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# Building Statistical Capacity in Fragile and Conflict-Affected States

by Stephanie Medina Cas, Yasmin Alem, and Jacinta  
Bernadette Shirakawa

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**Building Statistical Capacity in Fragile and Conflict-Affected States**  
Prepared by **Stephanie Medina Cas, Yasmin Alem, and Jacinta Bernadette Shirakawa**

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**ABSTRACT:** Based on internal data, this paper finds that the capacity development program of the IMF's Statistics Department has prioritized technical assistance and training to fragile and conflict-affected states. These interventions have yielded only slightly weaker results in fragile states than in other states. However, capacity development is constantly needed to make up for the dissipation of progress resulting from insufficient resources that fragile and conflict-affected states allocate to the statistical function, inadequate inter-agency coordination, and the pervasive impact of shocks exogenous to the statistical system. Greater coordination with other capacity development providers and within the IMF can help partially overcome low absorptive capacity in fragile states. Statistical capacity development is more effective when it is tailored to countries' level of fragility.

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WORKING PAPERS

# Building Statistical Capacity in Fragile and Conflict-Affected States

Prepared by Stephanie Medina Cas, Yasmin Alem, and Jacinta Bernadette Shirakawa<sup>1</sup>

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<sup>1</sup> Andrew Baer, Marcelo Dinenzon, Clement Ncuti, Samah Torchani and Richard Wild prepared the country case studies in the annexes. The authors would like to thank Salmaan Arif Ali, Roderico De Nitti, Chunmei Gao and Susie Han for their excellent research assistance, Mukhtar Amiri and Cristina Carraro Piacentini for editorial assistance, and Papa Niang and Marc Engher in ITD for their help with text mining. They are also grateful for comments from Issam Alsammak, Brian Graf, Alain Gaugris, Patrizia Tumbarello, Daniel Rodriguez Delgado, Margarida Martins, Serkan Arslanalp, Luca Ioana, Martha Tovar, Elirjeta Pepaj, Marcus Scheiblecker, Greg Legoff, Kazuko Shirono, Phousnith Khay, Brian Kwok Chung Yee, Tetsuo Kurosaki, Powkeem Lo Tiap Kwong, Yuwawan Rattakul, Foyz Khatun, Niall O'Hanlon, Alberto Sanchez, Lusine Lusinyan, and Antonio Bassanetti. The authors are thankful to Christine Dieterich for her guidance and comments.

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## Glossary

ADB	Asian Development Bank
AFC	Central Africa Technical Assistance Center
AFE	East Africa Technical Assistance Center
AfDB	African Development Banks
AFR	African Department
AFS	Regional Technical Assistance Center for Southern Africa
AFW	West Africa Technical Assistance Center
AFW2	West Africa II Regional Technical Assistance Center
APD	Asia and Pacific Department
ATI	Africa Training Institute
BFM	Banky Foiben'i Madagasikara
BPM6	Sixth Edition of the Balance of Payments and International Investment Position Manual
BRH	Banque de la République d'Haïti
CARTAC	Regional Technical Assistance Center for the Caribbean
CBD	The Central Bank of Djibouti
CBK	Central Bank of Kosovo
CBM	The Central Bank of Myanmar
CCAMTAC	The Caucasus, Central Asia, and Mongolia Regional Capacity Development Center
CCRT	Catastrophe Containment Relief Trust
CD	Capacity Development
CDIS	Coordinated Direct Investment Survey
CDOT	Capacity Development Office in Thailand
CEF	Center of Excellence of Finance
CEF	Middle East Center for Economics and Finance
CEM	Caisse d'Épargne de Madagascar
CES	Country Engagement Strategies
COVID-19	Coronavirus disease 2019
CPI	Consumer Price Index
CPIA	Country Policy and Institutional Assessment
D4D Fund	Data for Decisions Fund
DFID	The United Kingdom Department for International Development
DI	Direct Investment
DICA	Directorate of Investment and Company Administration
DSSI	Debt Service Suspension Initiative
ECF	Extended Credit Facility
EDDI2	Enhanced Data Dissemination Initiative 2
e-GDDS	Enhanced General Data Dissemination System
ETS	External Trade Statistics
EU	European Union
FAD	Fiscal Affairs Department

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FAS	Financial Access Survey
FCS	Fragile and Conflict-affected States
FDI	Foreign Direct Investment
FSSF	The Financial Sector Stability Fund
FTZs	Free Trade Zones
GDP	Gross Domestic Product
GFSM	Government Finance Statistics Manual
HICP	European Harmonized Index of Consumer Prices
HRL	High-risk Location
IEO	Independent Evaluation Office
JSA	Japan Sub-Account
KAS	The Kosovo Agency of Statistics
LLMIC	Low and Lower-Middle-Income Countries
MCD	Middle East and Central Asia
MCM	Monetary and Capital Markets Department
MEFP	Memorandum of Economic and Financial Policies
METAC	Middle East Regional Technical Assistance Center
MFSM	Monetary and Financial Statistics Manual
MIP	Management Implementation Plan
MOPFI	Ministry of Planning, Finance and Investment
NSDP	National Summary Data Page
ODP	Open Data Platform
PFM	Public Financial Management
PFTAC	Pacific Financial Technical Assistance Center
PPI	Producer Price Index
RBM	Results-based Management
RCDCs	Regional Capacity Development Centers
RCF	Rapid Credit Facilities
RFI	Rapid Financing Instrument
SARTTAC	South Asia Regional Training and Technical Assistance Center
SDDS	Special Data dissemination Standard
SDGs	Sustainable Development Goals
SDMX	Statistical Data and Metadata eXchange
SNA	System of National Accounts
SRFs	Standardized Report Forms
STA	Statistics Department
TA	Technical Assistance

# I. Introduction

Fragile and conflict-affected states (FCS) face formidable challenges for economic growth and development. According to the IMF's definition, currently 42 countries are FCS, equivalent to around 20 percent of the Fund's membership. The Managing Director's Global Policy Agenda aims to enhance the IMF's engagement to FCS. Fund capacity development (CD) to FCS has been a priority since 2014 and has accelerated under the Fund's 2018 CD Strategy. IMF CD plays a key role in building strong institutions that can help execute macro-economic policies that promote growth and help prevent fragility. Statistical CD is important since policy makers need more and better data to craft macroeconomic policies, plus data quality challenges tend to be more acute in FCS. There is also a need for more and timely macroeconomic data for the public, capital markets, and the international community. The annual number of CD missions in statistics to FCS increased by 30 percent between fiscal year (FY) 2016 and FY2019, despite the challenges of working in FCS, including weak absorptive capacity, poor governance, limited resources, and conflict.

The 2018 IMF Independent Evaluation Office's (IEO) evaluation of the Fund's engagement with FCS recommended to take practical steps to increase CD impact, including on statistics. In response, the Fund's Management Implementation Plan proposed a paper with analysis of the experience in providing statistical CD in FCS to identify lessons for making CD more impactful. This paper examines the characteristics of FCS affecting CD in statistics and highlights challenges common in FCS. It also scans recent CD developments, including how COVID-19 has impacted the delivery and effectiveness of engagement. The paper assesses CD impact in FCS and any differences with non-FCS. It attempts to identify factors impacting CD delivery and highlights policies that boost CD effectiveness.

Compared to non-FCS, the study finds that FCS have lower statistical capacity and face greater constraints especially with regards to resources and ability to establish internal coordination processes necessary for data compilation and dissemination. They also confront higher risks, such as uncertain political support to implement CD recommendations. Data quality issues undermine Fund surveillance of FCS more acutely than in non-FCS. Results-based management (RBM) ratings for CD are only slightly weaker for FCS than for non-FCS, indicating that efforts to tailor CD objectives and outcomes to the FCS context are generally successful. Since FY2016, the Statistics Department's (STA) CD delivery to FCS had risen significantly, but the onset of the COVID-19 crisis in FY2020 weakened demand. Thanks to shorter, ad hoc interventions to address urgent issues identified by the statistical compilers, the share of FCS missions increased in STA's total CD delivery in FY2021 despite IT and connectivity constraints.

When reviewing implementation of CD recommendations, the case studies and recent CD delivery to FCS confirm the importance of adopting a differentiated approach to FCS and the need for close coordination with other CD providers such as the World Bank. Case studies and analytical findings also highlight the importance of CD integration with Fund-supported programs and the need for longer-term CD engagement tailored to a country's absorptive capacity and to changing circumstances in recipient countries. Close engagement with Fund country teams and inter-departmental coordination are key to ensure that objectives are prioritized in view of scarce absorptive capacity. Big Data is increasingly used as a non-traditional data source to help fill gaps in official source data, often caused by a persistent lack of coordination among institutions. The experience suggests that virtual delivery has the potential for improving CD to FCS. Not having to worry about travel costs opens opportunities to deliver shorter, well-



targeted interventions that meet very specific demands and are better suited for countries with scarce absorptive capacity if internet connectivity and IT problems are resolved.

This paper has ten sections. After the introduction, the second section presents the statistical characteristics of FCS, and the third section is on data issues, including data quality. The fourth section highlights challenges in the absorption of CD and risks in FCS. The fifth section analyzes the overall delivery of CD to FCS, including by region and statistical topic. The sixth section examines CD delivery through the regional and thematic multi-partner vehicles and tailoring of CD. The seventh section assesses the impact of STA's CD in FCS as compared to non-FCS through RBM data. The eighth section presents an empirical analysis of factors that impact statistical CD missions, such as the level of fragility and statistical capacity. The ninth section highlights strategic policy findings from the five country case studies to recommend policies that enhance CD effectiveness. The concluding section extracts the main lessons for making CD more impactful. The annexes present the details of the five country cases in Haiti, Djibouti, Kosovo, Madagascar, and Myanmar.

## II. Statistical Characteristics of FCS

The IMF classifies as FCS countries affected by institutional fragility and/or violent conflict. Currently, weak institutional capacity is measured by a three-year average rating of 3.2 or less using the World Bank's Country Policy and Institutional Assessment (CPIA) score, while the presence of a UN or regional peacebuilding operation is used as a proxy for conflict. Forty-two countries, equivalent to around 20 percent of the IMF's membership, are currently classified as FCS, with nearly half concentrated in Africa and a quarter in the Middle East and Central Asia. In terms of income level, 35 (83 percent) are low income or lower middle-income countries (Table 1). Fifteen (36 percent) are assessed by the Fund as a 'high risk location' (HRL), a designation that constrains the delivery of CD (Figure 1). About a quarter of FCS are also considered small developing states or small states, which face unique vulnerabilities due to their small size, limited economic diversification and effects of climate change.<sup>2</sup>

FCS are a heterogenous group with varying sources and degrees of fragility, but they share common characteristics. Many suffer from weak administrative and institutional capacity, leading to the disruption or failure by the state to deliver public services such as education, healthcare, energy, and security. Deep governance issues are more prevalent in FCS who tend to have less favorable macroeconomic outcomes, including lower economic growth rates, larger government debt, higher inflation rates and greater dependence on official development assistance (IEO, 2018). Political instability and conflict are other common characteristic of FCS along with vulnerability and exposure to natural disasters, all of which entail great economic and human costs. A country's fragility status is also not permanent and may change over time.

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<sup>2</sup> The IMF classifies member countries with a population of less than 1.5 million, excluding advanced and fuel exporting economies, as small states.

**Table 1. FCS Overview**

Country Name	Income Group	Small States	Lending Facility <sup>1</sup>	RCF/RFI <sup>2</sup>	RCDC Membership	High Risk Location Designation	World Bank FCS Classification	Methodology Assessment Score <sup>3</sup> 2020
<b>AFR</b>								
Burundi	Low income			RCF	AFC	HRL	Medium-Intensity Conflict	40
Central African Republic	Low income		ECF (2019-2022)	RCF	AFC	HRL	Medium-Intensity Conflict	20
Chad	Low income		ECF (2017-2020)	RCF	AFC		Medium-Intensity Conflict	30
Comoros	Lower middle income	Yes		RCF	AFS		High Institutional and Social Fragility	30
Congo, Republic of	Lower middle income		ECF (2019-2022)	RCF	AFC		High Institutional and Social Fragility	20
Congo, Democratic Republic of	Low income			RCF	AFC	HRL	Medium-Intensity Conflict	60
Cote d'Ivoire	Lower middle income		ECF, EFF (2016-2020)	RCF	AFW			30
Eritrea	Low income			RCF	AFC		High Institutional and Social Fragility	30
Guinea	Low income		ECF (2017-2020)	RCF	AFW			30
Guinea-Bissau	Low income		ECF (2015-2019)	RCF	AFW		High Institutional and Social Fragility	20
Liberia	Low income		ECF (2019-2023)	RCF	AFW2			40
Madagascar	Low income		ECF (2016-2020, 2021-2024)	RCF	AFS			30
Malawi	Low income		ECF (2018-2021)	RCF	AFC			60
Mali	Low income		ECF (2019-2022)	RCF	AFW	HRL	Medium-Intensity Conflict	30
Sao Tome & Principe	Lower middle income	Yes	ECF (2019-2023)	RCF	AFC			40
Sierra Leone	Low income		ECF (2018-2022)	RCF	AFW2			40
South Sudan	Low income			RCF	AFC	HRL	Medium-Intensity Conflict	30
Gambia, The	Low income			RCF	AFW2			50
Togo	Low income		ECF (2017-2020)		AFW			40
Zimbabwe	Lower middle income				AFS		High Institutional and Social Fragility	40
<b>APD</b>								
Kiribati	Lower middle income	Yes		RCF	PFTAC		High Institutional and Social Fragility	40
Maldives	Upper middle income	Yes		RCF	SARTTAC			60
Marshall Islands	Upper middle income	Yes			PFTAC		High Institutional and Social Fragility	30
Micronesia	Lower middle income	Yes		RCF	PFTAC		High Institutional and Social Fragility	20
Myanmar	Lower middle income			RCF	CDOT		Medium-Intensity Conflict	70
Papua New Guinea	Lower middle income			RCF	PFTAC	HRL	High Institutional and Social Fragility	50
Solomon Islands	Lower middle income	Yes		RCF	PFTAC		High Institutional and Social Fragility	60
Timor-Leste	Lower middle income	Yes			PFTAC		High Institutional and Social Fragility	60
Tuvalu	Upper middle income	Yes			PFTAC		High Institutional and Social Fragility	40
<b>EUR</b>								
Kosovo	Upper middle income		SA (2015-2017)	RFI			High Institutional and Social Fragility	50
<b>MCD</b>								
Afghanistan	Low income		ECF (2016-2019)	RCF	METAC	HRL	High-Intensity Conflict	50
Djibouti	Lower middle income	Yes		RCF	METAC			50
Iraq	Upper middle income		SA (2016-2019)		METAC	HRL	Medium-Intensity Conflict	20
Lebanon	Upper middle income				METAC	HRL	Medium-Intensity Conflict	40
Libya	Upper middle income				METAC	HRL	Medium-Intensity Conflict	10
Somalia	Low income					HRL	High-Intensity Conflict	40
Sudan	Low income				METAC	HRL	High Institutional and Social Fragility	40
Syria	Low income				METAC	HRL	High-Intensity Conflict	10
Tajikistan	Low income				CCAMTAC			60
West Bank & Gaza	Lower middle income				METAC	HRL	High Institutional and Social Fragility	80
Yemen	Low income				METAC	HRL	High-Intensity Conflict	10
<b>WHD</b>								
Haiti	Lower middle income		ECF (2015-2016)	RCF	CARTAC	HRL	Medium-Intensity Conflict	40

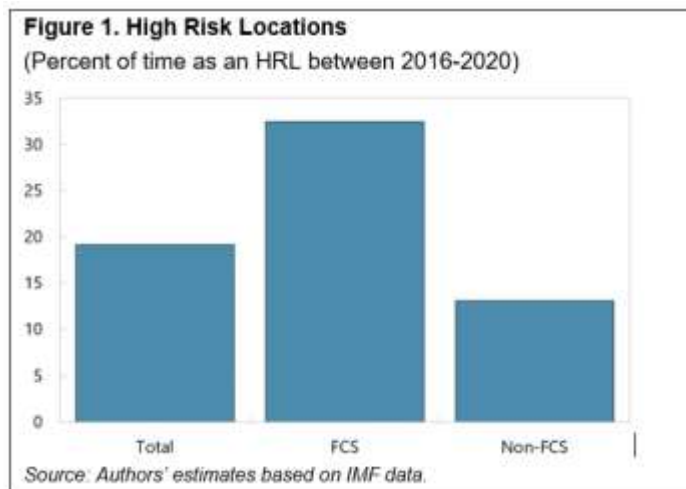
Sources: World Bank; IMF Financial Data Query Tool

Notes: 42 Total FCS; 36% HRL; 52% low income; 31% lower middle income; 17% upper middle income; 24% small states; 31% e-GDDS with NSDP; 29% with current program (ECF); 55% with RCF/RFI.

<sup>1</sup> ECF: Extended Credit Facility; EFF: Extended Fund Facility; SA: Standby Arrangement

<sup>2</sup> RCF: Rapid Credit Facility; RFI: Rapid Financing Instrument

<sup>3</sup> World Bank methodology assessment of statistical capacity (scale 0 - 100)

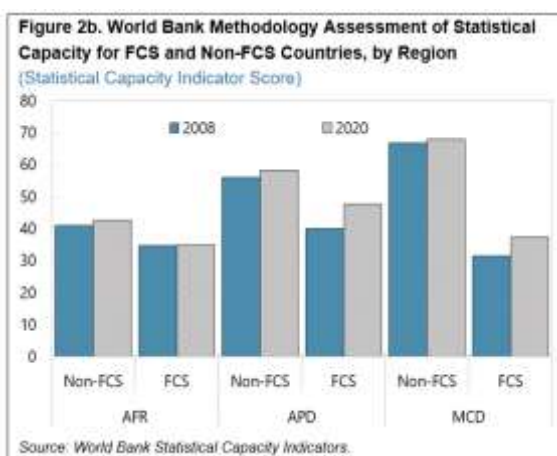
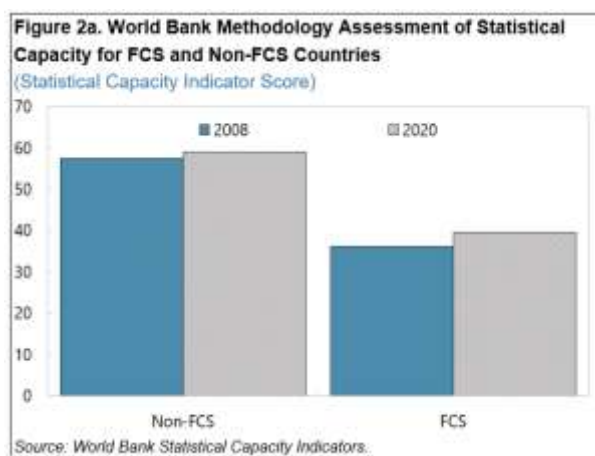


The World Bank's classification of FCS attempts to capture the differentiated nature of fragility and conflict. It is based on methodologies that distinguish countries according to the following categories: (i) countries with high levels of institutional and social fragility, based on indicators that measure the quality of policy and institutions, plus specific manifestations of fragility; (ii) countries affected by violent conflict, based on a threshold number of conflict-related deaths relative to the population. This latter category differentiates two more

subcategories founded on the intensity of violence: (a) countries in high-intensity conflict and (b) countries in medium-intensity conflict.

### III. Data Issues

Not surprisingly, data quality challenges are more acute in FCS. Using the World Bank’s statistical methodology score, which assesses a country’s capacity to adhere to international statistical standards, the average is lower in FCS than non-FCS, for all regions (Figures 2a, b).<sup>3</sup> Between 2008 and 2020, the overall statistical score for FCS has improved by about nine percent, more than in non-FCS, and despite difficulties with data compilation due to COVID-19 lockdowns in 2020. Zooming into the different areas of economic and financial statistics, scores for FCS are the weakest in import/export price indices, national accounts, the consumer price index (CPI), and government finance statistics. These weaknesses are also reflected in the low score on participation in the IMF’s Data Standards Initiatives (Box 1, Tables 2 a, b).



Another indicator for data problems is the IMF country teams’ assessment of data adequacy for surveillance included in staff reports. The highest data adequacy rating ‘A’ signals that data is adequate for surveillance, followed by rating ‘B’ if data has some shortcomings but is broadly adequate for surveillance, and then rating ‘C’ if data has serious shortcomings which significantly hamper surveillance. Of the 22 member countries whose data are rated ‘C,’ 16 are FCS, equivalent to 73 percent. Twenty-five FCS are rated ‘B,’ and one is rated ‘A’.

<sup>3</sup> The statistical methodology score ranges from 0-100, where each of the 10 components have equal weights comprising the methodology score. Each component takes the value of one if they fulfill the definition of the component, or zero otherwise. The ten components are: (1) National accounts base year within the last 10 years or annual chain linking, (2) use of the fifth or sixth edition of the Balance of Payments manual, (3) actual or preliminary reporting of external debt, (4) consumer price index base year within the last 10 years or annual chain linking, (5) monthly or quarterly data available for industrial production index, (6) monthly or quarterly data available for import/export prices, (7) consolidated central government accounts, (8) annual enrolment reporting to UNESCO—only missing once in the last four years, (9) Nationally reported data on measles vaccine coverage consistent with WHO estimates for four years, (10) Subscription to the IMF Special Data Dissemination Standard (SDDS). Each indicator takes the value of one if fulfilled and zero otherwise.

**Table 2a. Breakdown of Statistical Methodology Assessment**

Methodology Assessment	Year												
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Non-FCS</b>													
National accounts base year	38.2	52.2	48.9	50.0	41.8	47.0	61.0	63.4	68.8	77.5	69.7	63.3	71.1
Balance of payments manual in use	85.4	86.7	86.7	91.8	96.9	96.0	97.0	100.0	100.0	98.9	100.0	100.0	100.0
External debt reporting status	87.6	87.8	84.4	88.8	90.8	87.0	87.0	92.5	91.4	92.1	91.0	91.1	87.8
Consumer Price Index base year	61.8	58.9	65.6	73.5	70.4	75.0	80.0	73.1	71.0	70.8	62.9	48.9	37.8
Industrial production index	43.8	38.9	43.3	40.8	37.8	37.0	37.0	40.9	43.0	43.8	55.1	50.0	56.7
Import/export prices	21.3	18.9	17.8	17.3	19.4	22.0	19.0	19.4	20.4	12.4	11.2	18.9	20.0
Government finance accounting concept	49.4	51.1	53.3	49.0	50.0	43.0	48.0	52.7	47.3	40.4	43.8	41.1	37.8
IMF's Special Data Dissemination Standard	29.2	28.9	31.1	27.6	28.6	28.0	28.0	31.2	33.3	34.8	36.0	36.7	36.7
<b>FCS</b>													
National accounts base year	35.9	33.3	33.3	41.9	38.7	46.9	59.4	53.8	43.6	37.2	37.2	38.1	50.0
Balance of payments manual in use	66.7	76.9	76.9	74.2	80.6	90.6	93.8	94.9	94.9	100.0	100.0	100.0	100.0
External debt reporting status	71.8	71.8	74.4	67.7	64.5	71.9	71.9	64.1	56.4	72.1	65.1	73.8	71.4
Consumer Price Index base year	23.1	25.6	33.3	45.2	41.9	43.8	56.3	56.4	48.7	44.2	44.2	38.1	28.6
Industrial production index	7.7	5.1	2.6	12.9	12.9	12.5	12.5	2.6	5.1	9.3	9.3	7.1	14.3
Import/export prices	2.6	2.6	2.6	0.0	0.0	0.0	3.1	2.6	2.6	4.7	2.3	2.4	2.4
Government finance accounting concept	38.5	35.9	38.5	38.7	41.9	31.3	28.1	20.5	25.6	20.9	23.3	23.8	19.0
IMF's Special Data Dissemination Standard	0.0	0.0	0.0	3.2	6.5	6.3	6.3	2.6	2.6	2.3	2.3	2.4	2.4

Source: World Bank Statistical Capacity Indicators.

**Table 2b. Statistical Methodology Assessment Criteria**

Indicator	Score=1	Score=0	Max Score	Weight
National accounts base year	Within last 10 years or annual chain linking	Otherwise	1	10
Balance of payments manual in use	Balance of Payments Manuals, the fifth edition	Otherwise	1	10
External debt reporting status	Actual or preliminary	Otherwise	1	10
Consumer Price Index base year	Within last 10 years or annual chain linking	Otherwise	1	10
Industrial production index	Produced and available from IMF	Otherwise	1	10
Import/export prices	Produced and available from IMF	Otherwise	1	10
Government finance accounting concept	Consolidated central government accounts	Otherwise	1	10
IMF's Special Data Dissemination Standard	Subscribed	Otherwise	1	10

Source: World Bank Statistical Capacity Indicators

### Box 1. IMF's Data Standards Initiatives and FCS

The IMF's Data Dissemination Initiatives help promote data transparency.<sup>4</sup> They set standards for the dissemination of data needed to assess economic conditions and policies. The objective is for the authorities to publish such data in line with a pre-announced release calendar for the benefit of policymakers, market participants, the media, and the public. The standards consist of three ascending tiers: the enhanced General Data Dissemination System (e-GDDS) for countries with relatively weak statistical capacity; the Special Data dissemination Standard (SDDS) for members having or seeking access to capital markets; and the SDDS Plus primarily for systemically important financial systems. Data are published through an official website denominated the National Summary Data Page (NSDP). In Africa such websites use the African Development Bank's (AfDB) Open Data Platform and provide a one-click process for posting data using the Statistical Data and Metadata eXchange (SDMX) standards. This mechanism has helped resource-strained national statistics agencies to adopt an open data approach and reduce reporting burdens.

Among the 42 FCS, only 14 have fully implemented the e-GDDS by publishing data through the NSDP. Their performance in terms of reliable dissemination of data on the NSDP is in line with non-FCS. Twenty-four FCS participate in the e-GDDS without publishing any data through the NSDP (Table 3). Three FCS do not participate in Data Standards Initiatives. Within the FCS, only West Bank and Gaza has subscribed to the SDDS.

Implementing the recommendations of the e-GDDS improve data transparency and governance, as it requires good inter-agency coordination between the central bank, ministry of finance and national statistics office. In addition to limited staff and IT resources, FCS not implementing the recommendations of the e-GDDS may have confronted challenges to gain political support and to achieve improved inter-agency coordination. In the Middle East and Central Asia (MCD) region, for example, political instability and active conflict make inter-agency coordination among data producers more difficult, which has complicated the implementation of the e-GDDS recommendations. In fact, most of the e-GDDS countries that do not have a NSDP are HRL. Small island FCS in the APD (Asia Pacific Department) region launched NSDPs thanks to intense CD, funded by the Government of Japan. This CD assistance was integrated in the dialogue with country authorities as part of the IMF's surveillance discussions with member countries.

**Table 3. Fragile and Conflict-Affected States and IMF's Data Standards Initiatives**

SDDS Subscriber	e-GDDS Participants with NSDP	NSDP Launch Date	Number of Disseminated Data Categories	e-GDDS Participants with no NSDP	Outside of the Data Standards
West Bank & Gaza <sup>1</sup>	Cote d'Ivoire	2017	13	Afghanistan <sup>1</sup>	Eritrea
	Gambia, The	2018	11	Burundi <sup>1</sup>	Somalia <sup>1</sup>
	Guinea	2019	13	Central African Republic <sup>1</sup>	South Sudan <sup>1</sup>
	Kosovo	2017	14	Chad	
	Madagascar	2019	13	Comoros	
	Malawi	2016	14	Congo, Republic of	
	Maldives	2019	13	Congo, Democratic Republic of <sup>1</sup>	
	Micronesia	2017	10	Djibouti	
	Myanmar	2019	11	Guinea-Bissau	
	Sao Tome & Principe	2019	13	Haiti <sup>1</sup>	
	Sierra Leone	2016	11	Iraq <sup>1</sup>	
	Tajikistan	2020	11	Kenya <sup>1</sup>	
	Timor-Leste	2019	11	Lebanon <sup>1</sup>	
	Togo	2018	13	Liberia	
				Libya <sup>1</sup>	
				Mali <sup>1</sup>	
				Marshall Islands	
				Papua New Guinea	
				Solomon Islands	
				Sudan	
				Syria	
				Tuvalu	
				Yemen <sup>1</sup>	
				Zimbabwe	

Source: IMF Staff

<sup>1</sup> High Risk Location (HRL)

<sup>4</sup> For more information see the Fund's [Dissemination Standards Bulletin Board](#).

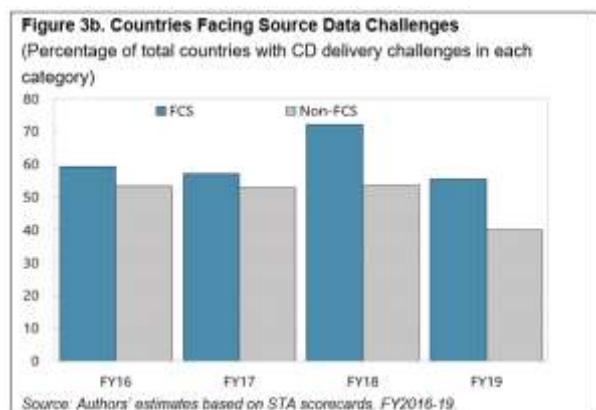
## IV. CD Challenges

A data mining analysis, using STA's internal scorecards from FY2016-19, provides insights into challenges with absorbing CD.<sup>5</sup> A sentiment analysis using a lexicon-based approach was performed on 348 scorecards to detect negative sentiments in the text. A dictionary of lexicons was created manually and applied using an algorithm to the text of the scorecards. The results were classified into three categories to compare absorptive capacity challenges in FCS and non-FCS (Table 4).<sup>6</sup>

**Table 4. Text Mining of Statistical Scorecards**

Challenges	Keyword
Resources	staff, human, capacity, resource, funding, financial
Source Data	source
Institutional Cooperation	cooperation, sharing, share, institutional, coordination, collaboration

Source: IMF Staff



Overall, terms associated with CD absorption issues appeared more frequently in scorecards for FCS than non-FCS and were even on the rise over time in two of the three examined categories between FY2016-19 (Figures 3a, b, c). In particular, the proportion of FCS facing resource inadequacy was higher and increased by 30 percent. The limitations included under-staffing, funding-related issues, and IT challenges. Source data problems also appeared more frequently in scorecards for FCS. The proportion of FCS facing weak interagency cooperation doubled over this period, but this challenge declined for non-FCS.

<sup>5</sup> Scorecards are a country-specific snapshot, presented in a heat map form, of a country's use of statistical methodology and the reporting of data to STA. They also include some background information on statistical issues, and information on recent and ongoing statistical CD activities. They were produced twice a year.

<sup>6</sup> Since in some cases the list of terms in each category appeared multiple times in one scorecard, the results were counted on a country basis and not on a term basis. A manual check of the lexicon analysis was undertaken to eliminate any noise, for example, the word 'source' could be used not only in relation to source data.

These findings were also reflected in analysis of risk ratings in STA's RBM dataset.<sup>7</sup> In four out of the five ratings categories, the risks to a CD project were higher in an FCS than in non-FCS (Figure 4). Resource adequacy risks, which cover the human, financial, infrastructure and technology resources needed to achieve an intended outcome, represented the highest threat to the implementation of CD recommendations. Meanwhile, management/technical staff commitment risks – assessing the authorities' commitment to undertake CD recommendations – and political support risks – evaluating the likelihood that recommendations could be blocked by high-level decisionmakers or changes in political leadership – were significantly higher in FCS projects. External climate/conditions risk such as global recession, epidemics, internal/external security conditions that might slow or impede CD delivery were also significantly higher in FCS than non-FCS.



While all of these factors hamper STA's CD delivery to FCS, there are differences in the resource adequacy risks among institutions involved in the compilation and dissemination of economic and financial statistics. Traditionally the national statistics offices, which are generally in charge of national accounts and price statistics, are most affected by the resource adequacy risks, reflecting low priority for data in a tight fiscal policy framework. Central banks, which are in most countries responsible for financial, monetary, and external sector statistics, have usually a more generous funding envelope and autonomy in allocating resources. Ministries of finance tend to be in-between. This pattern is also reflected in the statistical areas where the World Bank statistical methodology score is weakest, notably national accounts and prices, while external sector statistics have the highest scores.

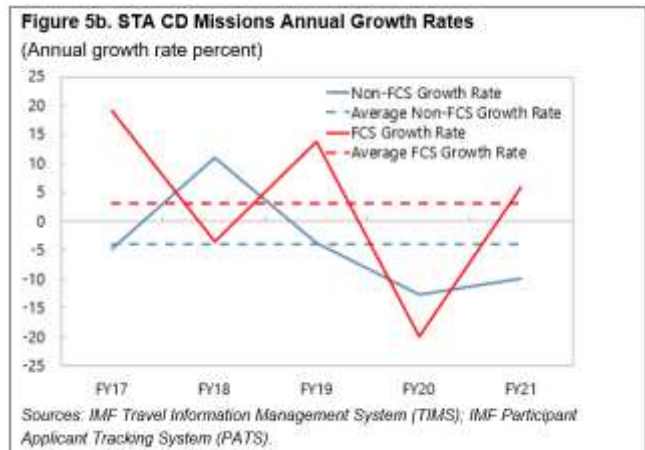
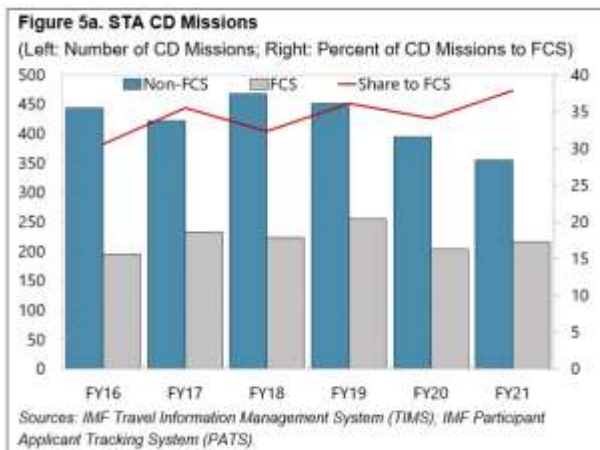
Regarding the World Bank, the recent decision by donors to allocate a significant amount of resources of the IDA 19 replenishment to data issues might offer opportunities to mitigate some of the resource issues in FCS. This funding to enhance staffing and IT infrastructure could complement ongoing work by the World Bank in the area of surveys, which is coordinated with the IMF's CD to ensure synergies particularly in supporting the production of real sector statistics (RSS).

## V. CD Delivery to FCS

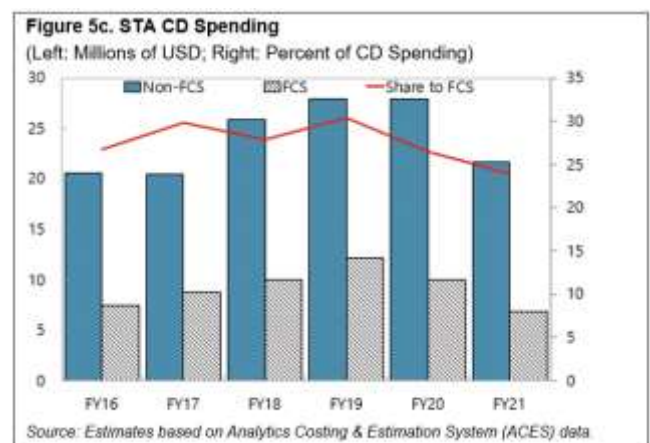
Between FY2016 and FY2019, and before the COVID-19 pandemic, STA CD missions to FCS rose by 30 percent, far outpacing growth in demand from non-FCS where CD missions rose by about 2 percent, even though the growth rate for FCS has been somewhat more volatile (Figures 5a, b).<sup>8</sup> The onset of the COVID-19 crisis in March 2020 led to a reduction in CD missions to FCS and non-FCS in FY2020 as missions were cancelled, reflecting the authorities' shift in focus to crisis management and the sudden stop

<sup>7</sup> For more information on RBM, see Section VII. Risk ratings are not updated by all project managers, so the results presented should be interpreted with some caution.

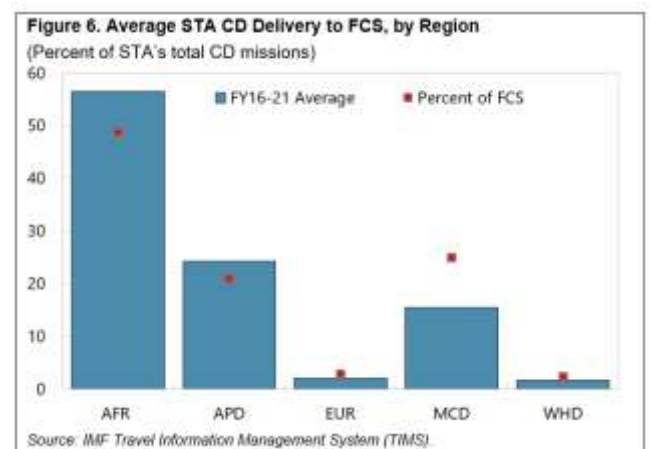
<sup>8</sup> A CD mission to FCS is defined as either a technical assistance mission benefitting an FCS or a multi-country training mission where at least one participant was from an FCS.



of travel. The switch to remote delivery allowed the gradual recovery of demand for CD missions in FY2020. The number and the share of CD missions to FCS even rose in FY2021, but missions were much shorter, as reflected in the declining FCS share of the dollar cost of STA CD (Figure 5c). This change was caused by less demand for time-intensive CD. For instance, multi-year CD programs for the re-basing of national accounts used to last 1-2 weeks prior to the pandemic, covering many issues. Instead, with COVID-19 demand shifted to ad hoc requests to address urgent crisis-related issues. For example, due to lockdowns, on-site data surveys for the CPI became unfeasible, so CD assisted in identifying alternative data sources, including web scraping and Big Data (Box 2).

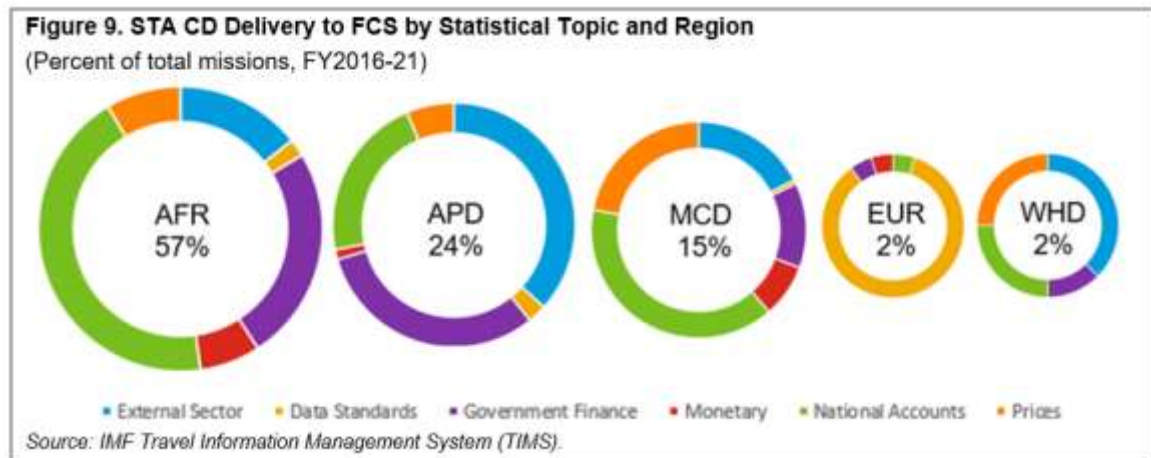
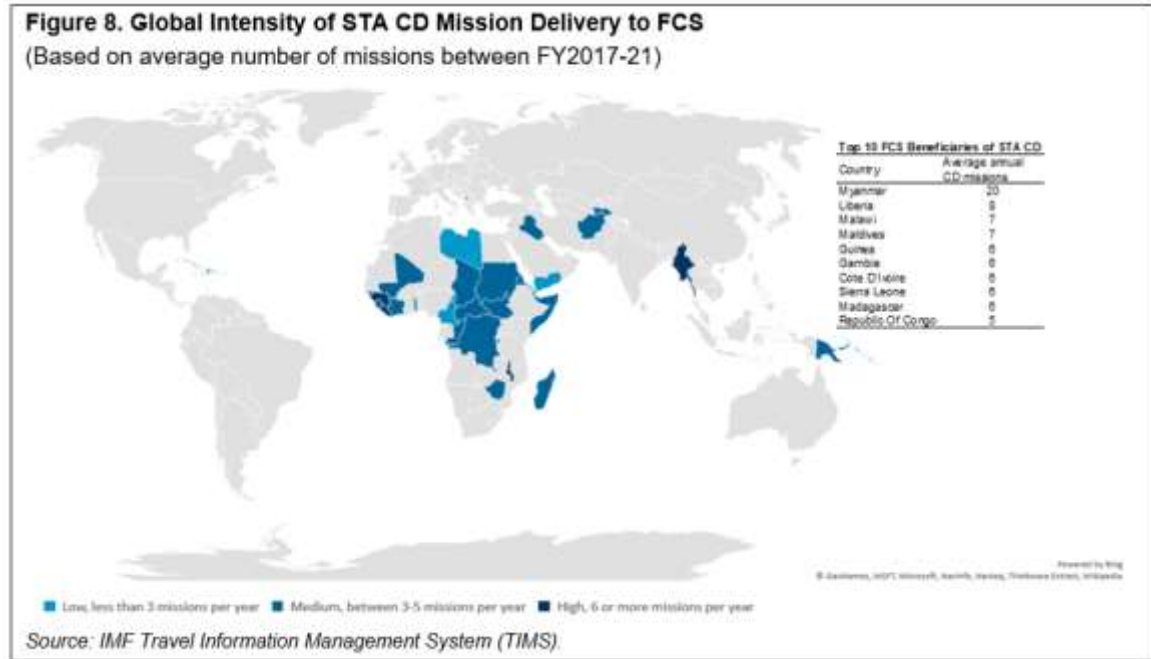
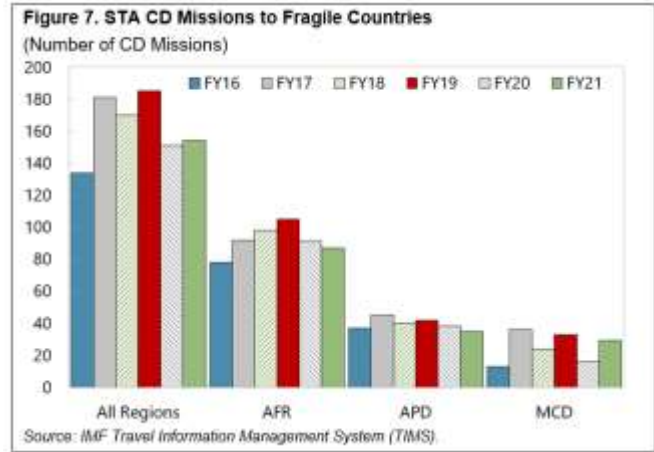


Looking at trends at the regional level, Africa (AFR) is the largest beneficiary of STA CD to FCS, followed by APD and MCD (Figure 6), where the rising trend was reversed by the crisis. In APD, the number of FCS missions has been relatively stable, probably reflecting less severe connectivity and IT problems. In MCD, the number of missions has been more volatile with the presence of many HRLs. Notably, despite shortcomings in internet connectivity and IT equipment, the shift to remote CD facilitated access to countries classified as HRL, which are mainly in the MCD region. In the past, travel restrictions to HRLs required cumbersome and expensive arrangements to gather officials in third country locations. With remote delivery, the number of CD missions increased quite substantially for the MCD region in FY2021, partly owing to new engagements in Yemen and Sudan (Figure 7). In terms of the distribution of CD delivery by country, Myanmar, West African countries, and Madagascar have been amongst the most intense FCS beneficiaries of CD (Figure 8).





Most statistics CD to FCS is focused on national accounts statistics, followed by government finance statistics (including debt statistics), and external sector statistics (Figure 9). This prioritization in CD demand, led by the country authorities, is also broadly consistent with the main data issues identified in the World Bank’s methodological data scores. Despite the World Bank scores also highlighting lagging participation in the IMF Data Dissemination Initiatives, CD in this area has been limited reflecting the nature of this type of CD intervention, which is usually limited to 1-2 missions and can only



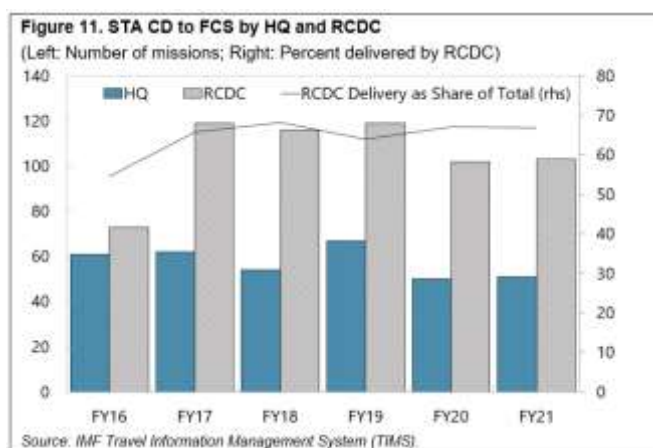
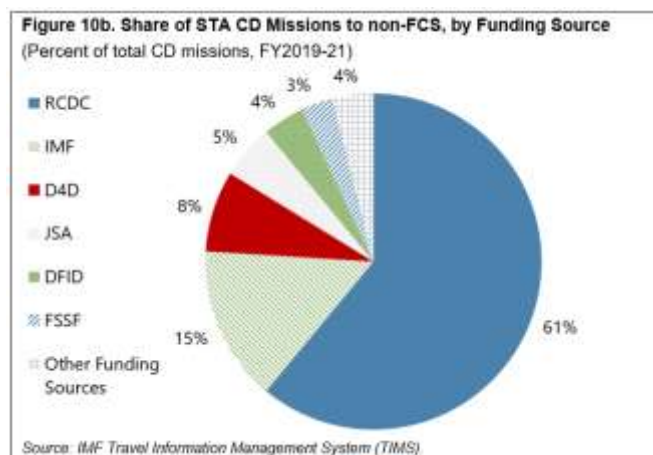
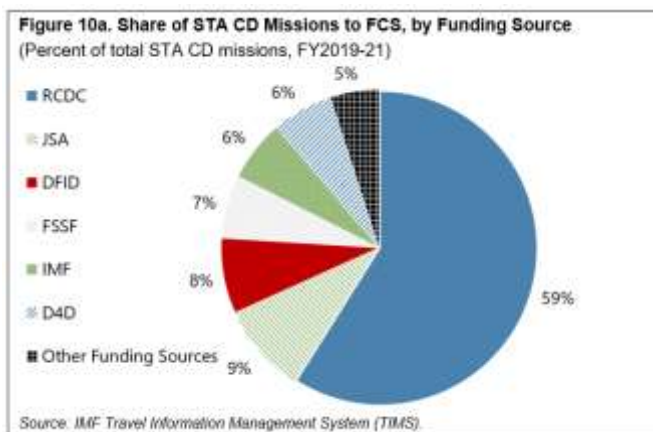
advance when the authorities commit resources to meet specific data requirements.

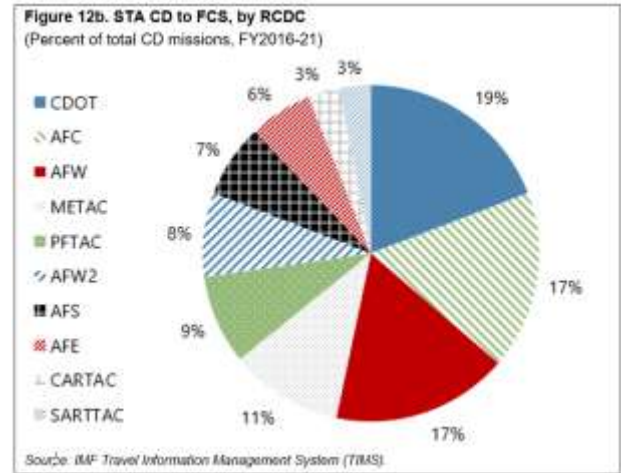
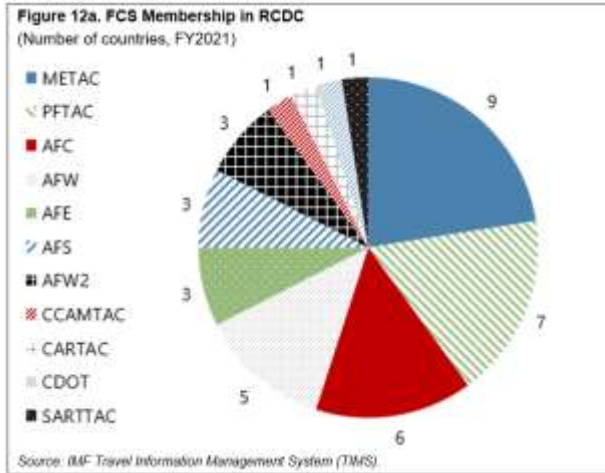
## VI. CD Delivery Through RCDCs and Thematic Trust Funds

Over 90 percent of STA's CD delivery to FCS is funded by donors compared to 85 percent for non-FCS (Figures 10a, b), reflecting their strong interest in supporting low and lower-middle income countries and a particular emphasis on FCS. Looking at the different means of IMF CD delivery, the Regional Capacity Development Centers (RCDCs) deliver about two thirds of total FCS CD. This share has remained stable throughout the pandemic (Figure 11). RCDCs have a multi-year engagement with countries to improve the methodological foundation for data compilation. Their presence on the ground and proximity to the country is particularly suitable for FCS as they require long-term support to develop statistical capacity. Their continuous engagement helps understand local/regional contexts, including the political economy of data, which is a major risk to implementing CD recommendations in FCS.

A total of 40 of the 42 FCS are covered by an RCDC (Figures 12a, b) except for Kosovo and Somalia. The larger presence of RCDCs in AFR and APD has resulted in a greater capacity to respond to the large CD needs of FCS in those regions. In contrast, MCD has had only one RCDC predominantly serving FCS, the Middle East Regional Technical Assistance Center (METAC). For HRLs, travel restrictions limit the benefit of CD delivery through METAC (Figure 13). The new Caucasus, Central Asia, and Mongolia Regional Capacity Development Center (CCAMTAC) launched virtually in early 2021, now also benefits Tajikistan in MCD.

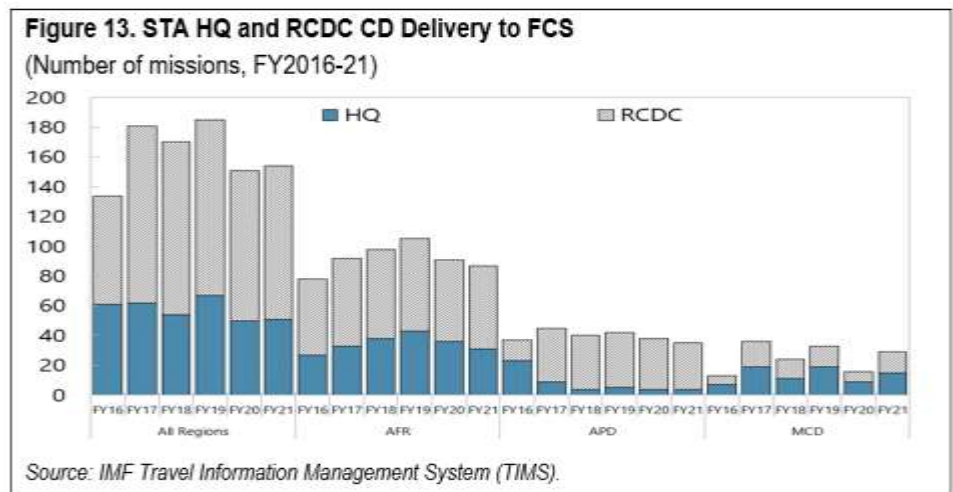
STA CD delivered through IMF headquarters (HQ) is closely coordinated with and complementary to RCDC CD, usually focusing on more advanced areas of statistics. For example, while RCDCs assist with methodological issues related to external sector statistics, CD by HQ experts supports more advanced topics such as widening statistical coverage by including informal economy estimates, or the effect of digitalization on the services account.





To enhance efficiency and agility of HQ-based CD, STA has transitioned to a structure for donor funding for increased flexibility in allocating resources to countries and topics in statistics. This flexibility is particularly relevant for FCS as they face high risks to CD delivery which requires frequent adjustments to CD plans. In FY2015, when the transition to the new funding structure started, STA had 17 bilateral donor projects and trust funds with often very strict requirements by donors on project objectives and countries to be covered. By FY2022 this number declined to about five, including the two main multi-donor trust funds—the Data for Decisions (D4D) Fund and the Financial Sector Stability Fund (FSSF). These two funds have increasingly financed CD to FCS, as FCS-focused bilateral donor projects have been de-emphasized. When the pandemic hit, donors supporting these funds helpfully agreed to move some funding away from longer-term CD projects towards shorter ad hoc interventions.

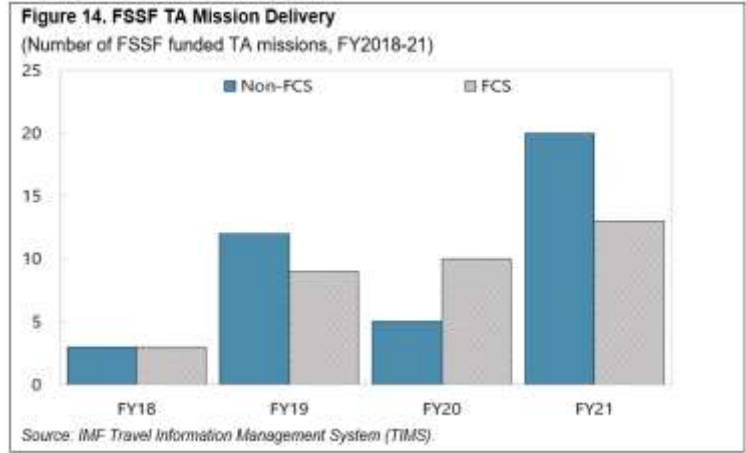
The FSSF aims at fostering financial sector stability in low and lower-middle-income countries (LLMICs) and all FCS.<sup>9</sup> It is designed to finance CD delivered by the Monetary and Capital Markets Department (MCM) as well as STA to ensure close integration. For example, when MCM plans a Financial Sector Stability Review, STA CD focuses on data gaps hampering analyses of financial vulnerabilities and risks to macroeconomic stability. This allows recipient countries to use scarce absorptive capacity to address the most urgent data gaps. Since the FSSF launch in 2017, 14 FCS have benefitted from FSSF



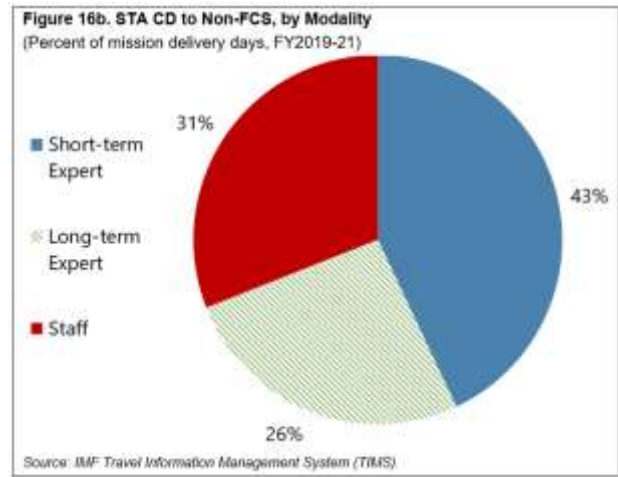
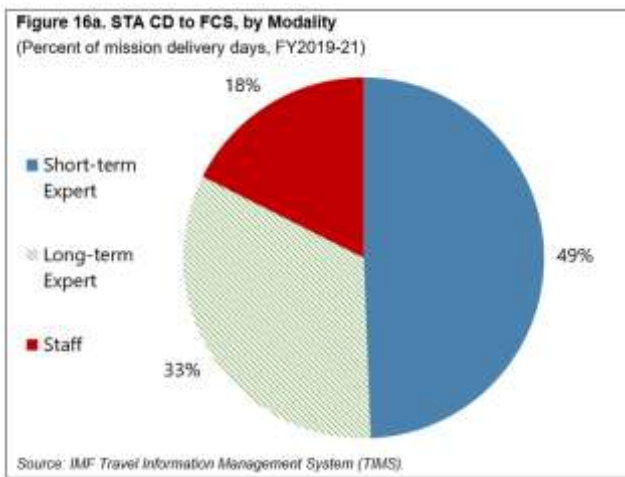
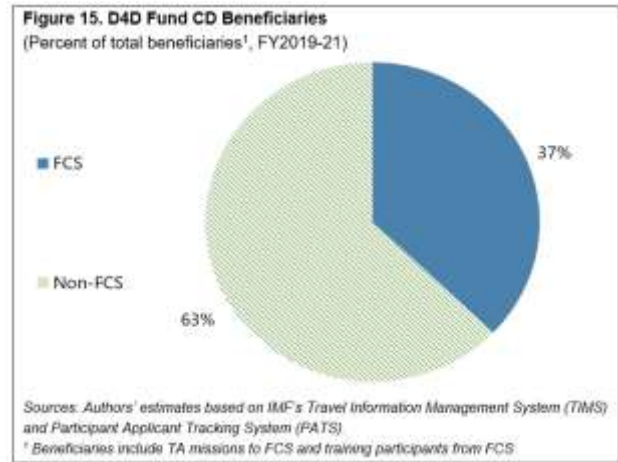
CD, while the decision to widen eligibility to all FCS in 2020 helped further increase the number of FSSF funded technical assistance (TA) missions to FCS (Figure 14).

<sup>9</sup> For more information on the FSSF and the Steering Committee decision to include all FCS, including the non-LLMIC countries, see <https://www.imf.org/en/Capacity-Development/Partners>.

The D4D Fund prioritizes CD in FCS, mostly in the AFR and APD regions.<sup>10</sup> It aims to put more and better data in the hands of decision-makers to support evidence-based macroeconomic policies. Forty-four percent of the D4D's eligible countries are FCS. Since its launch in 2018, activities have covered 35 of the 42 FCS (Figure 15). In FY2021, officials from 30 FCS participated in the series of COVID-19 webinars on public sector debt and external sector debt statistics funded by the D4D Fund. The D4D Fund's Financial Access Survey (FAS) database houses data on financial inclusion for 40 of the 42 FCS.



In recent years, short-term experts have delivered almost half of the CD to FCS, followed by the long-term experts stationed in the RCDCs (Figure 16a). Short-term experts are hired by the RCDC and IMF HQ to deliver CD. They are backstopped and supervised by long-term experts or HQ-based staff, which have delivered proportionally more CD to non-FCS (Figure 16b). The use of short-term experts provides flexibility in mobilizing experts at short notice depending on demand. (For example, experts with specialty knowledge, language skills, and experience in specific country groups). However, it entails somewhat less continuity in CD delivery, which might be particularly difficult in the weak and often complex institutional environment of FCS. Still, this is somewhat mitigated by the fact that quite a few short-term



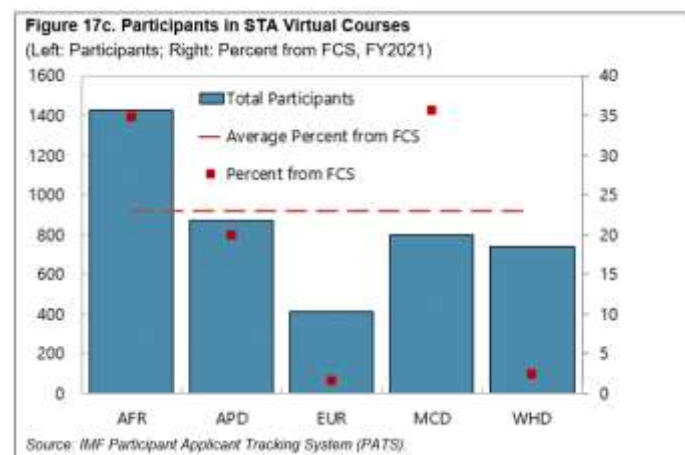
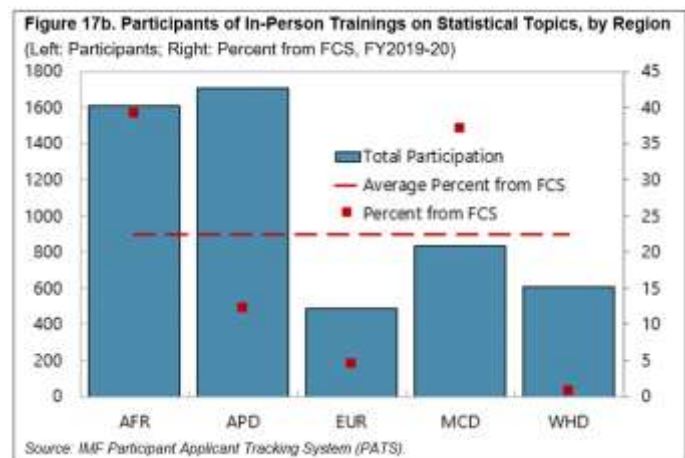
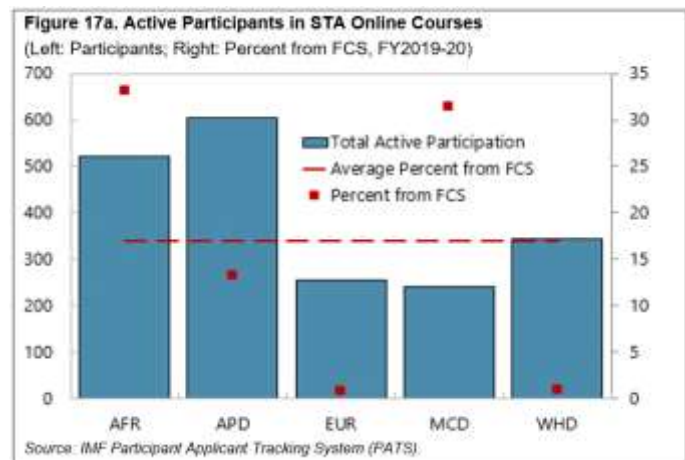
<sup>10</sup> For more information on the D4D Fund, see the latest [DFD Fund program document](#).

experts who undertake CD missions to FCS are repeatedly used and thus are familiar with FCS issues.<sup>11</sup> In addition, the STXs receive intense backstopping by staff in HQ and RCDCs, which ensures quality control and continuity in the engagements with FCS.

### STA Training

Training is an essential component of the statistical CD program for FCS, especially during the early phase of recovering from fragility when re-building staff capacity is a priority and a precondition to assimilate future CD. To leverage the curriculum of the traditional face-to-face training courses, STA is developing a series of online courses on the foundations of economic and financial statistics, funded by the D4D Fund. Courses on government finance statistics, public sector debt statistics, balance of payments and international investment position, and national accounts statistics have already been launched and translations into French and Spanish are being phased in. Preparation of courses in price statistics, monetary and financial statistics, and financial soundness indicators are under way.

These online courses have reached a share of FCS participants of over 30 percent for the AFR and MCD regions and about 15 percent in APD (Figure 17a). This is broadly in line with the share in traditional face-to-face courses despite challenges with internet access in many FCS, which illustrated continued strong demand for training (Figure 17b). Virtual training tailored to address challenges to data compilation during the pandemic attracted a share of participants from FCS exceeding traditional face-to-face and online courses in all regions (Figure 17c). This illustrates the potential to ease absorptive capacity constraints by shorter training events, similar to the pattern observed with TA missions to FCS (see Section V).



<sup>11</sup> For example, from May 2020 to end-November 2021, a total of 109 missions were undertaken to FCS by 54 short-term experts.

## Tailoring CD

As the FCS country group includes different levels of fragility, CD needs to be tailored accordingly. Conflict and political and social disruption can hinder CD provision, which requires long-term engagement and flexibility to adjust work plans when political risks materialize, or conflicts or natural disasters require to return to more basic needs. STA CD delivery has been tailored as follows (Figure 18):

- During the early phase of fragility when countries recover from conflict, training is a dominant component of CD to raise staff capacity and, consequently, absorptive capacity for future CD. For monetary and financial sector statistics and government finance statistics, which rely on administrative data sources (financial sector balance sheet data collected by the central banks and official government financial data), CD focuses on establishing basic reporting systems. This needs to be closely coordinated with regulatory reforms that establish a legal basis for proper bank reporting and public financial management. CD on national accounts, prices and external sector statistics is more complex as it relies on surveys and other sources, including in the private sector, which is often dominated by informal transactions. Sometimes conflict and fragility put at risk existing data compilation. For instance, remote CD to Yemen helped measure price changes for items whose price collection was spotty during the conflict and deteriorated further with the pandemic. Consequently, the Central Statistics Organization was able to estimate missing prices so that a complete CPI could be released. Such ad hoc interventions sometimes lead to further CD demand, for example, the authorities in Yemen indicated interest in implementing recommendations for further enhancing CPI coverage.
- As recovery advances, the focus of CD shifts towards widening coverage. For example, government finance statistics would aim to include the most relevant extrabudgetary funds while financial sector statistics would explore options to cover the most macro-critical non-financial institutions. External sector statistics would complement customs data through surveys to estimate the informal sector flows and seek to reduce errors and omissions by adding private sector data sources to estimate the financial accounts. In parallel, CD would assist with enhancing data frequency and timeliness.
- Small island states often feature a rather persistent lack of capacity to assimilate and retain CD in statistics. A key reason is severe underfunding of the statistical function. Against this backdrop, work plans for the new Pacific Financial Technical Assistance Center (PFTAC) funding cycle—which serves seven mostly small FCS with very low statistical capacity in APD—identifies countries for capacity supplementation. Until basic absorptive capacity has been established, the STA expert is engaged in actual data compilation to ensure production of the most essential data for surveillance. Once staffing levels are sufficient to absorb CD, which also requires strengthening coordination among compiling institutions, the traditional CD approach can be pursued that aims at sustainable outcomes. STA also uses synergies among countries in the region when supplementing capacity, including common tools, methods, and where possible data sources, including Big Data.

**Figure 18. STA's Tailoring of CD for Fragile States at Different Levels of Fragility**

		Statistics CD			
<b>Characteristics</b>	No Longer Fragile	Focus on advanced statistics compilation: e.g., government finance statistics to include a full financial balance sheet by adding data on stock positions of financial assets and liabilities, estimates of non-cash items and other economic flows (holding gains/losses and other volume changes), and data on nonfinancial assets.			
	Fragile: Stable but vulnerable	Focus on widening coverage of statistics: e.g., government finance statistics to include extrabudgetary funds, financial sector statistics to include non-bank financial institutions. External sector statistics to use surveys to estimate informal sector flows, plus reduce errors and omissions by using private sector data sources to estimate the financial accounts. Expand the system of national accounts, for example, with quarterly GDP compilation or institutional sectoral accounts. Aim to improve data frequency and timeliness, such as improving the timeliness and coverage of price statistics. Enhance consistency among different datasets.			
	Most Fragile / Small States/ Immediately Post-Conflict	Focus on hands-on training and technical assistance to raise staff capacity. Establish basic reporting systems for monetary, financial, and fiscal statistics. Set up source data or surveys for national accounts, prices, and external sector statistics.	In more advanced FCS, use of Big Data as data source, and use of administrative data to integrate in national accounts compilation (for example, use of VAT data) or develop high frequency indicators. For CPI, augment data sources to include internet price collection and alternative data sources, such as scanner data and web scraping.		
	High Conflict /Disaster	Wait	Focus on the compilation of basic datasets with basic coverage, and on capacity supplementation.		
		Wait	Basic CD	Intermediate CD	Advanced CD

**Box 2. Statistical Innovation and Big Data in FCS<sup>1</sup>**

For many FCS reliance on internationally recommended data sources and surveys is challenging, partly owing to weak data collection systems aggravated by a lack of coordination. These problems have been compounded by the COVID-19 crisis. Big Data can help FCS overcome source data challenges by providing alternative data sources. For example, using mobile phone data on travel services is more cost effective than cross-border surveys. Some FCS in Africa are interested in how to use data on mobile money and banking in the compilation of monetary statistics. Below are a few examples of how STA is using Big Data innovation in FCS.

In the Republic of Congo, administrative data has been utilized to develop high frequency indicators (HFIs). STA provided CD in 2019 and 2020 to use sales data from the monthly value added tax database for the compilation of GDP estimates and for the development of HFIs. Tax data offer timely and inexpensive source data for large parts of the formal economy but are often underused because of the absence of sharing agreements with the tax office and difficulties inherent to large datasets. STA assisted the national statistical office in engaging with the tax office and trained the compilers on data management, including for the treatment of data gaps and outliers which are common in large tax records. This was closely coordinated with the Central Africa Technical Assistance Center (AFC) which continued to follow up on the recommendations and assisted with implementation. CD to FCS in Africa also addresses the use of less traditional data sources such as regulatory data, data on electricity generation, and on production by large corporations to track the monthly evolution of economic activity.

Interest in African FCS to use nowcasting techniques to generate more timely data for economic policy making has created new demand for CD in the use of Big Data. For example, STA has been supporting Sierra Leone with the preparation of a database which consolidates administrative data from various sources complemented by Big Data from private sources to develop a set of HFIs. In addition to supporting nowcasting models, this database will serve as source data in addressing persistent data gaps that hampered compilation of traditional statistics.

In West Bank and Gaza property prices obtained from websites, a form of Big Data, were used to develop a residential property price index (RPPI). A remote TA mission funded by the D4D Fund in 2020 assisted the Palestine Monetary Authority with the development of the RPPI. In the absence of suitable source data, the authorities assessed the potential use of both asking prices (collected from two websites where properties are listed for sale) and appraisal prices generated from the process for mortgaging property. They found asking prices to be more suitable. STA helped with the development of the index, which was published in February 2021.<sup>2</sup>

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<sup>1</sup> Unlike statistical data that are compiled for specific purposes, Big Data is a byproduct produced in business and administrative systems, social networks, and the internet of things.

<sup>2</sup> See <https://www.pma.ps/en/Media/Press-Releases/announcing-the-findings-of-the-palestine-monetary-authoritys-residential-property-price-index-4th-quarter-2020>.



**Box 2. Statistical Innovation and Big Data in FCS (concluded)**

STA has experimented with a method to use Big Data on vessel traffic (developed by Arslanalp, Marini, and Tumbarello (2019)) to produce trade estimates in real time for Malta.<sup>3</sup> The methodology was extended by Arslanalp, Koepke and Verschuur (2021) and applied to eleven Pacific Island countries (about half of which are FCS) in view of lags in official statistics. This methodology can provide early warning signs of turning points in economic activity, helping fill gaps in official data. STA also produced a user guide to enable Fund economists to implement this methodology in other countries, including FCS, to help produce high frequency trade indicators of economic activity.

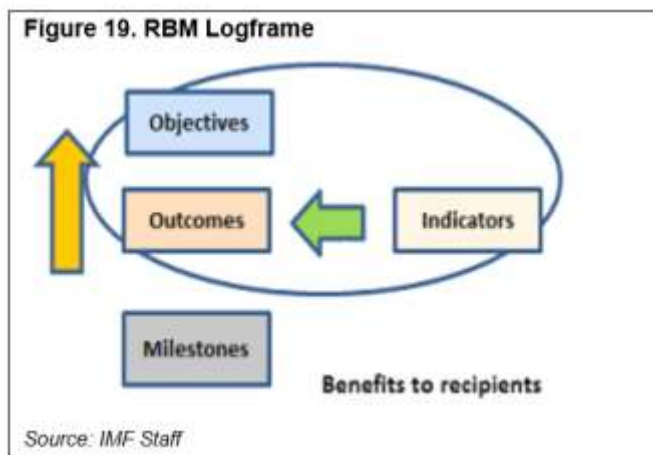
<sup>3</sup> Automatic Identification System (AIS) vessel traffic data was used from marine traffic. AIS is an 'air traffic control system' for ships and allows for real-time tracking of commercial vessels

## VII. Monitoring Targeted Results

Data from the RBM framework was used to monitor targeted CD results, as a way to measure CD impact.<sup>12</sup> A strategic management tool for designing CD interventions and measuring impact, RBM is based on the concept of the logical framework or log frame. RBM assumes that a causal framework links CD activities to desired outcomes, and ultimately to better policies in the beneficiary country. There is a distinction between outputs (what the IMF is responsible for—TA reports, training, missions, etc.), outcomes, and benefits to the recipient country.

Objectives define high-level goals of CD, and are not directly observable (Figure 19). Thus, in order to measure a country's progress towards reaching objectives, outcomes are used as measurable steps forward in CD achieved when recommendations developed jointly with country authorities are implemented. Indicators specify how the achievement of outcomes will be validated. Milestones are smaller, time-bound steps used to working towards an outcome. Objectives, outcomes and milestones are defined in the IMF RBM catalog. RBM milestone and outcome ratings are examined by the project manager, with both rated on a scale of 1 to 4 as follows: 1 – not achieved, 2 – partially achieved, 3 – largely achieved, and 4 – fully achieved.

The RBM analysis suggested that FCS had the lowest milestone ratings in prices, then government finance statistics and the Data Standards Initiatives, then national accounts, followed by balance of payments, and financial



<sup>12</sup> The data analyzed is based on the STA RBM catalog in place prior to the release of the new Fund RBM catalog in August 2021.

institutions ratings were the highest rated (Figures 20a, b).<sup>13</sup> This fits with the observation that national statistics offices and ministries of finance tend to be more resource constrained and have lower capacity than central banks producing balance of payments and financial sector data.

**Figure 20a. FCS Average Milestone Rating by Region and Topic, FY2016-21<sup>1</sup>**

Region	Balance of Payments	Financial Institutions	Government Finance	Real Sector - National Accounts	Real Sector - Prices	Data Standards	Total
AFR	3.5	3.6	3.1	3.3	3.0	3.0	3.3
APD	2.6	4.0	2.6	3.3	3.3	3.1	2.9
MCD	3.0	3.8	3.0	3.0	2.3	1.6	2.9
<b>Total</b>	<b>3.2</b>	<b>3.6</b>	<b>3.0</b>	<b>3.2</b>	<b>2.7</b>	<b>3.0</b>	<b>3.2</b>

Source: IMF Results Based Management Report.

<sup>1</sup> RBM Milestone data for EUR and WHD are not shown since there is only one FCS in each these regions and individual RBM data is confidential.

**Figure 20b. Non-FCS Average Milestone Rating by Region and Topic, FY2016-21<sup>1</sup>**

Region	Balance of Payments	Financial Institutions	Government Finance	Real Sector - National Accounts	Real Sector - Prices	Data Standards	Total
AFR	3.5	3.7	3.2	3.3	3.2	4.0	3.4
APD	3.2	3.7	2.7	3.1	3.6	4.0	3.2
MCD	3.3	3.6	2.9	2.6	2.6	3.3	3.0
<b>Total</b>	<b>3.4</b>	<b>3.6</b>	<b>3.0</b>	<b>3.3</b>	<b>3.3</b>	<b>3.9</b>	<b>3.3</b>

Source: IMF Results Based Management Report.

<sup>1</sup> RBM Milestone data for EUR and WHD are not shown since there is only one FCS in each these regions and individual RBM data is confidential.

FCS had a marginally lower overall average milestone rating at 3.1, compared to non-FCS at 3.2. This was due to FCS having lower milestone ratings in balance of payments, national accounts and prices, and Data Standards Initiatives. This may indicate that national statistical agencies in FCS are more under-resourced than those in non-FCS, similar to the findings in Section IV on the text mining analysis of the statistical scorecards. FCS' lower rating in Data Standards Initiatives relative to non-FCS is due to only 14 FCS having fully implemented e-GDDS (see Box 1). However, FCS on average had similar milestone ratings for financial institutions and government finance statistics. By region, FCS in APD had notably lower milestone ratings than non-FCS. This is probably related to the presence of seven FCS in the Pacific Islands that are also mostly small states and characterized by low absorptive capacity.<sup>14</sup>

FCS performance also tends to lag slightly behind non-FCS when examining broader outcome results. The average outcome rating for FCS was 2.9, while for non-FCS it was 3.0. When examining the distribution of the

<sup>13</sup> This comparison of ratings should be interpreted with some caution as differences may also reflect other factors, such as different rating practices across topics/workstreams.

<sup>14</sup> Small FCS on average tend to have lower milestone and outcome ratings compared to larger FCS.

outcome ratings with 1 and 2 ratings classified as unachieved, and 3 and 4 ratings classified as achieved, FCS had more unachieved outcomes than non-FCS, and less achieved outcomes than non-FCS (Figure 21). The marginal differences in ratings between FCS and non-FCS might also reflect STA's effort to take into consideration constraints from fragility when designing milestones and determining the timeframe for achieving outcomes. Similarly, analysis of the impact of STA trainings in FY2019–21 reveals that FCS participants on average showed somewhat lower learning gains than non-FCS participants: when comparing average post-training quiz results of participants with pre-training quiz results, FCS participants' learning gains were 18 percentage points while non-FCS' learning gains were 21 percentage points.



## VIII. Determinants of STA CD Mission Delivery

To gain a deeper understanding of the relationship between STA CD mission delivery and statistical capacity, cross-country regressions were conducted using STA mission data as the dependent variable from 142 countries from 2016 to 2020 (Table 5).<sup>15</sup> The cross-country regressions address the question whether there are more CD missions to countries with lower statistical capacity and if there are significant differences between FCS and non-FCS.<sup>16</sup> The regressions employ other control variables, such as RBM milestone ratings, population, presence of an IMF program, and security risk—factors that are hypothesized to also affect the number of CD missions. This study employs country averages—instead of using a panel data to investigate within-country effects—to examine CD delivery variation across countries. The regression results report Hubert-White robust standard errors, to correct for the heteroskedasticity revealed using the Breusch Pagan tests.

The summary statistics (Table 6) suggest that countries in the sample received an average of 17 CD missions between FY2016–2020, an average methodology capacity score of 54.2 from a scale of 0–100, and an average milestone rating of 3.7 out of 4. There are large cross-country variations in the sample as suggested by the minimum and maximum values of the variables. Further, the summary statistics reveal differences in countries' fragility, security risk, and participation in an IMF program.

The data has some limitations, including that milestone ratings are not recorded for all missions. The study attempted to overcome this issue by taking the average reported milestones in a country during the study period. While analyzing aggregate data is useful in providing an overview of CD delivery, it masks potential differences in CD delivery across statistical sectors, i.e., national accounts, prices, etc. This empirical analysis

<sup>15</sup> To account for the potential impact of outliers in the regression analysis, the sample excludes Myanmar, an outlier among CD mission recipients. Myanmar received 108 CD missions during the study period.

<sup>16</sup> The methodology category of the World Bank Statistical Capacity Indicator was used to represent average statistical capacity of a country (see Section III).

focuses on aggregate measures of CD delivery because there were not enough data on a sectoral/topical basis to provide meaningful results. Furthermore, while regression analysis using outcome ratings could provide further insights, data for STA outcome ratings were insufficient to provide an econometric estimation.

**Table 5. Determinants of Statistical CD Missions**  
**Dependent Variable: Total CD Missions (FY2016-2020)<sup>1</sup>**

	(1)	(2)	(3)	(4)
<b>Methodology capacity indicator<sup>2</sup></b>	<b>-0.092***</b> (0.033)	<b>-0.156***</b> (0.045)	<b>-0.162***</b> (0.044)	<b>-0.183***</b> (0.045)
<b>Milestone Ratings<sup>3</sup></b>			<b>-7.132**</b> (3.052)	<b>-7.614**</b> (3.035)
<b>Fragility<sup>4</sup></b>		<b>-2.156</b> (2.191)	<b>-2.946</b> (2.296)	<b>-2.357</b> (2.279)
<b>High Risk Location<sup>5</sup></b>				<b>-4.330*</b> (2.464)
<b>Log population<sup>6</sup></b>		<b>0.758**</b> (0.332)	<b>0.921***</b> (0.330)	<b>1.231***</b> (0.383)
<b>IMF Program<sup>7</sup></b>		<b>8.925***</b> (2.208)	<b>9.463***</b> (2.334)	<b>9.546***</b> (2.344)
<b>Constant</b>	<b>21.617***</b> (2.142)	<b>11.487***</b> (4.229)	<b>35.479***</b> (11.105)	<b>34.195***</b> (11.131)
<b>Observations</b>	<b>142</b>	<b>142</b>	<b>142</b>	<b>142</b>
<b>R-squared</b>	<b>0.039</b>	<b>0.154</b>	<b>0.191</b>	<b>0.209</b>

Sources: IMF Travel Information Management System (TIMS); World Bank Statistical Capacity Indicators; World Bank World Development Indicators; IMF Monitoring of Fund Arrangements (MONA).

Note: Robust standard errors in parenthesis. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Study period is IMF Fiscal year 2016-20.

<sup>1</sup> Total Missions are measured as the total number of missions in a country during the study period which runs from May 1st until April 30th of the following year. Data is from the STA CD Mission database.

<sup>2</sup> The methodology category of the World Bank Statistical Capacity Indicator is used to represent average statistical capacity of a country in terms of methodology and data dissemination. Average values from 2016-20 are used for each country.

<sup>3</sup> The milestone rating of capacity development missions is deemed as the capacity of the authorities to implement the milestones set for a capacity development mission. Average values from the study period are used for each country. Data is from the STA CD Mission database.

<sup>4</sup> Fragility represents the proportion of time a country is considered an FCS between the study period.

<sup>5</sup> High-risk location represents the proportion of time a country is considered a high security during the study period.

<sup>6</sup> Log population is the 2016-2020 average log population from the World Development Indicators, to measure the systemic nature of the country.

<sup>7</sup> IMF Program is a dummy variable representing the proportion of time a country is under an IMF program between 2016-2020 using the IMF Monitoring of Fund Arrangements (MONA) database.

The empirical results in Table 4 highlight four main findings:

- 1) Countries with lower statistical capacity and milestone ratings receive more STA CD missions. The analysis shows that the number of CD missions is negatively correlated with statistical capacity and milestone ratings.
- 2) Fragility is negatively correlated with the number of CD missions, but the relationship is not significant. (columns 2-4).
- 3) High risk locations are associated with a lower number of CD missions (column 4).
- 4) Countries with an IMF program and large populations are associated with higher CD missions and the correlation is statistically significant (columns 2-4).

The first finding suggests that STA CD missions are being deployed to countries with higher statistical needs as reflected by their lower statistical capacity and lower milestone ratings. The second and third findings suggest that CD missions are not being significantly affected by country fragility, though negative security factors related to conflict can weigh on the number of missions. The last finding indicates that STA CD is well integrated with IMF program activities.

**Table 6. Summary Statistics**

	no. of obs	min	mean	median	max
Total CD Missions (FY2016-2020) <sup>1</sup>	142	0	16.65	16	62
Methodology capacity indicator <sup>2</sup>	142	6.67	54.22	50	100
Milestone Ratings <sup>3</sup>	142	2.5	3.67	3.72	4
Fragility <sup>4</sup>	142	0	0.27	0	1
High Risk Location <sup>5</sup>	142	0	0.19	0	1
Log population <sup>6</sup>	142	9.34	15.66	16.04	21.05
IMF Program <sup>7</sup>	142	0	0.27	0	1

Sources: IMF Travel Information Management System (TIMS); World Bank Statistical Capacity Indicators; World Bank World Development Indicators; IMF Monitoring of Fund Arrangements (MONA)

Note: Study period is IMF Fiscal year 2016-20.

<sup>1</sup> Total Missions are measured as the total number of missions in a country during the study period which runs from May 1st until April 30th of the following year. Data is from the STA CD Mission database.

<sup>2</sup> The methodology category of the World Bank Statistical Capacity Indicator is used to represent average statistical capacity of a country in terms of methodology and data dissemination. Average values from 2016-20 are used for each country.

<sup>3</sup> The milestone rating of capacity development missions is deemed as the capacity of the authorities to implement the milestones set for a capacity development mission. Average values from the study period are used for each country. Data is from the STA CD Mission database.

<sup>4</sup> Fragility represents the proportion of time a country is considered an FCS between the study period.

<sup>5</sup> High-risk location represents the proportion of time a country is considered a high security during the study period.

<sup>6</sup> Log population is the 2016-2020 average log population from the World Development Indicators, to measure the systemic nature of the country.

<sup>7</sup> IMF Program is a dummy variable representing the proportion of time a country is under an IMF program between 2016-2020 using the IMF Monitoring of Fund Arrangements (MONA) database.

## IX. FCS Case Studies: Strategic Policy Findings

The case studies (presented in the Annexes) yield lessons that can be applied to improve the impact of CD in statistics. Five FCS were selected for the case studies, one per region (Table 7). Djibouti is a small state, facing unique vulnerabilities with acute capacity constraints. Haiti is a medium-intensity conflict fragile state, and an HRL, while Kosovo is the only FCS in Europe (EUR). Madagascar is one of the FCS in AFR that has received substantial CD that has been effective in supporting surveillance and lending. Myanmar was selected because it was the highest intensity user of Fund CD until early 2021 and is classified as a medium-intensity conflict FCS and an HRL.<sup>17</sup> Other selection criteria include:

- Djibouti, Madagascar, and Haiti have country engagement strategies (CES), an MIP initiative for FCS whereby IMF country teams write a paper that integrates the roles of policy advice, financial support, and capacity building.
- Haiti, Kosovo, and Madagascar have had Fund-supported programs with conditionality over the last six years, whereas Djibouti and Myanmar have benefited from Fund financing instruments for the provision of emergency assistance such as Rapid Credit Facilities (RCF) or a Rapid Financing Instrument (RFI), which have limited conditionality.
- One of the five countries, Kosovo, is an upper middle-income country, while Djibouti, Myanmar and Haiti are lower middle-income, and Madagascar is low income, which is representative of the fragile states' group.

<sup>17</sup> IMF CD to Myanmar had been substantial since 2012, when it emerged from decades of isolation, since the country faced heavy needs to build state capacity to transition to a market economy, thus CD was placed at the center of the Fund's work.

**Table 7. Case Studies Overview and Selection Criteria**

Country	Region	Income Group	IMF Lending Arrangements and Financial Instruments (2015-2021) <sup>1</sup>	WB Methodology Assessment Score (2020)	e-GDDS with NSDP Launch Date	Other Considerations
Djibouti	MCD	Lower middle income	RCF (2020)	50 (50 in 2019)		Small state with CES <sup>2</sup>
Haiti	WHD	Lower middle income	ECF (2015-2017); RCF (2016); RCF (2020)	40 (20 in 2019)		Pilot country for IFI dialogue with CES <sup>2</sup>
Kosovo	EUR	Upper middle income	SA (2015-2017); RFI (2020)	50 (50 in 2019)	2017	
Madagascar	APR	Low income	RCF (2015); ECF (2016-2020); RCF (2020); ECF (2021-2024)	30 (40 in 2019)	2019	CES <sup>2</sup>
Myanmar	APD	Lower middle income	RCF (2020); RFI (2020)	70 (70 in 2019)	2019	Highest receiver of Fund CD

Sources: World Bank Statistical Capacity Indicators; IMF Financial Query Tool

Notes: The median methodology score for fragile states is 45.; The history of lending arrangements is as of August 31, 2020.

<sup>1</sup> RCF: Rapid Credit Facility; ECF: Extended Credit Facility; SA: Standby Arrangement; RFI: Rapid Financing Instrument

<sup>2</sup> The Country Engagement Strategy (CES) is an MIP initiative for FCS whereby country teams write a memo that integrates the role of policy advice, financial support and capacity building. It benefits from inputs from diverse stakeholders, external development partners, and the country authorities.

**The case studies highlight the importance of coordination with other CD providers, especially the World Bank.** In Djibouti, coordination with the World Bank supported a major overhaul in national accounts and international trade statistics. In Madagascar, the launch of the NSDP in 2019 was undertaken with support from the AfDB, while coordination with the World Bank supported the release of revised national accounts in 2019. In Haiti, coordination with the World Bank supported the compilation and release of the new GDP series in 2020. In Kosovo, close coordination with development partners helped STA focus on improving the government finance statistics, while Eurostat provided TA on real sector statistics, and the Swedish development agency focused on CPI/PPI. In Myanmar, the ADB has focused on real sector statistics which allowed STA to focus on other sectors, particularly government finance and external sector statistics. Kosovo and Myanmar also highlight the importance of encouraging coordination amongst official data compilers.

**In most of the case studies, the effectiveness of statistical CD has been improved by integrating it with Fund-supported programs, financing instruments for the provision of emergency assistance, and surveillance work.** In Myanmar, the blend RCF/RFI has helped with the publication of government finance statistics data and improved coverage of the foreign direct investment (FDI) data. In Madagascar, the 2016–20 Extended Credit Facility (ECF) conditionality supported the new statistics law adopted in 2018, the new law on institutional arrangements for compilation of government finance statistics in 2019, and the publication of rebased national accounts in 2019. In Haiti, re-engagement through Article IV surveillance and the RCF helped support the resumption of the publication of real, monetary, and fiscal data in early 2020, the release of new rebased GDP in 2020, and the production of new monetary data. In Djibouti, the integration of STA CD with the RCF has helped improve the consistency of external sector statistics.

**Is the CES useful for statistical capacity building? It was in the case of Haiti, as the CES helped to prioritize CD provided in 2020 on data compilation and reporting in national accounts and monetary statistics and facilitated the integration of CD with surveillance.**<sup>18</sup> Similarly, for Djibouti the CES has prioritized data reporting, with priority in CD on external accounts and in the medium term, in other statistical areas, including the Data Standards Initiatives. On the other hand, for Madagascar, the CES did not define a role for future statistical CD when it recommended a successor ECF arrangement, though it did acknowledge that past statistical CD had been useful in national accounts and prices.

<sup>18</sup> See case study on Haiti for more details in the annexes.

**Complementing CD delivered by short-term experts and long-term experts based in the region, usually in RCDCs, with HQ-delivered CD has worked well in all country cases.** For example, through AFS the long-term expert has provided CD on real sector statistics in Madagascar, while short-term experts have provided TA on prices, and HQ-based CD has assisted with government finance, external sector, and monetary statistics. In Djibouti, CD on real sector has been provided by the long-term expert in METAC while short-term experts and HQ staff have provided CD on fiscal, monetary, and external sector statistics. Kosovo is not a member of an RCDC but did benefit from regional long-term experts in national accounts (2012–14) and in government finance statistics (2016–19), complemented by CD support through short-term experts and headquarter staff.

**Remote CD has been effective during the COVID-19 crisis, though it has limitations.** Due to the virtual format, interest in CD has diminished in some cases, such as in Djibouti. There are also connectivity and IT challenges, time-zone difference constraints, and shorter attention spans by the CD recipients. On the positive side, the remote format bypasses security concerns that come with on-site missions, such as in Haiti. Here national accounts and monetary missions in 2020 were effective in helping with the compilation of new GDP and new monetary statistics. Virtual missions also facilitate area department participation in STA missions, thus enhancing CD integration with Fund surveillance and program work. Virtual meetings also facilitate continuous follow up by the CD provider. In Madagascar, the authorities consider virtual CD to be effective, despite its challenges. Virtual missions are more effective when provided by an expert who already knows local officials. This has been the case in Kosovo where government finance statistics CD has been provided by an experienced short-term expert who had been a long-term expert in the region. In Myanmar, the effectiveness of virtual missions by the long-term experts in the Capacity Development Office in Thailand (CDOT) was facilitated by prior relationship with the authorities.

**Anchored by a regional expert, long-term tailored CD engagements tend to be effective.** Initially, in FCS with lower capacity, CD tends to be more hands-on, with training used to develop staff capacity, as was the case in Kosovo. Long-term experts provided more intense training and TA on statistical compilation at the start, and as statistics improved, CD became more focused on government finance statistics, and from 2019, only short-term experts and HQ staff provide CD. Another example is Djibouti, a small state where STA has resorted to continuous hands-on engagements, including remote support in between TA activities, and complementing TA with hands-on training. Following CD delivered between 2015 and 2020, the central bank started reporting regularly improved monetary and financial data. In Haiti TA complemented by training for the national statistics office allowed the release of rebased GDP in 2020. This contrasts with CD in 2006 that attempted to help develop high frequency indicators, which at the time was beyond absorptive capacity.

**Affected by low absorptive capacity, FCS require more time to build capacity.** STA has been engaged over many years in the FCS in the case studies, but progress has been subject to setbacks, especially in conflict FCS, owing to political and social disruption. For instance, recent events in Myanmar have jeopardized statistical capacity building progress,<sup>19</sup> while in Haiti, political instability, lack of policy ownership together with environmental fragility pose challenges for retaining the knowledge transferred through CD.

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<sup>19</sup> Due to divergences in the views of the international community regarding the recognition of the regime in effective control of Myanmar, the Fund has suspended dealings with Myanmar, including all CD activities.

**Interdepartmental Fund coordination on CD can facilitate greater impact of CD in statistics.** In Myanmar, STA long-term experts in CDOT have coordinated effectively with the Fiscal Affairs Department (FAD) long-term expert and the MCM resident advisor to improve balance of payments statistics, public sector external debt, and fiscal statistics. In Djibouti, STA participated in the Financial Sector Stability Review led by MCM, with improvements to financial soundness indicators' data quality. STA also delivered a TA mission in 2018 which improved the compilation of monetary and financial statistics.

**For French-speaking FCS, there is a need for CD to tackle language barriers, especially for training.** Djibouti officials would benefit from attending French courses at the African Training Institute (ATI). Workshop attendance by Haitian officials has been constrained because most regional events in the Caribbean are conducted in English, though some officials have attended French training at the ATI. These countries should have more flexible access to trainings and seminars in other RCDCs in French, especially as this is facilitated by the greater usage of remote or virtual modalities.

## X. Lessons and Conclusion

FCS face severe challenges in improving their statistical systems. On average, World Bank statistical methodology scores are lower for FCS, with data shortcomings hindering the adequacy of their official data for Fund surveillance. STA CD has worked to respond to the basic statistical needs of FCS, with most CD missions delivered in national accounts and government finance statistics, broadly consistent with the weakest main topical areas identified by the World Bank statistical methodology scores. While CD in statistics to FCS had been trending upwards until the onset of the COVID-19 crisis, progress had been constrained by inadequate resources that FCS allocate to the statistical function, insufficient inter-agency coordination, and a dearth of source data.

Risk ratings from the RBM framework also point to FCS's insufficient resources as a principal risk to achieving CD outcomes, followed by a weak commitment to implement CD recommendations, both at the technical and senior management level. While the achievement of targeted results of STA CD in FCS have been broadly in line with non-FCS, reflecting STA efforts to tailor RBM milestones and outcomes to FCS's circumstances, the analysis yielded moderately lower RBM ratings for FCS in balance of payments, national accounts, prices, and IMF Data Standards Initiatives. The fact that only 14 FCS have implemented the recommendations of the e-GDDS illustrates the difficulties faced by compiling agencies to mount a well-coordinated effort to achieve reliably regular data dissemination.

STA's greater reliance on multi-donor trust funds has provided more flexibility in allocating resources, which is often needed in high-risk FCS environments. While overall funding risks for multi-donor trusts funds might come to be affected by fiscal challenges in advanced countries, the main risk to STA CD stems from funding problems in RCDCs. With two thirds of STA CD to FCS delivered through RCDCs, it will be important to work with donors to maintain and, if possible, increase resources for the RCDCs for FCS.

CD missions have been well targeted. Countries with lower statistical capacity and milestone ratings have received more CD missions. Fragility is not a significant driver of the number of CD missions, though being a HRL can weigh somewhat on the amount of STA missions. Countries with an IMF lending program are associated with higher CD missions, confirming that STA CD is well integrated with program activities.



Despite the difficulties that FCS face with the absorption of CD, the overall statistical capacity of FCS has increased since 2008, as reflected in the increase in the average World Bank's statistical methodology score. This has coincided with better targeting of STA's CD delivery as it has become more flexible, regionally focused, demand driven, and results-based with the evolution of the RBM framework. In addition, RBM data suggests that majority of STA projects in FCS have achieved their TA outcomes.

Given the weak absorption capacity of FCS, STA has tailored its CD delivery and engaged more through the virtual modality. For example, in the Pacific Island fragile states served by PFTAC, with low absorptive capacity, STA is initially focusing on capacity supplementation, to ensure basic data compilation. STA utilizes its RCDC long-term experts that have a strong knowledge of FCS in their region and focus on providing longer-term statistical CD in methodology issues. The share of FCS in STA CD increased during the pandemic thanks to a shift to shorter virtual ad hoc interventions. Virtual CD missions have been effective in expanding engagement with FCS, especially when there are security concerns.

Some of the main policy recommendations arising from the delivery of STA CD to FCS relate to the need to tailor the type of CD and its modalities, and to improve coordination. These can form the basis for medium-term STA CD strategy for a post-pandemic world.

- **CD should be tailored to where an FCS lies along the fragility spectrum.** The more a FCS is subject to shocks and the lower its capacity and resources, the more statistical CD to FCS will need to be tailored, long-term, and focused on hands-on capacity building. CD in fragile states in conflict and with low absorptive capacity will tend to need CD focused on basic data compilation or establishing basic reporting systems.
- **Greater use of more long-term experts stationed in the RCDCs appears warranted.** To strengthen long-term engagement and continuity, experienced short-term experts should be selected and training on FCS issues should be provided to new ones.
- **Training to FCS should be an integral part of the CD, especially during the early phase of fragility,** as it is critical to build staff capacity. This includes not only face-to-face training, but also online and virtual trainings. The D4D-funded online training has become a powerful tool to leverage the traditional face-to-face training, with 30 percent of participants from FCS in AFR and MCD. The share of FCS participants has been even higher in short virtual training events on specific topics for data compilation during the pandemic.
- **Ongoing efforts to advance blended learning should build on the training experience** by designing a curriculum with short courses aimed at highly relevant subjects, such as fiscal consolidation. By integrating video material from the online courses with interactive sessions focused on hands-on data workshops, the efficiency of training should further improve to meet the needs of FCS.
- **Remote delivery of CD should continue even when travel resume.** As indicated in the case studies, several FCS appreciated the new remote delivery of CD that addressed specific challenges in a flexible manner. Especially for HRLs, this shift opened a more efficient way to deliver CD, which should complement the traditional approach. Also, remote delivery has allowed country authorities and CD experts to stay engaged regarding the implementation of CD recommendations.

- **Advancing FCS participation in the IMF’s Data Standards should be a key objective.** To focus on the FCS that have not yet implemented the e-GDDS—not yet publishing essential data for surveillance—STA launched in 2020 a Japan-funded project to improve data dissemination globally, including in 22 eligible FCS. Weak cooperation among data-producing agencies in FCS hampers regular dissemination even after compilation has been achieved. The implementation of e-GDDS with the establishment of an NSDP enhances cooperation between the central bank, ministry of finance and national statistics office, thereby freeing up scarce capacity in FCS and supporting efficiency gains.
- **Coordination with the World Bank and other CD providers, and within the Fund would help address low absorptive capacity.** The IDA 19’s allocation of significant funds to improving statistics can help address the resource scarcity at the heart of subpar data in FCS. Holding regular meetings between the heads of international organizations to exchange information on CD provision could enhance CD cooperation. Pressing ahead with the integration of statistical CD with Fund-supported programs and surveillance can improve statistics in FCS. Better coordination among compiling agencies can remove obstacles for sharing source data and support regular dissemination for the IMF’s Data Standards Initiatives. CES have the potential to help further integrate CD with surveillance.

STA’s experience with improving CD delivery to FCS while securing flexible donor support has positioned STA well for the future. It will be important, however, to leverage the experience from remote delivery during the pandemic to sustain the benefits from shorter interventions focused on urgent demands, integrating traditional face-to-face with remote and online delivery and more continuous engagements.

## Annexes on FCS Case Studies

### I. Case Study on Djibouti<sup>1</sup>

<p><b>Context and Approach:</b></p>	<p>Djibouti is a small and fragile state with acute challenges, compounded more recently by the COVID-19 pandemic. It is a small landlocked country with unique vulnerabilities. Consecutive years of drought have depleted food and water resources, forcing the country to import 90 percent of its food needs. Despite improvements in social indicators, one-fifth of the population still lives in extreme poverty and the unemployment rate remains high at around 47 percent. The country is politically and socially stable but is surrounded by fragile countries. Over the past decade, the inflow of refugees from Yemen, Somalia and Ethiopia have also imposed humanitarian costs on public finances and services. The government's development strategy aims at making Djibouti into a regional trade and logistics hub. This has led to large-scale investments in transport and logistics infrastructure, which have fueled strong growth with real GDP averaging about 7 percent during 2014-2017. However, it has also led to rising debt vulnerabilities with external public debt growing from 30 percent in 2013 to 70 percent in 2020. Before the COVID-19 pandemic, growth was strong, but GDP growth fell to -1 percent in 2020.</p> <p>While Djibouti has benefited from extensive statistical CD, limited capacity to implement Fund recommendations has been a challenge. The IMF assesses the data as broadly adequate for surveillance despite some shortcomings, though the external sector statistics have weaknesses. CD on real sector statistics has been deployed through the Middle East Regional Technical Assistance Center (METAC), which employs a long-term expert, whereas fiscal, monetary, and external sector statistics CD have been delivered using a combination of short-term experts and HQ staff. Officials have participated in trainings at the Middle East Center for Economics and Finance (CEF), although the delivery of courses in only English and Arabic have impaired the effectiveness of these trainings. The <i>IMF's Country Engagement Strategy (CES) for Djibouti</i> was undertaken in October 2019 and updated a year later. It prioritizes CD, including improving data reporting, and promotes integration of surveillance with TA and training, plus recommends more support from long-term experts. Immediate priorities include CD on external accounts, and the medium-term priorities include CD in data standards, national accounts, and government finance statistics to promote transparency. STA regularly meets with the area department team to prioritize CD and leverage their support on the implementation of CD recommendations. In May 2020, the IMF approved a \$43.4 million emergency disbursement under the Rapid Credit Facility (RCF) to help Djibouti meet needs resulting from the pandemic. Since the start of the pandemic, the authorities' interest in CD has declined somewhat, though some virtual missions have taken place.</p>
<p><b>Outcomes:</b></p>	<p>Consistent and timely release of national accounts data remains a concern. National accounts data are provided annually based on the expenditure and production approaches, with significant lags. In 2017, the authorities rebased Djibouti's annual national accounts to 2013 and implemented various SNA 2008 updates. Following CD by METAC and support from the World Bank, the 2019 Article IV consultation benefitted from new national accounts data with large upward revisions for 2013-17 to reflect new information on activity in the ports and free trade zones (FTZs). METAC has also been assisting Djibouti to establish a system of rapid preliminary GDP estimates since 2017. Djibouti provides CPI data on a timely basis; however, it only covers the capital city. In 2016, the index and</p>

<sup>1</sup> Prepared by Samah Torchani, under the supervision of Stephanie Medina Cas.

	<p>weight reference periods for the CPI were updated to 2013. While CD has been provided on producer price index, these statistics have not yet been compiled and disseminated.</p> <p>There has been most progress in monetary and financial statistics which has made a significant impact in terms of supporting improved monetary policy and macroprudential policies. Following TA missions conducted in 2018 (supported by the FSSF) and in 2019, the authorities started reporting monetary and financial statistics and financial soundness indicators conforming with the IMF's methodology and using the IMF's templates on a regular and timely basis. Djibouti also reports annual data to the IMF's Financial Access Survey (FAS). There are some data inconsistencies between monetary and financial statistics data and external sector statistics, namely the external position of the banks' balance sheet. STA was also involved in the Financial Sector Stability Review in 2019 led by the MCM and subsequently worked remotely with the authorities to address financial soundness indicators data issues raised by MCM and subsequently enhanced their data quality.</p> <p>The Central Bank of Djibouti (CBD) submits annual balance of payments and international investment position data in BPM6 format for dissemination, and quarterly external debt data to the World Bank. Djibouti's recent revision of external trade statistics (ETS) from 2013 onwards has resulted in significant improvements in the goods account, as this revision followed the adoption of the general trade system and the inclusion of free trade zones in ETS. However, errors and omissions in the balance of payments averaged around -23 percent of GDP over 2013-2018. In the context of the RCF and to support surveillance needs, an external sector statistics remote mission took place in November 2020 and addressed three topics: external trade, the consistency between external sector statistics and monetary and financial statistics, and the large net errors and omissions. The mission reconciled the external sector statistics and the monetary statistics.</p> <p>There has been slow progress with implementation of CD recommendations in fiscal statistics. Prior to the IMF's re-engagement with Djibouti in 2017, coverage of fiscal statistics was limited to transactions of the budgetary central government. No comprehensive balance sheet was compiled, except for debt liabilities of the budgetary central government. Following CD in government finance statistics and public sector debt statistics in 2017 and 2019, a <i>GFSM 2014</i> Statement of Operations was developed, with recommendations to broaden the coverage to beyond the budgetary central government. However, there has been little traction from the authorities to adopt the latest methodological standards for compilation of government finance statistics, and coverage remains limited to the budgetary central government. CD on public sector debt statistics has helped to expand the institutional coverage to non-guaranteed debt of public corporations and developing data collection templates for that purpose. Djibouti is yet to start reporting fiscal statistics to the IMF and debt statistics to the World Bank's Quarterly Public Sector Debt Statistics database.</p> <p>Djibouti has participated in the e-GDDS since 2012 but does not yet publish data through a NSDP. An IMF mission was scheduled to assist authorities to launch an NSDP in March 2020. It was postponed due to the COVID-19 crisis.</p>
<p><b>Lessons Learned:</b></p>	<p>Limited human resource capacity can pose challenges for data compilation. In Djibouti high staff turnover and the absence of dedicated resources to statistical topics have hindered the compilation of data in this area. For example, only one person in the CBD is responsible for the monetary and financial statistics, balance of payments statistics and the FAS. Thus, STA has resorted to more continuous hands-on engagements, including remote support in between TA activities, and</p>

	<p>complementing TA with hands-on training during TA missions, as well as through tailored training to specific regional and country needs.</p> <p>Coordination with the World Bank has been and will be essential to improving statistical advances. Supported by IMF and World Bank TA, the authorities have overhauled in 2019 their national accounts and international trade statistics to include new information on the activity of ports and FTZs. Looking ahead, the World Bank project, <i>Economic Management and Statistics Development for Policy Making</i>, launched in May 2020 will help improve data compilation as this project has three components: (i) strengthening the capacity of the national statistics office to produce and disseminate current and reliable statistics; (ii) modernizing the recipient's selected economic and fiscal management tools and processes, and (iii) project management. One of the activities that will be financed by this project is a computer application for balance of payments and TA from a more advanced central bank in Africa, a task that will be closely coordinated with the IMF.</p> <p>Virtual missions can still be effective, and easily allow area-department participation. The remote balance of payments mission at end-November 2020 resulted in some data improvements, as internet connectivity was stable, and documents could be exchanged. However, time is more limited (three hours a day), so access is more limited to the authorities, who are also more distracted by other daily tasks. A member from the area department team joined one day of the mission, thus helping integration with surveillance and program work.</p> <p>CD interventions need to consider the language context. Trainings and workshops can only help enhance the statistical knowledge of compilers when language barriers do not undermine their objectives. Given the extensive training needs that exist in Djibouti, the Fund should facilitate the participation of authorities in French language courses organized by the IMF's Africa Training Institute (ATI).</p>
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## II. Case Study on Haiti<sup>2</sup>

<p><b>Context and Approach:</b></p>	<p>Haiti's fragility stems from multiple factors. Its recent history is mired in political instability and has been punctuated by coups, internal strife, and foreign interventions. Poverty is widespread and GDP per capita is the lowest in the western hemisphere at around \$1,800 in purchasing power parity terms. Economic development has been stunted by major human and infrastructural losses from frequent natural disasters, including a devastating earthquake in 2010, and a category 4 hurricane in 2016 with damages equivalent to 23 percent of GDP. Progress has long remained hampered by a febrile and arduous transition toward stable democracy. From mid-2018, Haiti has experienced political instability and recurrent social unrest that paralyzed the economy and placed severe strains on the population. In July 2021, the president of Haiti, Jovenel Moïse, was assassinated and this has led to more turmoil, compounded by the 7.2 magnitude earthquake that struck the south-west of the island nation in August 2021.</p> <p>Intermittent security concerns and the protracted political crisis have made bilateral CD and surveillance continuity a significant practical challenge. CD has been frequently disrupted by political and environmental events, resulting in cycles of gains and atrophy. Only four Article IV consultations have occurred in the past 13 years (2007, 2010, 2015, and 2020) and Haiti-Fund relations and programs have been subject to numerous delays and setbacks. In recent years, Fund staff undertook several program-related missions and program discussions, some of which accompanied Article IV</p>
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<sup>2</sup> Prepared by Richard Wild, under the supervision of Stephanie Medina Cas.

	<p>consultation missions. However, as the proposed programs were not concluded for various reasons, the Article IV reports were not submitted to the IMF Board, resulting in a gap from 2015 to 2019. Traction of CD has been limited for several years. In 2020-2021, however, efforts by staff on a few focused projects resulted in important progress, namely in monetary statistics (see below), revision in the central bank law, and development of rules (by executive order) on the transparency and governance of public procurement.</p> <p>Statistics are broadly adequate for surveillance, though further improvements are necessary, especially in government finance statistics. Haiti reports quarterly balance of payments and annual international investment position data to the Fund, as well as monetary statistics though with a lag, while data in other areas is either provided bilaterally or is obtained manually. Political unrest, natural disasters, and COVID-19 hinder adequate data collection, both for regular collections and periodic benchmark surveys. Workshop attendance has also been hampered as regional events are tailored to the wider membership and conducted in English. However, there has been some attendance by Haitian officials at workshops conducted in francophone regions, for example at the ATI. CD on statistics has primarily been deployed through the Regional Technical Assistance Centre for the Caribbean (CARTAC), which became operational in the early 2000s. CARTAC employs long-term experts specializing in real sector statistics and—since 2011—balance of payments statistics and uses short-term experts largely to deliver CD on government finance statistics and monetary and financial statistics but also to deliver real sector statistics CD to Haiti in French. CD has sometimes been delivered in offsite locations.</p> <p>The Fund's reengagement with Haiti in 2019 provided an opportunity to advance statistical capacity building efforts. The IMF's Fragile States Country Engagement Strategy (CES) for Haiti, released in May 2020, defined an approach that integrates policy advice, financial support, and capacity building. It was founded on building ownership and consensus with the government and key stakeholders, to be complemented by a Fund-supported program. The CES defined a CD strategy that highlighted the presence of resident long-term experts and the preparation of roadmaps by the authorities as ways to improve ownership and make CD more effective. A worsening in overall fragility during 2020-2021 due to political instability and gang activity impeded Fund engagement. In this light, and consistent with the "enhanced" engagement of the Fund with FCS, Haiti's CES is being revised and adapted to the new realities and there will be consultations with the authorities. As in 2019, the CES priorities for statistical CD will continue to be to improve data compilation and reporting in monetary, price and national accounts statistics. The Fund concluded the 2019 Article IV consultation in January 2020 and a disbursement under the Rapid Credit Facility (RCF) equivalent to US\$111.6 million was approved in April 2020 with the aim of helping the country cope with the impact of COVID-19.</p>
<b>Outcomes:</b>	<p>Despite the low resource base, there has been progress recently on national accounts statistics. CARTAC and a peripatetic expert of the World Bank have assisted with national accounts CD, in particular updating the base year to 2011/12 and modernizing the methodology towards accordance with the 2008 SNA. The statistics agency was closed from August 2019 to March 2020 due to political and labor disturbances. Following a remote CD mission in May 2020, rebased GDP estimates were disseminated in October 2020, with an upward revision in nominal GDP by 65 percent. Still, they remain compiled only annually. Staff capacity to compile and disseminate national accounts statistics has improved through training, but the low number of staff and staff turnover pose challenges. In addition, the COVID-19 pandemic has aggravated access to limited data sources. Despite this progress, there is currently no timely data on economic activity. The timeliest indicator is the Conjunctural Indicator of Economic Activity (ICAE), which comes out only quarterly and with a six-month lag. This is an area where TA—to improve the frequency and timeliness of the</p>

	<p>Indicator—would be useful, to the extent it is easier and less costly to compile than real GDP data.</p> <p>The monthly CPI methodology has recently seen a major update, though improved price collection approaches are still needed. With support of CARTAC, the CPI was published with new fiscal year 2017/2018 expenditure weights in November 2018. Regular price collection from outlets by staff has been particularly affected by political instability and concomitant security concerns, as well as natural disasters and COVID-19. This activity is crucial for reliable CPI estimation, and its absence has stymied other technical improvements.</p> <p>Comparatively good progress has been achieved in external sector statistics, despite deficiencies in coverage, sources and methods, and timeliness due to low staffing levels. CD from CARTAC, most recently remotely during March 2021, has resulted in improvements to data collection, helped with drafting new compilation methods broadly in line with <i>Sixth Edition of the Balance of Payments Manual</i> (BPM6), and improved quarterly and annual consistency. However, further coverage and consistency issues remain. The authorities have yet to publish statistics for 2015-19 in accordance with BPM6. Although Haiti is one of the few countries in the Caribbean to publish its international investment position, it does so only on an annual basis.</p> <p>Technical support on fiscal statistics has been limited. Significant work remains to convert national presentations into international standard <i>GFSM2001/2014</i> presentations, and this has meant Haiti has not been able to submit government finance statistics data to the IMF for publication. Standardized government finance statistics presentations of budgetary central government consistent with the <i>GFSM2001/2014</i> have been developed with the help of CD but have not yet been disseminated. Work to develop estimates of consolidated general government is yet to start as there remains challenges due to heterogeneous approaches to recording source data across various agencies, low staff capacity, and insufficient inter-agency cooperation. A virtual CD mission in November 2020 aimed at putting in place an institutional framework for government finance statistics compilation and dissemination. Haiti does not yet report government finance statistics to STA.</p> <p>Monetary and financial statistics outcomes have recently improved, on the back of the Fund's reengagement. A remote TA mission in May 2020 from IMF headquarters, funded by the FSSF, assisted the central bank to improve the accuracy of monetary and financial statistics data, including those reported to the fund. The mission helped the Central Bank of Haiti (BRH) improve the classification framework and processes used to compile monetary and financial statistics using the Fund's Standardized Report Forms (SRFs), resolve emerging limitations in the BRH's existing compilation framework, and revise the definitions of key aggregates such as international reserves, net credit to the non-financial private sector, and the monetary base. The BRH has adopted the SRF data, which can be used for surveillance and Fund-program monitoring.</p> <p>On dissemination standards, Haiti has not yet implemented the recommendations of the enhanced General Data Dissemination System (e-GDDS). As such it does not publish data in a National Summary Data Page (NSDP), only metadata.</p>
<p><b>Lessons Learned:</b></p>	<p>Flexibility with CD delivery modalities can enhance the effectiveness of CD. Haiti is susceptible to shocks which interfere with the delivery of CD and travel to the country. Having options to build capacity through long-term experts based at CARTAC, short-term experts, and expertise available at IMF headquarters has been beneficial. TA accompanied by training is also constructive to boost the capacity of staff. The onset of the COVID-19 crisis has introduced some virtual missions which were</p>

	<p>effective as they were focused on topics conducive to virtual training and TA communicated online. These are likely to remain part of future CD delivery to Haiti, as persistent security concerns make in-person delivery difficult, but the topics will need to be carefully chosen to ensure compatibility with the constraints of transferring skills and learning on-line. Virtual meetings can also facilitate more frequent follow up with the authorities in the completion of tasks, as well as enhancing opportunities to reach wider audiences.</p> <p>For CD to be effective, it needs to consider the recipient institutions' respective capacity limitations and risks. In the case of Haiti, recent TA on annual GDP given to the statistics agency combined with training contrasts with more advanced CD in 2006 that attempted to develop high frequency indicators which was not effective.</p> <p>Coordination with other CD providers should form an integral part of CD. Overlapping missions in the same or integrated statistical domains, and with pre-agreed shared tasks and targets, should be arranged to maximize progress, supported by agreement from CD recipients that mission material can be shared. This is what has been done with the World Bank's project supporting the of national accounts that resulted in the release of the new GDP series. In addition, Paris 21 has supported the development of the new statistics law, that has been published in the Official Gazette.</p> <p>One factor that has helped the traction of the recent statistical CD in Haiti is its integration with Fund financing instruments and surveillance work. Resumption of the publication of real, monetary, and fiscal data earlier in 2020, which had been discontinued due to disruptions in the statistics agency, was facilitated through reengagement with Haiti under the 2019 Article IV consultation and the RCF. The dissemination of the rebased GDP and updated CPI series also helped Fund surveillance and policymaking by the authorities. The implementation of monetary CD to improve the quality and timeliness of SRFs is essential to allow Fund monitoring and reduce the central bank's reporting burden. CD provided in GDP, CPI and monetary accounts was in line with the CES priorities.</p>
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### III. Case Study on Kosovo<sup>3</sup>

<p><b>Context and Approach:</b></p>	<p>While Kosovo is more prosperous compared to other fragile states, it faces significant political and socioeconomic development challenges. Since declaring independence in 2008, it has experienced political volatility, turnover, and frequent deadlocks. Strained relations with Serbia, which does not recognize it as an independent state, impede progress towards EU membership and imperil stability in the Western Balkans. Despite progress in reducing poverty, Kosovo remains one of the countries in Europe with the lowest GDP per capita and suffers from economic issues, infrastructure gaps, poor regulation, an undiversified and largely consumption-based economy, and high unemployment rates.</p> <p>The economy has been severely impacted by the COVID-19 pandemic leading to renewed Fund support. The crisis has stretched the capacity of the health system and led to a reinstatement of containment measures. The government revised its GDP estimate for 2020 to -5.3%. In April 2020, Kosovo received emergency Fund financing through the RFI and support from both the World Bank and the EU.</p>
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<sup>3</sup> Prepared by Andrew Baer under the supervision of Stephanie Medina Cas.



	<p>The IMF has been providing statistical CD to Kosovo for over two decades. Early efforts focused on building institutional capacity and clarifying the responsibilities of newly formed agencies in establishing a statistical system and delivered through a combination of long-term advisors and short-term experts. Given limited institutional capacity, Fund TA experts have assisted with compilation of real sector, external sector, and financial sector statistics between 2003 and 2014, helping navigate the complex relationships between the nascent agencies responsible for statistical compilation in Kosovo. Between 2012-14, the Fund had a national accounts advisor stationed in Albania which provided CD to Kosovo as well. Since 2015, CD has primarily targeted building capacity in financial and government statistics through missions conducted by a long-term expert stationed at the Center of Excellence of Finance (CEF) in Slovenia and short-term experts. Kosovo has made advances in statistical compilation and data quality is assessed as suitable for surveillance as of 2020. Nonetheless, statistical agencies have significant shortages of financial and human resources.</p>
<p><b>Outcomes:</b></p>	<p>Progress was most quickly achieved in monetary and financial statistics. A series of CD interventions delivered between 2003 and 2005 helped Kosovo produce data broadly consistent with the <i>Monetary and Financial Statistics Manual (MFSM) 2000</i>. Monetary data are now compiled broadly consistent with the MFSMC 2016. STA also delivered a FSSF-funded TA mission to improve compilation of monetary and financial statistics in 2019. This supported the Central Bank of Kosovo (CBK) with increasing the timeliness of data reported for insurance companies, pension funds, and other financial intermediaries from quarterly to monthly, and using Standardized Report Forms (SRFs).</p> <p>In external sector statistics, Kosovo produces monthly balance of payments and quarterly international investment position data. STA TA delivered between 2007 and 2012 have helped Kosovo achieve these outcomes, which are consistent with the <i>Sixth edition of the Balance of Payments and International Investment Position Manual (BPM6)</i>, starting with 2013 data. These data are produced on an even more timely basis than the e-GDDS standards, which require only quarterly balance of payments and annual international investment position.</p> <p>Real sector statistics are also compiled on a timely basis and in line with international recommendations, though weaknesses remain. Eurostat played a leading role in supporting the development of key source data for national accounts, such as a population and housing census in 2011 and an agricultural census in 2015, allowing the Fund to focus on national accounts compilation. Intensive CD support from Fund regional advisors helped Kosovo establish a robust system of annual national accounts, produced using both the expenditure and productions approaches in current and constant prices. GDP by economic activity and by expenditure are now published simultaneously in an excel format on the website of the Kosovo Agency of Statistics (KAS) Agency with a delay of 10 months. Development of quarterly GDP has been slow due to staffing and source data constraints. A 2015 mission from headquarters assisted the authorities with making needed improvements and regular dissemination of quarterly estimates followed soon thereafter. Quarterly GDP data can be inconsistent with annual data, requiring significant revisions, and improvements in methodology are necessary. Kosovo needs to improve and develop additional high-frequency (monthly) indicators.</p>

	<p>The CPI has been produced monthly since 2002. Prices TA was primarily driven by the Swedish International Development Agency and Eurostat, though two IMF missions conducted by short-term experts in 2013 provided methodological guidance for improving the CPI and PPI. The PPI is produced quarterly. A new CPI was introduced in December 2014, with weights based on national accounts data aimed at bringing the CPI in line with the European Harmonized Index of Consumer Prices (HICP). It targets all products and services purchased by all households (resident and non-resident) in Kosovo. The HICP is now available from January 2010 onward. The HICP was rebased from 2002 to 2015 in January 2016. Both the CPI and the HICP are used to measure consumer inflation, the latter enabling comparisons between member states within the EU.</p> <p>The IMF has been providing regular assistance with compilation of government finance statistics since 2013. This CD, provided by both Fund staff and short-term experts and supported by the Swiss State Secretariat for Economic Affairs, has resulted in Kosovo reporting debt statistics to the joint World Bank/IMF Quarterly Public Sector Debt Database beginning in 2017. Building on this success, TA shifted to upgrading government finance statistics compilation files to align with the <i>Government Finance Statistics Manual (GFSM) 2014</i> framework. These data have been provided monthly to the Fund for surveillance since 2018. Since the COVID19 pandemic, a virtual government finance statistics CD mission successfully collaborated with compilers from both the KAS and the ministry of finance to improve alignment between budget planning and budget execution data, as budget classification is not fully consistent with GFSM 2014. While data is generally adequate, strengthening monitoring and disclosure of arrears will be important.</p> <p>Kosovo has been a subscriber to the e-GDDS since 2011 and launched a NSDP in 2017 with the support of the IMF. Kosovo's adoption of the e-GDDS demonstrated its commitment to publish timely and reliable statistics compiled in accordance with international standards. The NSDP is a single webpage where all the key macroeconomic statistics compiled by the CBK, the KAS, and the ministry of finance are available with associated metadata. This improved data accessibility is important for supporting Fund surveillance and data-driven policy.</p>
<p><b>Lessons Learned:</b></p>	<p>Consistent engagement through long-term resident experts was critical for the successful development of statistical capacity in Kosovo. Fund experts provided more intensive training and assistance in real, external, and financial sector statistics compilation between 2003 and 2014. This was particularly needed as the country built a statistical system with newly formed institutions. As the statistical system matured Kosovo has been successful in disseminating consistent data series with complementary support through short-term missions since 2015.</p> <p>The Fund's experience in Kosovo also highlights the importance of coordination among data compilers for the successful production and dissemination of macroeconomic statistics. Despite overcoming substantial resource deficits to produce needed data for surveillance, coordination between the CBK, KAS, and the ministry of finance has been a recurring challenge, exacerbated by high staff turnover rates. An earlier emphasis on establishing regular and consistent coordination between these agencies may have expedited statistical development.</p> <p>The pace of progress in Kosovo points to the importance of improving source data and taking a long-term strategy in the context of nation building in a newly established state. Many of the compilation areas where progress was slower were linked to insufficient access to source data.</p>

	<p>This includes quarterly national accounts and balance of payments compilation. While direct surveys of households and establishments are ideal, greater use of administrative tax data could help develop early indicators before more expensive and time-consuming data collections are completed. The KAS has only recently formalized agreements with the tax authorities for the recurring provision of high-frequency tax data.</p> <p>The potential candidacy for EU membership has served as a strong incentive for Kosovo to improve its statistics, which has been supported by CD coordination by the IMF and other CD providers. The European Commission (through Eurostat) has provided extensive real sector statistics TA to Kosovo to support the country in meeting the compilation requirements governed by Eurostat. Strong support from the Swedish International Development Agency has also accelerated progress and achieving results. The IMF's close coordination with these CD providers has allowed the Fund to focus its CD resources in other areas, avoid duplication, and promote complementarity.</p>
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#### IV. Case Study on Madagascar<sup>4</sup>

<p><b>Context and Approach:</b></p>	<p>Despite considerable natural resources, recurring socio-political crises and natural disasters have stymied sustainable economic growth in Madagascar. The 2019 IMF Article IV consultation report indicated that Madagascar was ranked among the poorest countries in the world in 2018, with approximately 75 percent of the population living on less than US\$1.90 a day at purchasing power parity. The report further noted a long history of vulnerability to natural disasters, cyclones, flooding, and droughts had caused US\$1 billion in damages since 1990. While economic growth has averaged 4 percent over the period 2014-2019, the COVID-19 pandemic reversed growth and many dimensions of fragility have created daunting challenges, reflecting slow progress towards meeting the sustainable development goals (SDGs).</p> <p>Madagascar has received considerable CD on statistics from the IMF since normalization of relations with the Fund in 2014 and the ECF-arrangement launched in 2016. The IMF's Fragile States Country Engagement Strategy (CES) for Madagascar, developed in March 2020, defines an approach that integrates policy advice, financial support, and capacity building. It finds that IMF CD in statistics was instrumental in rebasing and improving the quality of GDP series, creating quarterly GDP data, and improving the CPI. The CES recommends a successor Fund arrangement to maintain macroeconomic stability, and achieve sustained and inclusive growth, though it does not explicitly define a role for CD in statistics. The COVID-19 pandemic has had an adverse effect on economic growth and negatively impacted capacity for statistical reforms through reduced fiscal revenues and a weaker external position. Thus, the IMF approved two disbursements under the Rapid Credit Facility (RCF) of US\$166.0 million and US\$171.9 million, in April and July 2020, respectively. The IMF also approved debt service relief under the Catastrophe Containment Relief Trust (CCRT) for a cumulative US\$25.8 million in four tranches in April 2020, with the first tranche for US\$4.2 million in October 2020 and the second tranche for US\$4.3 million in October 2021. To support the recovery from the pandemic and advance reform implementation, the authorities requested a new 40-month ECF arrangement which was approved in March 2021 for US\$312.4 million</p>
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<sup>4</sup> Prepared by Clement Ncuti under the supervision of Stephanie Medina Cas.

	<p>The IMF has maintained close interaction with the Malagasy authorities to ensure that CD delivery is aligned with the country's priorities. Madagascar's data provision to the Fund is assessed as broadly adequate for Fund surveillance and program monitoring albeit with some shortcomings that are being addressed gradually. CD priorities for Madagascar since 2016 have been closely aligned with the 2016-20 ECF program objectives. CD provided by STA was instrumental in broadening the scope of external sector statistics to include dissemination of international investment position data and expanding the coverage of government finance statistics beyond the budgetary central government. STA CD has been delivered mainly through the Regional Technical Assistance Center for Southern Africa (AFS), with long-term experts and short-term experts focusing on real sector statistics, developing national accounts and prices. CD has also been delivered from IMF headquarters under the Enhanced Data Dissemination Initiative (EDDI2 supported by DFID) and the FSSF on government finance statistics, external sector statistics, and monetary and financial sector statistics.</p>
<p><b>Outcomes:</b></p>	<p>Under the Fund-supported program, the Malagasy authorities have made progress in improving the legal framework underpinning the compilation and dissemination of statistics. In 2016, in response to the IMF's recommendation, the 1994 law establishing the Banky Foiben'i Madagasikara (BFM, the central bank) was revised to give the BFM the mandate to compile balance of payments and international investment position data. In 2018, Madagascar enacted a new statistical law modernizing and regulating data collection, meeting the conditionality in the 2016-20 ECF-arrangement to improve the quality of statistics. Application decrees to the law are being finalized to strengthen the institutional arrangements for data compilation and address inefficient data sharing and coordination among data producing agencies. The law establishing the responsibilities of the Ministry of Finance and Economy and the institutional arrangements for the compilation of government finance statistics was adopted in 2019.</p> <p>The accuracy and comprehensiveness of government finance statistics has improved with work ongoing to broaden the coverage of data. Short-term expert missions provided support to the Ministry of Economy and Finance. An action plan for transforming the statement of operations into the analytical framework of the <i>Government Finance Statistics Manual (GFSM) 2014</i> are well advanced. Significant improvements have been made since 2019 to the presentation of other treasury operations, that constituted an issue for surveillance, preventing the distinction of transactions on subsidies, grants, social benefits, and other expenses. Dissemination of annual government finance statistics to STA has resumed since 2016, and dissemination of quarterly debt statistics to the joint IMF and World Bank quarterly public sector debt statistics database was initiated. Development of a bridge table between the budget and accounting classifications (chart of accounts) and the <i>GFSM 2014</i> is advancing, and complimentary FAD CD is supporting the updating of the government chart of accounts. Since 2019, steps to broaden the coverage of government finance statistics to include extrabudgetary units comprising public administrative entities, non-market public industrial and commercial entities, local governments, and the social security fund have been taken. A virtual TA mission in November 2020 cemented progress towards compilation of consolidated general government and the first draft is expected in the second half of 2022.</p>

Improved national accounts and price statistics have been disseminated. Until June 2017, the official estimates of the GDP were based on *the System of National Accounts 1968 (SNA 1968)* and an outdated reference year (1984). Irregular data collections and deficiencies in data sharing between institutions made it difficult to produce high quality national accounts. Revised series of annual national accounts for 2007-2017 with the new 2007 base year and based on SNA 1993 methodology were published in June 2019, with support from the AFS long-term expert and the World Bank. The statistical office (INSTAT) has started compiling and disseminating experimental quarterly GDP estimates under the new base year starting in 2018. An AFS remote TA mission in October 2020 helped INSTAT to improve ownership of quality control processes for quarterly GDP. CPI weights dated back to 1999 and had only been slightly updated in 2010. INSTAT has started producing, since May 2019, a reweighted CPI with 2016 as the base year. Efforts are underway to extend geographic coverage and add new products to the basket. In 2019, INSTAT launched a household budget survey that will be used to update household consumption of GDP series and the CPI weights. The survey was delayed due to COVID-19 but also due to budget issues and INSTAT used the opportunity, with support from AFS remote CD missions in March 2020 and April 2021, to strengthen the survey's methodology and the roadmap for the new reweighting.

The BFM has finalized the adoption of International Financial Reporting Standards (IFRS). The monetary survey is prepared monthly according to the analytical frameworks defined by the IMF's *Guide to Money and Banking Statistics* in International Financial Statistics. Adoption of the IFRS will strengthen the transparency and credibility of BFM's financial reporting practices. BFM transitioned to IFRS financial statements in 2021. Consolidated sectoral balance sheets of depository corporations are available. With support from IMF headquarters CD, the BFM consolidated in 2018 the sectoral balance sheets by expanding the coverage of the monetary statistics to include microfinance institutions (MFIs) and Caisse d'Epargne de Madagascar, a public financial institution which collect deposits, so to cover the full depository corporations survey. A new law transferring insurance supervision to the CBM was approved in September 2020, which facilitates the compilation of monetary and financial statistics for offshore financial corporations.

The BFM has made progress in the improvement of external sector statistics data collection and compilation. The quarterly data are compiled but should be supplemented by the collection of quarterly data using a simple survey of major public and private enterprises. The annual surveys, which have much broader coverage and detail, will be used to revise the quarterly data. In 2018, STA TA support under the FSSF was provided to support the compilation of the international investment position, which is now disseminated on a quarterly basis. However, some data sources used for international investment position compilation lack sufficient scope and coverage. The compilation system is still hampered by recurring issues such as processing lags due to partial automation of customs reports and inadequate coverage of several transactions. The compilation of external debt statistics is satisfactory. Private debt data coverage remains incomplete. STA CD is supporting the authorities to reduce debt data gaps.

Madagascar made an important step forward with data dissemination under the e-GDDS. It participated in the e-GDDS in April 2017 and committed to publishing a NSDP posted on the Open-Data Platform (ODP) sponsored by AfDB. Following a CD mission under the EDDI2 in

	January 2019, the NSDP was successfully launched on May 15, 2019 and the authorities started disseminating e-GDDS encouraged data categories.
<b>Lessons Learned:</b>	<p>Blending CD delivery modes has been instrumental for the success of the reform agenda. This includes coupling CD initiated from headquarters with CD delivered through the AFS, as well as remote assistance and training opportunities for Malagasy officials from the Ministry of Economy and Finance and of the BFM. The authorities consider that virtual missions have remained effective despite occasional technical difficulties with connectivity constraints and the time zone difference.</p> <p>Tight coordination of interventions from other CD providers and leveraging diverse approaches to CD is necessary for success. Effective coordination with other development partners including the AfDB on data standards that supported Madagascar's NSDP launch, and the World Bank on national accounts, have also been instrumental. Meanwhile, peer learning opportunities have improved the individual capacities of compilers of national accounts statistics. AFS funded an attachment of two statistical officers from Madagascar to Statistics Mauritius. This allowed the officials to interact with the national account team at SM on methodological issues, data sources and collection, rebasing techniques, and to discuss the Statistics Act of Mauritius. It also complemented ongoing CD to Madagascar in national account statistics and contributed towards objectives set by regional organizations such as the Southern African Development Community (SADC), the Common Market for Eastern and Southern Africa (COMESA), and the African Union on statistics.</p> <p>The impact of CD can be further increased by integration of CD activities with lending operations. Leveraging structural conditionality under the 2016-20 ECF-arrangement has contributed to improving the legal and institutional framework of statistics. Explicit reference to statistics in the structural conditionalities of the 2016-20 ECF arrangement was included for the enactment of a statistics law and the publication of rebased national accounts series. The authorities' commitment, through explicit reference to actions to improve the quality of statistics in the memorandum of economic and financial policies (MEFP) of the 2016-20 ECF-arrangement, has underpinned progress in national accounts statistics. In the MEFP of the new ECF, the authorities have clearly prioritized their needs for STA CD and have committed to improving a wide range of statistics.</p>

### V. Case Study on Myanmar<sup>5</sup>

<b>Context and Approach:</b>	Myanmar's sources of fragility are multifaceted and present, as highlighted by the recent political events. It is vulnerable to climate-induced shocks and is one of the three countries most affected by climate change over the past decade. Since declaring independence in 1948, Myanmar has been embroiled in a civil war that has cost thousands of lives, forced population displacement, and threatened the country's unity. In 2011, after decades of isolation from the international community, Myanmar embarked on an ambitious political and economic reform agenda. The first democratic elections held in
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<sup>5</sup> Prepared by Marcelo Dinenzon, under the supervision of Stephanie Medina Cas.

	<p>2015 marked the country's transition from military rule to a more pluralistic style of government. At the same time, measures taken to liberalize the economy helped boost growth, which averaged 7 percent between 2011-2019 and reduced poverty. However, in February 2021, political events ended civilian rule and reimposed military rule.</p> <p>Prior to the coup, the COVID-19 pandemic had already affected some of Myanmar's key economic engines, including exports of goods, tourism, remittances, and domestic demand. With the economy already slowing due to the COVID-19 pandemic in FY2019/20, a more intense second wave hit Myanmar hard, inflicting large economic and social costs and straining the frail healthcare system. The IMF's RCF/RFI disbursement/purchase in June 2020 had helped support the authorities' policy response, limited monetary financing within a target, catalyzed financing from external partners, and allowed Myanmar to avail of the G20 Debt Service Suspension Initiative (DSSI). However, after the army seized power in early 2021, the economy collapsed causing a humanitarian crisis.</p> <p>Prior to the Fund's engagement in 2012, Myanmar did not produce reliable macroeconomic statistics. Between 2012-2021, the Fund assisted Myanmar with building its statistical operations from scratch by providing CD through long-term experts specializing in external sector statistics and government finance statistics based in the IMF Capacity Development Office in Thailand (CDOT), some HQ-based missions, and deployment of short-term experts. Noticeable improvements in fiscal and external sector statistics had resulted from extensive TA and training delivered through CDOT. The IMF had closely coordinated its statistical CD delivery with the World Bank and the Asian Development Bank (ADB) to ensure complementarity of efforts. The Fund had focused on building fiscal and monetary institutions, strengthening the legal framework, improving external sector statistics, and price indicators. The ADB, on the other hand, had assisted the authorities with national accounts compilation, and the World Bank had focused on supporting overall statistical strategy development, institutional reform, and poverty monitoring. Up until 2021, Myanmar was the highest recipient of IMF's statistical CD, but given the lack of consensus in the international community on the recognition of the ruling order, the Fund has suspended its engagement with the country, including all CD activities.</p>
<b>Outcomes:</b>	<p>External sector statistics compilation system had been revamped with significant coverage improvements. Quarterly balance of payments and international investment position statistics are compiled in line with international standards and are reported to the IMF with improved timeliness. Extensive work on data sources has resulted in improved estimates of several balance of payments and international investment position components. Scope and accuracy of the International Transactions Reporting system were significantly improved with enhanced validation procedures. For instance, establishing banking system data collection for the balance of payments and administrative data collection for direct investments are recent achievements. The coverage of data on FDI significantly improved through annual direct investment surveys conducted by the Directorate of Investment and Company Administration (DICA), and the 2020 DI survey was successfully conducted with the help of remote</p>

	<p>CD. Also, the country started to report FDI data by partner economy to the IMF's Coordinated Direct Investment Survey (CDIS). These new data improved the coverage of balance of payments, international investment position, and external debt statistics, which are produced but have not been disseminated yet.</p> <p>Fiscal statistics data were used for IMF surveillance and disseminated domestically and published in the Government Finance Statistics Yearbook. Prior to the IMF's CD interventions in 2012, Myanmar did not produce any reliable fiscal data, which severely constrained economic monitoring and decision making. There had been steady progress with annual government finance statistics and public sector coverage being produced and reported to the Fund for surveillance. More recently, with assistance from CDOT based government finance statistics long-term experts, quarterly government finance statistics for the consolidated nonfinancial public sector for FY2019/20 and quarterly budget monitoring reports for Covid-19 related expenditures were published on the Ministry of Planning, Finance and Investment (MOPFI) website starting in September 2020, in compliance with e-GDDS and the RCF data reporting requirements. Draft data on public sector debt statistics for 2017-2020 were compiled by the MOPFI, were reported to the Fund, but have not been published.</p> <p>Progress had been made on national accounts. With support of the ADB, Myanmar had to build its national accounts statistical operations from scratch. The national accounts follow the 1968 SNA. National accounts data are only available on an annual basis up to FY2017/2018. Compilation of quarterly data starts in FY2018/19 at a new base year (2015/2016). GDP estimates are compiled at current and constant prices by production and expenditure approaches; however significant discrepancies exist between the two approaches. The quality of GDP is hampered by inadequate source data and the lack of relevant price indexes. Also, national accounts data do not completely account for the informal sector. TA was being provided by the ADB to improve the national accounts through the compilation of supply and use tables and to implement the 2008 SNA. The IMF had provided limited TA on quarterly national account statistics, moving to the 2008 SNA methodology, and measures of non-renewable natural resources in national accounts. IMF TA had been coordinated with ADB assistance.</p> <p>IMF CD on price statistics had been helpful. TA has helped Myanmar develop a CPI in line with international standards and best practices. The CPI, published in 2016, is based on a household survey (2012) and has comprehensive coverage, including the whole country (since 2016) and about 70 percent more products and services than the previous version of the index. STA has provided TA to develop a new PPI in 2018, but these data are not yet released. A new Household Income and Expenditure Survey was conducted in 2017. Results from this survey were to be used to update the CPI basket and weights.</p> <p>Good improvements had been made in the areas of monetary and financial statistics. The Central Bank of Myanmar (CBM) compiles a monetary survey, covering the central bank and all commercial banks, that is in line with international standards and best practices. Reporting of monetary data in the Standardized Report Forms (SRFs), which accord with the Monetary and Financial Statistics Manual classification principles, was</p>
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	<p>established in January 2012. There are still some shortcomings in coverage of, for example, recently established deposit-taking microfinance institutions. The authorities disseminated quarterly financial soundness indicators in March 2017, with data from the beginning of 2016. The CBM reports nine core and four encouraged financial soundness indicators for deposit takers, with a lag of more than one quarter, for posting on the IMF's financial soundness indicators website. However, the reporting of one core and three encouraged financial soundness indicators was discontinued since 2016.</p> <p>In 2019, Myanmar implemented the e-GDDS and launched a NSDP utilizing the SDMX standard. The NSDP also contains links to statistics published by the CBM.</p>
<p><b>Lessons Learned:</b></p>	<p>Extensive hands-on TA, combined more recently with virtual CD, had produced tangible outcomes in Myanmar but maintaining statistical advances will be challenging in a fragile environment. Improving the quality of statistics is a continuous task and requires long-term and sustained engagement. The achievements in the Myanmar CD program reflected a realistic degree of commitment and willingness to learn from international good practices. Ownership by the authorities had ensured more sustainable results, even if the pace of implementing recommendation had been slow at times. Remote TA missions and workshops had continued to support the compilation of macroeconomic statistics and strengthen the capacity staff who are engaged in data compilation. The remote engagement on a peripatetic basis had worked well because of the good relationship between the authorities and the CDOT-based long-term experts. Despite the challenges of connectivity, CD delivery continued relatively well.</p> <p>CD had been aligned to the IMF's surveillance priorities and financing instruments. Integration of CD activities with surveillance priorities is more likely to deliver tangible outcomes and to gain the support of the country. The CDOT experts in government finance statistics, public sector debt statistics, external sector statistics, and public financial management (PFM) had been actively engaged with the data requirements of IMF staff for surveillance and program monitoring, including, for instance, the coordinated work with the area-department team to update the external sector outlook to address the requests for disbursement/purchase under the RCF/RFI. The participation of Myanmar in the blend RCF/RFI financing instruments had been a motivating factor fueling progress with statistics.</p> <p>Resource constraints and weak inter-agency cooperation have had an impact on further progress. While inter-agency collaboration between external sector statistics compiling agency and other government agencies serving as data sources has gradually improved, limited staff resources dedicated to statistical work has hindered CD traction. For government finance statistics, the weak coordination between the budget and treasury departments was a risk factor for progress in the compilation of comprehensive (quarterly and annual) government finance and public sector debt statistics, and in the reconciliation of financing data. Resource constraints at the Planning Department and the Central Statistical Organization, along with the lack of inter-agency coordination, limited the conduct of surveys and other data collections for national accounts.</p>

	<p>Inter-departmental IMF coordination, along with planning with other CD providers, had supported CD results. Inter-departmental coordination at the IMF by the CDOT long-term experts with the resident MCM's resident foreign exchange operations advisor and with the CDOT FAD's PFM regional advisors had delivered successful results for balance of payments and public sector external debt statistics, while also improving fiscal reporting systems and strengthening capacity. The synergies between government finance statistics and PFM CD activities had accelerated the development of tracking systems for the COVID-19 fiscal support measures to enable monitoring under the IMF financing instruments. In parallel, the coordination of IMF CD with the ADB on national accounts and prices had proved to be an efficient use of resources and helped avoid overburdening CD recipients in Myanmar.</p>
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