

Measuring Vulnerability and Exposure to Illicit Financial Flows in Africa

Markus Meinzer, Tax Justice Network
with Alex Cobham / Alice Lépissier / Nara Monkam /
Gamal Ibrahim / William Davis / Charles Abugre /
Maïmouna Diakité / Alvin Mosioma

2018



COFFERS
EU Horizon 2020 Project



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 727145.

Financial secrecy enables all types of IFFs..



- Financial Secrecy enables Illicit Financial Flows (High Level Panel on Illicit Financial Flows out of Africa 2015, “Mbeki Panel”)
- IFFs are hidden: likelihood of an illicit component increases in the degree of financial opacity in any given transaction
- Since 2015, whistleblowers and leaks illustrated range of IFFs concerned
 - illegal origin capital (“classic money laundering”, i.e. illegal drug-, weapon-, and human trafficking; embezzlement/corruption); and
 - legal origin capital (market rigging, tax avoidance, evasion)

...& IFFs everywhere on the planet (incl. Africa)

Exposing the Rogue Offshore
Finance Industry (April, 2016)

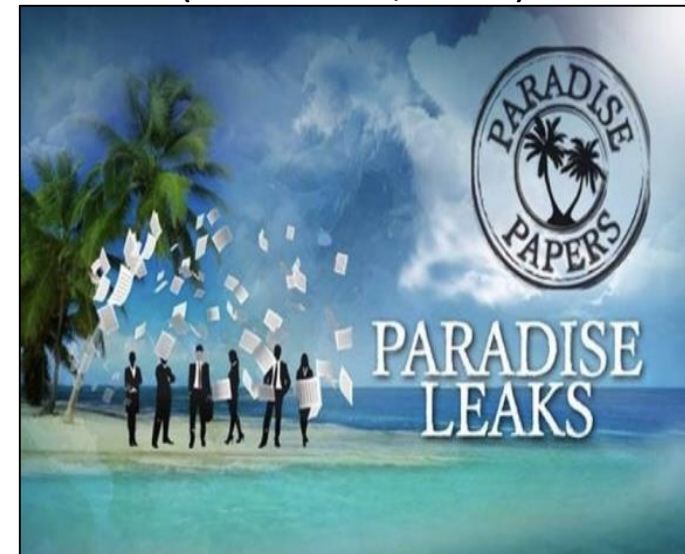
Source:
<https://www.ici.org/investigations/panama-papers/the-power-players/>; 10.9.2018.



Companies and individuals from 52 African countries were in the data.

Revealing secrets of the world
elite's hidden wealth
(November, 2017)

Source: <https://www.geo.tv/latest/166462-sbp-reviewing-pakistanis-revealed-in-paradise-papers>; 10.9.2018.



Elites of 7 African countries were named in the papers.

Corporate quest for secrecy?



Source: <https://projekte.sueddeutsche.de/paradisepapers/wirtschaft/apple-scouts-a-country-without-rules-e654132/>; 9.9.2018.

Pursuing “the Holy Grail of tax avoidance”

APPLE - PRINCIPAL PLACE OF BUSINESS QUESTIONNAIRE 2014			
1,2	Confirm that an Irish company can conduct management activities (such as board meetings, signing of important contracts) without being subject to taxation in your jurisdiction.		
1,4	What information is publicly visible (e.g. , through the companies registry or equivalent) when a company is registered in your jurisdiction.		
1,7	Is there a credible opposition party or movement that may replace the current government?		

Quelle: Paradise Papers

Source: <https://projekte.sueddeutsche.de/paradisepapers/wirtschaft/apple-scouts-a-country-without-rules-e654132/>; red highlights by mm; 9.9.2018.

IFF risk measures: motivating questions



- Considering the entirety of a jurisdiction's external economic relationships, where is the highest risk for IFFs, and which (partner) jurisdictions are relevant for addressing this problem?
- What data sources exist to answer the questions above?
- What policy recommendations can be drawn from the findings?

IFF risk measures: concept

■ Intuition:

IFF risk = **Financial Secrecy Level** of partner jurisdiction * **Size/Volume** of cross-border stock/flow/transaction

■ Financial Secrecy Level

- Secrecy Scores of the Financial Secrecy Index (112 juris)

■ Size/Volume

- Macro: 8 broad IFF channels in 4 bilateral external economic datasets:
 - Trade: Imports and Exports (UN COMTRADE)
 - Foreign Direct Investment: Inward and Outward (IMF's CDIS)
 - Banking: Liabilities and Claims (BIS)
 - Portfolio Investment: Liabilities and Assets (IMF's CPIS)
- Micro: transaction level data (customs, central banks [ForEx], tax return data, company registry data [ownership, financial statements], suspicious transactions reports, etc.)

FSI 2018: Secrecy Scores

Ownership Registration		Legal Entity Transparency		Integrity of tax and financial regulation		International Standards and Cooperation	
1	Banking secrecy	6	Public Company Ownership	11	Tax Administration Capacity	17	Anti-Money Laundering
	IDs 89, 157, 158, 352, 353 and 360		IDs 470 – 475, 485 and 486		IDs 317 and 400 to 406		ID 335
2	Trusts and Foundations Register	7	Public Company Accounts	12	Consistent Personal Income Tax	18	Automatic Information Exchange
	IDs 204, 206, 214, 234, 236 - 240, 244, 355, 384, 393, 395 and 396		IDs 188, 189 and 201		IDs 374, 435 and 489		IDs 150, 371 - 374, 376 and 377
3	Recorded Company Ownership	8	Country by Country Reporting	13	Avoids Promoting Tax Evasion	19	Bilateral Treaties
	IDs 388, 470 - 473, 485 and 486		ID 318		Cf. Tax Details section of the country database reports		IDs 301 and 143
4	Other Wealth ownership	9	Corporate Tax Disclosure	14	Tax Court Secrecy	20	International Legal Cooperation
	IDs 416, 418, 437, 439 and 487		IDs 363, 419 and 421		IDs 407 to 410		IDs 33, 35, 36, 309 - 314 and 469
5	Limited Partnership Transparency	10	Legal Entity Identifier	15	Harmful Structures	16	
	IDs 269, 272, 273, 274, 476, 477 and 479 to 484		IDs 414, 415 and 420		IDs 172, 184, 224 and 488		
					Public Statistics		
					IDs 425 to 434		

Source: TJN 2018 (FSI-Methodology), page 12

- Arithmetic average of 20 Key Financial Secrecy Indicators (0-1), 4 areas, driven by 115 variables (“IDs”), 0-100
- Fully referenced to source, verifiable
- More demanding than IOs/standards
- Open Data: all data downloadable
- Used by financial intelligence units, public prosecutors, risk rating agencies, tax administrations, central banks, etc.

■ <https://www.financialsecrecyindex.com/>

Weakest Link Principle

Potential economic channels for IFFs – example COMTRADE, CDIS

Flow	Manipulation	Illicit motivation
Exports	Over-pricing	Exploit subsidy regime
		(Re)patriate undeclared capital
	Under-pricing	Shift undeclared (licit) income/profit
		Shift criminal proceeds out
		Evade capital controls (including on profit repatriation)
Imports	Under-pricing	Evade tariffs
		(Re)patriate undeclared capital
	Over-pricing	Shift undeclared (licit) income/profit
		Shift criminal proceeds out
		Evade capital controls (including on profit repatriation)
		Shift undeclared (licit) income/profit
		Shift undeclared (licit) income/profit
Inward investment	Under-pricing	Shift undeclared (licit) income/profit
		Shift criminal proceeds out
	Over-pricing	Evade capital controls (including on profit repatriation)
		(Re)patriate undeclared capital
		Hide market dominance
Outward investment	Anonymity	Hide political involvement
	Under-pricing	Evade capital controls (including on profit repatriation)
	Over-pricing	Shift undeclared (licit) income/profit
		Shift criminal proceeds out
	Anonymity	Hide political involvement

Source: United Nations Economic Commission for Africa/African Union 2015 (Mbeki Panel Report)

Vulnerability, Intensity, Exposure

- $i \in \{1, \dots, I\}$ reporting country
- $j \in \{1, \dots, J\}$ partner country
- $t \in \{2008, \dots, 2018\}$ year
- X_{ijt} flow or stock value of cross-border transaction between reporter i and partner j at time t
- Y_{it} GDP of reporting country i at time t
- SS_j Secrecy Score (or individual KFSI) of partner country j

Vulnerability

$$V_{it} = \frac{\sum_{j=1}^J X_{ijt} \cdot SS_j}{\sum_{j=1}^J X_{ijt}}$$

Intensity

$$I_{it} = \frac{\sum_{j=1}^J X_{ijt}}{Y_{it}}$$

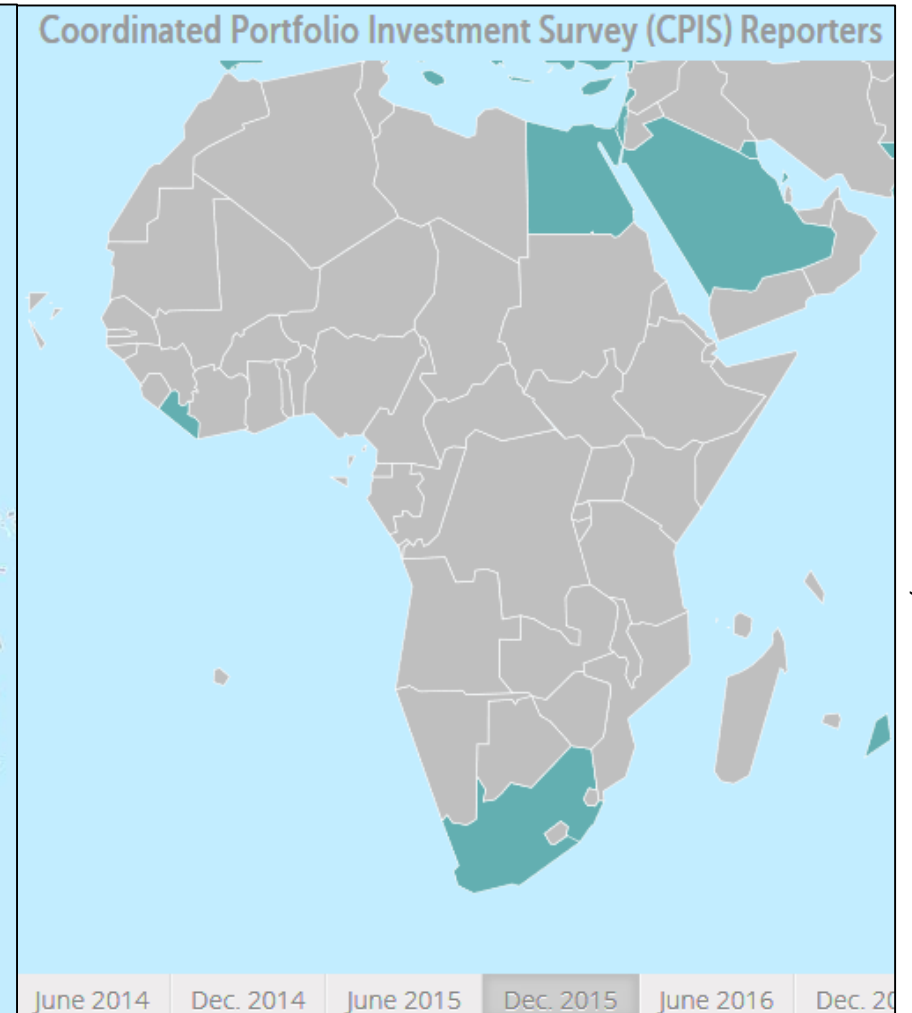
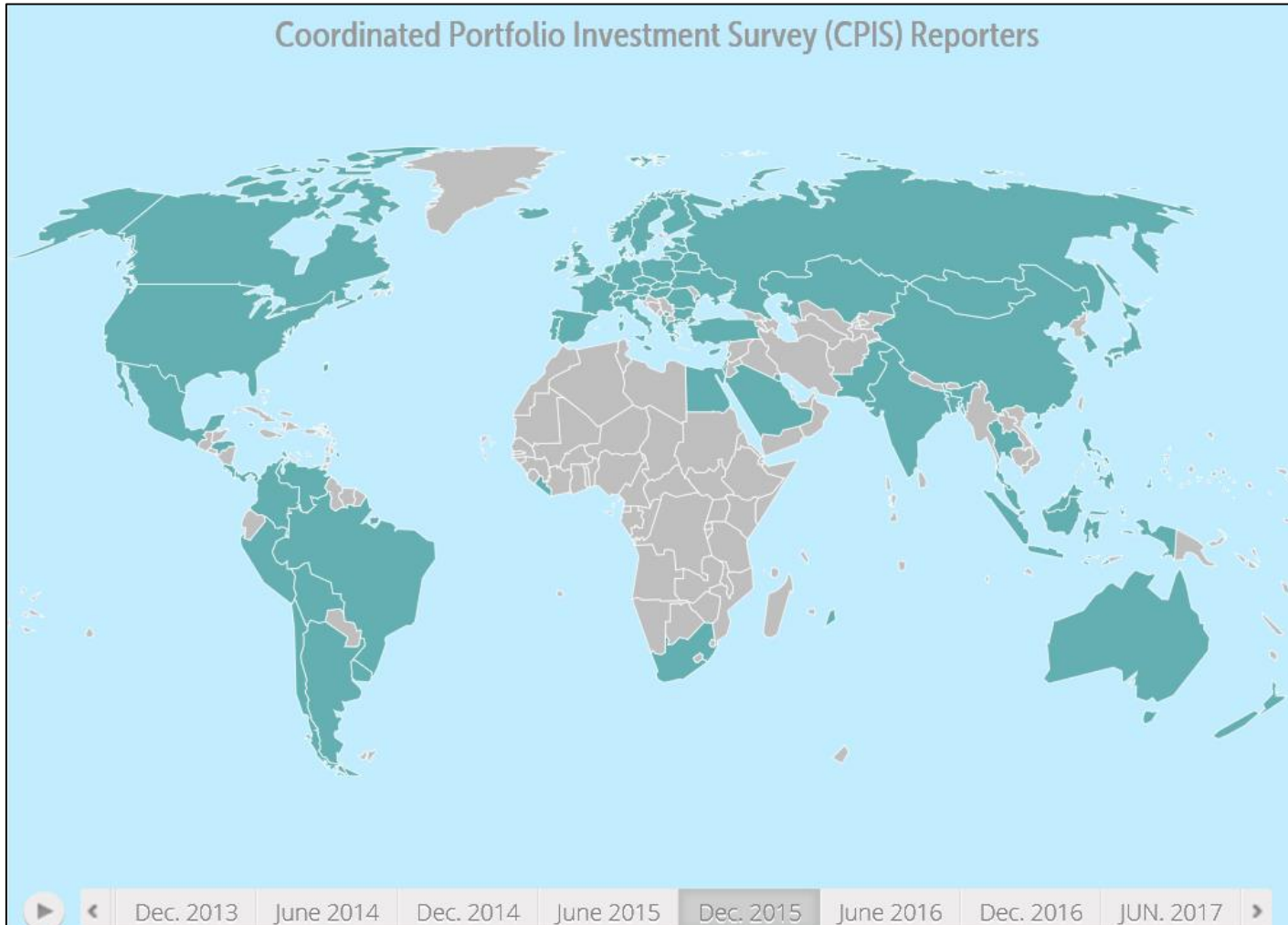
Exposure

$$\begin{aligned} E_{it} &= V_{it} \cdot I_{it} \\ &= \frac{\sum_{j=1}^J X_{ijt} \cdot SS_j}{\sum_{j=1}^J X_{ijt}} \cdot \frac{\sum_{j=1}^J X_{ijt}}{Y_{it}} \\ &= \frac{\sum_{j=1}^J X_{ijt} \cdot SS_j}{Y_{it}} \end{aligned}$$

Data availability: a key challenge

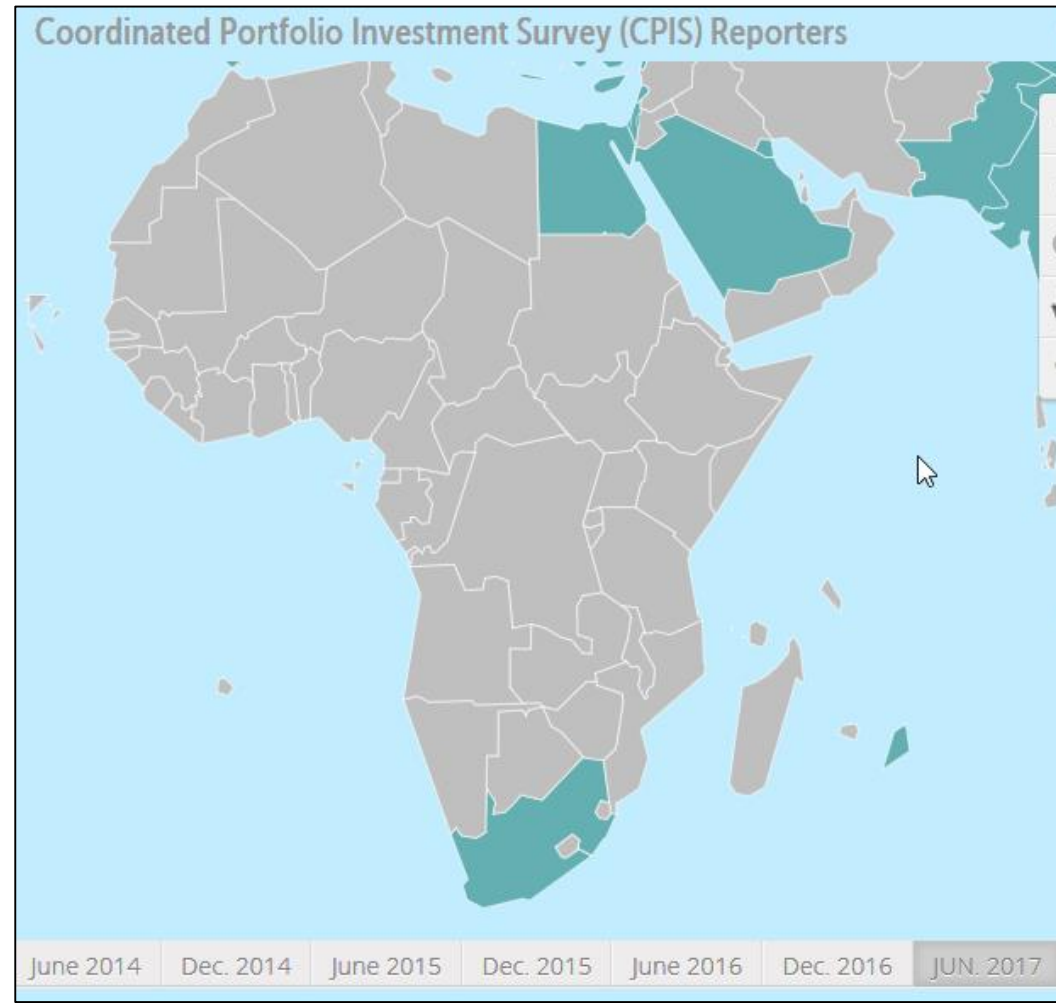
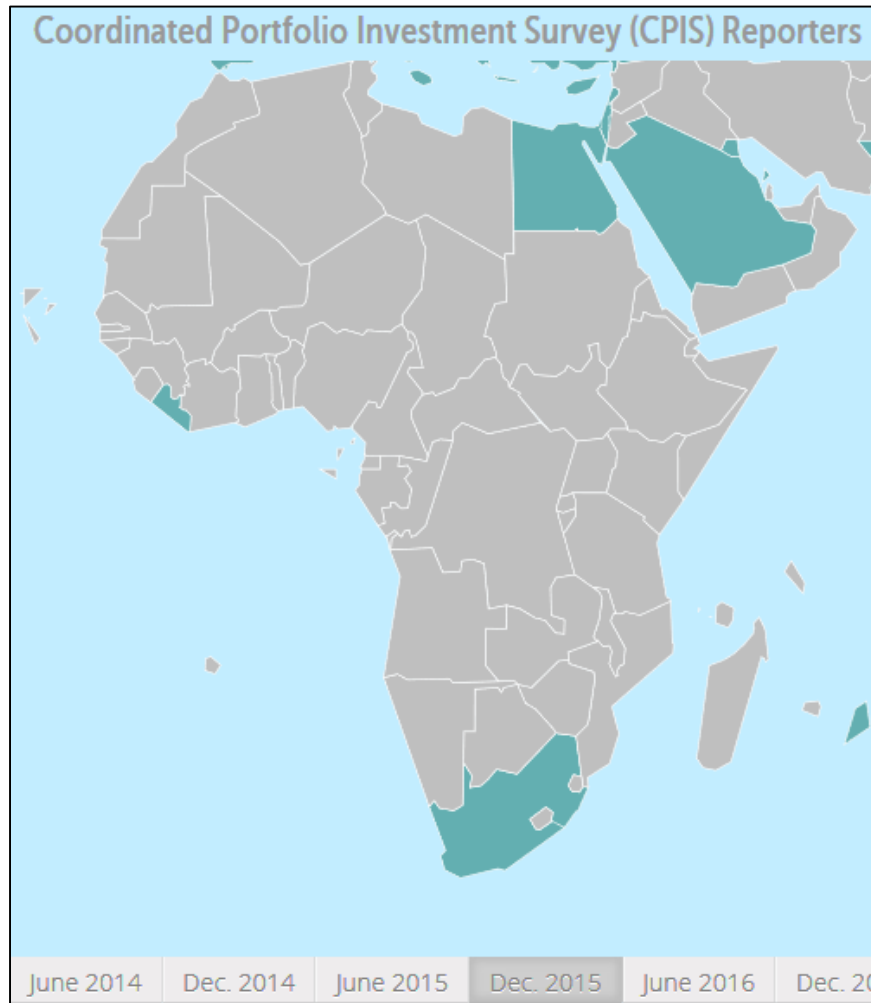


Data availability is a key challenge for Africa...



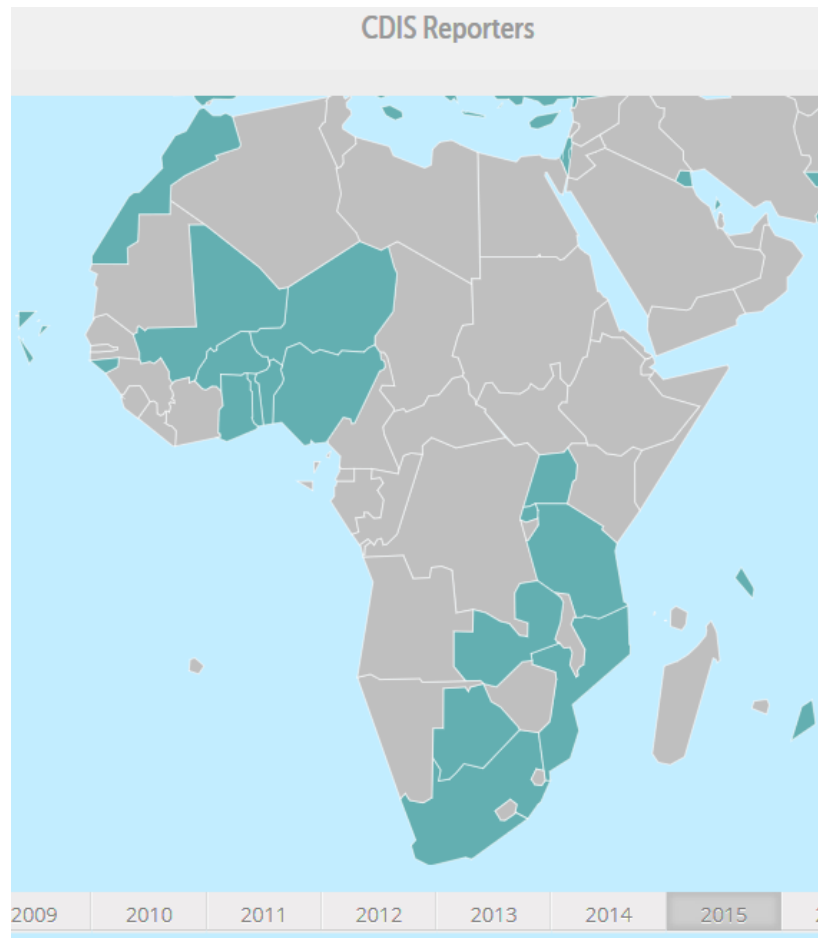
Source: <http://data.imf.org/?sk=B981B4E3-4E58-467E-9B90-9DE0C3367363&sid=1481580274211>, 9.9.2018.

...and over time...



Source: <http://data.imf.org/?sk=B981B4E3-4E58-467E-9B90-9DE0C3367363&sid=1481580274211; 9.9.2018.>

...and for specific channels.



- In Africa, bilateral data coverage is best for trade
- Second best for foreign direct investment CDIS (see left); inward better than outward
- Third best for portfolio investment CPIS (previous slide: max 4 reporters, EGY, LBR, MUS, ZAF); assets better than liabilities
- Worst for banking BIS data (only one reporter, ZAF)

Strategies to overcome data coverage challenges



- Panel data: using multiple years
 - Live Data: refresh analyses with instant data updates
 - Mirror Data: derive PF liabilities/outward FDI from PF assets/inward FDI reported by all jurisdictions
 - Transparency: make explicit where data coverage is constraining analyses
- [→ Policy Ask: improve statistical coverage and capacity]

Final Dataset – Coverage Africa

- 2008-2018, instant downloading and scraping from original data providers (COMTRADE, IMF, BIS)

IFF Channel / Dataset	Number of African reporter jurisdictions with data at least one observation 2008-2018*	Coverage (% out of 60)
Export	42	70.0%
Import	42	70.0%
FDI Inward	21	35.0%
FDI Outward (derived)	60	100.0%
Banking Claims	1	1.7%
Banking Liabilities	1	1.7%
Portfolio Assets	3	5.0%
Portfolio Liabilities (derived)	59	98.3%
*if secrecy scores of partner jurisdiction is also available.		

Country Level analyses: examples of South Africa and Burkina Faso



Vulnerability - FDI – Inward - 2016

Burkina Faso				South Africa			
Jurisdiction	SS	Inward FDI Stock (USD)	VulShare	Jurisdiction	SS	Inward FDI Stock (USD)	VulShare
Barbados	74	573543196	37%	United Kingdom	42	51899345608	31%
Canada	55	600468700	29%	Netherlands	66	28920782348	27%
Bermuda	73	233996775	15%	USA	60	9250718882	8%
France	52	177313974	8%	Germany	59	6745247343	6%
Isle of Man	64	68723469	4%	China	60	5677904483	5%
United Kingdom	42	-70997485	3%	Japan	61	5195459079	4%
India	52	40579082	2%	Luxembourg	58	3949227042	3%
Mauritius	72	11330068	1%	Australia	51	4178099960	3%
Ghana	62	10522086	1%	Switzerland	76	1541238413	2%
Luxembourg	58	8876875	0%	Malaysia	72	1330415179	1%
Overall Vulnerability Inward FDI	63			Overall Vulnerability Inward FDI	54		

Vulnerability - FDI – Outward (derived) – 2016



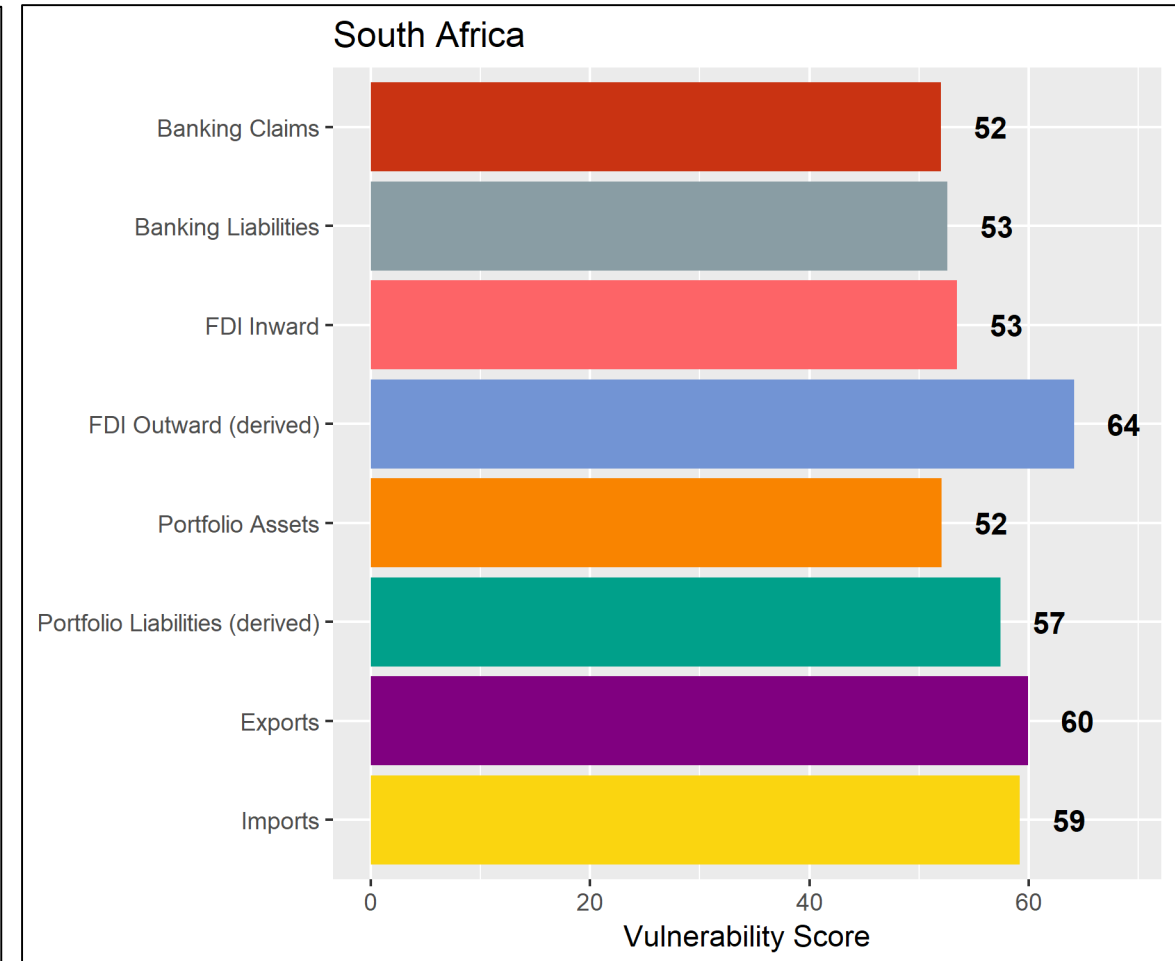
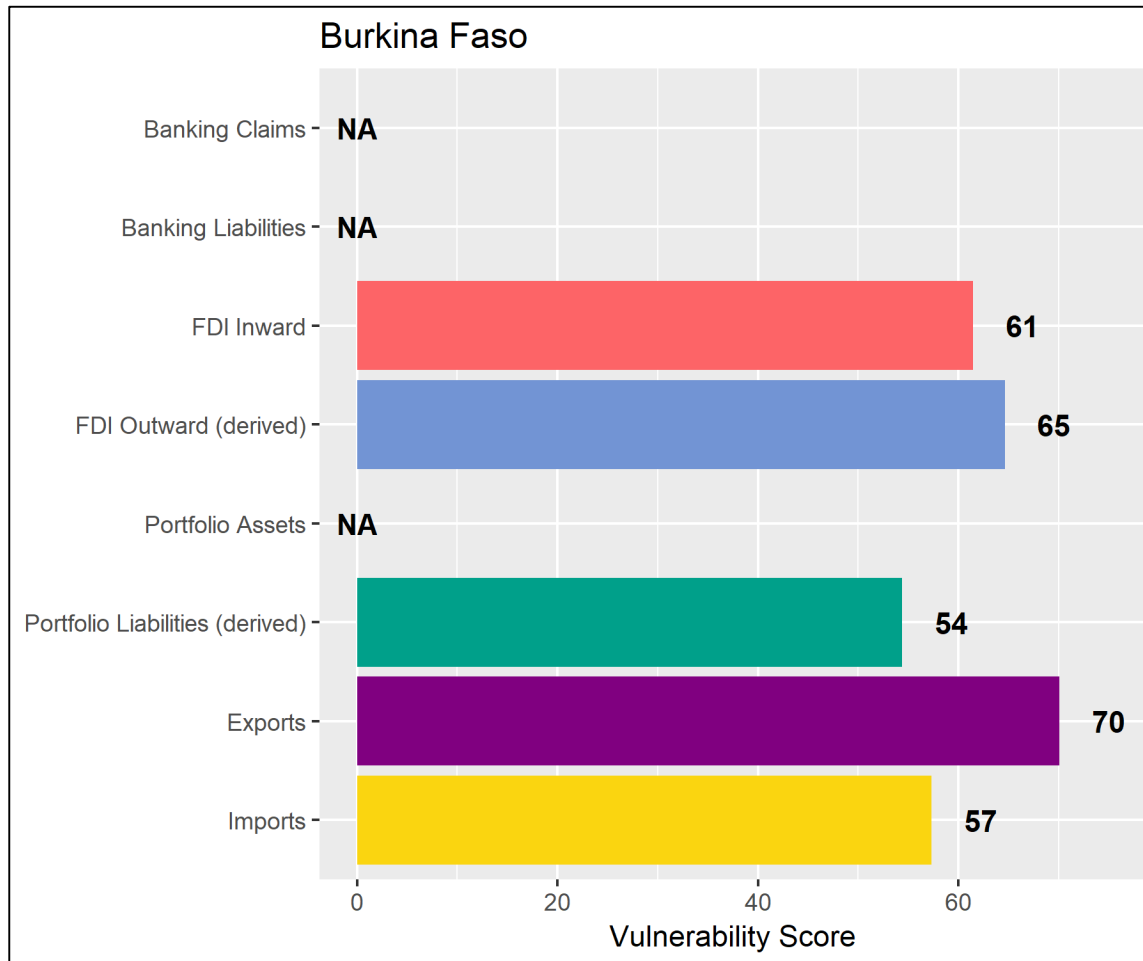
Burkina Faso				South Africa			
Jurisdiction	SS	Outward FDI Stock (USD)	VulShare	Jurisdiction	SS	Outward FDI Stock (USD)	VulShare
Singapore	67	6983337	60%	Mauritius	72	15754600000	37%
China	60	1221943	9%	Hong Kong	71	14743874129	34%
Mauritius	72	1000000	9%	Austria	56	3856108620	7%
USA	60	-1000000	8%	USA	60	3114000000	6%
Luxembourg	58	-682021	5%	Australia	51	2555755200	4%
Italy	49	660056	4%	United Kingdom	42	2029830000	3%
Belgium	44	-632460	4%	Botswana	69	950797612	2%
Poland	57	-119637	1%	Luxembourg	58	659231829	1%
Cyprus	61	-12017	0%	Singapore	67	478600567	1%
				Germany	59	523019528	1%
Overall Vulnerability Outward FDI	64			Overall Vulnerability Outward FDI	66		

Vulnerability – Banking Liabilities – 2016

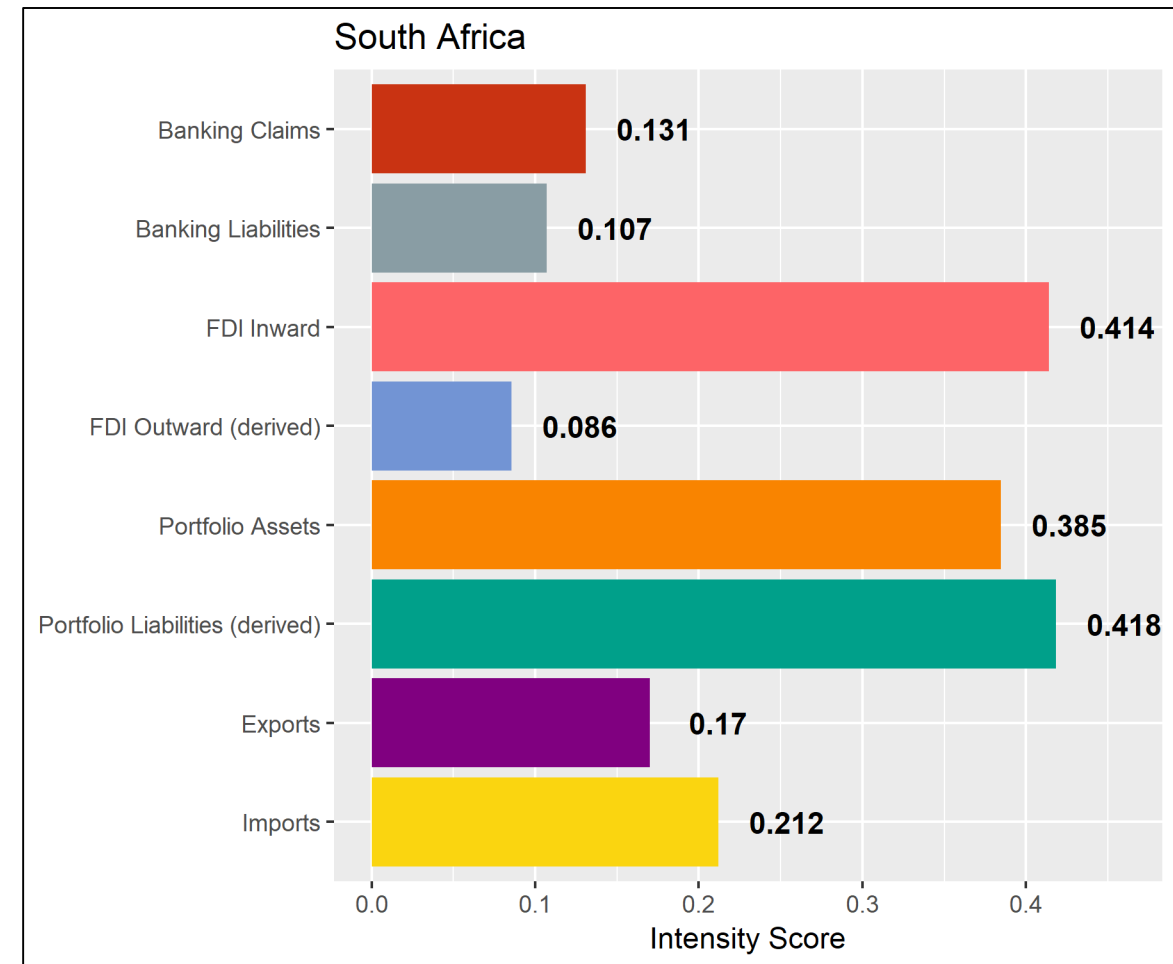
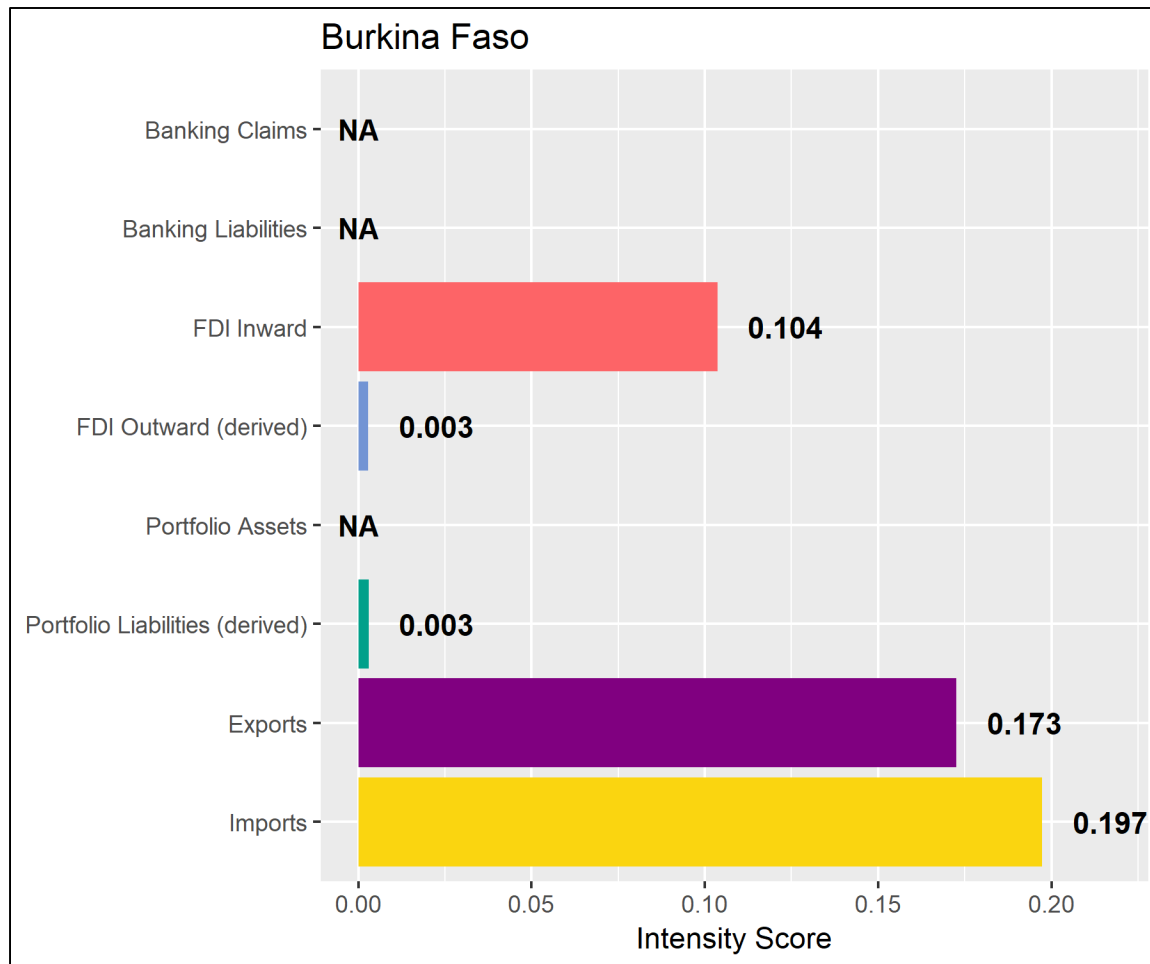
South Africa				AEOI	Ghana (derived foreign assets)			
Jurisdiction	SS	Banking Liab (USD)	VulShare	Activated AEOI relationship (sending)?	Jurisdiction	SS	Banking Liab (USD)	VulShare
United Kingdom	42	13196000000	30%	Y	South Africa	56	540000000	-
Isle of Man	64	4429000000	15%	Y	Isle of Man	64	68883000	-
United States of America	60	2459000000	8%	N	United Kingdom	42	1956000000	-
China	60	2332000000	8%	Y	Jersey	65	39000000	-
United Arab Emirates	84	1129000000	5%	N	Belgium	44	86043000	-
Mauritius	72	1230000000	5%	Y	Germany	59	163000000	-
Germany	59	1097000000	4%	Y	United States of America	60	531000000	-
France	52	1165000000	3%	Y	Switzerland	76	114492000	-
Taiwan	76	493000000	2%	N	Hong Kong	71	155533000	-
Ghana	62	540000000	2%	N	Austria	56	15235000	-
Overall Vulnerability Banking Liabilities	56			http://www.oecd.org/tax/automatic-exchange/international-framework-for-the-crs/exchange-relationships/ ; 12.11.2018	Overall Vulnerability Banking Liabilities	?		

→ AEOI: what share of this is covered under existing AEOI? Loopholes in CRS necessitates statistics disclosure

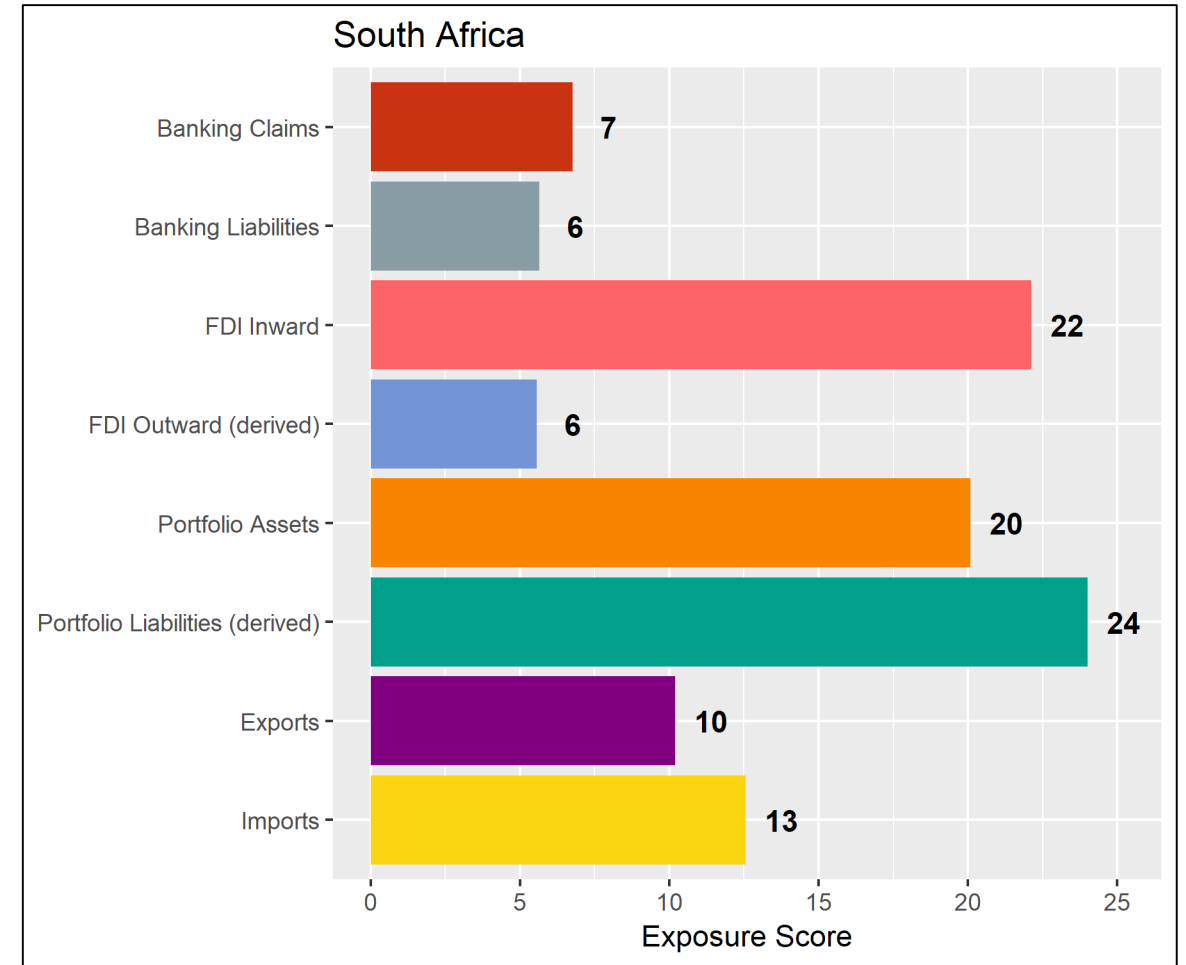
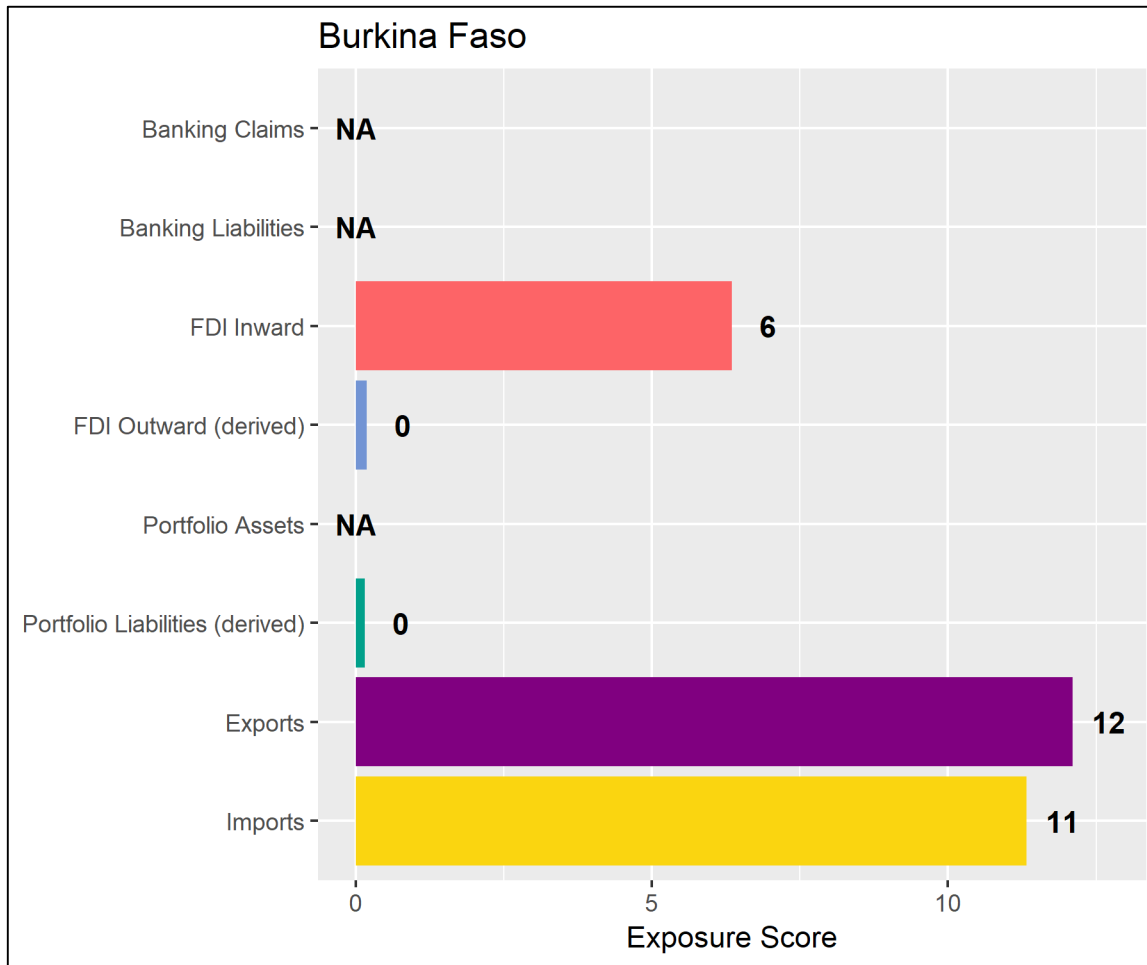
Summary Vulnerability over 8 channels, averages 2008-2018



Summary Intensity over 8 channels, averages 2008-2018



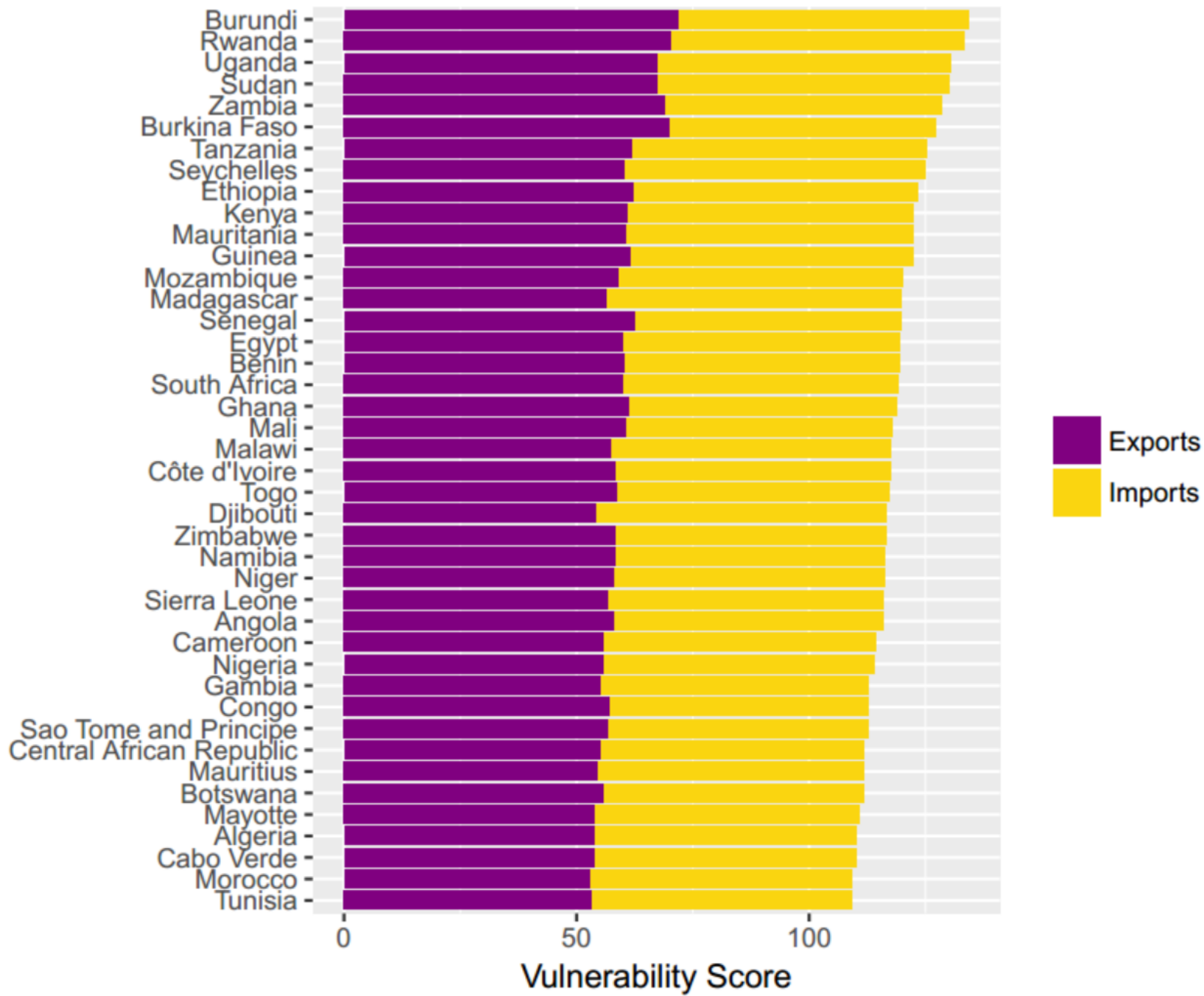
Summary Exposure over 8 channels, averages 2008-2018



Vulnerability, intensity and exposure in trade in Africa, averages 2008-2018



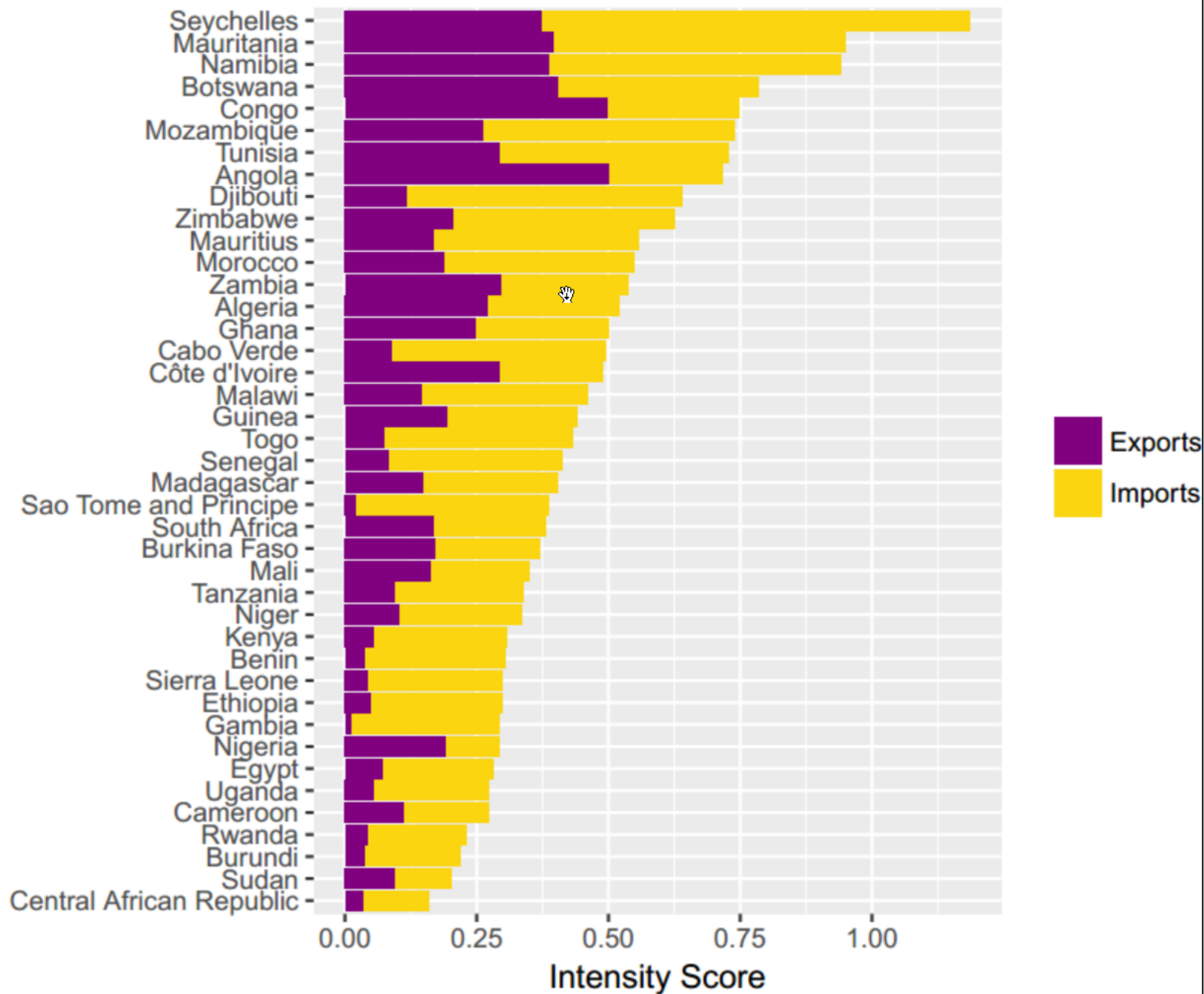
Vulnerability of Trade in Africa



**Vulnerability
in trade in
Africa,
averages
2008-18**

Reporting country

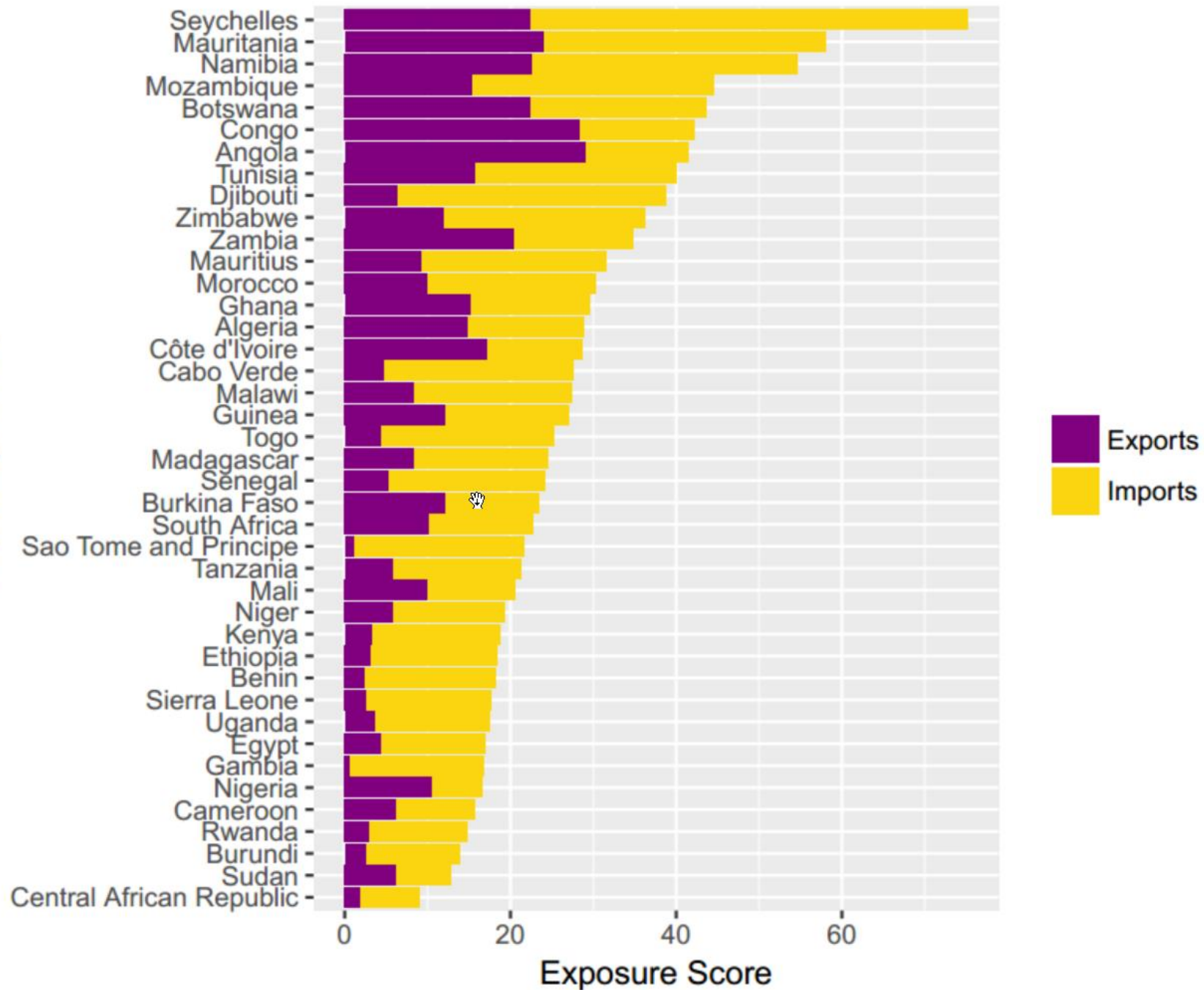
Intensity of Trade in Africa



Intensity of
trade in
Africa,
averages
2008-18

Exposure of Trade in Africa

Reporting country

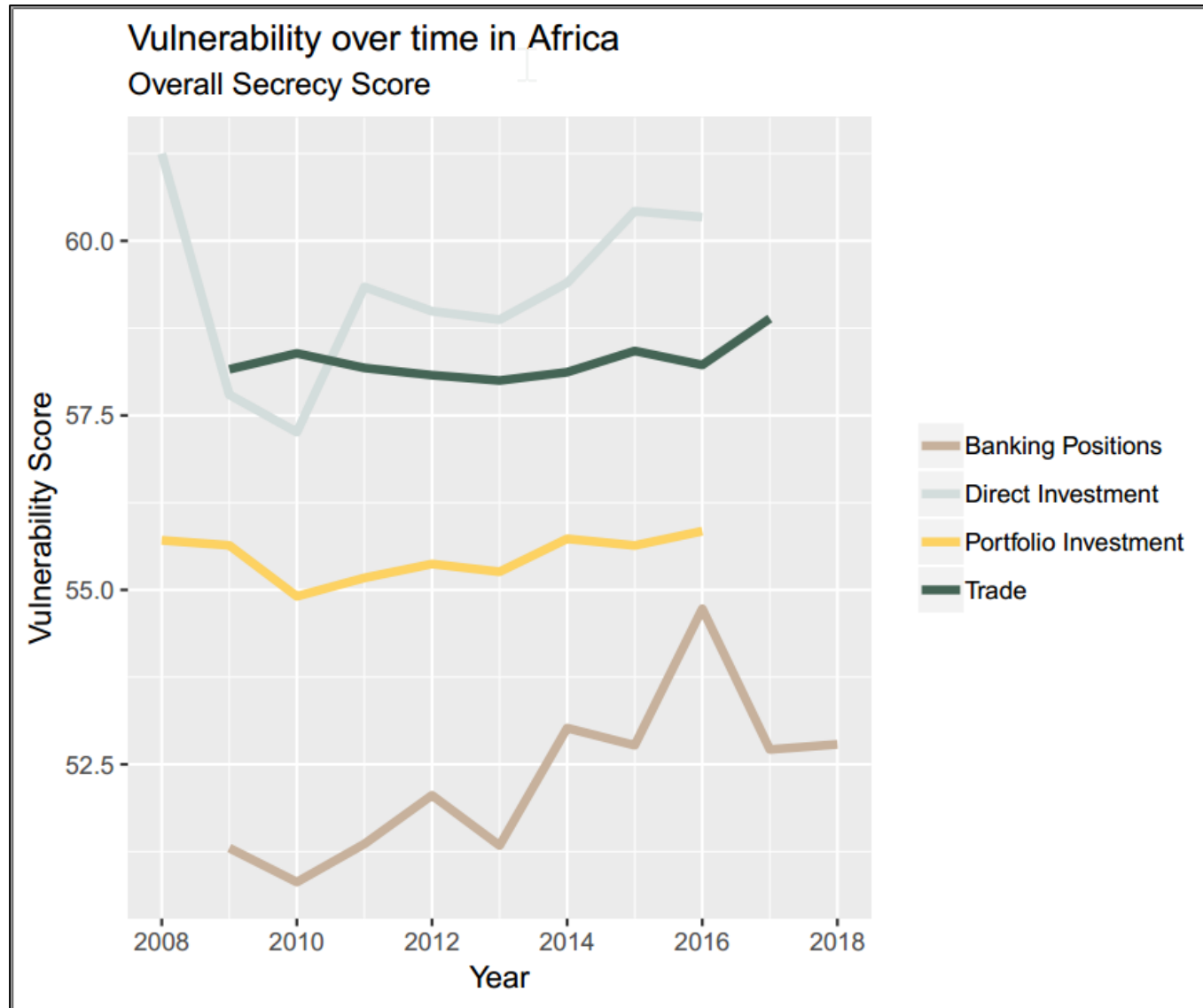


**Exposure of
trade in
Africa,
averages
2008-18**

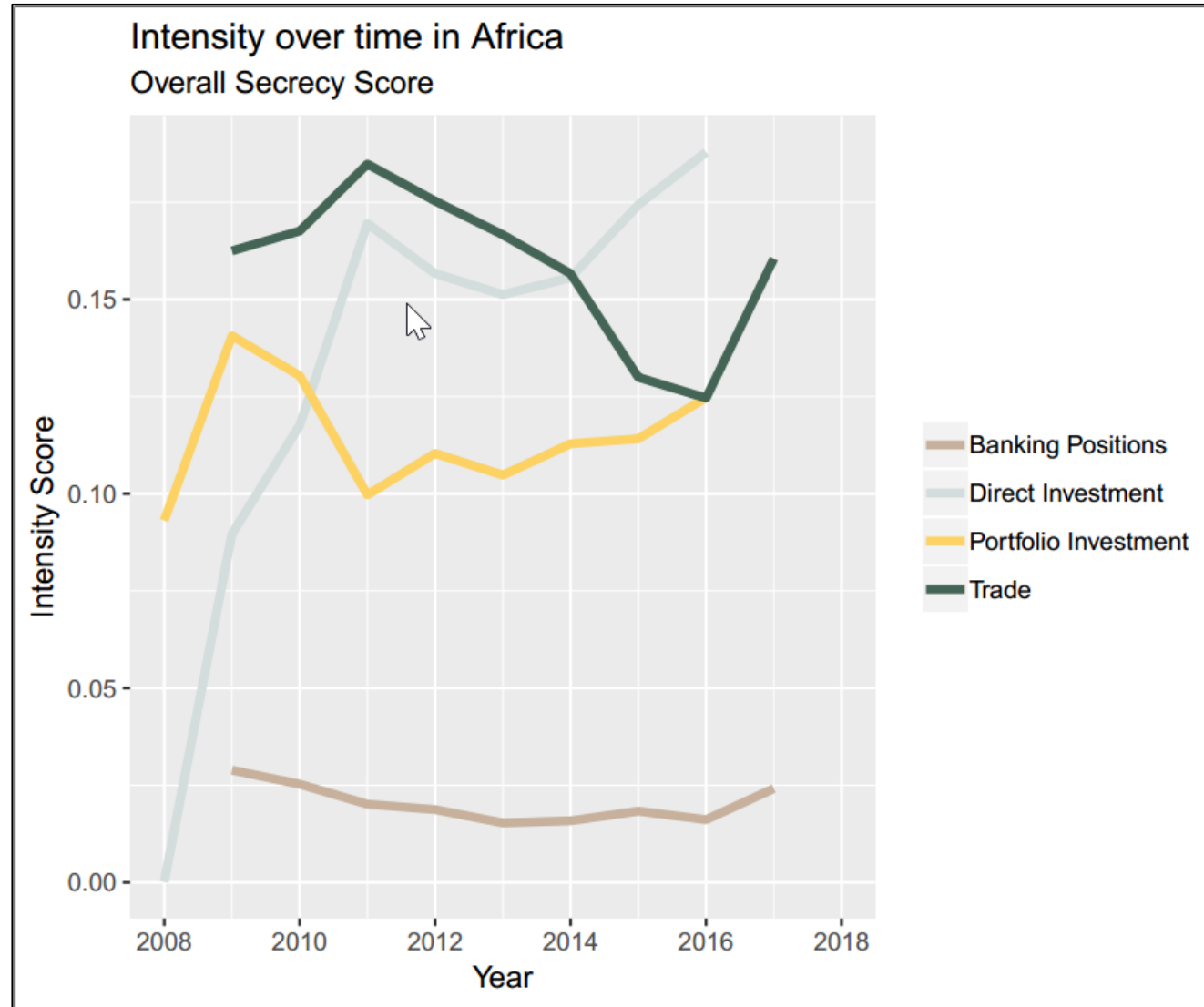
Panel aggregate measures of vulnerability, intensity and exposure



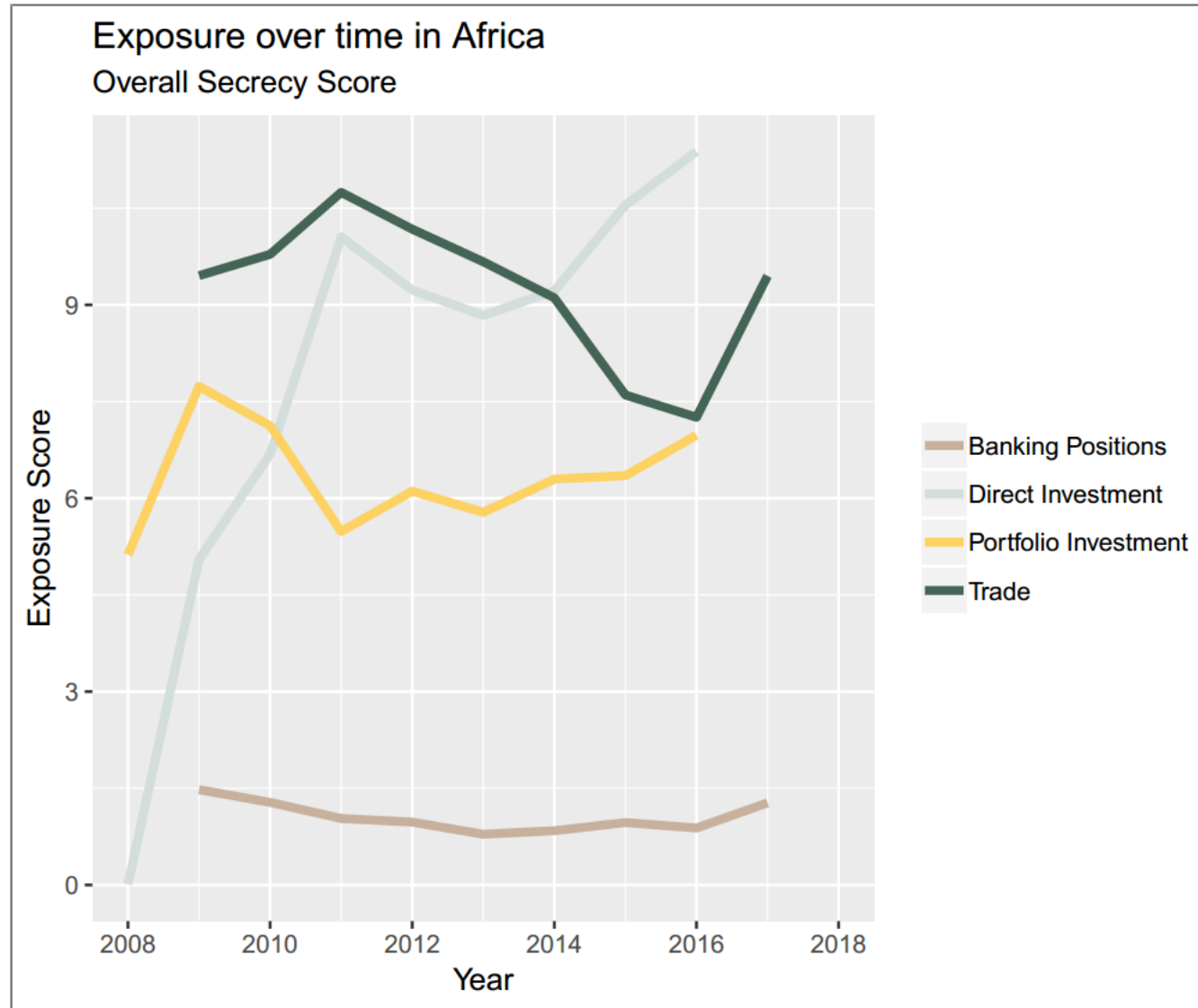
IFF Vulnerability in Africa 2008-2018



Intensity in Africa 2008-2018



IFF Exposure in Africa 2008-2018



Preliminary conclusions and policy recommendations



Preliminary conclusions

■ At Present

- Macro data driven analyses enable strategic and tactic orientation across a number of government administration departments (tax admin, central banks, financial intelligence units, customs/police, etc.)
 - capacity building priorities (human and other resources)
 - policy priorities (incl. treaty negotiation, anti-avoidance measures, economic statistics)
 - audit priorities
- E.g. through checkup of current priorities/focus through country risk profiles (e.g. Burkina Faso, South Africa)

■ In Future

- Complement secrecy driven analyses with specific corporate tax haven indicators (from Q1 2019)
- Partnering with tax administrations in Africa for advancing micro-/transaction level risk analyses – e.g. with customs transaction level data, corporate registry data, tax returns, suspicious transaction reports, etc.

Preliminary policy recommendations



- Enhance (macro) statistical capacity & data availability by considering participating in CDIS, CPIS, BIS (or national equivalent reporting)
- Analyse country risk profiles (in report to be published Q1 2019) and consider adequate capacity and/or policy and/or audit response
- When engaging in automatic exchange of information, legislate for public statistics on AEOI (e.g. Australia, template in Knobel/Meinzer 2017)
- Research takeaways:
 - dataset will be made available Q1 2019 – goldmine of data (regressions, etc.)
 - please reach out as we are interested to build long term research collaborations with universities (e.g. on FSI, CTHI, IFF risk)

Literature



- Cobham, Alex/Janský, Petr/Meinzer, Markus 2015: The Financial Secrecy Index: Shedding New Light on the Geography of Secrecy, in: Economic Geography 91: 3, 281–303.
- Johannesen, Niels/Zucman, Gabriel 2014: The End of Bank Secrecy? An Evaluation of the G20 Tax Haven Crackdown, in: American Economic Journal: Economic Policy 6: 1, 65-91.
- Knobel, Andres/Heitmüller, Frederik 2018: Citizenship and Residency by Investment Schemes: Potential to Avoid the Common Reporting Standard for Automatic Exchange of Information, in: http://taxjustice.wpengine.com/wp-content/uploads/2018/03/20180305_Citizenship-and-Residency-by-Investment-FINAL.pdf; 21.8.2018.
- Knobel, Andres/Meinzer, Markus 2014: "The end of bank secrecy"? Bridging the gap to effective automatic information exchange. An Evaluation of OECD's Common Reporting Standard (CRS) and its alternatives (TJN-Report 24 November 2014), London, in: <http://www.taxjustice.net/wp-content/uploads/2013/04/TJN-141124-CRS-AIE-End-of-Banking-Secrecy.pdf>; 20.3.2015.
- Knobel, Andres/Meinzer, Markus 2017: Delivering a level playing field for offshore bank accounts. What the new OECD/Global Forum peer reviews on automatic information exchange must not miss, in: www.taxjustice.net/wp-content/uploads/2013/04/TJN_AIE_ToR_Mar-1-2017.pdf; 16.3.2017.
- Meinzer, Markus 2016: Towards a Common Yardstick to Identify Tax Havens and to Facilitate Reform, in: Rixen, Thomas/Dietsch, Peter (Eds.): Global Tax Governance – What is Wrong with it, and How to Fix it, Colchester, 255-288.
- Murphy, Richard 2008: Finding the Secrecy World. Rethinking the language of 'offshore', in: <http://www.taxresearch.org.uk/Blog/2008/08/27/finding-the-secrecy-world/>; 8.9.2008.
- Murphy, Richard 2009: Where are the World's Secrecy Jurisdictions?, Downham Market, in: http://www.secrecyjurisdictions.com/PDF/SJ_Mapping.pdf; 18.07.2013.
- Palan, Ronen/Murphy, Richard/Chavagneux, Christian 2010: Tax Havens. How Globalization Really Works, London.
- Picciotto, Sol 1992: International Business Taxation. A Study in the Internationalization of Business Regulation, London.
- Tax Justice Network 2018: Financial Secrecy Index 2018 - Methodology, London, in: <https://www.financialsecrecyindex.com/PDF/FSI-Methodology.pdf>; 14.2.2018.
- United Nations Economic Commission for Africa/African Union 2015: Report of the High Level Panel on Illicit Financial Flows from Africa („Mbeki Report"), in: www.uneca.org/sites/default/files/PublicationFiles/iff_main_report_26feb_en.pdf; 21.7.2015.
- Wojcik, Dariusz 2012: Where Governance Fails: Advanced Business Services and the Offshore World, in: Progress in Human Geography, 1-18.
- Zoromé, Ahmed 2007: Concept of Offshore Financial Centers: In Search of an Operational Definition (IMF Working Paper), Washington D.C., in: <http://www.imf.org/external/pubs/ft/wp/2007/wp0787.pdf>; 26.9.2011.

Thank you!

For further information please visit:

www.taxjustice.net

www.coffers.eu

www.financialsecrecyindex.com



The project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 727145.



COFFERS
EU Horizon 2020 Project