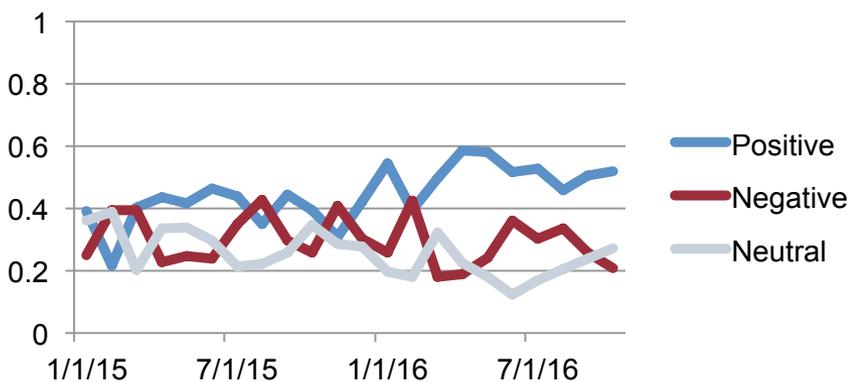
6,669 posts
2015-2016

Group	Incidents
Military	0
Fulani	67
Riots/Protests	25
Attacks	128

% increase of positive posts about the governor

significant at p<0.05 = ☐

	FH[1]	R/P	ATT
Day of	-0.5	3.0	-1.9
1 Day	-2.6	-4.4	-3.2
2 Days	-9.9	1.3	-5.5

% increase of negative posts about the governor

significant at p<0.05 = ☐

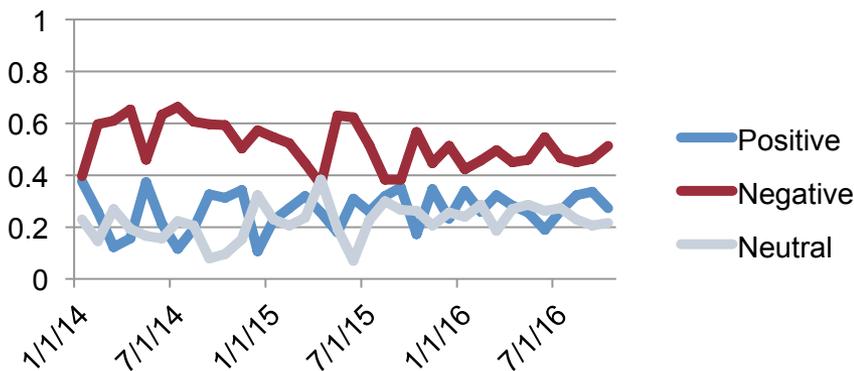|	FH	R/P	ATT
Day of	8.4	-2.0	8.0
1 Day	9.2	0.9	8.0
2 Days	8.2	-4.7	6.3

1. MIL = military intervention, FH = Boko Haram attack, R/P = riot or protest, ATT = attack

Benue does not exhibit significant changes in sentiment toward the federal government following violence attacks

2g

Benue Take-aways

- Any kind of incident **negatively shift sentiments about state governor**, but **does not change in views of the military or federal government**

Changes in sentiment toward the federal government

— Positive
— Negative
— Neutral
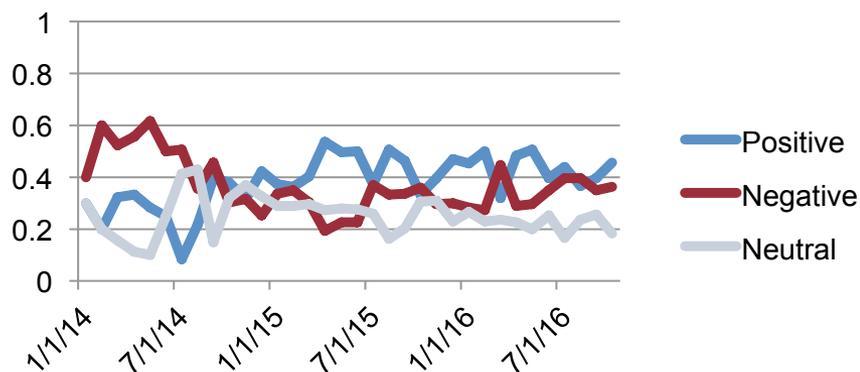
8,787 posts
2014-2016

Group	Incidents
Military	1
Fulani	104
Riots/Protests	31
Attacks	177

% increase of positive posts about the federal gov't

significant at p<0.05 =

	FH[1]	R/P	ATT
Day of	3.1	1.6	1.2
1 Day	2.1	7.1	2.0
2 Days	-0.4	4.8	2.2

% increase of negative posts about the federal gov't

significant at p<0.05 =

	FH	R/P	ATT
Day of	-3.7	-5.1	-2.0
1 Day	2.6	-0.9	1.9
2 Days	1.6	-3.2	-2.5

1. MIL = military intervention, FH = Boko Haram attack, R/P = riot or protest, ATT = attack

Benue demonstrates significant negative changes in opinion toward the military following violence attacks

2h

Benue Take-aways

- Any kind of incident **negatively shift sentiments about state governor**, but **does not change in views of the military or federal government**

Changes in sentiment toward the military

- Positive
- Negative
- Neutral
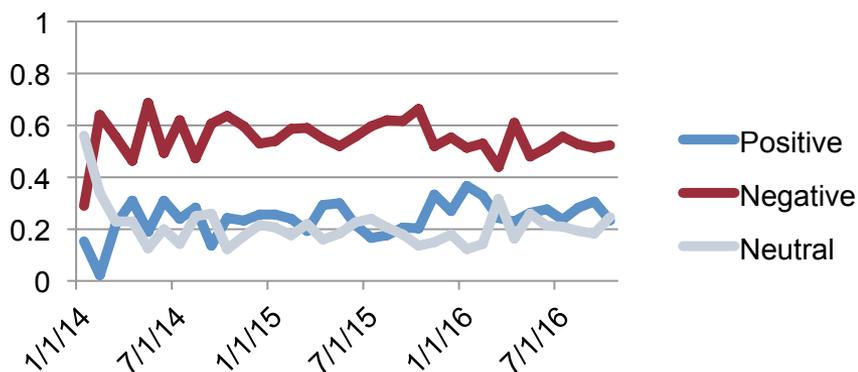
5,140 posts
2014-2016

Group	Incidents
Military	1
Fulani	104
Riots/Protests	31
Attacks	177

% increase of positive posts about the military

significant at p<0.05 = ☐

	FH[1]	R/P	ATT
Day of	-4.3	-6.1	-3.7
1 Day	0.1	-3.0	1.5
2 Days	1.1	-0.8	-2.2

% increase of negative posts about the military

significant at p<0.05 = ☐

	FH	R/P	ATT
Day of	1.8	6.6	3.7
1 Day	2.2	0.3	-1.5
2 Days	1.8	0.4	3.8

1. MIL = military intervention, FH = Boko Haram attack, R/P = riot or protest, ATT = attack

Lagos also shows no significant change in public opinion toward the state government after most types of violence

2i

Changes in sentiment toward the governor and state government

— Positive
— Negative
— Neutral
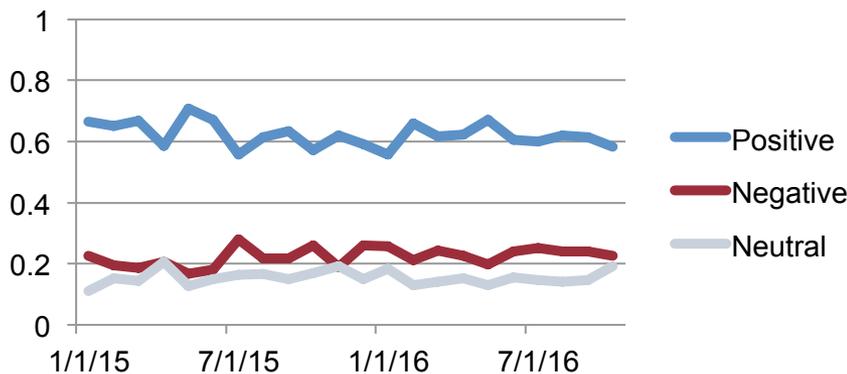
9,354 posts
2015-2016

Group	Incidents
Military	4
Fulani	1
Riots/Protests	180
Attacks	235

Lagos Take-aways

- Riots and protests have **little impact on public opinion**

- Non-state actor events **negatively impact perception of the state governor**

- Military intervention leads to **increase in negative sentiment about the military**

% increase of positive posts about the governor

significant at $p<0.05$ =

	MIL[1]	FH	R/P	ATT
Day of	-10.7	-60.8	-0.3	0.8
1 Day	0.6	-14.5	-0.7	-0.6
2 Days	-2.4	-6.1	-0.1	0.5

% increase of negative posts about the governor

significant at $p<0.05$ =

	MIL[1]	FH	R/P	ATT
Day of	12.7	77.4	-0.3	-1.1
1 Day	-1.2	23.3	0.1	-0.7
2 Days	4.7	4.4	0.4	-0.1

1. MIL = military intervention, FH = Fulani Herdsmen attack, R/P = riot or protest, ATT = attack

Lagos also shows no significant change in public opinion toward the federal government after most types of violence

2j

Lagos Take-aways

- Riots and protests have **little impact on public opinion**

- Non-state actor events **negatively impact perception of the state governor**

- Military intervention leads to **increase in negative sentiment about the military**

Changes in sentiment toward the federal government

— Positive
— Negative
— Neutral
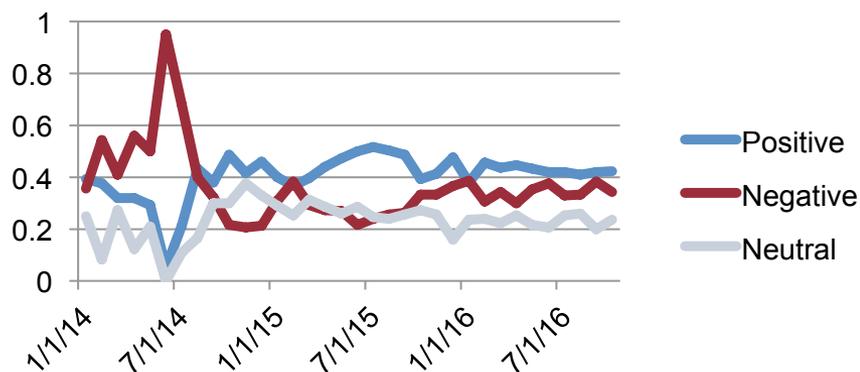
9,291 posts
2014-2016

Group	Incidents
Military	6
Fulani	1
Riots/Protests	269
Attacks	341

% increase of positive posts about the federal gov't

significant at p<0.05 = ☐

	MIL[1]	BH	R/P	ATT
Day of	-7.9	-38.8	-1.4	-2.1
1 Day	-7.8	-38.5	0.0	-0.1
2 Days	8.7	--	1.9	1.5

% increase of negative posts about the federal gov't

significant at p<0.05 = ☐

|	MIL[1]	BH	R/P	ATT
Day of	4.4	66.4	0.2	0.8
1 Day	9.4	63.2	0.2	-0.1
2 Days	4.3	--	0.2	0.2

1. MIL = military intervention, FH = Fulani Herdsmen attack, R/P = riot or protest, ATT = attack

Lagos also shows no significant change in public opinion toward the military after most types of violence

2k

Lagos Take-aways

- Riots and protests have **little impact on public opinion**

- Non-state actor events **negatively impact perception of the state governor**

- Military intervention leads to **increase in negative sentiment about the military**

Changes in sentiment toward the military

- Positive
- Negative
- Neutral
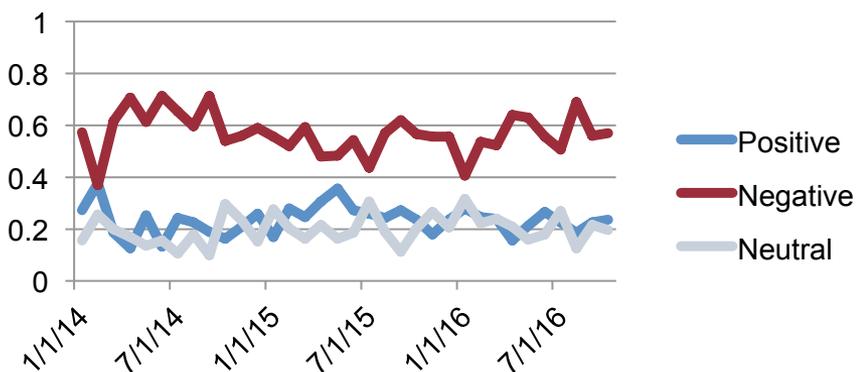
3,082 posts
2014-2016

Group	Incidents
Military	6
Fulani	1
Riots/Protests	269
Attacks	341

% increase of positive posts about the military

significant at p<0.05 =

	MIL[1]	FH	R/P	ATT
Day of	-23.4	-23.8	-1.7	-3.0
1 Day	-6.7	-7.0	2.5	-1.2
2 Days	-14.9	-23.7	1.9	0.3

% increase of negative posts about the military

significant at p<0.05 =

	MIL[1]	FH	R/P	ATT
Day of	28.3	45.7	-1.4	-0.3
1 Day	24.1	29.1	-2.9	1.0
2 Days	2.0	45.8	-1.6	0.1

1. MIL = military intervention, FH = Fulani Herdsmen attack, R/P = riot or protest, ATT = attack

Opinions of the federal military show significant negative changes following military interventions

2m

- At a national level, the Nigerian military appears to be consistently unpopular and high casualty attacks are deeply unpopular

- Following high casualty attacks by non-state actors or riots, **citizens exhibit a significant negative shift** in opinion toward the military

- Across the board, **citizens blame the military for lack of a security but find fault in current efforts to intervene**

Changes in sentiment toward the federal military

— Positive
— Negative
— Neutral

86,962 posts
2014-2016

Group	Incidents
Military	678
Boko Haram	491
Riots/Protests	1802
Attacks1	4346
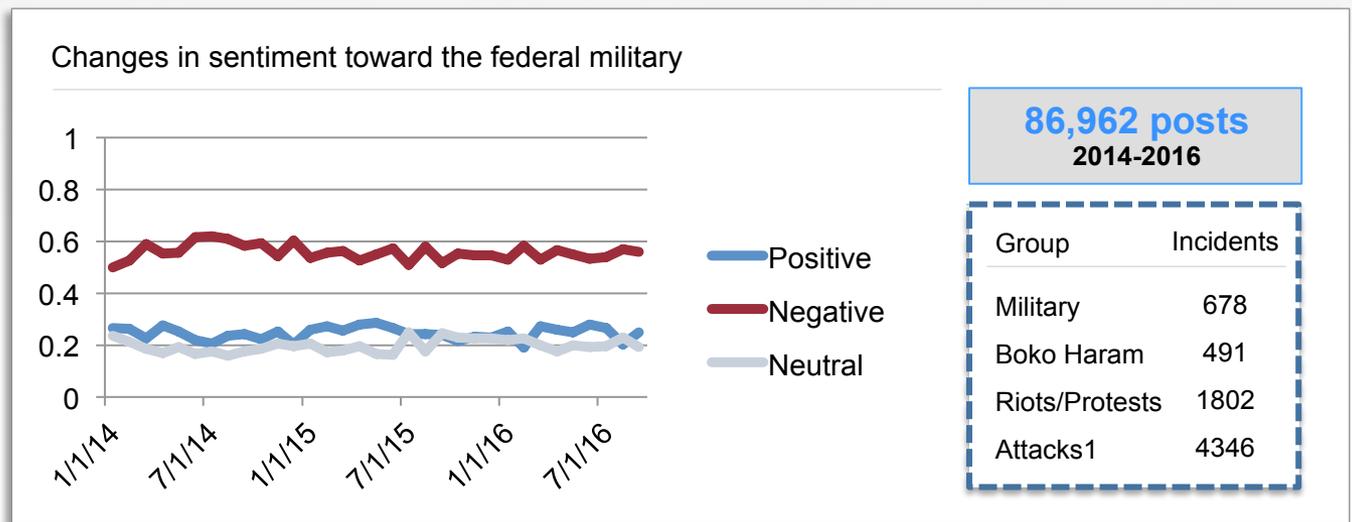
% increase of positive posts about the military

significant at p<0.05 = ☐

	MIL[1]	BH	R/P	ATT[2]
Day of	-1.5	-0.8	-2.0	-1.2
1 Day	-0.7	-1.5	-0.3	-0.3
2 Days	-0.2	-1.6	-1.1	-0.4

% increase of negative posts about the military

significant at p<0.05 = ☐

	MIL[1]	BH	R/P	ATT[2]
Day of	2.5	1.2	2.9	2.0
1 Day	2.3	2.9	1.6	1.5
2 Days	0.9	2.4	2.6	1.6

1. MIL = military intervention, BH = Boko Haram attack, R/P = riot or protest, ATT = attack
2. Including attacks causing 50+ fatalities

Opinions of the federal government show positive changes after military interventions and riots/protests

2n

- Sentiment about the **federal government shift dramatically in 2015, following the election of Buhari**

- **Following riots and protests, citizens exhibit a significant positive shift** in opinion toward the federal government

- Following **other types of violence there is no significant relationship**

- Citizens focus blame on the military not the federal government for violence

Changes in sentiment toward the federal government and Buhari

Positive
Negative
Neutral

94,805 posts
2014-2016

Group	Incidents
Military	678
Boko Haram	491
Riots/Protests	1802
Attacks1	4346
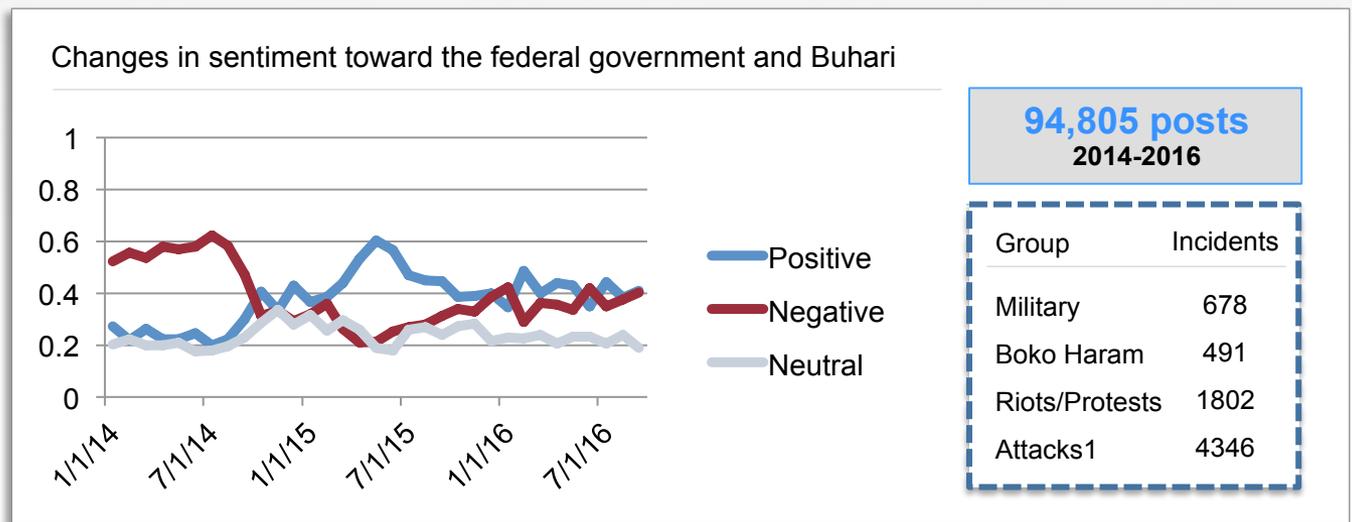
% increase of positive posts about federal gov

significant at p<0.05 = ▢

	MIL[1]	BH	R/P	ATT
Day of	-0.2	-0.1	2.6	0.8
1 Day	1.4	-2.6	2.6	-1.4
2 Days	1.1	-1.7	2.2	-0.7

% increase of negative posts about federal gov

significant at p<0.05 = ▢

	MIL[1]	BH	R/P	ATT
Day of	0.7	-0.1	-2.2	-0.2
1 Day	-2.1	3.1	-1.8	1.3
2 Days	-1.7	2.3	-2.0	-1.0

1. MIL = military intervention, BH = Boko Haram attack, R/P = riot or protest, ATT = attack

2o Final take aways: Our findings suggest that…

Takeaways

- Study confirms that **citizens link violence to opinion of government**, and Nigerians **blame government (on some level) for lack of security** against different violent actors

- Nigerians primarily **blame the military for lack of security against terrorist violence but view military interventions unfavorably**

- Whichever level of **government is perceived as responsible** for combatting Fulani Herdsmen (state) versus Boko Haram (federal) **bears the negative shift post violence**

- Nigerians view the **federal government more favorably in the wake of riots and protests**

Presentation contents

1. Background

2. Public opinion on governance and conflict

3. Nigerian Financial Intelligence Unit reform

4. Final Takeaways

2. According to the Internal Displacement Monitoring Centre

1a In their recent meeting with USIP, Nigerian governors cited FDI as their main priority.

| Oct. 19th | USIP Meeting with Nigerian Governors | > | #1 Priority | Increasing FDI |

Nigeria's 65% FDI drop since 2011 has been linked to falling oil prices, rising corruption and political instability.

1b

FDI Inflows

Current US $, Year

Y-axis: 0, 1E+09, 2E+09, 3E+09, 4E+09, 5E+09, 6E+09, 7E+09, 8E+09, 9E+09, 1E+10

X-axis: 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015

Change in FDI Inflows

Nigeria 3rd Largest FDI Stock in Africa

Y-axis: 0, 5E+10, 1E+11, 1.5E+11, 2E+11

- South Africa: $145B
- Egypt: $87.8B
- Nigeria: $86.6B
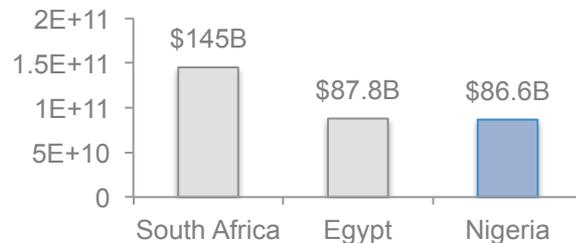
16% — *Drop in Nigeria's FDI Inflows (2013-2014)*

27% — *Drop in Nigeria's FDI Inflows (2014-2015)*

36% — *Increase in global FDI flows (2015)*

Main Causes

Oil Prices

Corruption

Instability

Corruption and political stability can be controlled by governors. This section will therefore focus on those aspects.

1. UNCTAD
2. World Bank Data

Recent events highlight the importance of AML and corruption control to increase FDI.

1c

HSBC Scandal (2012)

"Can I recommend putting your money into 25 tons of Mexican cocaine?"
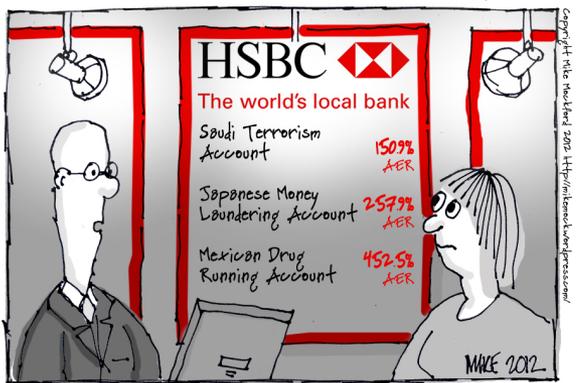
- HSBC processes drug-trafficking proceeds through Mexico
- Funds transmitted from sanctioned countries like Iran
- Ties to KSA bank linked to terrorist financing

- **Fined $1.9 Billion**

J.P. Morgan Out of Nigeria (2015)

- HSBC scandal leads to more caution amongst big banks

- JP Morgan removed Nigeria from Emerging Market Bond Indexes

- Cites fluctuating Naira **and lack of transparency**

Investors who track the GBI-EM series continue to face challenges and uncertainty while transacting with the naira due to the **lack of a fully functional two-way FX market and limited transparency.**
– JP Morgan Statement

Corruption & money laundering are **main concerns for foreign investors**

1. Bloomberg
2. The Guardian
3. Financial Times

De-risking can have severe consequences on Nigeria's economy if left unchecked

7

- **Correspondent banking relationships** (CBRs) enable domestic & cross-border transactions

- **De-risking** is the process through which financial institutions reduce or eliminate ties to avoid, rather than manage risk

- Driven by fears over being sanctioned as a result of regulations associated **with AML or CFT**

- > 50% of banks in Sub-Saharan Africa have seen declines in CBRs [1]

CONSEQUENCES

Limited or no ties to financial institutions, which are costly to reestablish.

Decreased ability to import, export, or send remittances

Increase in informal methods of conducting financial transactions

Small local financial institutions harmed disproportionately, indirectly affecting society's poorest

"Nigeria and other emerging markets are increasingly at risk of financial shocks because of the withdrawal of correspondent banking relationships." – *ELOMBAH*

"The withdrawal of commercial banking relationships has reached a critical level in some affected countries [and could] disrupt financing services and cross border flows, including trade finances and remittances, potentially undermining financial stability, inclusion, growth and development goals." – *IMF head, Christine Lagarde*

1. SWIFT Data
2. World Bank

1d Recent trends in de-risking pose a huge risk on Nigerian FDI and economy which FIUs can help mitigate

De-Risking	Anti-Money Laundering	Financial Intelligence Unit
The trend has been to **completely cut ties with high risk countries, and institutions** This leads to **huge drops in FDI** in Nigeria, further straining its economy	AML efforts would improve's Nigeria's status and **limit derisking** This would ultimately put investors at ease and **increase FDI**	NFIU reforms amongst **Buhari's main promises** Very **high potential** Could have **huge impact** on investor trust and FDI

How effective are FIUs and anti-corruption efforts in increasing FDI inflows and promoting political stability?

2

Using classic regressions, as well as sentiment analysis, to showcase the importance of anti-money laundering and FIU reforms in Nigeria.

1 **2** **3** **4**

COLLECT data on countries similar to Nigeria, regress, and find trends between corruption, FDI, and political stability.

MAP SHIFTS in public sentiment onto major events relating to corruption and financial systems in Nigeria, and determine correlation.

ASSESS current Nigerian FIU using:
- Best practices
- Benchmarks
- FATF and GIABA Mutual Evaluations and reports

RECOMMEND improvements to Nigeria's FIU and anti-money laundering efforts, and identify potential challenges.

2 How effective are FIUs and anti-corruption efforts in increasing FDI inflows and promoting political stability?

Using classic regressions, as well as sentiment analysis, to showcase the importance of anti-money laundering and FIU reforms in Nigeria.

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Common factors affecting FDI: Corruption, Insecurity & Terrorism, and Adverse Shocks

2a

Factors that affect FDI:

- Corruption
- Insecurity & Terrorism
- Oil Shocks

Corruption Perceptions[1]

Legend:
- Foreign Direct Investment, billion dollars
- Corruption perceptions
- Freedom from corruption

- While the index for freedom from corruption has been on the incline, corruption perceptions remain low and have decreased since 2014

- Incidents such as the issuing of a presidential pardon to the former Governor of Bayelsa State, charged with money laundering in 2007, have called Nigeria's anti-corruption efforts into question [2]

- Inefficiencies in the judicial system resulting from rampant corruption and low funding have also discouraged FDI

1. The Global Economy
2. Adejugbe, 2013

Common factors affecting FDI include: Corruption, Insecurity & Terrorism, and Adverse Shocks

2b

Factors that affect FDI:

- Corruption

- Insecurity & Terrorism

- Oil Shocks

Illicit Financial Flows (IFF)

Legend:
- Illicit Financial Flows (billions of U.S. dollars)
- Foreign Direct Investment, (billions of U.S. Dollars)
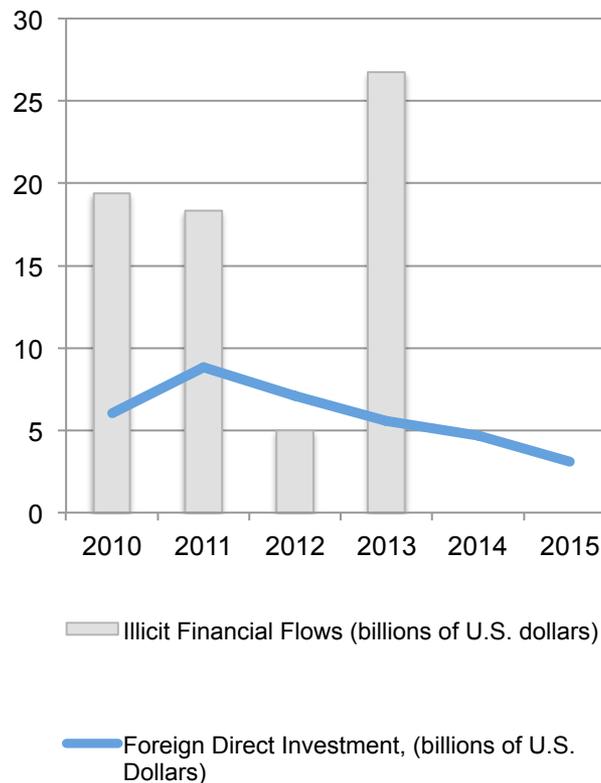
- In 2012, Africa lost $69 billion from illicit financial flows

- On average, $17.3 billion of illicit finances flow from Nigeria

- According to Global Financial Integrity, Nigeria ranks highest in Africa in its cumulative illicit flows

- The Africa Progress Panel and UN have highlighted how eliminating IFF is necessary to encourage FDI
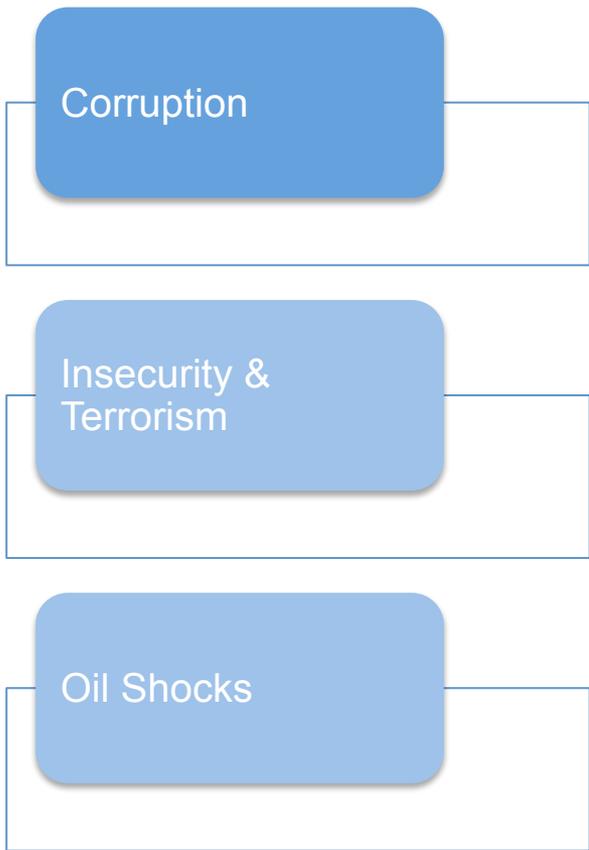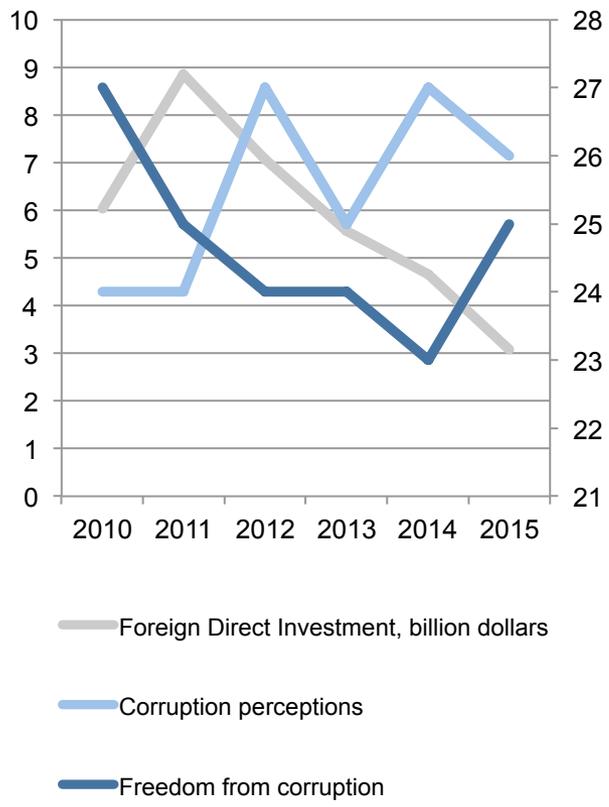
1. Global Financial Integrity

Common factors affecting FDI: Corruption, Insecurity & Terrorism, and Adverse Shocks

2c

Factors that affect FDI:

- Corruption
- Insecurity & Terrorism
- Oil Shocks

Insecurity and Terrorism [1] [2]

- Number of Terrorism Incidents
- FDI, billions of U.S. Dollars
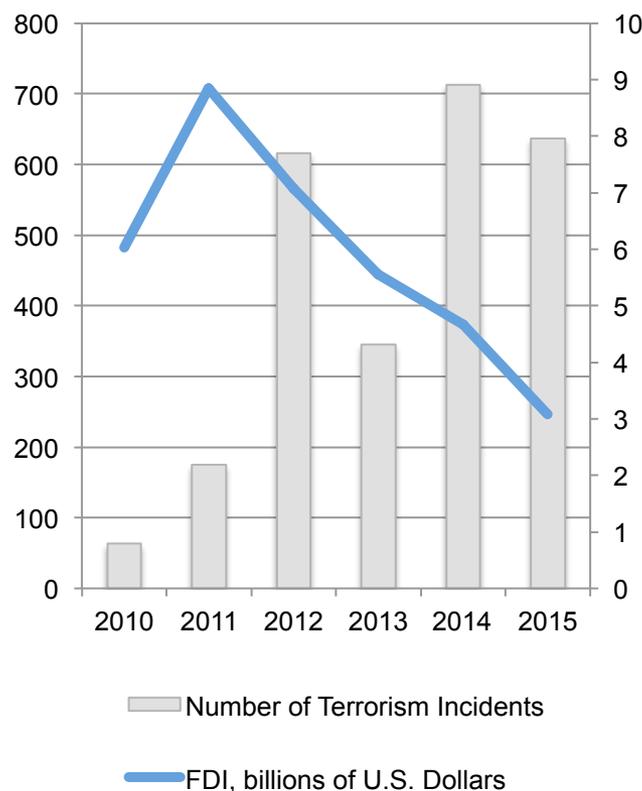
- Studies show that political stability is key to encouraging FDI

- The increasing sense of instability and security in Nigeria has contributed to a decline in foreign direct investments

- Insecurity and terrorism is not only responsible for generating fear and uncertainty, but the destruction of infrastructure that has adversely affected the oil sector, leading to further declines in FDI

1. The Global Economy
2. Global Terrorism Database

For countries similar to Nigeria, higher corruption control has significantly led to increase in FDI.

3a

	Effect on logFDI (1995 – 2015)	P-Values
Corruption Control	**1.90204****	**0.024**
Exchange Rate	**- 0.0003*****	**0.003**
Natural Resources Income	**0.0342****	**0.027**
Oil Prices	**0.0168*****	**0.000**
Population	3.93e-08***	0.000
Political Stability	0.5922249	0.111
Regulatory Quality	0.2901648	0.731
GDP Growth	0.014193	0.443
Real Interest Rate	- 0.0046739	0.602
Investment Freedom	0.0039421	0.624
Rule of Law	- 1.19481	0.302
Trade Openness	0.0083638	0.475
Constant	**15.45973 ***	**0.000**

- Corruption control, natural resource presence, and oil prices are **significantly correlated** with FIU inflows.

- **Political stability**, though not significantly correlated in this model, has a relatively low **11.1% P-value**. It is still important.

- A **high R2 value of 91.47%, and adjusted R2 of 88.84%** demonstrate the strength of this model.

1. World Bank Data

The positive correlation between corruption control and FDI is seen in this graph.

3b
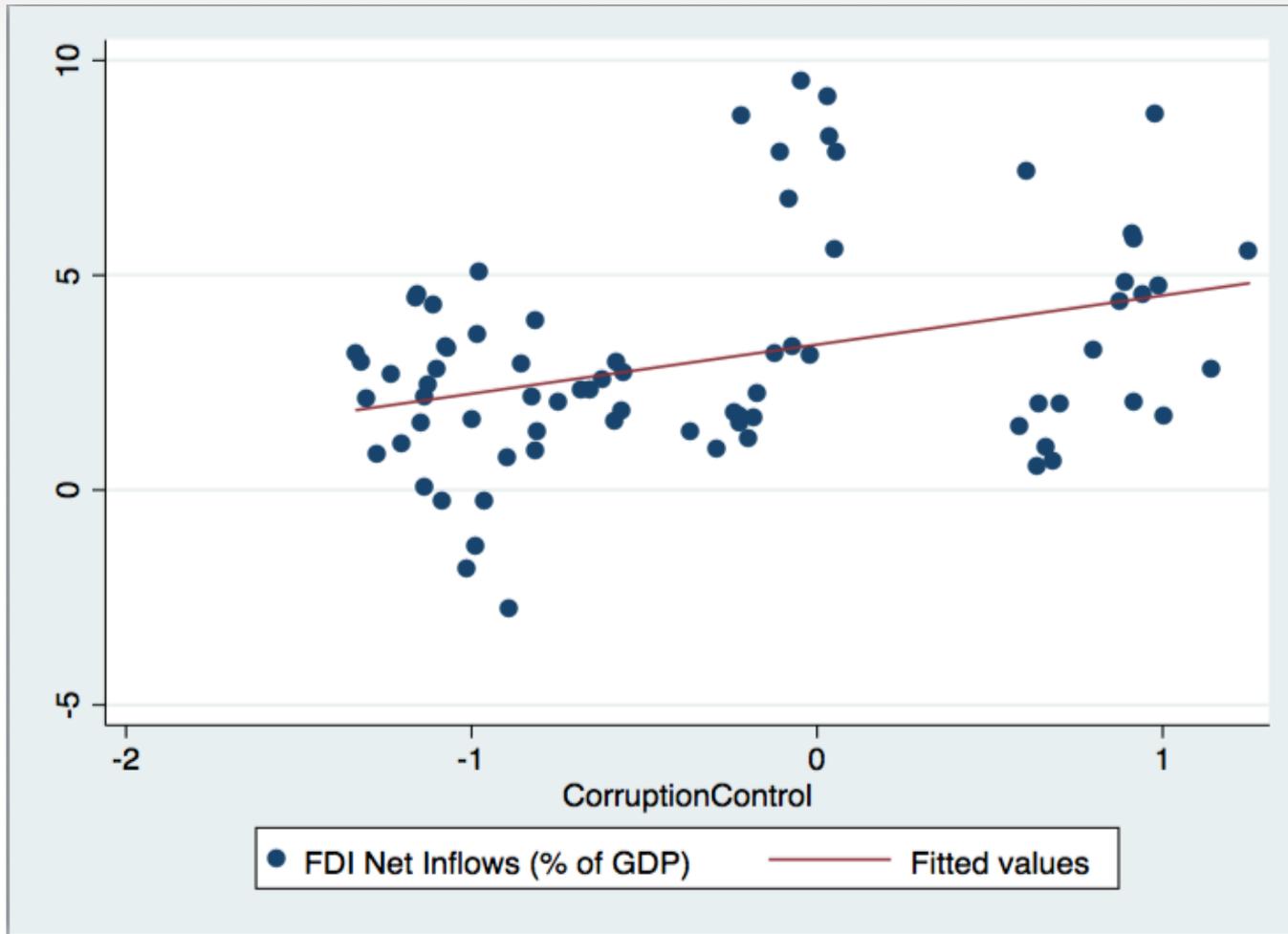
- The relationship between FDI and corruption control can be seen in this graph.

- One way to improve corruption control is by **fighting money laundering and improving financial intelligence.**

- This includes **de-risking and financial intelligence unit improvements.**

1. World Bank Data

3c

There is a positive trend between political stability and FDI inflows.
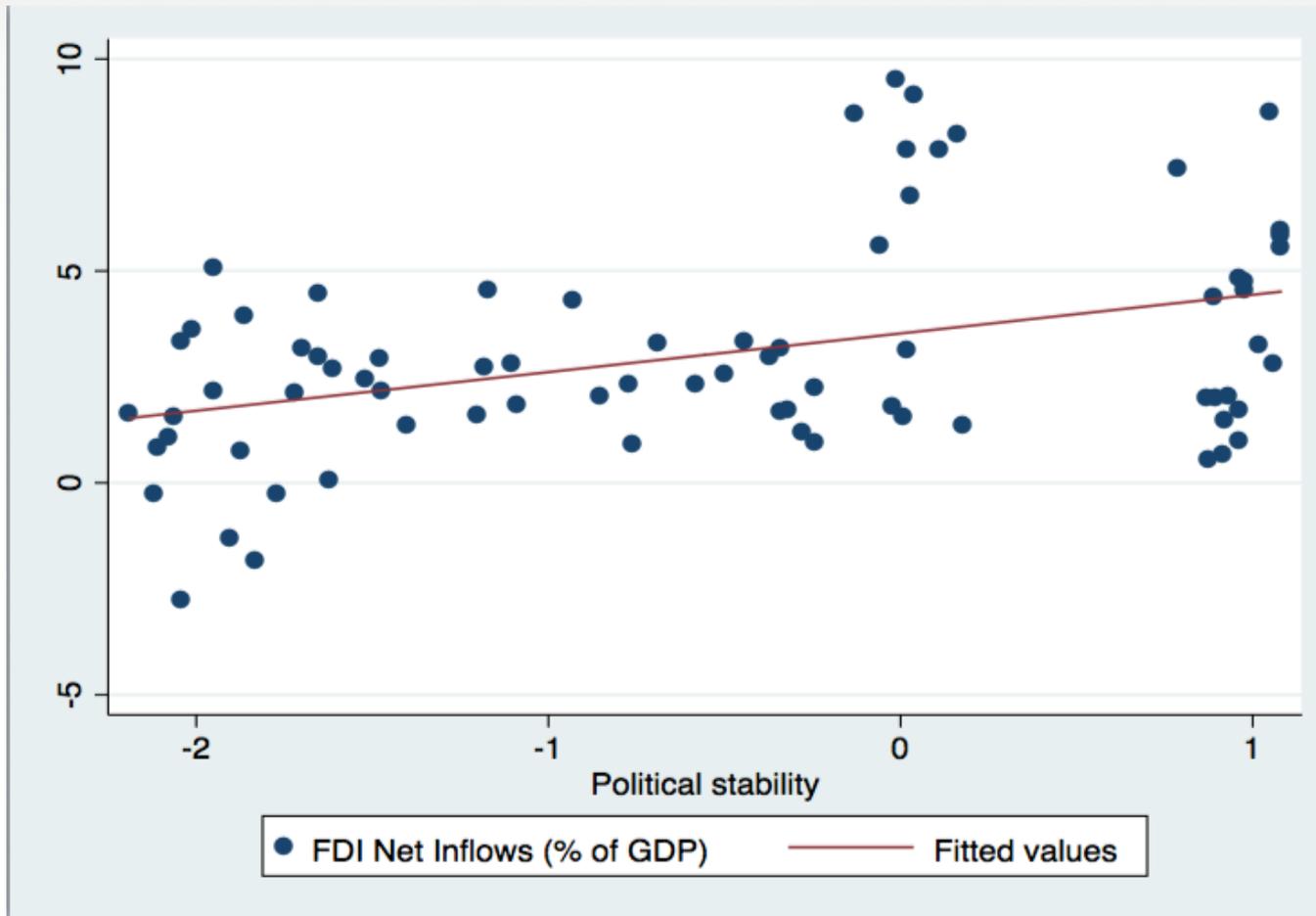
- Despite slightly insignificant results in our regression, **there is a visible positive trend between political stability and FDI inflows** in countries similar to Nigeria.

- According to a UNCTAD report, investors, both foreign and domestic, did cite **terrorism fears as a main reason** for their decreased investment.

- Political stability is therefore also something to keep in mind when courting foreign investors.

1. UNCTAD
2. World Bank Data

Corruption control is also associated with improvements in political stability.

3d

- Corruption control is **highly correlated** with political stability.

- Interviews with Boko Haram defectors and almost-recruits have also shown **corruption to be a main driver behind joining the terrorist organization**.

- This indicates that **steps to control corruption** and money laundering would only help with the governors' goal to increase investment, but also **their fight against Boko Haram**.

1. World Bank Data
2. Mercy Corps
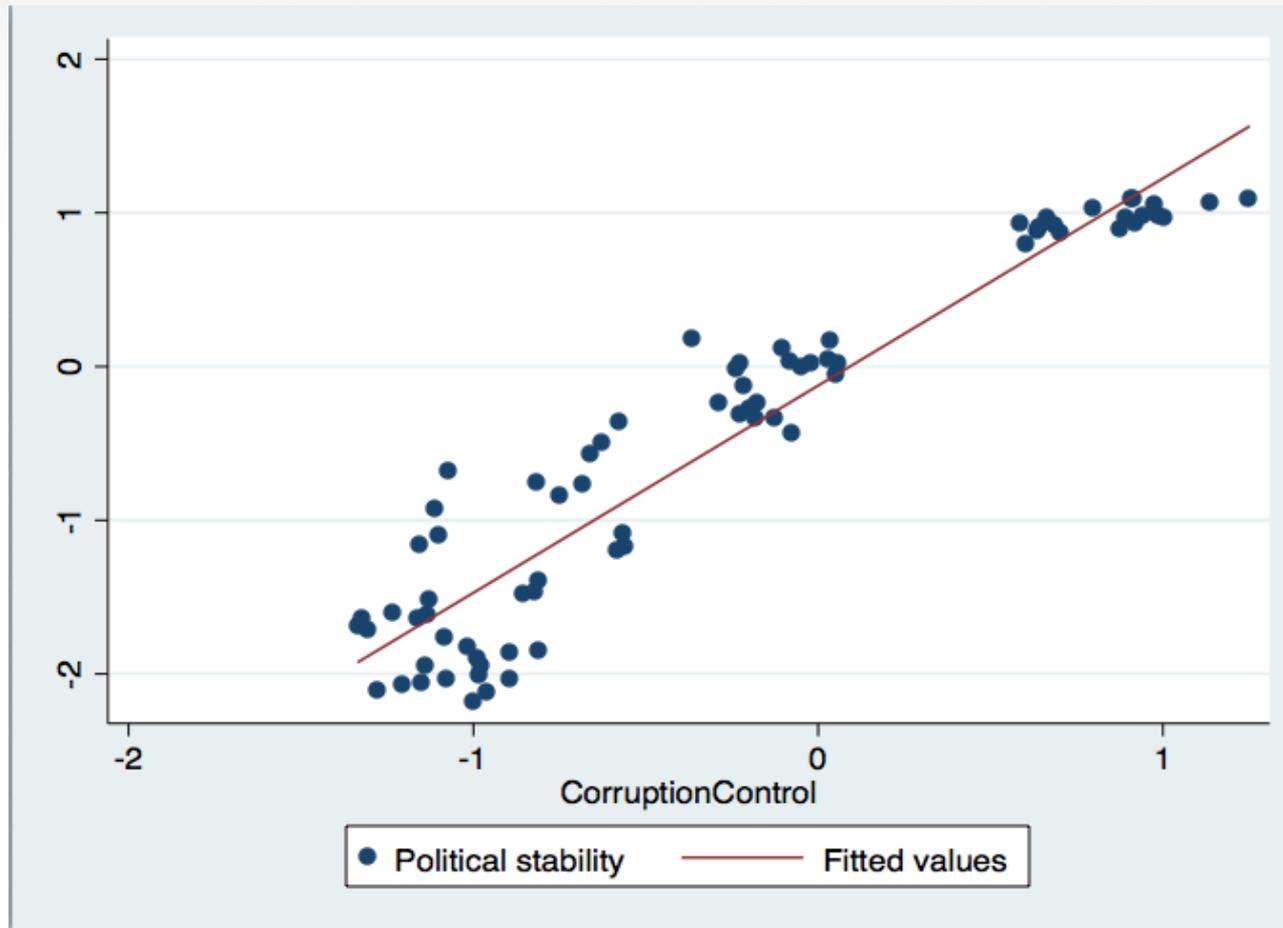
Corruption control and political stability both lead to increase in FDI.

3e

Corruption Control

- FIU Reforms
- De-Risking
- General crackdowns

FDI

- More confidence in economic outlook and FDI returns
- More confidence in stability and growth

Political Stability

- Less incentive to join Boko Haram
- Less anger towards government
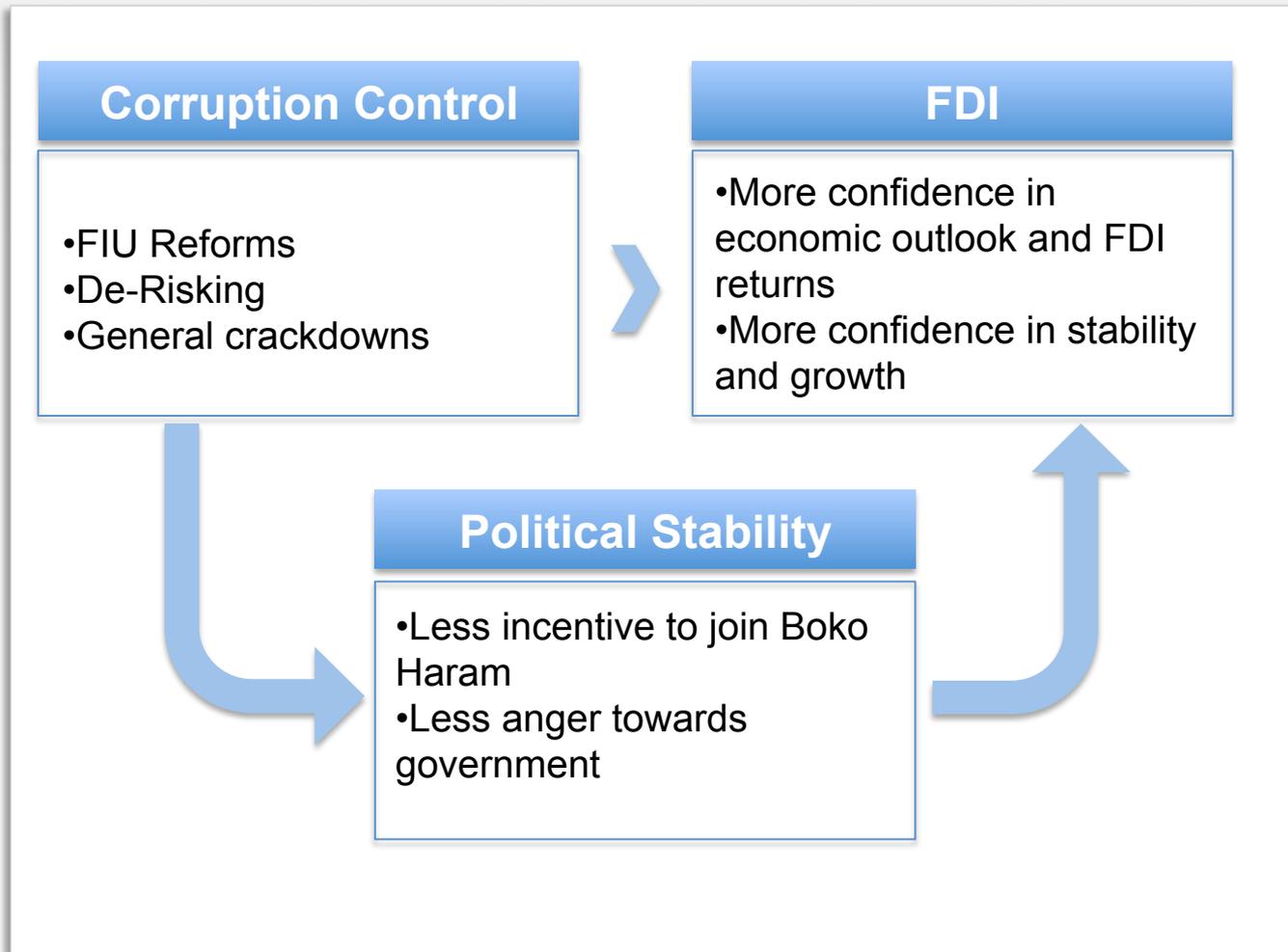
Areas to Explore:

Anti-Money Laundering

De-Risking

Financial Intelligence Units

President Obasanjo launched the Nigerian Financial Intelligence Unit (NFIU) in 2004

4a

NFIU

- Analyze suspicious transactions and cross-border movements of currency

- Maintain a transparent financial intelligence database

- Advise government authorities on policies to prevent financial crimes

The Economic and Financial Crimes Commission (EFCC)

- NFIU operationally autonomous from the EFCC

- NFIU is housed within EFCC and derives its budget from EFCC's budgetary allocation

- NFIU central authority with the mandate to receive, analyze and disseminate information on Suspicious Transaction Reports (STRs)

1995	Anti Money Laundering (AML) Act
2004	Economic and Financial Crimes Act
2004	Money Laundering Prohibition Act
2011	Money Laundering Prohibition Act
2011	Terrorism Prevention Act
2015	Nigerian Financial Intelligence Center Bill

1. Mutual Evaluation of the Federal Republic of Nigeria (2008)

GIABA Mutual Evaluation of the Federal Republic of Nigeria (2008).

4b

MUTUAL EVALUATION REPORT

Published May 7, 2008

Since then, there have been seven yearly updates

Financial Action Task Force (FATF)

Mandate: Set standards and to promote effective implementation of legal, regulatory and operational measures for combating ML/TF and other related threats to the integrity of the international financial system.

R.26: Partially Compliant

- Operational autonomy of the FIU.
- Power of NFIU Director
- Protection of information
- FIU statistics on STRs and CTRs inconsistency/inaccuracy
- Deficiencies in public reports issued by the FIU

1. Mutual Evaluation of the Federal Republic of Nigeria (2008)

GIABA Mutual Evaluation of the Federal Republic of Nigeria Yearly Updates.

4c

2015 Update:

Still only Partially Compliant on R.26

- Indicate timelines for enacting the NFIU Bill

- Improvements to management structure of the NFIU

- Protection and dissemination of information

- Provide specific number of analysts/staff deployed to the Monitoring & Analysis department of the NFIU; further training

Improvements since 2008:

Maintenance of STR and CTR statistics	Issuance of public and annual reports	Increased inter-agency cooperation	NFIU management structure streamlined

1. Mutual Evaluation of the Federal Republic of Nigeria (2009-2015)

5 How effective are FIUs and anti-corruption efforts in increasing FDI inflows and promoting political stability?

Using classic regressions, as well as sentiment analysis, to showcase the importance of anti-money laundering and FIU reforms in Nigeria.

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5a

Capturing public sentiment on Nigeria's Financial Intelligence Capabilities using social media analytics

- Can social media analytics be used to capture public sentiment on the NFIU?

- Does there exist a strong public discourse surrounding the NFIU?

- Does there exist a strong discourse surrounding financial corruption issues that FIUs seek to remedy?

- To what extent do Nigerians associate financial corruption issues with the state? To what extent do they associate it with the federal government?

Social media tracks on the Nigerian Financial Intelligence Unit [1]

Topics under which FIUs are most discussed

8,083 posts

About the Financial Intelligence Unit between 2010 - 2016

Words most used in combination with "FIU"

Fluctuations in total posts about FIUs, 2014 - 2016

1. Crimson Hexagon social media post aggregator

5b Capturing public sentiment on Nigeria's Financial Intelligence Capabilities using social media analytics

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Social media tracks using a lexicon of financial terms associated with the FIU[1]

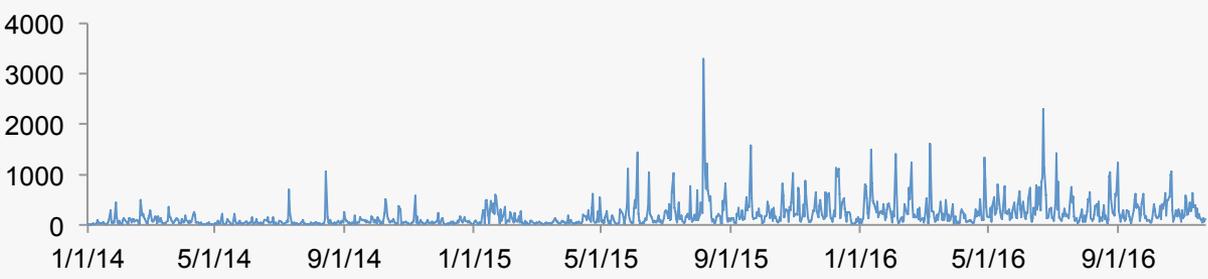Words most used in combination with the lexicon

238,217 posts

About related topics to the FIU between 2010 - 2016

Changes in FIU posts since Buhari's election

73% of total posts between 2014 and 2016 occurred in the Buhari Presidency

Fluctuations in total posts about FIUs, 2014 - 2016

1. Crimson Hexagon social media post aggregator

5c By scraping Nigerian news sites and blogs, we developed a 'financial lexicon' encompassing words associated with financial regulation

("Financial Intelligence" OR FIU OR "Financial Intelligence Unit" OR NFIU OR "Nigerian Financial Intelligence Unit" OR EFCC OR "Economic and Financial Crimes Commission" OR "Nigeria Drug Law Enforcement Agency " OR "Special Control Unit against Money Laundering" OR "Central Bank of Nigeria" OR CBN OR "Economics and Financial Crimes Commission Establishment Act" OR HURIWA OR "Human Rights Writers Association of Nigeria" OR "Integrity Group" OR ICPC OR "Independent Corrupt Practices Commission" OR NAICOM OR "National Insurance Commissions" OR "National Treasury" OR NBA OR "Nigerian Bar Association" OR "National Judicial Court" OR "Egmont Group of Financial Intelligence Units" OR Egmont OR FATF OR "Financial Action Task Force" OR "Financial Action Task Force Recommendation" OR GIABA OR "Intergovernmental Action Group Against Money Laundering in West Africa" OR "International Money Laundering Information Network" OR "Eastern and Southern African Anti-Money Laundering Group" OR UN OR "United Nations" OR IMF OR "World Bank" OR "United Nations Convention Against Corruption" OR MPLA OR "Money Laundering Prohibition Act" OR TPA OR "Terrorism Prevention Act" OR AML OR "Anti Money Laundering" OR CFT OR "Combating Financing of Terrorism" OR "Countering Financing of Terrorism" OR "Currency Transaction Reports") **AND** (FDI OR "Foreign Direct Investment" OR "Foreign Investment" OR "Financial institutions" OR "Commercial Banks" OR "Financial Stability" OR "Financial illiteracy" OR "Illicit Funds Flow" OR "Derisking" OR "Legislation" OR "Money" OR "Cash" OR "Poverty" OR "Financial Autonomy" OR "Financial Fraud" OR "Financial Flows" OR "Cash Flows" OR "Nigeria Factor" OR "Terrorist Financing" OR "Money Laundering" OR "Organised crime" OR Funding OR Funds OR "Campaign Funding")

Social media analytics show that events pertaining to financial corruption cause shifts in discourse

5d

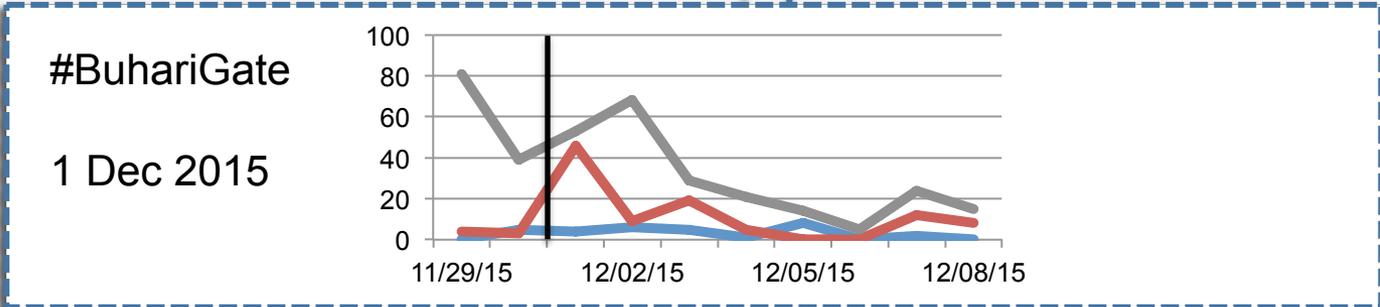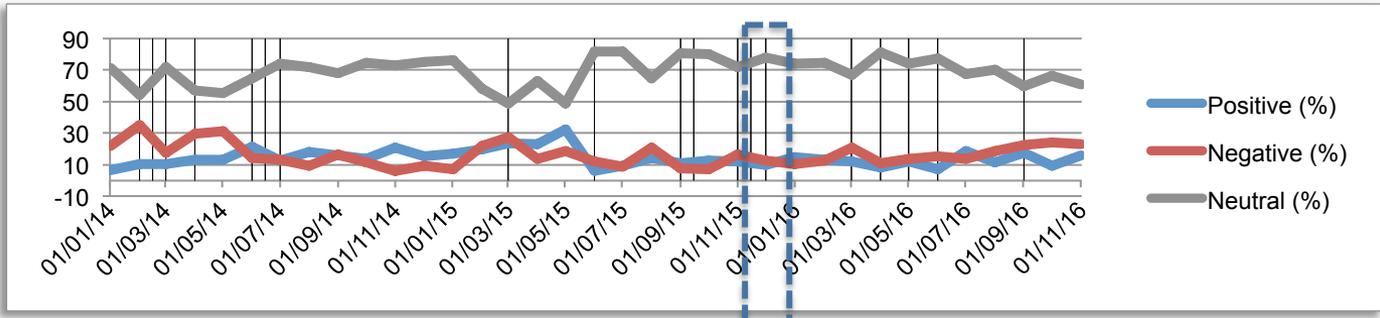**Capturing Sentiment from Twitter Data using LIWC**

↓

Constructing a timeline of events pertaining to financial corruption and FIUs

↓

Super imposing events onto the sentiment analysis

↓

Examining if sentiment changes in the days following the event

#BuhariGate

1 Dec 2015

Legend (for charts):
- Positive (%)
- Negative (%)
- Neutral (%)

1. Using LIWC Sentiment Analysis Software
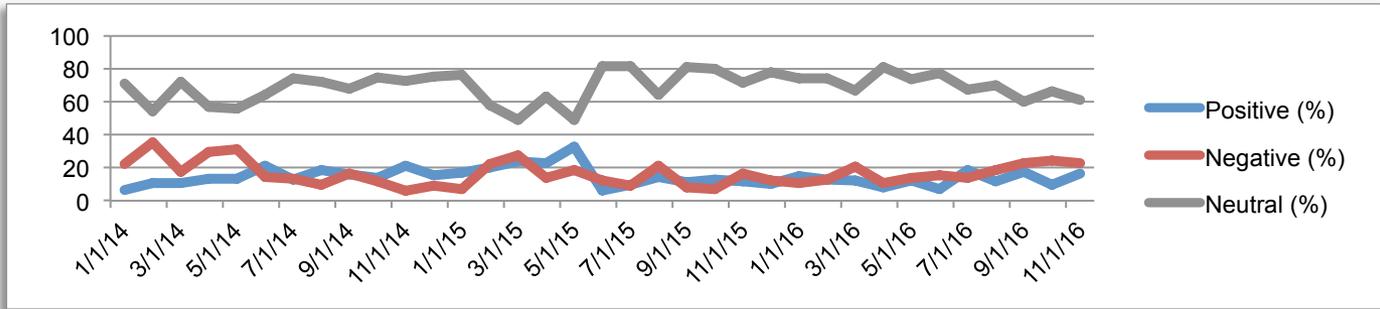
Timeline of financial regulatory events

5e

Timeline events:

- Bankers involved in newspaper scandal
- State revenue moved to federal account
- Biometric ID system launched
- Dasuki arrested for fraud
- CBN liquidated 83 micro-finance banks
- Nigeria passed highest ever budget
- Sanusi named Emir of Kano
- Usman arrested by EFCC
- Fayemi replaced by Fayose
- Nigeria fell into recession
- CBN banned defaulters from credit
- MTN paid $1.7bn fine in Nigeria
- FRC criticized CBN
- Osinbajo: "$15bn stolen from treasury"
- CBN Governor Sanusi sacked
- Buhari: "Inherited empty treasury"
- Buhari publicly declared assets
- Buhari announced contract with Nigeria

Timeline axis: 2014 — 2015 — 2016 — 2017

Happenings relating to the financial system are followed by significant changes in general sentiment

5f

Change in sentiment following general event

significant at $p<0.05$ = ☐

	Positive	Negative	Neutral
Day of	-0.05	-0.04	0.09
2 Days	-0.03	0.06	-0.04
7 Days	0.03	0.13	-0.15

Change in sentiment following positive event

significant at $p<0.05$ = ☐

	Positive	Negative	Neutral
Day of	0.03	0.01	-0.04
2 Days	-0.09	-0.03	0.12
7 Days	0.02	0.16	-0.18

Change in sentiment following negative event

significant at $p<0.05$ = ☐

	Positive	Negative	Neutral
Day of	-0.11	-0.06	0.17
2 Days	0.02	0.08	-0.10
7 Days	0.06	0.09	-0.16

Change in sentiment proportions depending on number of events per month

significant at $p<0.05$ = ☐

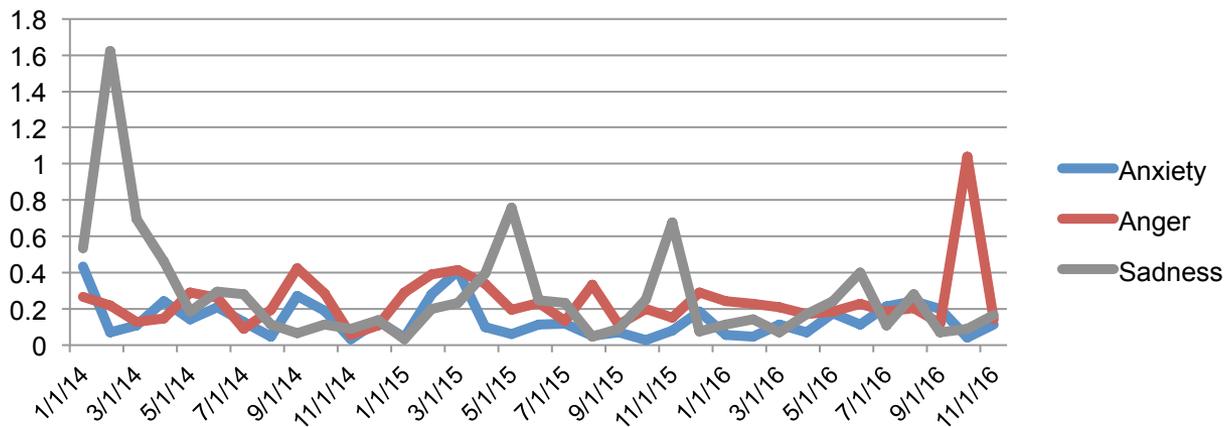|	Positive	Negative	Neutral
General	-0.4	-0.02	0.4
Positive	-0.7	-0.2	0.9
Negative	-0.3	0.06	0.3

- **Lack of positive reactions**, even when events are positive, indicate **general skepticism towards anti-corruption** efforts.

- **Significant changes in neutral sentiment** can be explained by the social media demographic. People are reporting events rather than reacting to them because they're not affected by them.

- The fact that so many people are reacting, however, shows that **the population is attentive to financial news.**

1. Using an OLS regression

Social media analytics can be disentangled beyond binary emotions

5g

Fluctuations in proportions of negative sentiment between 2014 and 2016

Legend: Anxiety (blue), Anger (red), Sadness (gray)

OLS Regression of negative tweets on differing emotions

	Anger	Sadness	Anxiety
Coefficient	0.135	0.128	0.099

- **Anger and sadness appear to be most associated with negative tweets**

- Understanding the specific emotions behind negative sentiment **could sway policy**

- While emotions such as sadness and anxiety could be remedied through assurance on part of Nigerian leaders, anger could indicate future spikes in violence levels
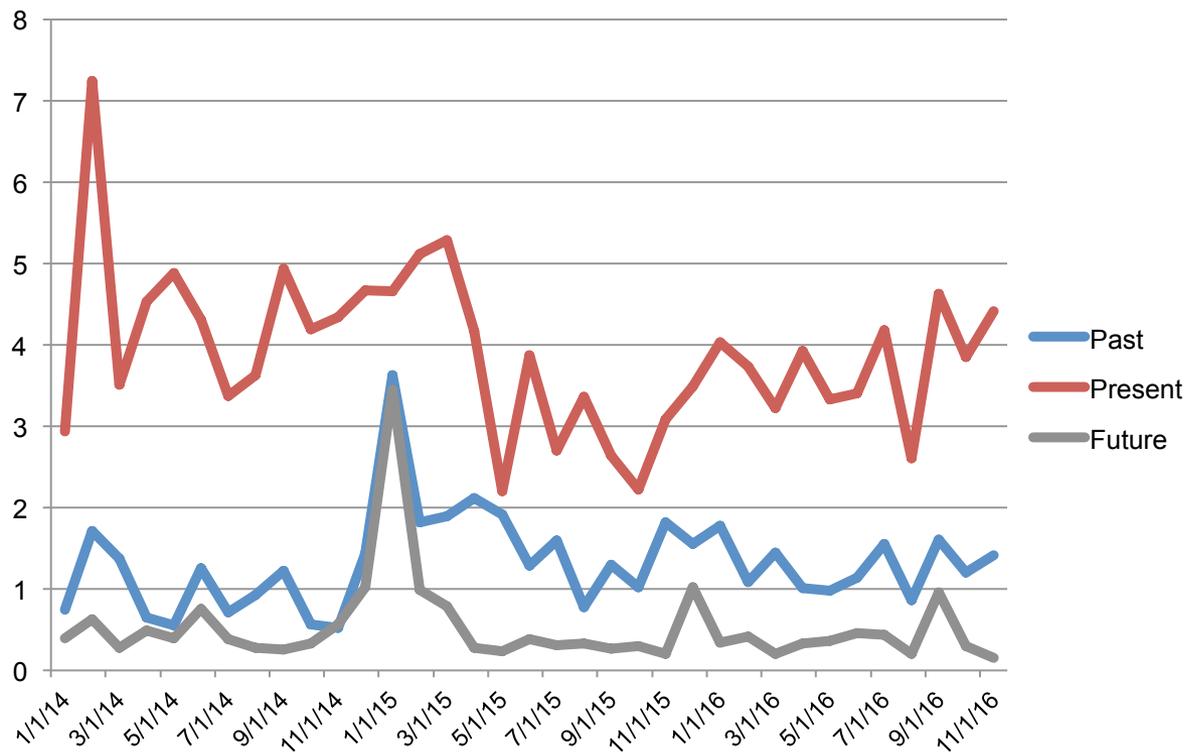
1. Using LIWC Sentiment Analysis Software

Social media analytics can provide insight on the time orientation of Nigerians

5h

Fluctuations in proportions of differing time orientations between 2014 and 2016


- Sentiment analysis shows that Nigerians tend to speak of **regulatory financial terms with respect to the present**

- Thus, we can see that Nigerians are **focused on the immediate present issues and less concerned with future or past issues** pertaining to financial corruption

1. Using LIWC Sentiment Analysis Software

Sentiment on the federal government with regards to financial intelligence fluctuates over time
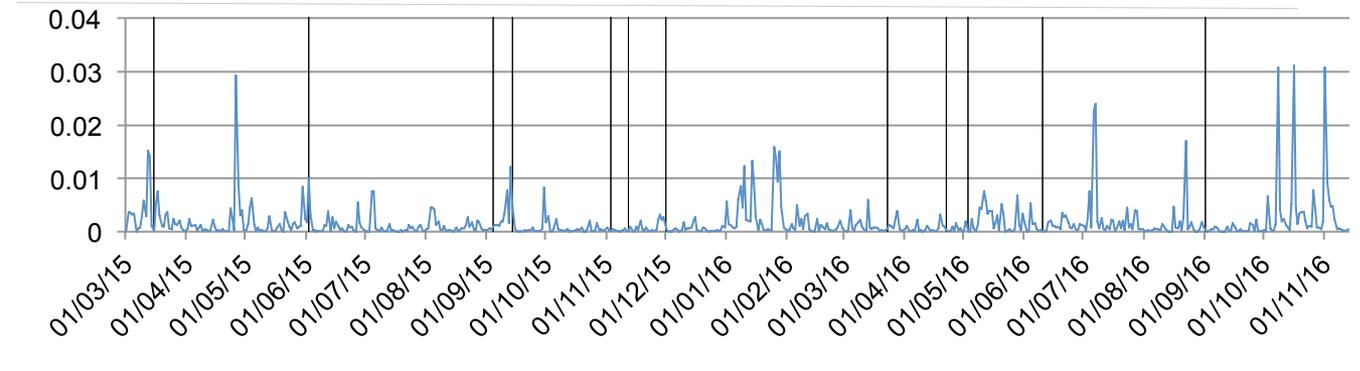
(5i)

28,764 posts
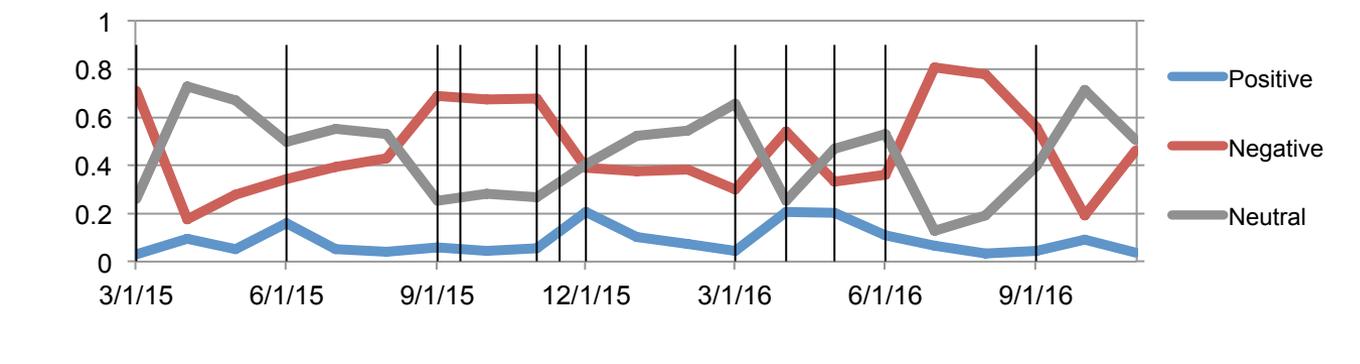March 2015 – Present

Federal Gov / Financial Lexicon
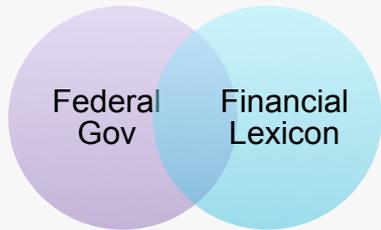
To what extent do Nigerians associate financial corruption issues with the federal government?

Weighted fluctuations in volume of posts on federal government & financial lexicon

Changes in sentiment toward the federal government

Positive
Negative
Neutral

1. Crimson Hexagon social media post aggregator

Events associated with the financial regulatory regime tend to result in more favorable views of the federal government

5j

Change in sentiment following general event

significant at p<0.05 = ☐

	Positive	Negative	Neutral
Day of	-0.18	-0.09	0.1
2 Days	2.2	-0.14	-0.07
7 Days	2.5	-0.14	-1.08

Change in sentiment following positive event

significant at p<0.05 = ☐

	Positive	Negative	Neutral
Day of	0.04	0.06	-0.1
2 Days	0.21	0.13	-0.07
7 Days	0.22	0.12	-0.11

Change in sentiment following negative event

significant at p<0.05 = ☐

	Positive	Negative	Neutral
Day of	-0.06	-1.6	0.22
2 Days	0.23	-0.27	0.03
7 Days	0.29	-0.41	0.11

Change in total tweets following an event

significant at p<0.05 = ☐

	Positive	Negative	Neutral
Day of	1.6	1.6	1.6
2 Days	1.9	2.0	1.9
7 Days	3.8	3.8	3.8

- **Positive significant changes in positive sentiment following a general event and a negative event,** indicate **that Nigerians look favorably on the federal government's** efforts in tackling anti-corruption.

- **A significant decline in negative tweets following negative events** further indicate that Nigerians do not blame the federal government with negative events pertaining to financial corruption.

1. Using an OLS regression

State and financial intelligence analysis yields twice more posts than federal government

5k

53,954 posts
March 2015 – Present
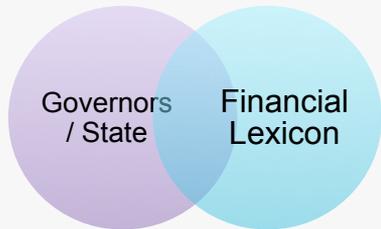
Governors / State

Financial Lexicon

To what extent do Nigerians associate financial corruption issues with the state?

Weighted fluctuations in volume of posts on state government & financial lexicon

Changes in sentiment toward the state government

Positive
Negative
Neutral
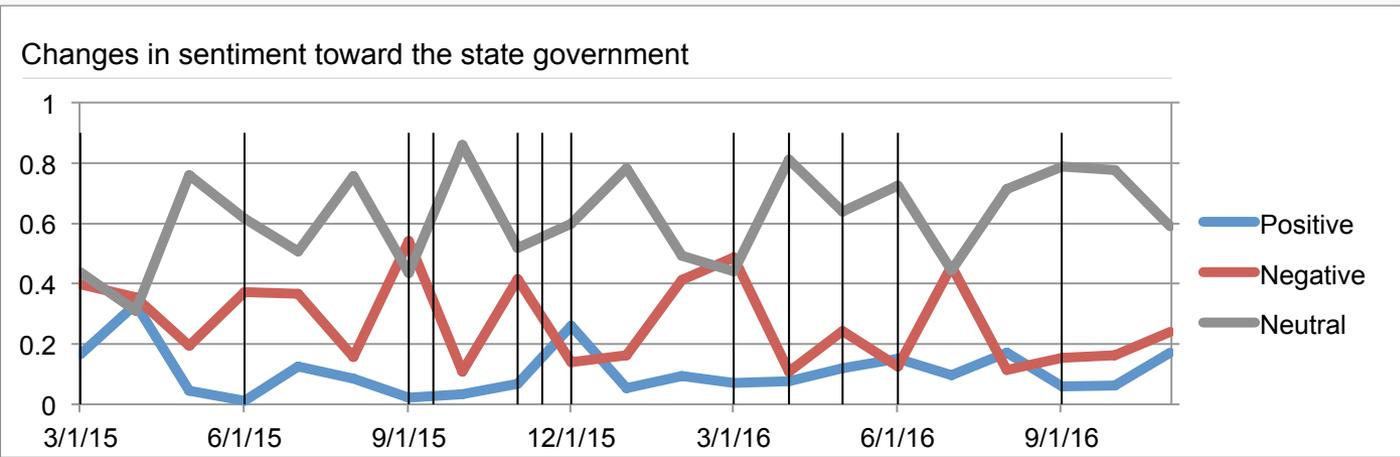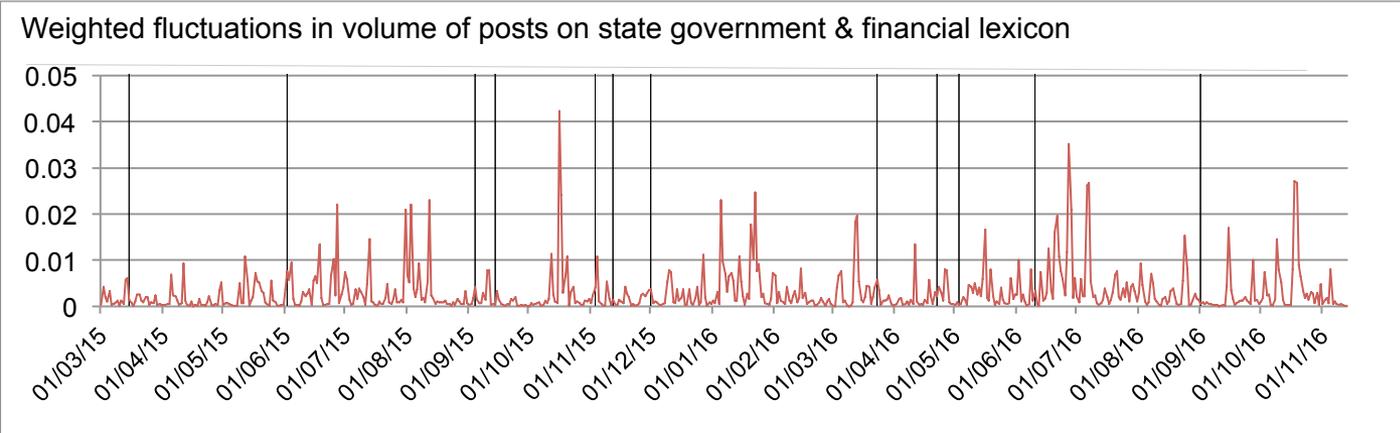
1. Crimson Hexagon social media post aggregator

Changes in sentiment following events indicate a skepticism towards the role the state plays in financial intelligence

5l

Change in sentiment following general event

significant at p<0.05 = ☐

	Positive	Negative	Neutral
Day of	-0.08	0.0003	-0.08
2 Days	0.14	0.08	-0.22
7 Days	0.21	0.18	0.38

Change in sentiment following positive event

significant at p<0.05 = ☐

	Positive	Negative	Neutral
Day of	0.33	-0.02	-0.31
2 Days	-0.07	0.49	-0.41
7 Days	-0.08	0.72	-0.65

Change in sentiment following negative event

significant at p<0.05 = ☐

	Positive	Negative	Neutral
Day of	0.03	0.002	-0.03
2 Days	0.1	0.14	-0.24
7 Days	0.21	0.1	-0.31

Change in total tweets following an event

significant at p<0.05 = ☐

	Positive	Negative	Neutral
Day of	0.08	0.08	0.08
2 Days	0.17	0.17	0.17
7 Days	0.59	0.59	0.58

- **Statistically significant increase in negative sentiment and a decline in the proportion of neutral tweets following positive events,** indicate a **general skepticism towards anti-corruption efforts as pursued at the state level.**

- Comparing these results with that from the federal government could indicate that **Nigerians associate blame or praise pertaining to financial corruption with the state level rather than the federal government**

1. Using an OLS regression

Key takeaways from social media analytics highlight the need for an autonomous FIU that works to remedy corruption in Nigeria

5m

- Issues pertaining to financial regulation are not only present in the public discourse but have the ability to shift public sentiment, which appears to be more negative and skeptical towards positive efforts of anti-corruption control

- Upon segmenting negative emotions into different types we see that anger appears to have the highest proportion

- Nigerians are more concerned with present regulatory issues as opposed to ones of the past or future

- Despite corruption control being an issue at the federal level, sentiment analysis shows that Nigerians tend to associate financial regulatory issues more strongly at the state government level rather than the federal level

- Given the effect corruption control has on perceptions of governors, this could be leveraged to lobby the federal government for a stronger, more autonomous Financial Intelligence Unit

1. Using an OLS regression

How effective are FIUs and anti-corruption efforts in increasing FDI inflows and promoting political stability?

6

Using classic regressions, as well as sentiment analysis, to showcase the importance of anti-money laundering and FIU reforms in Nigeria.

1 **2** **3** **4**

COLLECT data on countries similar to Nigeria, regress, and find trends between corruption, FDI, and political stability.

MAP SHIFTS in public sentiment onto major events relating to corruption and financial systems in Nigeria, and determine correlation.

ASSESS current Nigerian FIU using:
- **Best practices**
- **Benchmarks**
- **FATF and GIABA Mutual Evaluations and reports**

RECOMMEND improvements to Nigeria's FIU and anti-money laundering efforts, and identify potential challenges.
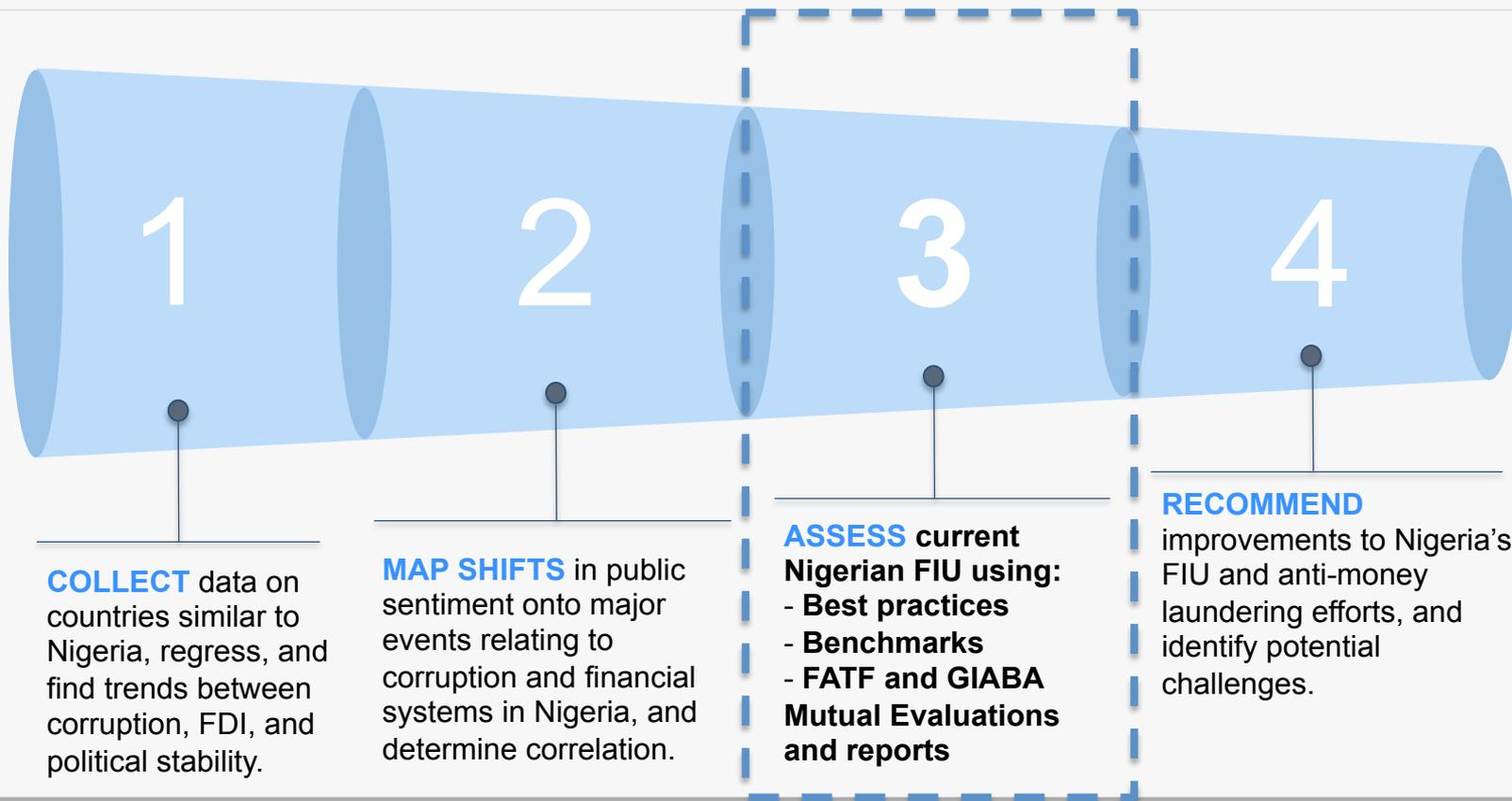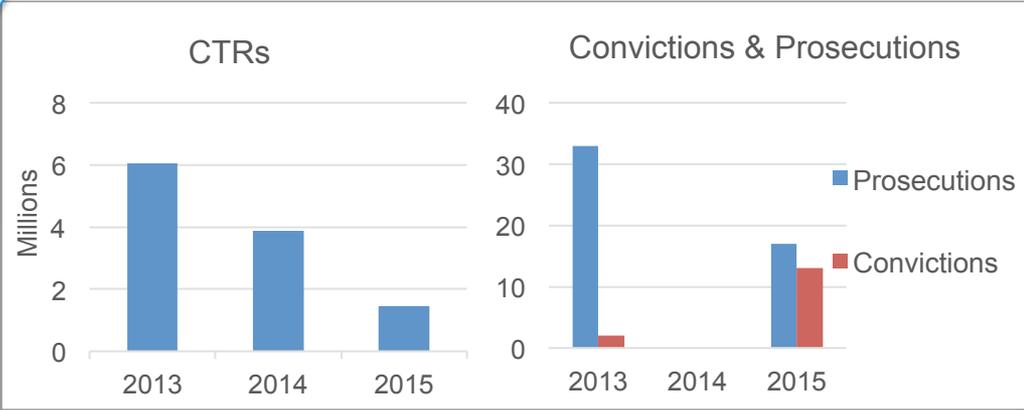
Anti-Money Laundering (AML) in Nigeria

6a

Nigeria is a major drug transshipment point and a **significant center for criminal financial activity.**[1]

Main sources of illicit proceeds:

Oil bunkering	Bribery & embezzlement
Smuggling	Bank robberies
Financial crime	

$12.7 billion

Losses *to financial fraud in West Africa*

CTRs

Convictions & Prosecutions

- Prosecutions
- Convictions

Challenges:

Quantity and quality of CTRs / STRs

Prosecutions & convictions

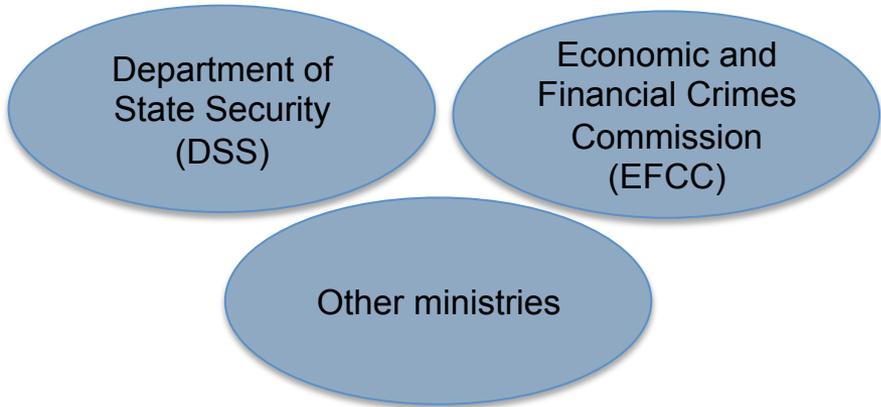Cash-based economy

NFIC Bill yet to be signed into law

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1. 2013 to 2015 International Narcotics Control Strategy Report (INCSR)

Countering Terrorist Financing (CFT) in Nigeria

6b

Multiple agencies involved in CTF but little cooperation.[1]

- Department of State Security (DSS)
- Economic and Financial Crimes Commission (EFCC)
- Other ministries

The DSS is the primary investigating agency for terrorism cases, but…**does not have the capacity to investigate terrorism financing…and does not share information** with other agencies…[1]

The EFCC…which houses the financial investigative expertise is often **excluded from participating…and thus unable to fully contribute**.

Challenges:

Strongly dependent on **Boko Haram's financing structure**

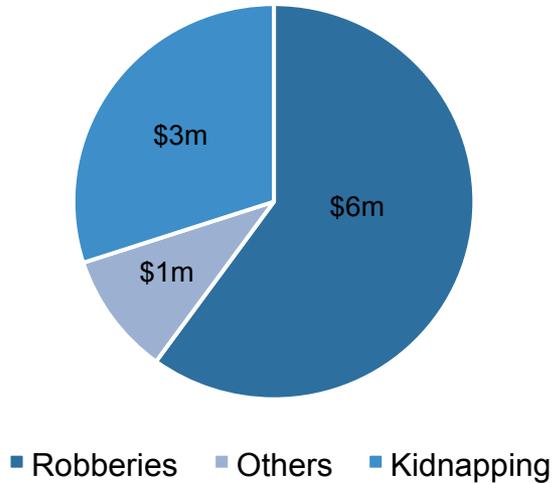Multinational Joint Task Force (MNJTF) in 2012 had **initial success**

But Boko Haram adjusted their operations to **asymmetric attacks**

1. Country Reports on Terrorism 2015

Boko Haram's Financing Structure

6c

Total Estimated Funding ($10 million)[1] :

Pie chart segments:
- $6m
- $3m
- $1m

Legend: ■ Robberies ■ Others ■ Kidnapping

Nigerian authorities have reported an **increase in cattle rustling activities**…that is directly connected to BH.[2]

$12 million

Est. value of cattle stolen by BH in 3 instances from 2014-16

Challenges:

Boko Haram operations are not costly

- E.g. Weapons are stolen instead of bought

Links to foreign terrorist groups, domestic organized crime, and AML

- Less territory today
- Look to crime to ensure sufficient funding
- Need to create better links between FIUs, law enforcement and intelligence communities

Corruption

- Politicians and border security

1. US House of Representatives Committee on Financial Services
2. Terrorist Financing in West and Central Africa. October 2016. FATF.

8 ## What makes a good Financial Intelligence Unit?

Technology

Human Capital

- Hiring
- Training
- Performance Evaluations

Financial Capital

FIU Resources

FIU Processes

- Reporting Entities
- Law Enforcement
- Strategic Partnerships

Strengthen Stakeholder Relations

- Compliance Reporting
- Information-Sharing
- Accountability Measures

Tightening Work Protocols

How effective are FIUs and anti-corruption efforts in increasing FDI inflows and promoting political stability?

9

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Recognition

9a

Recommendations

GIABA/ FATF

Greater Autonomy
- Pass NFIC Bill
- Establish legal structure to handle proceeds of financial crimes
- Creation of individual intelligence system

Management structure of the NFIU
- Regular stakeholder visits
- Separating corporate and analytical departments
- Improvements to accountability and transparency

Further integration of the AML/CTF regime
- Interagency/law enforcement cooperation
- Establish partnerships with other target nations
- Secure protection of information and intelligence sharing

Human Capacity Development
- Training Programs
- Sensitization and Awareness
- Technical Assistance

Recommendations

9b

De-Risking

Regulators/ Supervisors/Law Enforcement
- Greater interaction and information sharing between stakeholders
- Education/training on CDD
- Digitization and int'l cooperation

Correspondent Banking
- Personalized relationship with risk profile focus
- Transparent legal framework
- Disaggregating risk assessments

Charities/Non-profits
- Safe haven provisions
- Transparency in vetting and closures
- Creation and maintenance of white lists

Next steps?
- Complete National Risk Assessment
- Transfer jurisdiction of NRA Secretariat to NFIU
- Deepen cooperation with the Inter-Ministerial Committee on AML/CFT

How effective are FIUs and anti-corruption efforts in increasing FDI inflows and promoting political stability?

9c

1

Parties

USIP
Peace Tech Lab
Nigerian Governors

Goals

Increase FDI
Mitigate political instability

2

Methods

Regression
Sentiment analysis
NFIU Evaluations
Global best practices

Findings

Corruption & FDI correlation
Public discourse on AML
Blame directed towards governors

3

Recommendations

Governor lobbying for:

- Greater FIU autonomy
- Passing of NFIC bill
- Improved management structure of FIU
- Human capacity development
- Integration of AML/CTF regime

Presentation contents

1. Background

2. Public opinion on governance and conflict

3. Nigerian Financial Intelligence Unit reform

4. Final Takeaways

4a Final take aways: Our findings suggest that…

Social media can illuminate public opinion in ways that traditional surveys could not previously

Nigerians link violence to their opinions of state and federal government, although the specific impact depends on event type

FIU is statistically linked to foreign direct investment, and Nigeria has concrete steps to increase transparency at the state and federal levels