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MEETING**

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January 31, 2022

To: Members of the Executive Board

From: The Secretary

Subject: **Tenth Review of the International Monetary Fund's Data Standards Initiatives**

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Questions:	Ms. Tumbarello, STA (ext. 34395) Ms. Lusinyan, STA (ext. 34898) Mr. Gonzalez-Garcia, STA (ext. 36310)



January 31, 2022

TENTH REVIEW OF THE INTERNATIONAL MONETARY FUND'S DATA STANDARDS INITIATIVES

EXECUTIVE SUMMARY

The Data Standards Initiatives enhance data transparency as a global public good.

This policy framework seeks to promote data transparency by encouraging countries' voluntary publication of key macroeconomic and financial data subject to commitments relating to coverage, periodicity, and timeliness. Disciplined publication—involving a pre-announced release calendar—is intended to inform the public, markets, and the international community in a timely manner, thereby facilitating early resolution of macroeconomic imbalances and market disequilibria. The three tiers of the framework—the enhanced General Data Dissemination System (e-GDDS), Special Data Dissemination Standard (SDDS), and SDDS Plus—are tailored to countries' capacity, with the framework periodically evaluated by the IMF Executive Board.

Achievements by Fund members in implementing the standards have been remarkable, and the framework has served the membership well. Nonetheless, the economic context of the Tenth Review is challenging, given the effects of the pandemic, which has in turn intensified calls for greater data transparency, especially in the fiscal area. New policy priorities at the national and global levels require novel data to inform policymaking and multilateral action to enhance economic resilience. At the same time, the pandemic has stretched countries' resources, calling for a more guarded approach in considering changes to the framework.

Against this backdrop, staff proposes parsimoniously expanding encouraged data categories, without introducing any new requirement, and intends to continue to foster modernization of data publication technology. The new encouraged data categories would cover selected aspects related to public debt, macro-financial analysis, foreign exchange intervention, climate change, and gender. To enhance data sharing across countries and institutions, SDDS countries will be encouraged to modernize dissemination technology by adopting the Statistical Data and Metadata eXchange.

Internal and external consultation. With the Fund's 2018 [Overarching Strategy on Data and Statistics](#) calling for a greater integration of the Fund's data policy frameworks, the proposals in this Review are broadly aligned with those in the forthcoming *2022 Review of Data Provision to the Fund for Surveillance Purposes* and the surveillance priorities identified in the *2021 Comprehensive Surveillance Review*. The views and proposals in the paper have benefited from extensive consultation with members, market participants, and international partners.

Approved By
J.R. Rosales

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Glossary

AfDB	African Development Bank
BIS	Bank for International Settlements
CD	Capacity Development
CDIS	Coordinated Direct Investment Survey
CG	Central Government
CPIS	Coordinated Portfolio Investment Survey
CSR	Comprehensive Surveillance Review
DPF	Data Provision to the Fund for Surveillance Purposes
DSBB	Dissemination Standards Bulletin Board
DGI	Data Gaps Initiative
ECB	European Central Bank
e-GDDS	Enhanced General Data Dissemination System
EMDEs	Emerging Market and Developing Economies
FCS	Fragile and Conflict-Affected States
FSAP	Financial Sector Assessment Program
FSB	Financial Stability Board
FSIs	Financial Soundness Indicators
FX	Foreign Exchange
FXI	Foreign Exchange Intervention
GG	General Government
G20	Group of Twenty
IEO	Independent Evaluation Office
IIP	International Investment Position
LICs	Low-Income Countries
NSO	National Statistical Office
NSDP	National Summary Data Page
OECD	Organization for Economic Co-Operation and Development
ODP	Open Data Platform
SDDS	Special Data Dissemination Standard
SDMX	Statistical Data and Metadata eXchange
SEEA-CF	System of Environmental-Economic Accounting - Central Framework
SIFS	Systemically Important Financial Sectors
TCIRS	Table of Common Indicators Required for Surveillance

INTRODUCTION AND MAIN MESSAGES

Nothing would help improve standards more than if countries that met higher standards were rewarded with lower borrowing costs.

Stanley Fischer (2002)

1. The framework. The Data Standards Initiatives aim at promoting data transparency as a global public good. The IMF introduced the data dissemination standards, as a policy framework, after the 1994–95 Mexican financial crisis to promote data transparency by encouraging timely publication of key macroeconomic and financial data. The purpose was to prevent the hidden accumulation of imbalances and disequilibria while promoting improvement in countries' statistical systems—with an emphasis on enhancing institutional safeguards that ensure timely publication of key macroeconomic and financial data. As noted by Fischer (2002), data transparency promoted by the data standards initiatives has many benefits, such as helping make markets more efficient and improving policy. Transparency enables a better-informed debate by governments and stakeholders domestically and abroad about the assessment, formulation, and results of policymaking. It highlights the trade-offs and risks that feed into decision-making, thereby lending credibility to the authorities' policies. In addition to fostering accountability with domestic stakeholders, increased dissemination helps mitigate risks perceived by domestic and international investors.

2. Achievements since the Ninth Review. With nearly universal voluntary participation by Fund members (Figure 1 and Table 1), the Data Standards Initiatives continue to exemplify strong voluntary multilateral action. Transformational progress since the Ninth Review in 2015 (IMF 2015) has reshaped the landscape by

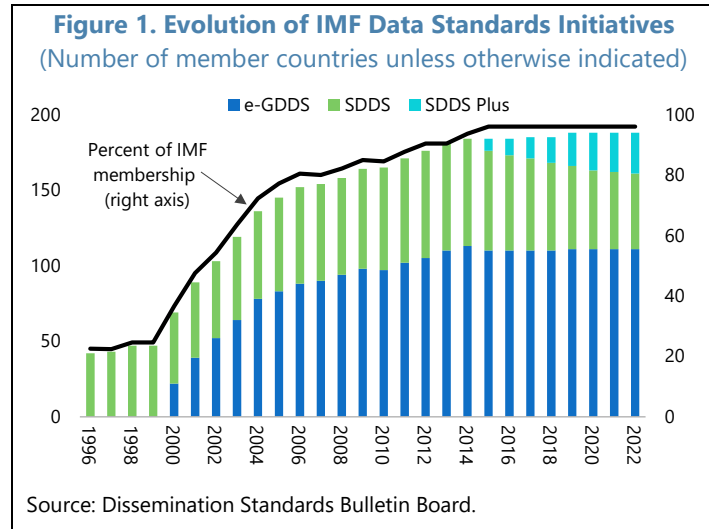


Table 1. Achievements Since the 2015 Ninth Review
(Number of economies)

	Ninth Review May 2015	Jan 2022
GDDS/e-GDDS participants	113	111
with NSDP 1/	n.a.	68
without NSDP 1/	113	43
SDDS subscribers	63	50
SDDS Plus adherents	8	27
Total 2/	184	188
<i>Memorandum item:</i>		
Fund members outside the Initiatives	8	7

Source: Dissemination Standards Bulletin Board.

1/ Countries with a National Summary Data Page (NSDP) publish data under the Initiatives, while those without an NSDP do not.

2/ As of January 2022, the total includes 183 member countries and five jurisdictions (part of Fund members and territories); Equatorial Guinea, Lao P.D.R., and Uzbekistan joined the Data Standards Initiatives after 2015; IMF member countries not yet participating in the Initiatives are Andorra and Nauru (new members), Eritrea, New Zealand, Somalia, South Sudan, and Turkmenistan.

introducing a new first tier in the framework—the *enhanced* General Data Dissemination System (e-GDDS).¹ This change sparked a transition across tiers, bringing forth an increase in the volume of data published, and increasing resources allocated to statistics. This transformation involved all regions of the world and nearly half of the Fund membership (Table 2). In particular, since 2015, over half the countries participating in the first tier have implemented the enhancements to the GDDS. This involved moving from publishing only metadata to publishing data and adopting standardized dissemination practices—focused on the publication of *data* essential for surveillance—on a machine-readable National Summary Data Page (NSDP). Six countries have advanced from the e-GDDS to the Special Data Dissemination System (SDDS). Nineteen countries with advanced statistical systems moved swiftly to adhere to the most demanding standard—the SDDS Plus, resulting in a three-fold increase in the number of SDDS Plus adherents as of January 2022, including half of the 32 jurisdictions with systemically important financial sectors (SIFS) subject to five-year mandatory Financial Sector Assessments.

3. Context. The economic context in which the current Review takes place is challenging, including because of the effects of the pandemic on the global economy, climate change, and the digital revolution—all requiring more and novel data for informed policymaking. The pandemic has worsened the public finances and sharply narrowed fiscal and financial buffers, creating macroeconomic imbalances in key markets in many countries. The worsening public debt situation has in turn intensified calls for greater debt transparency and publishing more comprehensive fiscal data. The pandemic has also highlighted the critical role of timely data for monitoring economic developments and encouraging the use of alternative data sources and innovative solutions to data and statistical challenges. At the same time, the pandemic has strained countries’ resources, including the agencies in charge of implementing the data dissemination standards, calling for a more guarded approach when considering possible changes to the framework.²

4. Against this backdrop, the Tenth Review focuses on:

- the evolution and effectiveness of the Data Standards Initiatives since inception in 1996;
- the transformational progress and accomplishments, since the 2015 Ninth Review, in each of the three tiers of the Data Standards Initiatives, focusing on their effectiveness in enabling a timely flow of essential data to market participants to facilitate the early resolution of imbalances;
- the impact of the pandemic on publication performance, with the observed resilience signaling strong country ownership;

¹ The tiers are tailored to countries’ statistical capacity and are progressively more stringent in terms of data and dissemination requirements, which are encouraged for the countries in the first tier and mandatory to observe for the countries in the second and third tiers.

² The Eleventh Periodic Monitoring Report (IMF 2021c) envisages a few actions on data standards: encouraging countries to publish a few additional indicators, including those to advance such important new policy requirements as debt transparency. The Report also envisages that the Tenth Review would make proposals to further align publication capabilities across the tiers, including work with SDDS subscribers to increase the adoption of the Statistical Data and Metadata eXchange (SDMX) technology.

- strengthening monitoring of the e-GDDS, including by asking the authorities to certify every two years data dissemination practices, and encouraging SDDS countries to modernize data publication technology;
- updating the framework, in light of emerging global data priorities, through a parsimonious expansion of encouraged data categories. In line with the priority areas outlined in the Comprehensive Surveillance Review (CSR; IMF 2021a) and the forthcoming 2022 Review of the Data Provision to the Fund for Surveillance Purposes (DPF), the new encouraged data categories cover public debt, macro-financial conditions, foreign exchange intervention (FXI), and indicators related to climate change and gender;
- introducing a clause of “force majeure” to permit suspension of the activation of nonobservance procedures when unforeseen circumstances beyond the authorities’ control materialize (which is reflected in the amendments to the SDDS Decision; see Proposed Decisions); and
- potential scope for future reviews to remain aligned with emerging medium-term surveillance priorities.

5. The Tenth Review benefited from the staff’s broad outreach to and consultations with the membership and other stakeholders (Annex II). The latter included the private sector and other international financial institutions.

DATA STANDARDS INITIATIVES: 25 YEARS OF MULTILATERAL ACTION

6. The data dissemination standards were launched in the 1990s. Upon realization that data deficiencies and lack of transparency played a role in the financial crisis in the mid-1990s, in October 1995, the Interim Committee of the IMF Board of Governors recommended a new standard to guide members in disseminating economic and financial data to the public. The SDDS was approved by the IMF Executive Board in March 1996 and, later that year, an electronic bulletin board—the [Dissemination Standards Bulletin Board \(DSBB\)](#)—was established to provide public access to information on countries’ dissemination practices and data.

7. In December 1997, the IMF Executive Board approved the GDDS as a general framework to guide countries in developing sound systems to support eventual dissemination of data to the public. Participation required countries to appoint a national coordinator, prepare metadata (methodological notes) describing current practices about data production and dissemination, develop plans for improvement, and identify needs for assistance in implementing these plans. The GDDS focused on developing a full range of economic and financial data but did not require GDDS participants to disseminate the data.

**Table 2. Membership of the IMF Data Standards Initiatives:
Accomplishments Since the 2015 Ninth Review 1/**

e-GDDS Participants		SDDS Subscribers	SDDS Plus Adherents	Outside Data Standards Initiatives 3/
With NSDP	Without NSDP 2/			
AFR	AFR	AFR	APD	AFR
1 Angola	1 Burundi*	1 Mauritius*	1 Japan	1 Eritrea
2 Benin	2 Central African Republic*	2 Senegal	EUR	2 South Sudan
3 Botswana	3 Chad*	3 Seychelles*	2 Austria	APD
4 Burkina Faso	4 Comoros*	4 South Africa	3 Bulgaria	3 Nauru
5 Cabo Verde*	5 Congo, Dem. Rep. of*	APD	4 Czech Republic	4 New Zealand
6 Cameroon	6 Congo, Republic of*	5 Australia	5 Denmark	EUR
7 Côte d'Ivoire*	7 Guinea-Bissau*	6 China	6 Estonia	5 Andorra
8 Equatorial Guinea	8 Liberia*	7 Hong Kong SAR	7 Finland	MCD
9 Eswatini, Kingdom of*	9 Mali*	8 India	8 France	6 Somalia
10 Ethiopia	10 Niger	9 Indonesia	9 Germany	7 Turkmenistan
11 Gabon	11 Zimbabwe*	10 Korea, Republic of	10 Israel	
12 Gambia, The*	APD	11 Malaysia	11 Italy	
13 Ghana	12 Cook Islands	12 Mongolia	12 Latvia	
14 Guinea*	13 Kiribati*	13 Philippines	13 Lithuania	
15 Kenya	14 Macao SAR	14 Singapore	14 Luxembourg	
16 Lesotho	15 Marshall Islands, Republic of*	15 Sri Lanka	15 Netherlands, Kingdom of the	
17 Madagascar*	16 Palau*	16 Thailand	16 North Macedonia	
18 Malawi*	17 Papua New Guinea*	EUR	17 Portugal	
19 Mozambique	18 Solomon Islands*	17 Armenia, Republic of	18 Romania	
20 Namibia	19 Tonga*	18 Belarus	19 Slovak Republic	
21 Nigeria	20 Tuvalu*	19 Belgium	20 Slovenia	
22 Rwanda	MCD	20 Croatia	21 Spain	
23 São Tomé and Príncipe*	21 Afghanistan, Islamic Rep. of*	21 Cyprus	22 Sweden	
24 Sierra Leone*	22 Algeria	22 Georgia	23 Switzerland	
25 Tanzania	23 Bahrain, Kingdom of	23 Greece	WHD	
26 Togo*	24 Djibouti*	24 Hungary	24 Brazil	
27 Uganda	25 Iran, Islamic Republic of	25 Iceland	25 Canada	
28 Zambia	26 Iraq*	26 Ireland	26 Chile	
APD	27 Lebanon*	27 Malta	27 United States	
29 Bangladesh	28 Libya*	28 Moldova		
30 Bhutan*	29 Sudan*	29 Morocco		
31 Brunei Darussalam	30 Syrian Arab Republic*	30 Norway		
32 Cambodia	31 Yemen, Republic of*	31 Poland		
33 Fiji*	WHD	32 Russian Federation		
34 Lao P.D.R	32 Antigua and Barbuda*	33 Turkey		
35 Maldives*	33 Aruba, Kingdom of the Netherlands	34 Ukraine		
36 Micronesia, Fed. States of*	34 Belize*	35 United Kingdom		
37 Myanmar*	35 Bolivia	MCD		
38 Nepal	36 Dominica*	36 Egypt		
39 Samoa*	37 Grenada*	37 Jordan		
40 Timor-Leste *	38 Haiti*	38 Kazakhstan		
41 Vanuatu*	39 Nicaragua	39 Kyrgyz Republic		
42 Vietnam	40 St. Kitts and Nevis*	40 Saudi Arabia		
EUR	41 St. Lucia*	41 Tunisia		
43 Albania	42 St. Vincent and the Grenadines*	42 West Bank and Gaza*		
44 Bosnia and Herzegovina	43 Venezuela, Rep. Bol de	WHD		
45 Kosovo, Republic of*		43 Argentina		
46 Montenegro*		44 Colombia		
47 San Marino		45 Costa Rica		
48 Serbia, Republic of		46 Ecuador		
MCD		47 El Salvador		
49 Azerbaijan, Republic of		48 Mexico		
50 Kuwait		49 Peru		
51 Mauritania		50 Uruguay		
52 Oman				
53 Pakistan				
54 Qatar				
55 Tajikistan*				
56 United Arab Emirates				
57 Uzbekistan				
WHD				
58 Bahamas, The*				
59 Barbados*				
60 Dominican Republic				
61 Guatemala				
62 Guyana*				
63 Honduras				
64 Jamaica				
65 Panama				
66 Paraguay				
67 Suriname*				
68 Trinidad and Tobago*				

Source: Dissemination Standards Bulletin Board.

1/ **Bold** indicates improvement since 2015, as of January 2022; (*) indicates FCS and small states. 2/ Comoros and Palau are in the process of implementing the e-GDDS with NSDP. 3/ Andorra and New Zealand are in the process of participating/subscribing in/to the e-GDDS and SDDS, respectively; work is also underway to support Somalia participate in the e-GDDS.

Box 1. The 2018 Overarching Strategy on Data and Statistics, Data Standards Initiatives, and Synergies with Other Frameworks

This Review of the Data Standards Initiatives is integral to the implementation of the [Overarching Strategy on Data and Statistics at the Fund in the Digital Age](#) (IMF 2018), prepared in response to the Independent Evaluation Office (IEO) report (IMF 2016a) and implementation plan (IMF 2016b). The strategy called for an integrated approach to the Fund's data activities and frameworks, including by seeking opportunities to further align data dissemination standards with surveillance priorities, data provision to the Fund, and capacity development. The strategy also set a long-term vision for a cloud-based network of country websites (NSDPs) publishing data essential for surveillance under the Data Standards Initiatives (the *global data commons*) to inform global markets and improve data sharing.

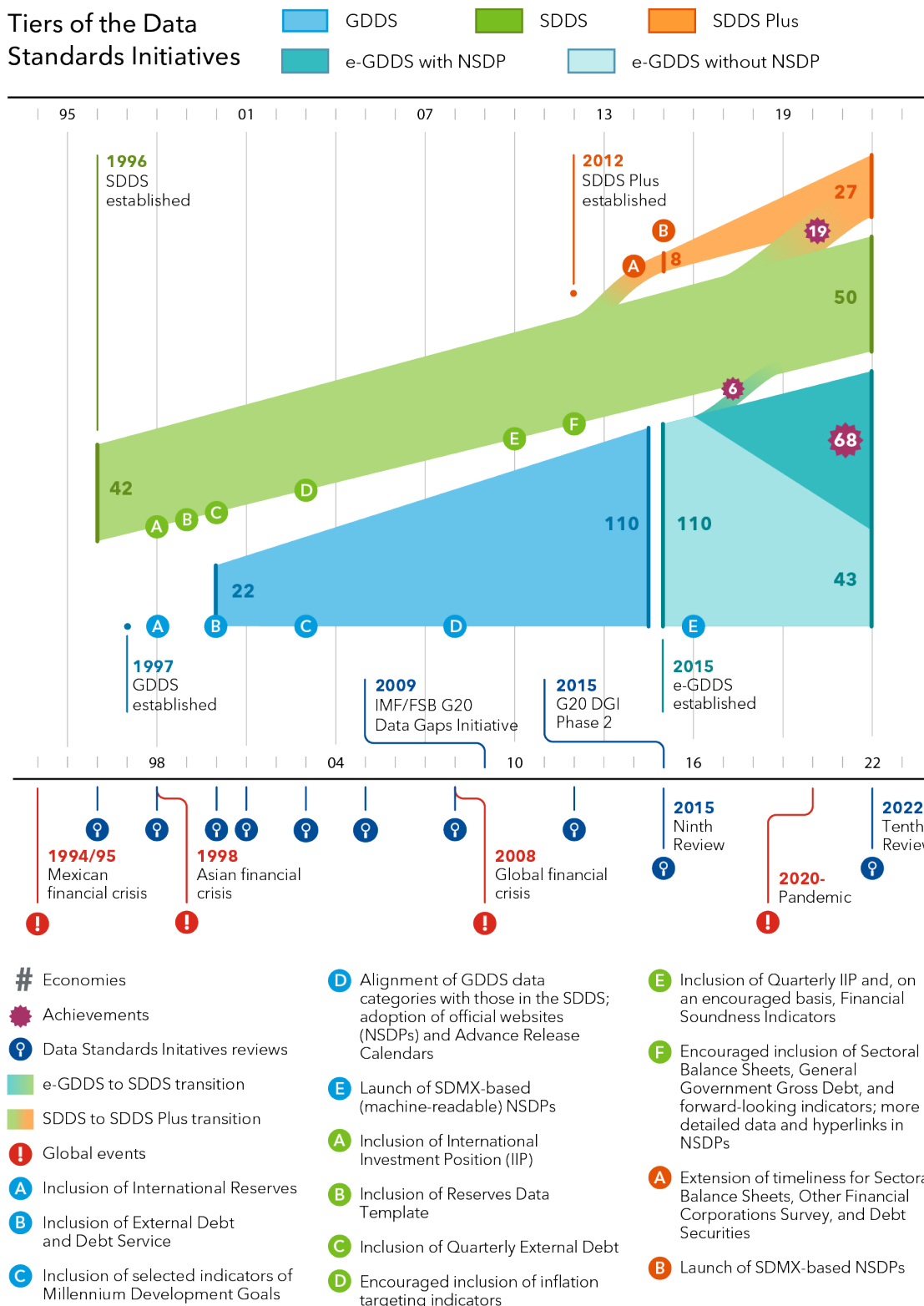
The Data Standards Initiatives differ from other data policy frameworks but shares important linkages. Unlike the member countries' obligatory provision of data to the Fund for surveillance, the data dissemination framework serves to directly inform markets and the public, based on the countries' voluntary participation in the framework. The Data Standards Initiatives, however, leverage the CSR as well as the findings of the 2021 Financial Sector Assessment Program Review (IMF 2021b) and the proposals under the 2022 DPF Review, particularly when considering possible new data needs. The Initiatives also provide a frame of reference for reasonable expectations on timeliness and periodicity of data provided to the Fund for surveillance purposes since the DPF does not mandate minimum timeliness or maximum periodicity. Annex I, Table A.1 summarizes the linkages between the DPF and Data Standards Initiatives in terms of the current and proposed data categories under these frameworks.

Important synergies and complementarities between the Data Standards Initiatives and other policy frameworks exist in the area of public debt data. Enhancing public debt transparency—one of the pillars of the joint IMF-World Bank Multipronged Approach for Addressing Debt Vulnerabilities—is the focus of the ongoing work on debt transparency. Pursuing the same overall objective, the data dissemination standards apply to official debt liabilities, while the debt transparency workstream (also, the Multipronged Approach) covers both debtor and creditor (including private sector) data and their reconciliation. The outcomes of the debt transparency work should inform future updates of the data dissemination standards. The need for more comprehensive, detailed, and timely debt data is also recognized in other policy frameworks, including the 2017 debt sustainability framework for low-income countries (LIC-DSF), the 2020 policy on public debt limits, and the 2021 debt sustainability assessment for market access countries (MAC-DSA).

8. Enhancements to the Data Standards Initiatives over the past 25 years have ensured that the framework remains agile and continues to adapt to evolving data needs in the globalized economy (Figure 2). In particular:

- In response to the Asian financial crisis of 1997–98, SDDS enhancements incorporated data on countries' foreign currency liquidity and external debt to allow for a better assessment of external vulnerabilities.
- The 2008 global financial crisis prompted further modifications of the SDDS framework. These included adding seven financial soundness indicators (FSIs) as encouraged data categories; requiring a change in the frequency of reporting international investment position (IIP) data from annual to quarterly; and adding a simplified table on external debt by remaining maturity as an encouraged category. Data quality issues were addressed with the requirement that SDDS metadata should indicate where statistical practices deviate from internationally accepted

Figure 2. IMF Data Standards Initiatives: Milestones and Achievements



Source: Fund staff.

methodologies and by encouraging subscribers to undertake and publish quality assessments using a recognized data quality assessment tool at intervals of no longer than 7–10 years.

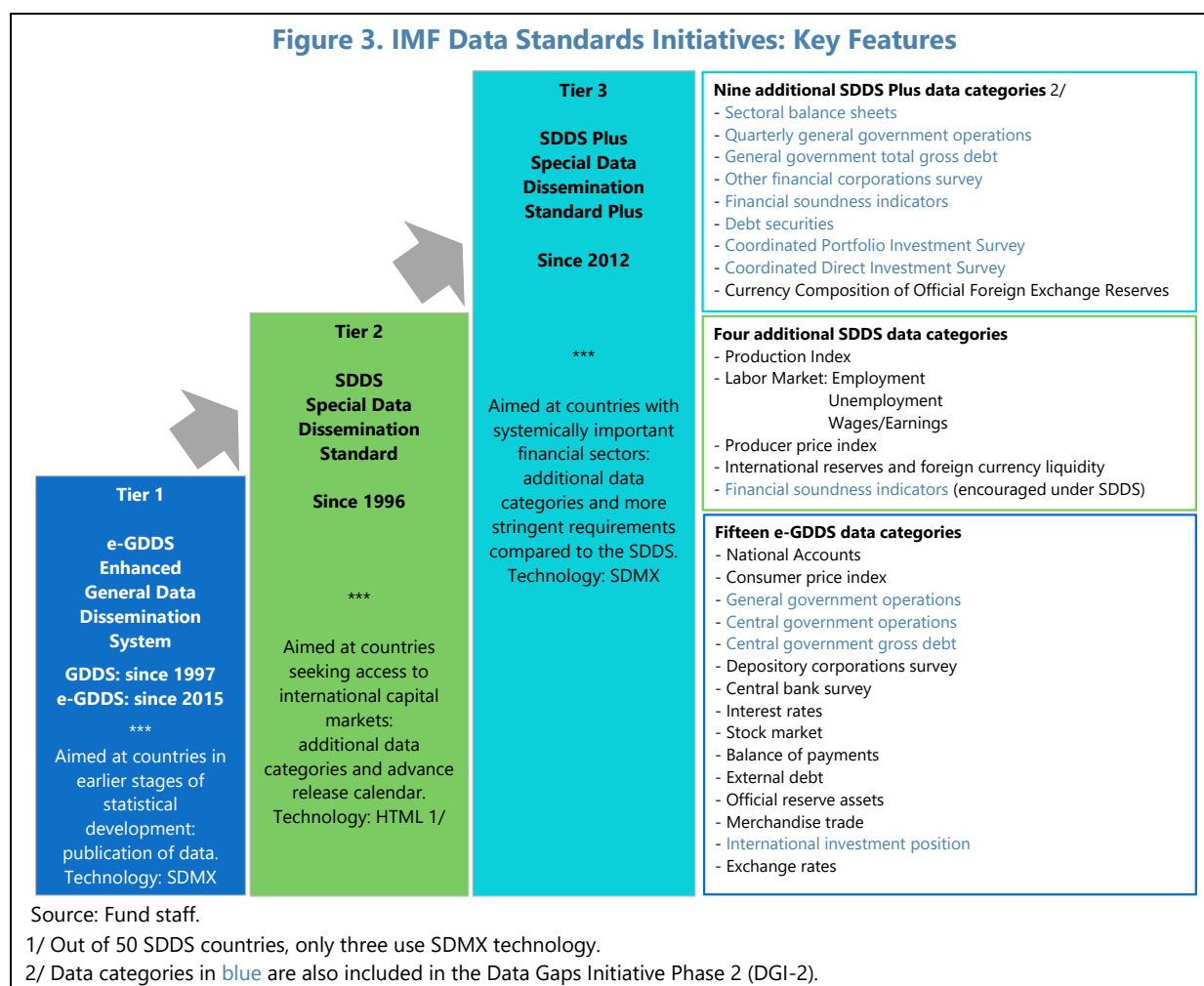
- The 2008 global financial crisis led to further reassessment of the scope of economic and financial data disseminated to the public. The G20 Data Gaps Initiative (DGI) launched in 2009 at the request of the G20 by the IMF and the Financial Stability Board aimed to help close data gaps identified during the global financial crisis. The DGI recommendations were subsequently aligned in 2012 with the requirements of the newly created SDDS Plus, the highest and most demanding tier. Aimed at supporting domestic and global financial stability through data dissemination, the SDDS Plus is intended mainly for countries that play a leading role in international capital markets and have institutions that are interconnected through channels such as interbank lending, securities, repurchase agreements, and derivatives contracts. The SDDS Plus goes beyond the SDDS focus on accessing international capital markets to emphasize systemically important financial sectors that are integral to the working of the international monetary system. In February 2012, in the context of the Eighth Review, the IMF Executive Board also approved further changes to the SDDS.
- The framework was further modified by the Ninth Review concluded in May 2015. At that time, an ambitious enhancement to the GDDS envisioned a transition from publication of only metadata and plans for statistical development to dissemination of actual data through a modern platform permitting machine-to-machine access (using SDMX technology).

9. The three tiers are progressively more stringent in terms of required/encouraged data and dissemination standards (Figure 3 and Annex I, Table A.2). The framework features 15 encouraged data categories under the e-GDDS and expands to 19 required categories under the SDDS, and to 28 required categories under the SDDS Plus. Depending on the level of statistical capacity, countries decide to participate in one of the three tiers of the framework, publishing data with encouraged or required periodicity and timeliness.

10. The principles underpinning the framework include:

- *voluntary participation*: countries make voluntary commitments to join and comply with the dissemination standards;
- *flexibility*: recognizing different levels of statistical development, not requiring usage of the latest methodology, and allowing for some flexibility options for periodicity and timeliness and a transition period to comply with requirements while also differentiating between required and encouraged data categories;
- *agility*: the framework has evolved in response to, and has adapted to, new data needs;
- *synergies* with capacity development (CD) objectives and with other Fund frameworks (Box 1) as well as the DGI;
- *monitoring*: monthly monitoring by staff for each of the 77 SDDS and SDDS Plus countries/jurisdictions and 68 e-GDDS participants with NSDP (even if data is encouraged for the latter); and

- *incentive compatibility*: evidence shows that markets reward countries for data transparency through lower sovereign borrowing costs (Box 2), while participating in the standards is also associated with better governance (Box 3).

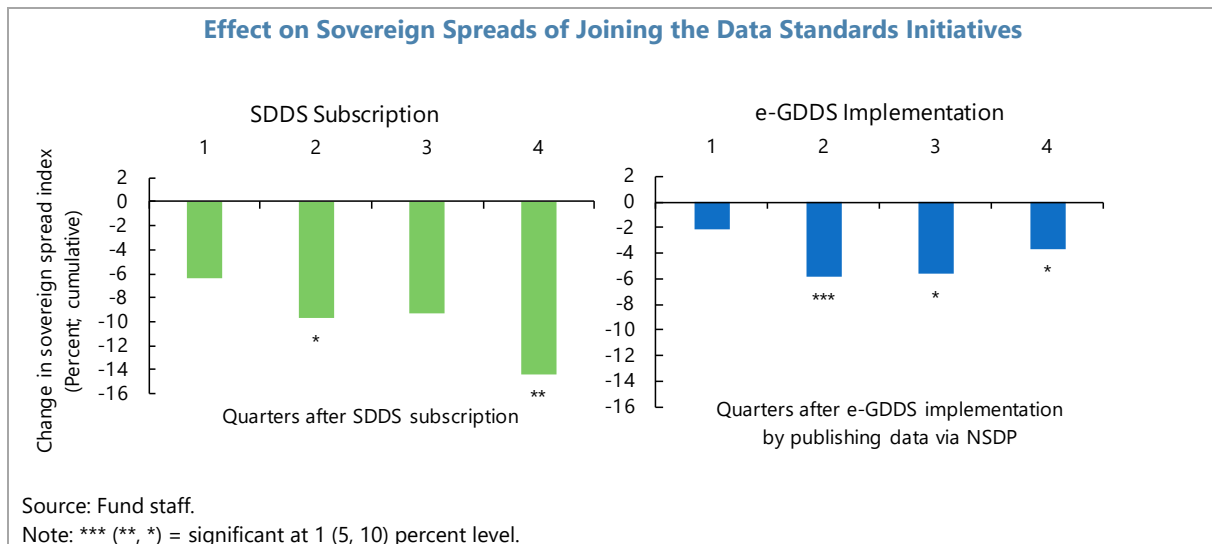


11. Overall, the success of the Data Standards Initiatives demonstrates the benefits of an inclusive framework—voluntary yet coupled with agreed procedures to ensure observance of the standards. The framework remains sufficiently flexible to embrace a diverse membership and agile in adapting to new circumstances, while accommodating synergies with other initiatives at a country and global levels. Implementation of the framework requires increasing collaboration across government agencies, which can lead to efficiency gains also in policymaking. Greater public scrutiny of data is expected to lead to improvements in the quality of data, thus fostering a virtuous cycle of statistical development. While not featuring any non-statistical requirements—for example, market access or hosting SIFS—to be part of a specific tier, participating countries have—in effect—considered the framework as affording a way to plan and progress towards improved statistical outcomes, including through stronger interagency collaboration.

Box 2. Data Standards Initiatives and Sovereign External Borrowing Costs

The number of countries accessing global capital markets has been growing over time, especially lately in the low-interest and search-for-yield environment. Currently, in addition to most SDDS and SDDS Plus countries, more than 40 percent of the 111 e-GDDS countries participate in global sovereign bond markets (Annex I, Table A.3).

Research suggests that increased data transparency resulting from countries' participation in the Data Standards Initiatives is associated with better financing conditions as enhanced transparency helps reduce information asymmetries and thus risk premia (e.g., Choi and Hashimoto 2018). Building on this research, staff has analyzed the dynamic response of sovereign spreads to joining the Initiatives and launching NSDPs and evaluated for the first time the experience with the e-GDDS implementation.^{1/} In particular, the empirical model (based on Jordà 2005) estimates the cumulative response of sovereign spreads—measured by the JP Morgan EMBIG spread index—during the year following a country's joining the SDDS, GDDS (prior to 2015), and implementing e-GDDS by publishing data via the NSDP, while controlling for country-specific and global determinants of sovereign spreads. In line with the previous studies, the analysis does not cover the SDDS Plus countries whose sovereign bond performance would be expected to be less sensitive to the countries' adherence to the SDDS Plus.



The results show a significant reduction in sovereign spreads in the quarters following subscription to the SDDS or publication by GDDS countries of macroeconomic and financial data through an NSDP (the latter effect is in addition to a favorable impact on spreads from joining the GDDS in the first place).

The analysis also investigates the role of governance and the institutional environment in the relationship between increased transparency and sovereign financing conditions. When interacting the data standards participation variable with indicators of governance, it is found that countries with relatively weaker governance tend to benefit the most from implementing the e-GDDS or subscribing to the SDDS.

^{1/} Based on Gonzalez-Garcia (forthcoming).

Box 3. Data Transparency and Governance

Transparency is a core principle of good governance. Country efforts to implement the data dissemination standards also reflect the Fund's enhanced engagement with members on governance and addressing corruption vulnerabilities (IMF 2020a). Countries in the lower tiers of the Data Standards Initiatives tend to score lower in terms of governance, including measures of control of corruption (capturing perceptions of the extent to which public power is exercised for private gain) and regulatory quality (perceived ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development).

Staff analysis suggests that:

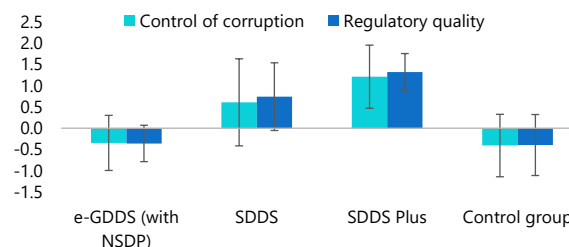
- data publication under the e-GDDS is associated with improved control of corruption;
- subscription to the SDDS is associated with better public resource management (proxied by the indicator of quality of budgetary and financial management); and
- adherence to the SDDS Plus is associated with improvements in regulatory quality.^{1/}

Since the governance indicators used in the analysis proxy different aspects of governance, the importance of these indicators would be expected to vary across country groups.

Publication of data under the internationally established umbrella of the e-GDDS would signal country's efforts toward greater data transparency, providing access for data scrutiny, which can improve public perceptions as regards corruption. But the first-order, marginal benefits for control of corruption may diminish for countries in the higher tiers of the standards, for which improvements in public finance management through more frequent, timely, and accurate data (SDDS) and in the overall quality of government regulation (SDDS Plus) gain importance in terms of governance outcomes.

^{1/} Based on Shirakawa and others (forthcoming).

Sample Means of Governance Perception Indicators (Index; higher values=better perception)



Sources: World Bank Worldwide Governance Indicators; and Fund staff calculations.

Note: Lines show standard errors; control group=countries outside the standards, historical GDDS without NSDP, and observations before countries joined the standards.

Governance and Participation in the Data Standards Initiatives

	Dependent Variable		
	Control of Corruption	Regulatory Quality	Quality of Budgetary and Financial Management
e-GDDS implementation	0.10***	0.01	0.02
SDDS subscription	0.06	0.06	0.19**
SDDS Plus adherence	-0.01	0.157**	
Real GDP per capita	0.26***	0.56***	0.50*
Trade openness	0.002	0.03	0.18*
IMF lending arrangement	0.01	0.07***	0.12**
Number of observations	3,351	3,349	937 1/
Number of countries	175	175	75
R2 overall	0.53	0.63	0.11

Source: Fund staff estimates.

Note: Estimates from fixed-effects panel data regressions of the dependent variable on dummy variables for e-GDDS implementation, SDDS subscription, and SDDS Plus adoption (=0/1 before/after the event), controlling for the effects of economic development, trade openness, presence of IMF lending arrangement, and country- and time-effects; robust standard errors; *** (**, *) = significant at 1 (5, 10) percent level. Control of corruption and Regulatory quality are indices from the World Bank Worldwide Governance Indicators database; Financial Management and Budgetary Quality is an index from the World Bank Country Policy and Institutional Assessment. 1/ The sample is limited to countries eligible for the International Development Association (IDA) financing because of the availability of the dependent variable.

TRANSFORMATIONAL PROGRESS AND ACHIEVEMENTS SINCE THE NINTH REVIEW

A. Data Dissemination Through the e-GDDS

12. Recognizing insufficient progress under the GDDS to disseminate data, the Ninth Review (IMF 2015) proposed bold enhancements (e-GDDS) to strengthen countries' incentives to disseminate data. These enhancements included:

- refocusing countries' efforts on publication of data essential for surveillance by the Fund and markets and in a standardized format—moving away from publication of only methodological notes (metadata)—while leveraging the Article IV consultation dialogue to support such improvement;
- using a phased approach to lock in progress toward SDDS subscription; and
- regularly monitoring progress under the e-GDDS, with an assessment to be presented at the time of the Tenth Review.

13. A key feature of the enhancements made to the GDDS is the vision of statistical development as a continuum, a path for the development of statistical capacity (Figure 4). This path involves a sequence of phases that bridge the gap between the initial state (GDDS), where only metadata and plans for development were published, and the last stage, which is the graduation to the SDDS. In addition to the three phases denoted by the thresholds shown in Figure 4, the framework recognizes that participants may not be ready for those thresholds at the time of committing to implement the e-GDDS. Thus, to provide a complete progression map, the initial steps (baseline levels) are included in the framework.³ Progression through the baselines and threshold levels allows countries to set a path for statistical development, including the planning and implementation of CD activities.

14. As proposed in the Ninth Review, the data categories encouraged under the e-GDDS (the e-GDDS framework does not prescribe requirements) have been aligned since 2015 with those in the Table of Common Indicators Required for Surveillance (TCIRS). The data in the TCIRS (16 categories) are a subset of those required under Article VIII, Section 5.⁴ The phased approach to the e-GDDS implementation allows countries to publish a subset of the data categories according to recommended coverage, periodicity, and timeliness in the initial phase.

³ Figure 4 shows the initial two steps (baselines) as envisaged in the [e-GDDS Guide](#) (¶4.2): “Baseline one: participants that disseminate less than 10 of the 15 data categories; and baseline two: participants that disseminate 10 to 14 of the 15 data categories, or disseminate 15 categories but do not meet the NSDP or an advance release calendar (ARC) requirements of the thresholds.”

⁴ Article VIII, Section 5 of the Fund's Articles of Agreement requires members to provide certain data to the Fund. The original data requirements were supplemented by Decision No. 13183-(04/10), as amended.

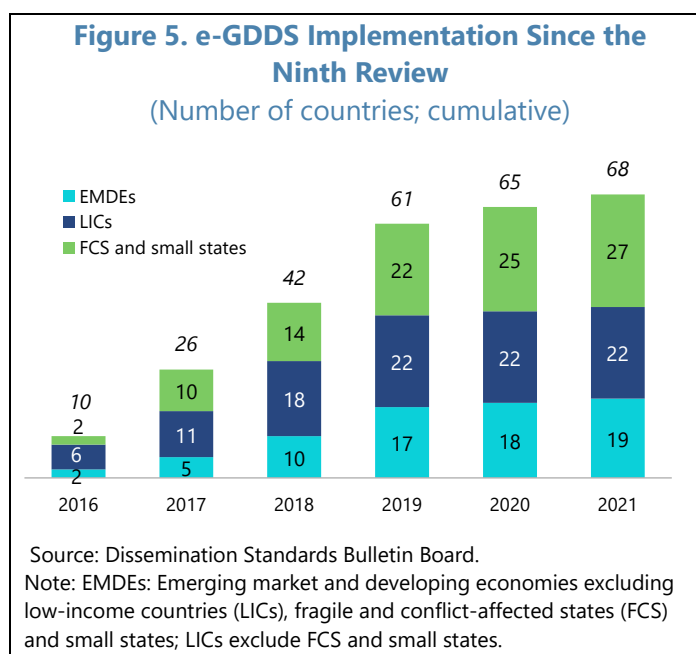
Figure 4. e-GDDS Framework

Prior to the 2015 Ninth Review		e-GDDS			
		Baselines	Threshold 1	Threshold 2	Threshold 3
No IMF monitoring		(*)			
Disseminate what:	Only metadata and plans for improvement	Baseline 1: Less than 10 of the 15 data categories Baseline 2: 10–14 data categories	15 data categories, some fall short of the recommended coverage/periodicity/timeliness, and metadata	All 15 data categories, as per recommended coverage/periodicity/timeliness, and metadata	All 15 data categories, as per coverage/periodicity/timeliness equal or better than recommended, and metadata
Disseminate how:	No National Summary Data Page (NSDP)	With or without NSDP	Launch NSDP with quarterly updating	Maintain NSDP with monthly updating	Maintain an up-to-date NSDP Observe an advance release calendar

SDDS

Source: [Enhanced General Data Dissemination System—Guide for Participants and Users](#).
(*) IMF monitoring starts once data is disseminated via the NSDP.

15. Countries have made impressive progress in publishing data through official websites—NSDPs (Figure 5). Since the implementation of the e-GDDS, participating countries have disseminated a total of nearly 1,200 data categories through NSDPs (each category including one or more time series), following the dissemination practices recommended under the e-GDDS.⁵ As of mid-January 2022, 68 of 111 e-GDDS participants published data through NSDPs, including 27 fragile and conflict-affected states and small states (Box 4). Implementation of the recommendations of the e-GDDS increased at a good pace until 2020 but has since slowed, owing to the COVID crisis. All 68 e-GDDS countries with an NSDP have adopted machine-readable (SDMX) technology, facilitating systematic monitoring by the Fund and timely data access by users directly and through intermediaries (e.g., Haver and other commercial data providers). Six e-GDDS participants have graduated to the SDDS following the Ninth Review: China, Mongolia, Saudi Arabia, Senegal, Seychelles, and Sri Lanka (Box 5). The e-GDDS implementation in Africa has benefited from the Fund’s collaboration with the African Development



⁵ Total number of data categories disseminated by 68 e-GDDS participants based on the Summary of Dissemination Practices available at the DSBB.

Bank (AfDB), which has funded the Open Data Platform (ODP) available to all African countries, intended to make it easier for countries to disseminate and for users to access data.⁶

Box 4. Implementing the Data Standards Initiatives in Fragile and Conflict-Affected States and Small States

The 2015 Ninth Review of the Data Standards Initiatives aimed at helping to address the challenges experienced by fragile and conflict-affected states (FCS) and small states. Implementing the Data Standards Initiatives in FCS supports the availability of macroeconomic and financial data essential for policymaking and analysis and helps promote data transparency, contributing to the accountability of government policies vis-à-vis the public, markets, and the international community.^{1/} This is critical given the focus of the Fund's enhanced engagement in FCS on governance, which is generally positively associated with transparency.

As noted earlier, the empirical relationship between countries' participation in the Data Standards Initiatives and sovereign borrowing costs suggests that countries with relatively weaker governance will benefit the most from projecting greater data transparency by joining the Initiatives (see Box 2). This reflects a signaling effect that could be stronger in the context of a relatively weaker institutional environment, such as that prevailing in FCS.

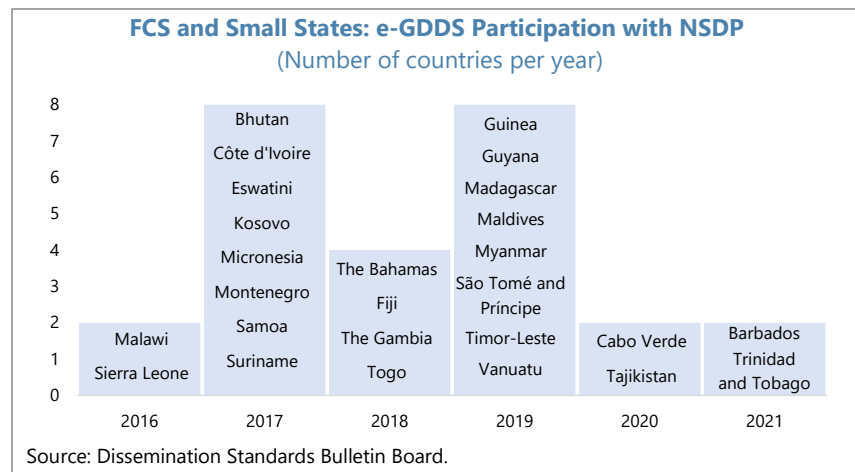
Since the introduction of the e-GDDS in 2015, 14 of 42 FCS have implemented the e-GDDS, publishing data through NSDPs. Twenty-four FCS participate in the e-GDDS but do not disseminate data (only metadata), and three FCS do not participate in the

Initiatives. West Bank and Gaza is the only FCS that has succeeded in subscribing to the SDDS.

Small states—the Pacific islands, the Caribbean, and other small states—have greatly participated in the implementation of the e-GDDS. The Fund has supported this effort by providing regional workshops and liaising with the regional partners.

While the pandemic has slowed the pace of implementation of the e-GDDS among FCS, staff engagement with nearly 10 FCS is ongoing. Much of this effort is supported by donor funding, including from the Data for Decisions Fund (D4D) and/or Japan Administered Accounts (JSA). To target those FCS that have not yet implemented the e-GDDS and are not yet publishing data through NSDPs, STA launched in 2020 a Japan-funded project to improve data dissemination globally, including in 22 eligible FCS.

^{1/} See also Medina Cas and others (forthcoming).



⁶ The ODP program was launched by the AfDB in 2013 as part of its "Africa Information Highway" initiative aimed at improving data management and dissemination in Africa and scaling up the availability of quality data to foster evidence-based decision-making, public accountability, and good governance. Twenty-nine out of 68 e-GDDS countries with NSDPs disseminate data via the ODP.

16. A system to monitor e-GDDS implementation is in place. The Ninth Review and the [e-GDDS Guide](#) stipulate the preparation of annual reports and semiannual updates on publication performance under the e-GDDS, with annual reports to be posted on the DSBB. In the first years of e-GDDS implementation, the priority was to build infrastructure to monitor performance with monthly frequency (relative to the dissemination plans set out by each country) and establish direct communication with the authorities to encourage compliance. Country-specific reports have been prepared every month and shared with e-GDDS coordinators, thus, far exceeding the semiannual frequency of updates envisaged by the Ninth Review. Between 2015 and end-2021, over 2,500 monthly reports were produced and shared with the authorities, accompanied by STA country coordinators' comments and guidance. While annual reports summarizing e-GDDS performance have not been posted on the DSBB (owing to resource constraints), the authorities' commitments on data dissemination (periodicity and timeliness) are summarized in online country-specific tables on Summary of Dissemination Practices. Country-specific e-GDDS issues have also been raised in the context of the Fund's regular country surveillance.

17. Dissemination practices of e-GDDS participants are broadly satisfactory in terms of coverage, timeliness and periodicity of the encouraged data categories compared with recommendations. To assess progress under the e-GDDS, staff analyzed the dissemination practices, as committed by the authorities, of all participating countries with an NSDP, based on the latest available information.

- In terms of coverage of data categories, most e-GDDS participants disseminate between 10 and 14 of the 15 (core) encouraged data categories (Table 3).⁷
- The most common non-disseminated data categories are general government operations, IIP, and external debt. Focusing efforts on disseminating these categories will help several countries reach

Table 3. e-GDDS Data Coverage, Timeliness, and Periodicity: Country Commitments and Practices
(Percent; as of December 2021) 1/

	Coverage	Timeliness	Periodicity
	Share of countries reporting data categories	Share of countries meeting the e-GDDS recommendations	
National Accounts	100	<u>50</u>	<u>46</u>
Consumer price index	100	93	97
Interest rates	100	n.a.	97
Merchandise trade	100	57	68
Depository corporations survey	99	91	97
Balance of payments	99	<u>52</u>	66
Central bank survey	97	88	98
Central government operations	93	76	76
Official reserve assets	93	65	98
Exchange rates	91	n.a.	n.a.
Central government gross debt	82	84	<u>64</u>
External debt	75	88	76
International investment position	<u>68</u>	85	100
General government operations	<u>29</u>	80	100
Labor market	78	73	100
Financial soundness indicators	76	77	96
Production index	54	65	59
Producer price index	50	71	56
Population	100	21	100
Socio-demographic indicators	4	100	100

Sources: Dissemination Standards Bulletin Board; and Fund staff.

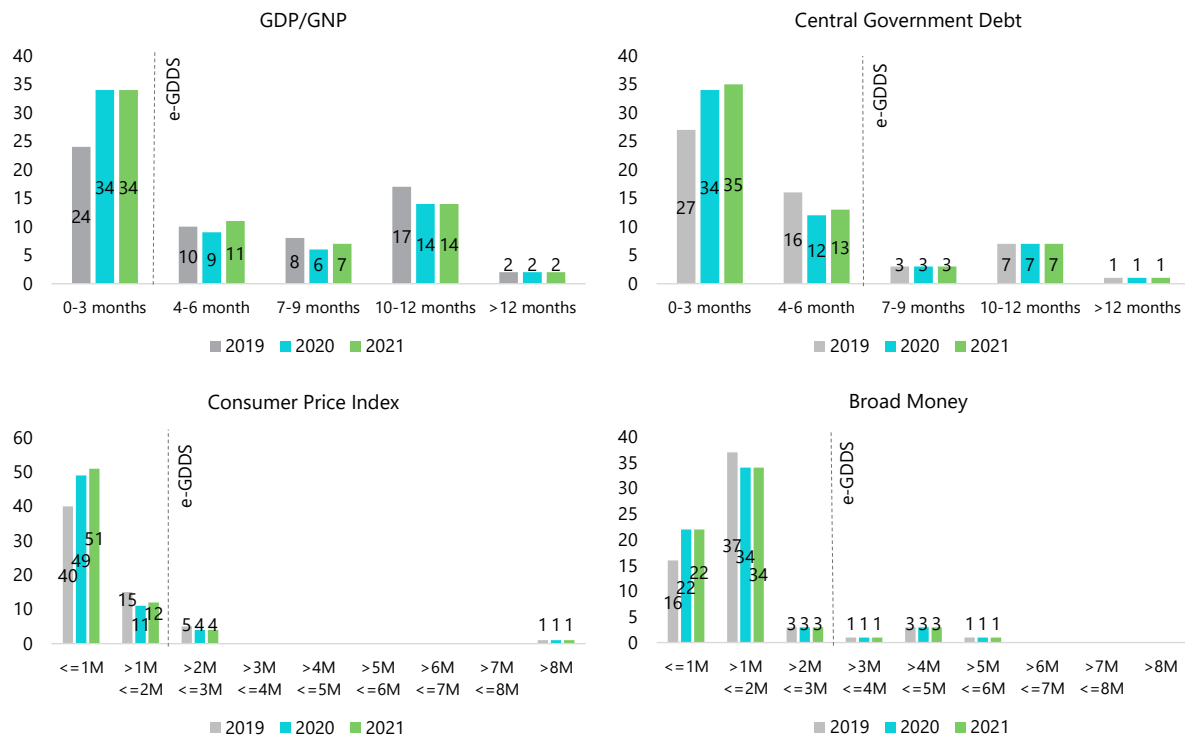
1/ The tables show 15 encouraged categories for macroeconomic and financial data, 4 supplementary macroeconomic and financial data categories, and 2 socio-demographic data categories. **Bold** = two highest percentages (best performing categories), and underlined = two lowest percentages among the 15 encouraged categories.

⁷ Dissemination of supplementary data categories—such as the production index, labor market indicators, producer price index, and FSLs—is limited.

Threshold 1 of the e-GDDS framework (see Figure 4).

- The recommendations for timeliness and periodicity for the core categories disseminated through the NSDP are met, on average, by over 75 percent and 80 percent of e-GDDS participants, respectively.
- During 2019–21, countries, on average, improved their timeliness commitments, reflecting also new e-GDDS participants (Figure 6).

Figure 6. Timeliness of e-GDDS Data Dissemination for Selected Data Categories, 2019–21
(Number of e-GDDS countries with NSDP)



Sources: Dissemination Standards Bulletin Board - Summaries of Dissemination Practices; and Fund staff estimates.

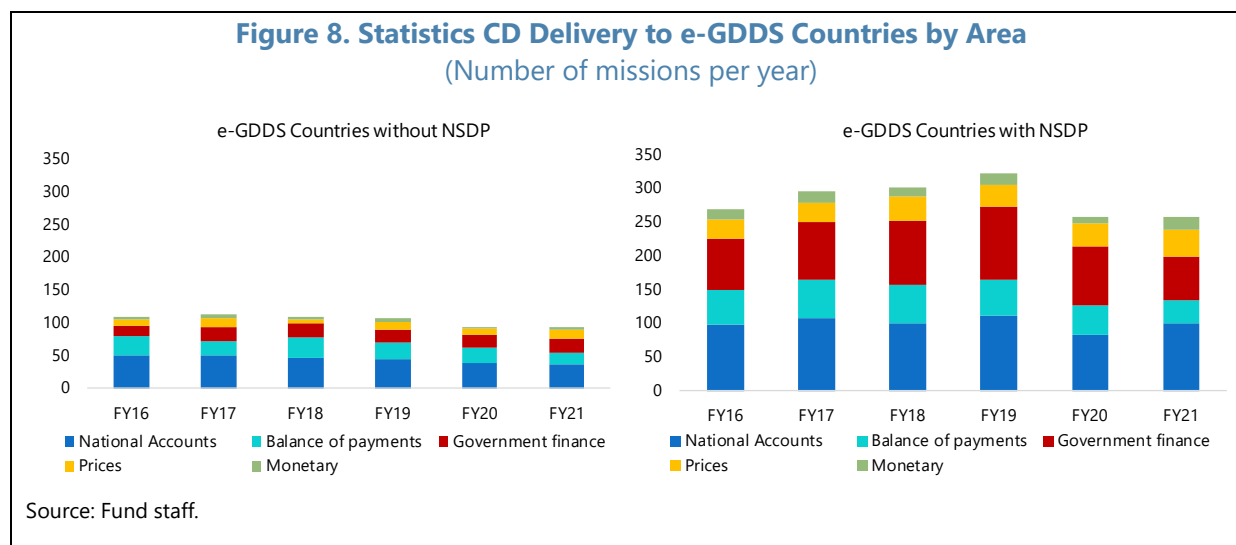
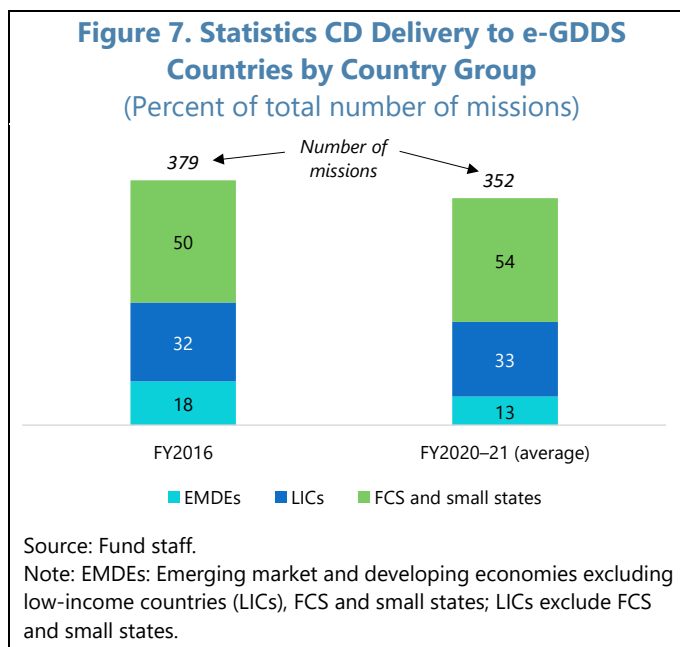
Note: Vertical dashed lines represent the timeliness of given data categories encouraged under the e-GDDS; M = month.

18. Implementing the e-GDDS has improved interagency coordination. Disciplined timely publication of data produced by different agencies requires continuous interagency collaboration. Data on the institutional affiliation of e-GDDS country coordinators and their positions indicate that most are affiliated with national statistical offices (NSOs) (65 percent), followed by those working in central banks (18 percent), and in finance ministries (16 percent). Improving timeliness can be interpreted as a proxy for effectiveness in applying greater resources and securing closer interagency coordination.

19. Implementation of the recommendations of the e-GDDS is supported by demand-driven CD. Statistics CD delivery (measured in number of missions) has remained focused on FCS,

small states, and low-income countries (Figure 7), supported by the Financial Sector Stability Fund (FSSF) launched in 2017 and the Data for Decisions Fund (D4D) in 2018. When deciding to implement the recommendations of the e-GDDS, authorities are effectively launching a project to improve the statistical system, which tends to attract CD to remedy gaps as regards data coverage, periodicity, and/or timeliness. A review of CD delivered to e-GDDS participants in FY2016–21 (Figure 8) also suggests that the technical assistance was positively associated with the implementation of e-GDDS, reflecting that it is demand driven: e-GDDS countries with NSDP have

received more than twice as many technical assistance missions as the e-GDDS countries without NSDP since 2016 (the average number of missions to countries with NSDP was 3.8 per country vs. 2.2 missions per county for countries without NSDP). National accounts and government finance were the focus of most of the missions to the e-GDDS countries, although limited data for the analysis does not allow exploring further the relationship between Fund assistance and countries’ performance under the e-GDDS in specific statistical areas.



20. Strong country ownership in improving data dissemination, donor-funded regional projects that help advance statistical development, and multiyear technical assistance have been key to supporting graduation of e-GDDS countries to the SDDS (Box 5). Challenges in producing some data—especially, on general government operations and some of the additional SDDS data (beyond those identified in the e-GDDS analysis in Section A)—are among the main barriers to graduation to the SDDS.

Box 5. Transitioning from the e-GDDS to the SDDS: Lessons Learnt

Since 2015, six countries (China, Mongolia, Saudi Arabia, Senegal, Seychelles, and Sri Lanka) have transitioned from the e-GDDS to the SDDS, pioneering the gradual transition to higher-tier statistical performance envisaged in the Ninth Review. Based on interaction with the country authorities around the time of the SDDS subscription, staff has identified certain factors behind the success of the migration to the SDDS:

- **Strong ownership of a vision to improve data transparency.** For example, Mongolia and Senegal made efforts over several years to meet the criteria. In Saudi Arabia, the migration was facilitated by structural reforms and Fund TA focused on closing data gaps.
- **Regional donor-funded projects financed by development partners to improve data dissemination.** Mongolia and Sri Lanka benefitted from regional projects, most notably the project on *Improvement of Data Dissemination in the Asia and Pacific Region*, financed by the government of Japan. Seychelles, the third sub-Saharan African country after South Africa and Mauritius to subscribe to the SDDS, benefitted from the UK Department for International Development-funded *Enhanced Data Dissemination Initiative* project.
- **SDDS subscription as the overarching anchor of the CD strategy.** Saudi Arabia and Senegal anchored the CD roadmap to the purpose of SDDS subscription, which was also closely aligned with surveillance priorities. Saudi Arabia made it a priority ahead of the G20 presidency, becoming the only SDDS country in the G20 to have adopted SDMX, and Senegal made major efforts by setting up a steering committee to coordinate related activities and arranging workshops supported, in addition to the IMF, by the AfDB and the West African Monetary and Economic Union. China benefited from multi-sector statistics missions fielded by the Fund.

Possible reasons for the low overall rate of graduation from the e-GDDS to the SDDS include:

- Difficulties in producing complying data on general government operations, one of the main barriers to progress into the thresholds of e-GDDS.
- Widespread difficulties in compiling the Template on International Reserves and Foreign Currency Liquidity.^{1/}
- Among the four supplementary data categories (production index, labor market, producer price index, and FSIs), shortcomings were most common in preparing the producer price and production indexes according to the SDDS requirements.

Outreach to country coordinators suggested that resource constraints are the main obstacle to further progress within the e-GDDS and graduation to the SDDS.

Source: Fund staff, based on internal communication and documents, including mission reports and related assessments.

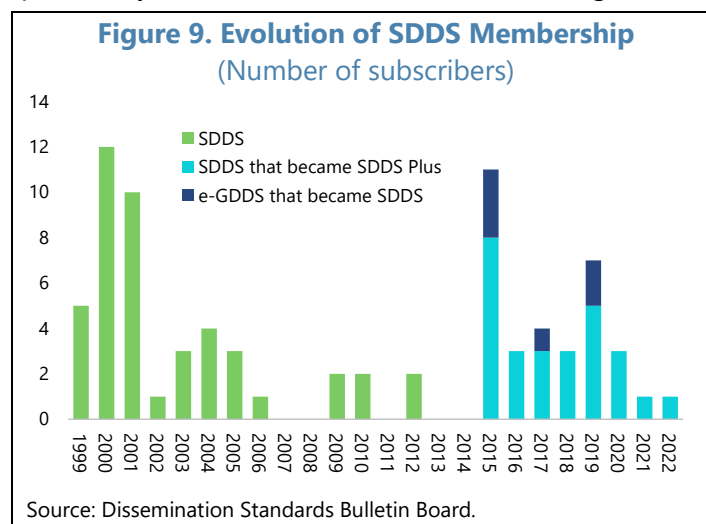
1/ Currently, only one of the nine participants that have reached the e-GDDS thresholds produces the reserves template.

21. Recent experience suggests that further strengthening the e-GDDS framework would require:

- focusing on certain key data not yet ready for dissemination under the e-GDDS—most commonly data on general government operations, IIP, and external debt—to inform CD priorities. This is also important for facilitating graduation to the SDDS;
- enhancing Fund staff engagement with the e-GDDS countries through informal annual consultations with e-GDDS coordinators to help support the authorities' efforts in e-GDDS implementation and improve performance where timeliness issues or limited data coverage persist;
- leveraging the use of e-GDDS thresholds (Figure 4) to help countries better track their progression within the tier, including by incorporating information about the thresholds and countries' relative performance in the Fund monitoring reports;
- introducing a biennial metadata certification of all e-GDDS countries (with and without NSDPs). To reduce the reporting burden, such certification could initially focus on updating the countries' commitments vis-à-vis the e-GDDS recommendations as reported in the Summary of Dissemination Practices (data coverage, periodicity, and timeliness) and expand to other data production and publication practices in subsequent updates; and
- starting the publication of an annual summary report on e-GDDS performance by staff on the DSBB, as already anticipated by the Ninth Review and the e-GDDS Guide.

B. Performance Under the SDDS

22. The SDDS aims to guide members that currently have, or seek, access to international capital markets in publishing macroeconomic and financial data. SDDS subscribers commit to disseminate data with prescribed coverage, periodicity, and timeliness on NSDPs, according to an advance release calendar. Subscribers also agree to the framework's non-observance procedures and sanctions aimed at enforcing compliance. Subscribers are required to disseminate data for 19 data categories (with limited options for deviating from requirements). Certain Fund lending policies use the SDDS as a benchmark for data transparency and integrity. In particular, subscription to the SDDS (or a judgment that satisfactory progress is being made toward meeting its requirements) is a core indicator for one



of the qualification criteria (data transparency and integrity) for the Fund's Flexible Credit Line and Precautionary and Liquidity Line.

23. The number of SDDS countries moving up to the SDDS Plus since 2015 substantially exceeds the number of e-GDDS countries that moved up to the SDDS (Figure 9). Noting the good track record in members' observance of SDDS requirements, the Ninth Review set new priorities that included assisting the SDDS subscribers with systemically important financial sectors to upgrade to the SDDS Plus; helping GDDS participants graduate to the SDDS; a lighter and more risk-based monitoring (of the SDDS); and consolidating previously introduced modifications (encouraging publication of data on sectoral balance sheets and general government gross debt and revamping NSDPs through hyperlinks and more detailed data). Currently, 50 members subscribe to SDDS, including 35 emerging market economies, 12 advanced economies, and three low-income countries; two countries are also small states (Mauritius and Seychelles). While six new members subscribed to the SDDS since the Ninth Review (China, Mongolia, Saudi Arabia, Senegal, Seychelles, and Sri Lanka), 19 former SDDS subscribers have moved up to the highest tier of the Data Standards Initiatives, the SDDS Plus.

24. Since the Ninth Review, SDDS subscribers have continued to meet the timeliness and periodicity requirements while opting for the flexibility option in several cases. Out of the 50 SDDS subscribers, 13 did not choose a flexibility option for either timeliness or periodicity (Table 4). Of the 19 disseminated data categories, SDDS subscribers have opted for the flexibility option the most with respect to data on central and general government operations and the production index for timeliness, while the flexibility option for periodicity is mostly used for the production index, labor market statistics, and central government operations.

Table 4. Flexibility Options for Timeliness and Periodicity Used by SDDS Subscribers
(Number of countries; as of January 2022)

	Dissemination on NSDP	Timeliness Option Used	Periodicity Option Used
National accounts	50	2	0
Consumer prices	50	0	1
General government operations	50	10	0
Central government operations	49	13	6
Central government debt	49	3	1
Depository corporations survey	50	5	0
Central bank survey	50	3	0
Interest rates	44	0	0
Stock market: Share price index	43	0	1
Balance of payments	50	1	0
External debt	50	0	0
Official reserve assets	50	0	0
Merchandise trade	50	0	0
International investment position	50	3	2
Exchange rates	45	0	0
Production index	50	12	6
Labor market: Employment	50	4	6
Unemployment	50	4	5
Wages/Earnings	50	6	6
Producer prices	50	3	2
Reserves template	50	0	0

Sources: Dissemination Standards Bulletin Board; and Fund staff.

25. Nonobservance procedures have not been invoked since the introduction of revised procedures in the context of the Eighth Review in 2012.⁸ Subscribers generally have strong capacity and observe the requirements.

⁸ The SDDS nonobservance procedures were last used in July 2012, but this involved a pre-existing issue addressed under the previous procedures. The amendments to the SDDS Decision proposed in the context of the Tenth Review include further clarification on the scope of nonobservance procedures, namely that the initiation of nonobservance

(continued)

Consequently, the framework is largely “self-policing,” requiring relatively limited staff resources for effective oversight in most cases. Close collaboration and consultation between staff and subscribers (through the SDDS coordinator/s) on emerging issues have, so far, effectively pre-empted the need to invoke these procedures.

26. Most SDDS subscribers participate in the four IMF surveys that are among the additional data categories required under the SDDS Plus. Readiness of SDDS subscribers to

adhere to the SDDS Plus may be assessed through participation in key external sector and financial surveys (Table 5). Compared to a 100 percent subscription in the case of SDDS Plus countries, subscription of SDDS countries is about 80 percent in the case of CDIS and CPIS and 90 percent for the FSIs database. In the case of COFER, the subscription rate is lower. In addition, over two thirds of SDDS subscribers produce—although not necessarily according to required timeliness and periodicity—general government debt (according to a recent survey), which is encouraged under the SDDS and required under the SDDS Plus.

Table 5. Subscription to Key IMF Databases to Assess Readiness Toward the SDDS Plus
(As of January 2022)

	CDIS	CPIS	COFER	FSI
<i>Number of subscribers</i>				
SDDS	42	38	32	45
e-GDDS with NSDP	29	10	25	44
<i>Percent of total subscribers</i>				
SDDS	84	76	64	90
e-GDDS with NSDP	43	15	37	66

Source: Fund staff.

Note: CDIS=Coordinated Direct Investment Survey; CPIS=Coordinated Portfolio Investment Survey; COFER=Currency Composition of Official Foreign Exchange Reserves; FSI=Financial Soundness Indicators database. All SDDS Plus adherents subscribe to all four databases.

27. Of the current 50 SDDS subscribers, only three have an NSDP with machine-readable (SDMX) technology, which is a requirement for adhering to the SDDS Plus. The SDMX technology allows users to access data machine-to-machine, which facilitates monitoring by the Fund (Annex III). This technology facilitates uptake by commercial vendors that re-disseminate the data, such as Haver and other commercial data providers. Among the six new SDDS subscribers since the Ninth Review, only three countries (Mongolia, Saudi Arabia, and Senegal) have adopted the SDMX technology. The adoption of the SDMX technology—in progress in several countries—requires technical support to implement and has been slowed by the pandemic in some cases. Many countries, however, do not have immediate plans to move from HTML-based to SDMX technology.

28. With a good track record and satisfactory progress to date, SDDS subscribers could benefit from the experience of peers that have advanced to the SDDS Plus. Performance under the SDDS continues to be robust, albeit with shortcomings in the dissemination of some encouraged data categories and the continued use of flexibility options for some data categories. The experience of SDDS Plus countries also suggests the importance of strong interagency

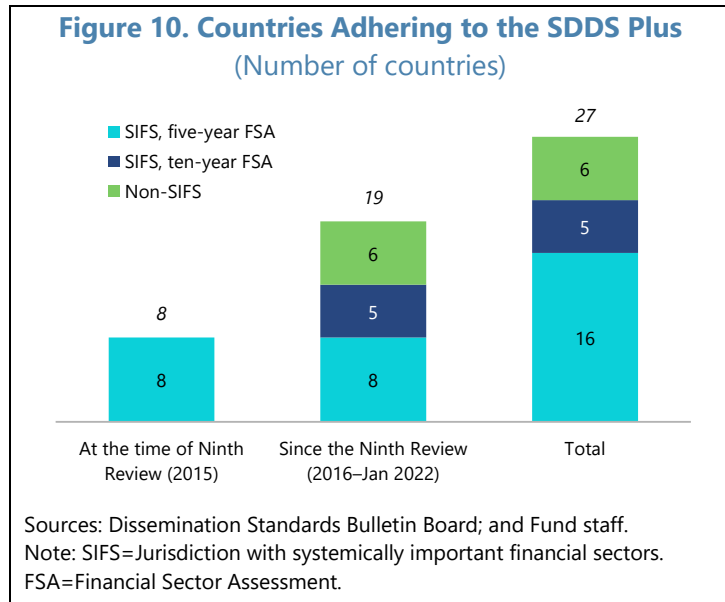
procedures takes place only if a deviation from the requirements is considered by Fund staff to be “serious” and is not resolved through technical discussions between staff and the authorities.

collaboration when working toward SDDS Plus adherence, which in turn is facilitated by the availability of transition periods (see next section).

29. SDDS countries should develop—with support from Fund staff—a three-four year plan to modernize their NSDPs by mid-2026. Such a policy will be in line with the 2018 *Overarching Strategy* which anticipated the construction, over time, of the *global data commons*—a network of official websites publishing data under the Data Standards Initiatives.

C. Achievements Under the SDDS Plus

30. The number of adherents to the SDDS Plus has more than tripled since the Ninth Review. The first eight countries adhered in 2015, and 19 countries have subsequently adhered to the SDDS Plus (Figure 10). Most recently, Estonia became an SDDS Plus country in January 2022. Belgium, Hungary, and Malta are at an advanced stage toward adherence. As of January 2022, 16 of the 32 SIFS jurisdictions subject to five-year mandatory Financial Sector Assessments—or 21 of the total 47 jurisdiction with SIFS as defined in the 2021 FSAP Review (IMF 2021b)—have adhered to the SDDS Plus, a number that has doubled since the Ninth Review (Table 6). Non-adherent SIFS countries include China and other leading financial centers, such as the United Kingdom and Singapore. The SDDS Plus countries represented about 50 percent of global GDP in 2021, up from 38 percent in 2015, and close to 60 percent of global portfolio flows in 2021, up from 30 percent in 2015.⁹



While some additional non-SIFS countries have advanced in their plans to adhere to the SDDS Plus, SIFS countries continue to receive the highest priority in the Fund's engagement with members on the SDDS Plus.

31. Dissemination of SDDS Plus data categories has advanced, with only a few countries retaining transition plans in some data categories (Box 6). The transition plans used by the first cohort of adherents (eight countries that joined during January–February 2015) are now completed, and these countries disseminate all the additional nine required categories. At the same time, eight of the most recent adherents are using transition plans for a few categories. Data on debt securities and general government debt and operations are among the data categories for which a transition plan is most used. The countries that most recently adhered to the SDDS Plus were already

⁹ Calculations are based on the WEO database; GDP and portfolio flows (assets plus liabilities) are measured in US dollars.

participating in the Fund’s key external sector surveys (CDIS, CPIS, and COFER), which facilitated compliance with three of the five minimum data categories (as four categories can be placed in transition plans). Given the broad alignment between the SDDS Plus requirements and the DGI-2 recommendations (G20 2019), the steady progress in the DGI since 2009 has also fostered compliance by G20 countries and other DGI participants (see below).

32. Currently about 90 percent of SDDS Plus adherents (all but three) disseminate quarterly sectoral balance sheet data within the required timeliness of four months. About 60 percent (16 out of 27) of SDDS Plus adherents exceed the timeliness requirement.

33. Synergies between the SDDS Plus and other multilateral data efforts (e.g., G20 DGI) remain substantial. Progress under the DGI-2 has supported the expansion of the SDDS Plus by fostering the compilation and dissemination of key data categories, including thorough knowledge exchange. The additional requirements of the SDDS Plus are broadly aligned with the recommendations of the DGI-2 (Figure 3): all except one of the nine additional categories in SDDS Plus are included in the DGI-2 (COFER is the only exemption).

34. In line with the recommendation of the Ninth Review, staff sought feedback from the SDDS Plus adherents.¹⁰ Officials found transition plans useful, including to allow sufficient time to produce some data categories according to requirements. The pandemic has had a limited effect on data dissemination, while some adherents relied on alternative source data and business continuity measures to maintain data compilation and dissemination during the pandemic.

Table 6. SDDS Plus Adherents
(As of January 2022)

Country	Date of Adherence
Netherlands, Kingdom of the *	Jan-27-15
Portugal	Feb-11-15
Sweden	Feb-11-15
Spain *	Feb-12-15
Germany *	Feb-17-15
France *	Feb-18-15
Italy *	Feb-18-15
United States *	Feb-18-15
<i>Czech Republic</i>	Apr-4-16
Japan *	Apr-18-16
Bulgaria	May-31-16
Denmark	Jan-3-17
Austria	Jan-10-17
Canada *	Apr-11-17
Finland	Jun-6-18
Lithuania	Jul-19-18
Latvia	Aug-1-18
North Macedonia, Rep.	Jan-28-19
<i>Slovak Republic</i>	Sep-16-19
<i>Romania</i>	Nov-5-19
Brazil *	Nov-14-19
Luxembourg	Nov-18-19
<i>Slovenia</i>	Feb-7-20
<i>Chile</i>	Mar-20-20
Israel	Dec-22-20
Switzerland *	Jan-19-21
Estonia	Jan-11-22

Source: Dissemination Standards Bulletin Board.

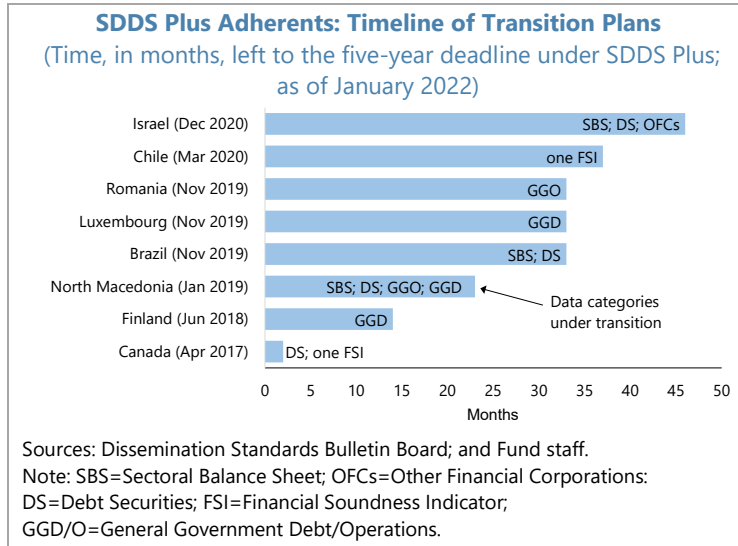
Note: Countries in **bold (italics)** names = Jurisdictions with Systemically Important Financial Sectors (SIFS) subject to **five-year (ten-year)** mandatory Financial Stability Assessments. * = G20 DGI participant.

¹⁰ The Ninth Review acknowledged that the launch of the SDDS Plus had taken longer than expected and suggested that staff should remain open to feedback from current and prospective adherents in its early stages of implementation, giving priority to promoting adherence by economies with SIFS.

Box 6. Implementation of SDDS Plus Commitments Under Transition Plans

Among the 27 SDDS Plus adherents, eight are under transition plans and all within the permitted five-year transition period (Text Figure). The SDDS Plus allows countries to adhere by publishing five of the nine additional data categories relative to the SDDS, provided countries commit to implementing the remaining requirements within a five-year transition period through a well-developed transition plan. All countries, still under transition plans, joined after 2016. Canada, facing a deadline in April 2022, is on track to full compliance with the SDDS Plus requirements by the deadline.

Most of the eight countries currently under transition plans have used the transition period for only one or two data categories, except North Macedonia (four) and Israel (three). The data categories most frequently included in the transition plans are debt securities (four countries), general government debt (three), sectoral balance sheets data (three), general government operations (two), and FSIs (two).



At the time of adherence, two countries (Finland and Slovak Republic) set more ambitious target periods than allowed under the SDDS Plus. The Slovak Republic, as undertaken at the time of adherence, published general government operations data at the end of 2021 (ahead of September 2024 deadline). Finland, whose general government debt data category is under a transition plan, has published this information on the Treasury's website and plans to exit the transition plan closer to the 2023 five-year deadline.

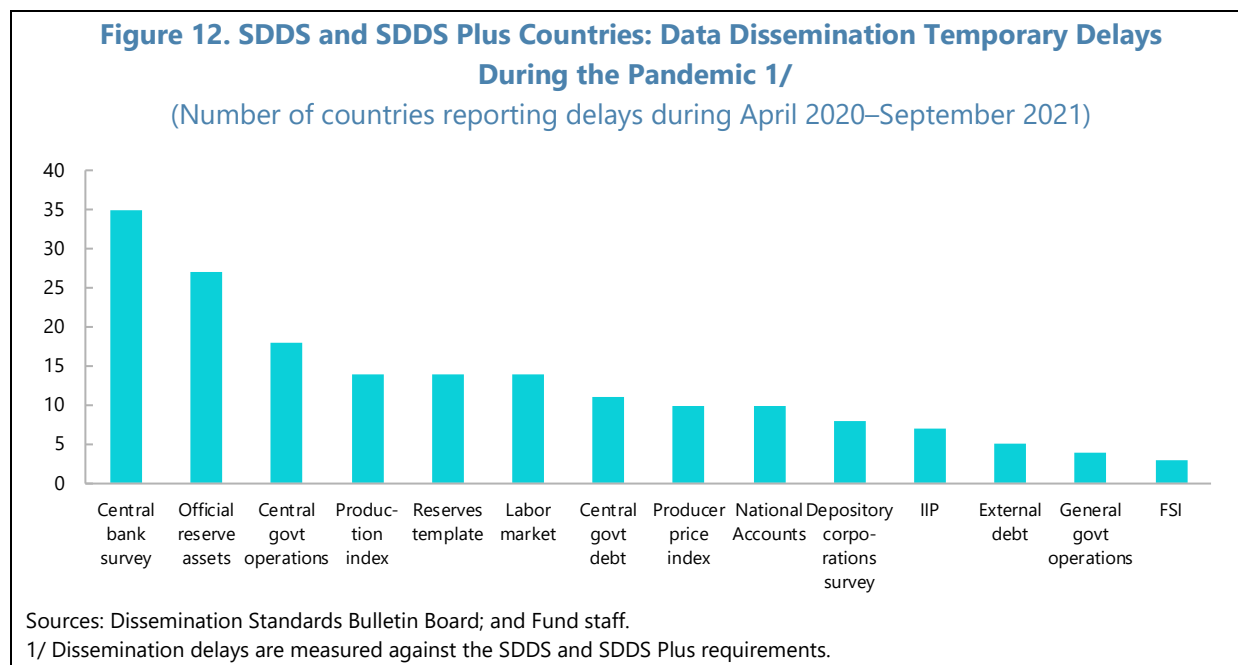
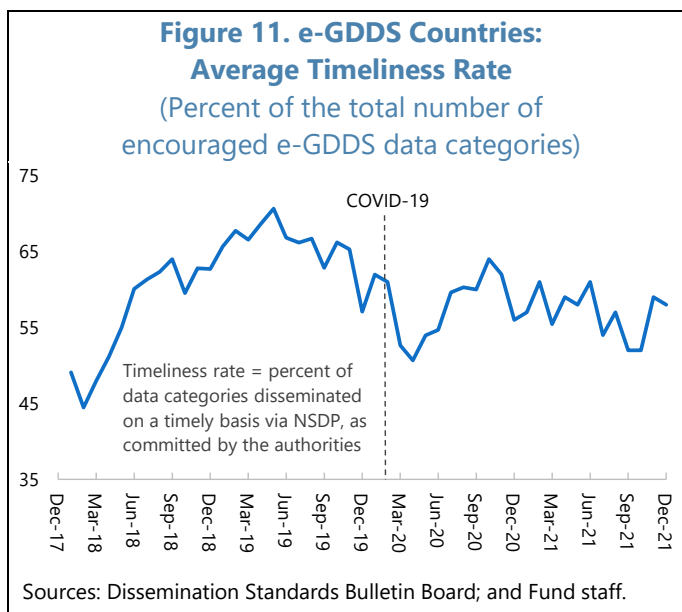
IMPACT OF THE PANDEMIC

35. The pandemic initially complicated data dissemination across the Data Standards Initiatives, but the impact was contained, and the initial delays largely addressed.¹¹

- **e-GDDS.** The average timeliness rate among the e-GDDS countries—the share of data categories disseminated on a timely basis—reached a low of 50 percent in April 2020 before slowly recovering to approach the pre-COVID-19 levels of about 60 percent (Figure 11). However, more recently timeliness has slackened, likely reflecting the recurring waves of the pandemic.
- **SDDS and SDDS Plus.** The pandemic affected data dissemination by SDDS and SDDS Plus countries and jurisdictions: all 77 SDDS and SDDS Plus countries experienced delays from the beginning of the pandemic but were overcome in all but eight cases as of end-January 2022.

¹¹ A 2020 Fund survey of 155 NSOs found that most released data on time, with less than 10 percent of NSOs reporting that some data were not published owing to pandemic-induced quality concerns.

Also, some countries have introduced changes in their advance release calendars in view of the difficulties in meeting pre-pandemic dissemination schedules. Delays in SDDS and SDDS Plus countries have been mostly temporary. For example, of total of 275 data categories reported as “not yet disseminated” at some point during April 2020–September 2021, about 60 percent were subsequently disseminated, with short delays (less than 15 days) and 35 percent with long delays, while 4 percent remained outstanding (Figure 12). The Fund monitoring has shown that publication delays mainly concerned central bank survey and data on official reserve assets, likely reflecting the fact that these data categories have the shortest timeliness requirements (two weeks and one week, respectively).



36. The pandemic had different effects on the different tiers, likely the result of preexisting differences in infrastructure and organization. For e-GDDS participants, connectivity with staff and sources of information were the main problems, and collection of some indicators was suspended in some cases. Difficulties in connectivity and data collection also affected SDDS

subscribers, and especially the dissemination of high-frequency indicators with high timeliness. The pandemic also affected the plans of some SDDS countries to adopt the SDMX technology but had a relatively limited impact on data dissemination by SDDS Plus countries. The main remedial measures adopted by countries in the three tiers consisted of implementing business continuity measures to set up alternative ways to continue producing data. Countries' feedback has underscored the benefits of having the data standards framework in place, which helped maintain data dissemination discipline even under severely constrained circumstances.

37. Ensuring business continuity, including in data dissemination, has been the focus of Fund staff interactions with member countries during the pandemic.¹² While travel restrictions have affected mission work (resulting in some delays in e-GDDS implementation), staff has continued to engage remotely with member countries. The Fund's enhanced monitoring and engagement with countries consisted of monitoring observance of publication commitments on a daily basis; engaging officials of affected countries and providing guidance to address delays; and reporting (internally) weekly on the status of affected countries. At the same time, the Fund has offered timely guidance and technical assistance to countries on statistical methods and other compilation issues to facilitate data production during the pandemic (e.g., through remote missions and COVID-19 notes).

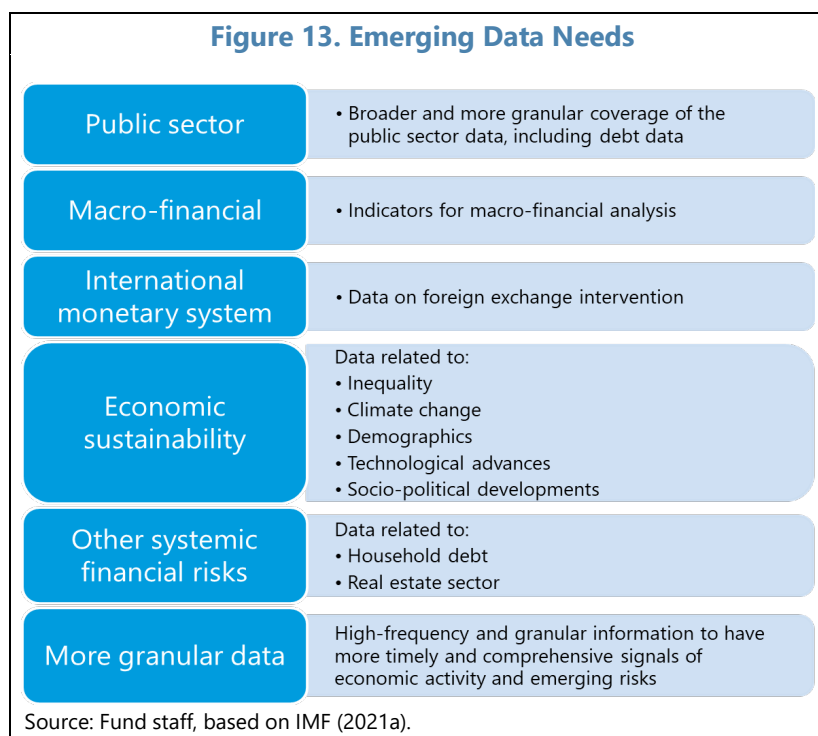
38. A practical and flexible approach to help address publication delays during the pandemic, coupled with enhanced monitoring, has worked well. The approach entails a degree of forbearance in view of the unforeseen nature of the nonobservance of publication obligations. It asks countries to publish the reason for the delays, any changes in crisis-related compilation sources and methods, and a temporary revision in the advance release calendar. Overall, this approach has been sufficient to accommodate and resolve temporary deviations from publication obligations.

39. For possible enhancements to the data standards policy framework, staff proposes incorporating force majeure in the framework. In addition to the authorities' strong commitment to data transparency, countries' efforts to comply with requirements—as an SDDS subscriber or SDDS Plus adherent—have been clearly demonstrated with good results. However, the current framework does not take into account situations when unavoidable or exceptional circumstances such as an extreme natural disaster or a pandemic (force majeure) could make the performance of a subscriber's or adherent's obligations under the framework impossible or untenable for a sustained period. This Review therefore proposes modifying the SDDS and SDDS Plus framework to allow staff to refrain from initiating nonobservance procedures with respect to deviation arising from such unforeseen circumstances beyond the authorities' control. Such a determination will be made by staff during the initial technical discussions, in consultation with the SDDS/SDDS Plus coordinator and management, and would allow for the suspension of nonobservance procedures for up to 12 months at a time for a total period of up to 36 months.

¹² Soon after the start of the pandemic, staff prepared and disseminated [Special Series on COVID-19](#) notes with advice on how to address compilation and dissemination challenges.

PROPOSALS FOR NEW ENCOURAGED DATA CATEGORIES

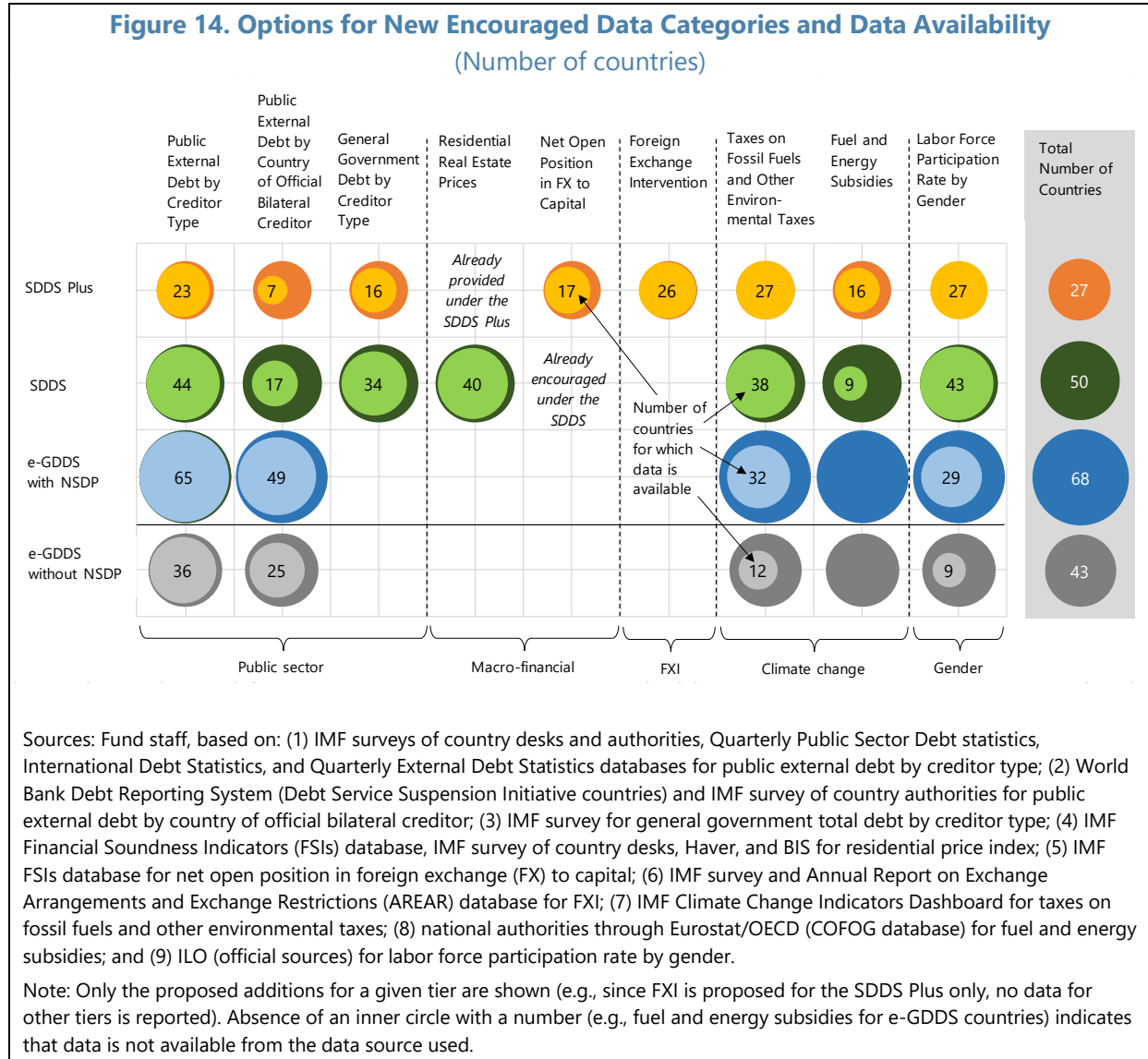
40. The Data Standards Initiatives should remain attuned to new demands for data for surveillance and policymaking, particularly those important to inform markets. The key areas of new data needs, articulated in the *2021 Comprehensive Surveillance Review* (IMF 2021a), are discussed in the forthcoming *2022 DPF Review* and other multilateral fora, such as the G20 DGI. The CSR highlighted areas of immediate data needs, where the case for closing the critical data gaps for surveillance priorities is the strongest and most urgent. In particular, it calls for: broader and more granular coverage of the public sector data, including debt data to support the analysis of fiscal risks; data for macro-financial analysis, including main financial sector indicators; and access to timely and comprehensive FXI data for bilateral and multilateral surveillance (Figure 13). Furthermore, demand is growing for indicators of economic sustainability, along with high-frequency alternative data, such as on economic activity (e.g., mobility and vessel traffic). The new G20 DGI, to be launched in March 2022, also covers climate change, household distributional information, and fintech and financial inclusion.¹³



41. Aligning the Data Standards Initiatives with new data needs in a sustainable way requires a principles-based approach. Based on the experience and spirit of the Initiatives—voluntary publication of data essential for assessing macroeconomic conditions and policies—a new data category should meet most of the following conditions: (i) the data should be official data; (ii) the data should be demonstrably viewed as necessary for policymaking and for monitoring market conditions; (iii) there should be internationally accepted methodological guidance for compilation to facilitate broad comparability of indicators across countries and prevent that absence of methodological guidance impedes data production; and (iv) the data must be already compiled

¹³ The Data Standards Initiatives *Guides* also discuss forward-looking indicators (industrial production, investment, manager's purchases, business confidence, retail sales, and inflationary expectations) to consider among potential new data categories.

and disseminated by a critical mass of members to facilitate adoption. Annex IV provides details on previous additions of data categories to the Data Standards Initiatives, based on the introduction of FSIs and IIP (the chronology of the changes to the data categories included in the Initiatives is summarized in Figure 2).



42. Guided by the above outlined data needs and broad principles, the Tenth Review proposes parsimoniously expanding the encouraged data categories, without introducing new required ones. The emphasis on parsimony of new data takes into consideration the heightened resource limitations confronted by countries during the pandemic, as conveyed during the outreach to stakeholders (through the e-GDDS, SDDS, and SDDS Plus workshops organized by staff in preparation of the Tenth Review; see Annex II). Another principle is to address some current imbalances across the tiers, as in the case of the FSIs (see below).

43. From the options considered for new encouraged data categories (Figure 14), the Review proposes a limited set of data, as outlined in Table 7, taking into account differences across the three tiers of the framework.

Tier	Proposed Encouraged Data Category	Periodicity / Timeliness 1/	Current Data Standards Initiatives
SDDS Plus	1 General government debt by creditor type	Q / 4M	Required to publish quarterly general government gross external debt by maturity and instrument; and total general government gross debt at nominal value, disaggregated by instrument, currency, and residency of creditors
	2 Net open position in FX to capital (ratio)	Q / 1Q	Encouraged under the SDDS
	3 Foreign exchange intervention 2/	Q / 1Q	
	4 Taxes on fossil fuels 3/	Q / 12M	
	5 Labor force participation rate by gender	Q / 1Q	Required to publish total employment, unemployment, wages/earnings
SDDS	1 General government gross external debt owed to official creditors, and the amounts, by country, owed to the five largest (in terms of shares in total bilateral debt) official creditors	Q / 1Q	Required to publish quarterly general government gross external debt by maturity and instrument; and encouraged to publish general government gross debt/breakdowns
	2 General government gross external debt owed to multilateral creditors, and the amounts, by institution, owed to the five largest (in terms of shares in total multilateral debt) multilateral creditors	Q / 1Q	
	3 Residential real estate prices	Q / 1Q	Required under the SDDS Plus
	4 Taxes on fossil fuels 3/	Q / 12M	
	5 Labor force participation rate by gender	Q / 1Q	Required to publish total employment, unemployment, wages/earnings
e-GDDS	1 Public external debt owed to official creditors and the amounts, by country, owed to the five largest (in terms of shares in total bilateral debt) official creditors	Q / 2Q	Encouraged to publish quarterly public and publicly guaranteed external debt by maturity
	2 Public external debt owed to multilateral creditors, and the amounts, by institution, owed to the five largest (in terms of shares in total multilateral debt) multilateral creditors	Q / 2Q	
	3 Taxes on fossil fuels 3/	A / 12M	

Source: Fund staff.

1/ Based on current requirements for related categories when available. M = monthly or with lag of no more than one month after the reference date (or the end of the reference period); Q = quarterly or with lag of no more than one quarter after the reference date (or the end of the reference period); A = annual.

2/ Includes four indicators (specified in section C) that are the same as the ones proposed in the 2022 DFP Review.

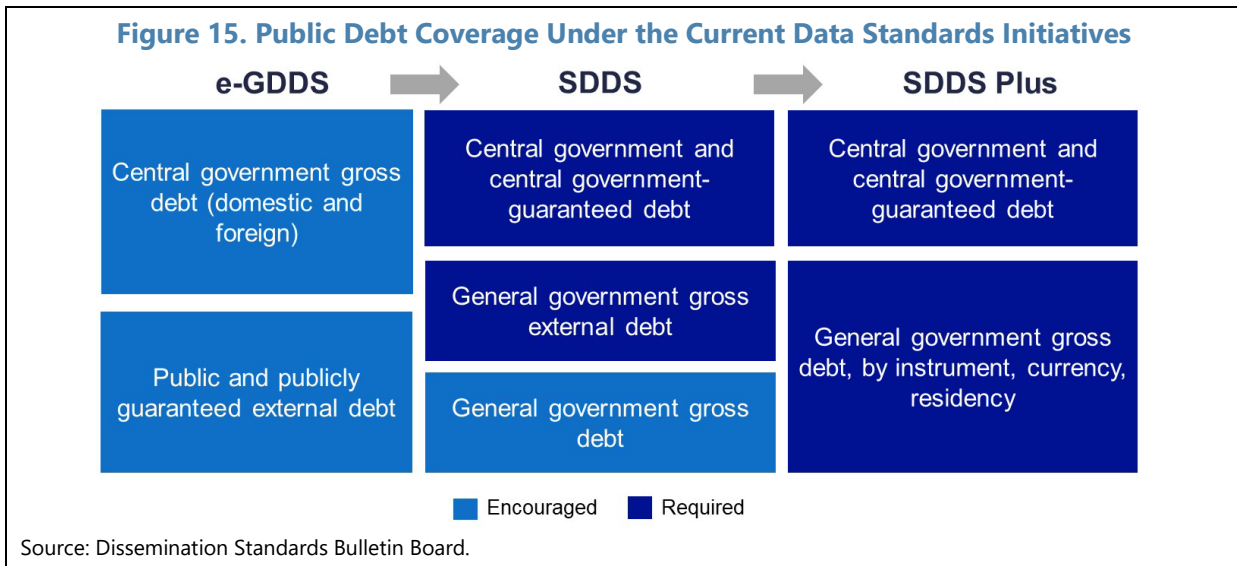
3/ Includes taxes collected on gasoline, diesel, and other petroleum-based products; both in US dollars and in percent of GDP.

A. Public sector debt—building on the current framework to add by-creditor granularity, including exposure to largest official bilateral and multilateral creditors.

- **Starting point.** While all member countries are required to provide central government (CG) and CG-guaranteed debt data to the Fund,¹⁴ publishing quarterly CG (domestic and external) gross debt, with a two-quarter lag, is encouraged under the e-GDDS (Figure 15). The e-GDDS countries are also encouraged to publish quarterly public and publicly guaranteed external debt,

¹⁴ The [2004 Decision](#) requires members to provide the Fund with the data on the stocks of CG and CG-guaranteed debt, including composition by currency, maturity, and residency of the holder (if data is amenable to classification).

broken down by maturity. SDDS subscribers are required to publish data on CG and CG-guaranteed debt (as relevant) separately via the NSDP, with quarterly periodicity and a one-quarter lag, disaggregated by maturity, residency, and instrument/sector. The SDDS also prescribes quarterly dissemination of general government (GG) gross external debt, by maturity and instrument, and encourages publication of GG debt (as per details noted below under the SDDS Plus). In addition to the requirements to publish data on CG and CG-guaranteed debt separately via NSDP, similar to the SDDS, publishing GG debt data is required for SDDS Plus countries, involving dissemination of quarterly GG total gross debt at nominal value, disaggregated by instrument, currency, and residency of creditors (external and domestic).¹⁵



- Proposal.** Further enhancing debt transparency calls for publishing government debt disaggregated by creditor type, adding an important dimension of debt disaggregation needed to assess rollover risks and their impact on sustainability prospects as well as concentration risk driven by the composition of creditors. In particular, while for all countries, it is proposed to encourage publication of debt by creditor type, the coverage of debt and granularity vary across tiers, *as relevant* (Table 7).¹⁶ Concessional debt is considered part of total debt.

For SDDS Plus countries—already required to publish general government (or more comprehensive, public sector) debt and its breakdowns—the proposal is to disseminate a breakdown by creditor type for the total general government debt (domestic and external). For

¹⁵ The SDDS Plus requirements also include, as memorandum items, GG debt securities and loans classified by remaining maturity, and total debt securities at market value.

¹⁶ The Data Standards Initiatives encourage the use of comprehensive statistical frameworks which, for the coverage of the fiscal sector, could be either general government or public sector ([SDDS Guide](#), ¶4.5), “as relevant” (with determination made by Fund staff, ¶2.10). Public sector covers operations of the general government (including central government, state/provincial/regional and local levels, and social security systems), public nonfinancial corporations, and public financial corporations. In addition, the SDDS prescribes separate dissemination of central government-guaranteed debt.

SDDS and e-GDDS countries, the focus is on a narrower coverage of public debt—its external component, which is already required/encouraged to be published as part of the total gross external debt by sector. It is proposed to encourage countries to publish:

- public (general government, for the SDDS) external debt owed to official creditors, total and by country for the five largest official creditors; and
- public (general government, for the SDDS) external debt owed to multilateral creditors, total and by institution for the five largest multilateral creditors.

Since the proposals build on the existing data categories, the additional breakdowns should follow the same periodicity and timeliness as the current data. With some exceptions, a significant share of countries already has the data on debt (Figure 14).

B. Indicators of macro-financial analysis—enhancing information on systemic financial risks and rebalancing the current requirements for FSIs.

- **Starting point.** The need for macro-financial data has been rising with the growing importance of financial sector linkages with other sectors of the economy and the need to deepen the analysis of financial vulnerabilities and systemic risks. The Data Standards Initiatives currently require the SDDS Plus countries to publish seven FSIs, on a quarterly basis, with one quarter lag. The dissemination of slightly different set of seven FSIs is encouraged for the SDDS subscribers. While the six FSIs are the same under the SDDS Plus and SDDS (Regulatory Tier 1 capital to risk-weighted assets; Regulatory Tier 1 capital to assets; Nonperforming loans net of provisions to capital; Nonperforming loans to total gross loans; Return on assets; and Liquid assets to short-term liabilities), the SDDS Plus also requires publication of Residential real estate prices, and the SDDS encourages publication of the Net open position in foreign exchange (FX) to capital.
- **Proposal.** To ensure consistency in the coverage of FSIs between the SDDS Plus and SDDS, the Tenth Review proposes to add—as encouraged categories— data on the Net open position in FX to capital to the list of FSIs under the SDDS Plus, and data on Residential real estate prices to the FSIs encouraged under the SDDS. The majority of SDDS Plus and SDDS countries already compile these data.

C. Foreign exchange intervention—contributing to greater understanding and credibility of macroeconomic policies through publication of standardized systemic data on FXI, starting with SDDS Plus adherents.

- **Starting point.** Assessing countries' exchange rate policies and external sector performance requires timely information about FXI. The *2020 Central Bank Transparency Code* stipulates that the central bank—as part of the core transparency practices—publishes information of its FX management and volume of activity (aggregated quarterly) annually, while more comprehensive practices call for the central bank to report on its interventions on its website and publish the aggregate volume of interventions and specific instruments on a monthly basis (in line with

SDDS frequency and timeliness requirements for the Template on International Reserves and Foreign Currency Liquidity).

- **Proposal.** The Tenth Review proposes to encourage the SDDS Plus countries to lead the way in publishing data on FXI by central bank, on a quarterly basis. In line with the forthcoming 2022 *DPF Review* proposal, FXI data includes spot FXI by the central bank (corresponding monetary authority); derivatives FXI by the central bank; swaps and repurchase agreements undertaken by the central bank with other central banks; and FXI undertaken by other public sector entities on behalf of the central bank. All but one SDDS Plus country (Romania) already have/publish the FXI data (Figure 14).

D. Climate change-related policy variables—embracing the urgency of action on climate change and the need for data for informed policymaking and multilateral action.

- **Starting point.** The Fund is advancing work on climate change on multiple fronts, also acknowledging the need to improve related data for policymaking and to identify key *climate change indicators* to be disseminated. In particular, as per the recent strategy for the Fund’s engagement on climate issues, the Fund’s Climate Change Indicators Dashboard (CID) was launched in April 2021. The 2021 FSAP review (IMF 2021b) pointed out that climate-related risks would be a focus of financial surveillance under FSAPs going forward. Climate change is also among the new areas to be covered in the new G20 DGI. Furthermore, in a consultation with stakeholders for the Tenth Review, some officials pointed out that, while the overall demand for new data has been limited, indicators related to climate change commonly receive most interest.
- **Proposal.** Reflecting these developments, the Tenth Review proposes to include in the Data Standards Initiatives one encouraged data category closely linked with climate-related policy action: taxes on fossil fuels (and other environmental taxes, as relevant), both in US dollars and in percent of GDP. Such data should help inform the public about government policy affecting the incentives that ultimately shape environmental outcomes. It should be noted that the Ninth Review already envisaged a possibility for e-GDDS countries to use the NSDP to disseminate other indicators, including on Sustainable Development Goals.¹⁷ Given a wide variety of fossil fuel taxes (e.g., taxes on gasoline, diesel, and other petroleum-based products), countries will be encouraged to publish these categories as presented in their national budgets, with quarterly/annual periodicity (Table 7). While the countries can also follow the methodological approach used by the Organization for Economic Co-Operation and Development (OECD) for *Environmentally Related Tax Revenue*,¹⁸ it is recommended that, at the minimum, countries

¹⁷ Currently, out of 68 e-GDDS countries with NSDPs, only three countries (Bangladesh, Panama, and Uzbekistan) disseminate socio-demographic data, of which only Uzbekistan with specific references to Sustainable Development Goals. All e-GDDS countries publish data on population (demographic details vary).

¹⁸ Environmentally related taxes are those whose tax base is a physical unit (or a proxy for it) of an item that has a proven, specific, negative impact on the environment. The OECD methodological guidelines for compiling Environmentally Related Tax Revenue accounts are in line with the [System of Environmental-Economic Accounting - Central Framework](#) (SEEA-CF). The proposed taxes on fossil fuels are part of the energy taxes as per the SEEA-CF.

publish annual data on revenue from the gasoline tax. Figure 14 shows that the majority of countries would be in a position to publish such data.

E. Gender dimension of labor markets—enriching the analysis of inclusive growth.

- **Starting point.** Demand is growing for systematically assessing the economic consequences of gender gaps which have worsened in the context of the pandemic (e.g., IMF 2021d). Conducting gender-sensitive macroeconomic analysis and designing policies to reduce gender gaps would require gender-disaggregated data, as envisaged also in the ongoing work on the Fund’s gender strategy.
- **Proposal.** Labor market indicators (employment, unemployment, wages/earnings), that are encouraged under the e-GDDS and required under the SDDS and SDDS Plus, can be expanded to include breakdowns of data by gender. To this end, the Tenth Review proposes to encourage SDDS and SDDS Plus countries to disseminate labor market indicators decomposed by gender, particularly the labor force participation rate by gender, following the ILO guidelines and the same provisions for timeliness and periodicity as encouraged/prescribed for the aggregate series. Figure 14 shows that among SDDS/SDDS Plus countries, the availability of the proposed indicators is high/complete.

44. Implementing the proposed recommendations to disseminate new data on an encourage basis puts an even higher premium on country ownership and commitment to data transparency. Experience with introducing amendments suggests that the Data Standards Initiatives have evolved by adding new data categories, both prescribed (with different implementation periods) and encouraged categories, reflecting different statistical capacities (Figure 2). Some requirements were fine-tuned, highlighting also the important role of consultation and outreach activities to solicit feedback from the stakeholders. Transition periods (for required categories) have also been useful in supporting countries’ efforts to complete the adherence process over time.

45. Other operational considerations. While the additional data categories are proposed only as encouraged categories selectively for each tier of the Initiatives, countries will be encouraged to publish at least five years of recent data for the new categories (similar to the practice used for SDDS Plus countries). It is proposed to have a transition period until May 1, 2023, for all tiers and all data categories (without sequencing, given the relatively limited set of newly proposed data categories), after which countries would be expected to publish, on an encouraged basis, the new data categories. Given that the implementation of the new encouraged data categories would not be subject to formal monitoring, alternative mechanisms focused on peer learning, knowledge sharing, and outreach would need to be more intensively used. To this end, staff proposes starting a consultation process about six months after the end of the transition period, by early 2024, to learn and discuss progress and plans for publishing the new encouraged data categories. These efforts would be supplemented with more regular outreach activities (such as tier-specific workshops and seminars during the Spring and Annual Meetings).

RESOURCE IMPLICATIONS

46. Implementing some of the recommendations will likely require additional resources albeit to a limited extent.

- Resource implications for the authorities and Fund staff are expected to be limited. Given that the new data categories are proposed to be introduced as encouraged, their publication would not be subject to close monitoring of observance, hence limiting reporting and compliance costs. In addition, as outlined above, the proposals have been guided by principles requiring that the data must be official data already compiled and published by a critical mass of Fund members.
- Strengthening the e-GDDS monitoring framework would involve biennial certification by authorities of data dissemination practices (by updating the metadata). The Fund will publish on the DSBB an annual summary report on the e-GDDS performance building on the existing internal monitoring framework.
- Supporting the SDDS countries to implement the SDMX technology would require modest resources both from the authorities and Fund staff, including because the required new technology is available at no charge to the authorities.

Box 7. Agility of the Data Standards Initiatives: Panama and New Zealand

Panama. In the absence of a central bank, the National Bank of Panama (NBP) performs functions of a monetary authority, including publication of reserves and monetary data. The NBP is a publicly owned commercial bank that has been designated by the authorities as their fiscal agent and depository in its relations with the IMF. Data provided by the NBP to the bank supervisor (SBP) and statistical agency (INEC) underpins the compilation and reporting of financial and monetary statistics. The NBP provides the data on official reserves currently disseminated in the NSDP. Taking account of the different monetary organization, technical assistance to facilitate subscription of the SDDS has pointed to practical ways to prepare the template on International Reserves and Foreign Currency Liquidity, and the depository corporations survey. The requirement to disseminate interest rate data is to be met by publishing short- and long-term government bond rates. The SDDS requirement for disseminating the central bank survey will be waived.^{1/}

New Zealand. In the process of adhering to the SDDS, New Zealand will be using the New Zealand Activity Index (NZAC), a composite leading indicator that summarizes several monthly indicators of core economic activity. This indicator was compiled and launched in June 2020 given the need to produce more timely data during the pandemic. The possibility of publishing this indicator instead of the industrial production index (called “as relevant” provision) is fully recognized by the [SDDS Guide](#) (¶2.10), as the activity index better reflects the structure of the New Zealand economy.

^{1/} A similar approach is being adopted in the case of Andorra (absent a central bank) which is in the process of implementing the e-GDDS.

REFLECTIONS ON THE FUTURE OF THE DATA STANDARDS INITIATIVES

47. The Data Standards Initiatives will need to remain agile and adapt to fast-paced developments in the global economy and financial markets. The deepening of domestic financial markets and accelerating digitalization will likely lead to a greater use of real-time data by investors, policymakers, and the public. Faster data production and dissemination, coupled with greater demand for more timely data needed to assess economic conditions and policies may require further enhancements to the Data Standards Initiatives, mainly higher timeliness. In turn, statistical systems would need to embed flexibility to allow for more frequent revisions in data frameworks to effectively respond to changing requirements (Box 7).

48. The Data Standards Initiatives will need to remain open to incorporating indicators that may be identified¹⁹ in future Fund surveillance reviews. In this context, data categories that may be discussed and considered as encouraged in the medium term include:

- general government debt for the e-GDDS participants, data on the net debt of the consolidated public sector for SDDS Plus adherents, and data on outstanding liabilities of nonfinancial public sector corporations;
- indicators of economic sustainability (linked also to the ongoing international effort to update the System of National Accounts, in which the Fund is participating) and inclusion (e.g., household distributional information and average monthly earnings by gender to monitor the earnings gap);
- indicators of climate-related financial risks;
- indicators related to ongoing structural transformation in the global economy, such as digitalization and its implications, including for financial access;
- data on Special Purpose Entities, which will become mandatory in the European Union in 2022 (more than 30 countries are already providing the Fund with this information);
- IIP by currency—broadening the coverage of external assets and liabilities from the government sector to other sectors of the economy;
- indicators on governance and control of corruption (linked to the implementation of the Fund's Framework for Enhanced Fund Engagement on Governance (IMF 2020a), including efforts to fill data gaps, such as measurement of illicit financial flows and corruption risks); and

¹⁹ Criticality of newly identified indicators will need to be established in the Fund-wide surveillance reviews or other major Fund strategies, and interest by market participants be verified.

- data related to central bank transparency, building on the recently updated Central Bank Transparency Code (IMF 2020b), which is applicable on a voluntary basis.²⁰

49. Outreach with participating countries to further increase visibility of the framework would benefit the implementation of the Data Standards Initiatives going forward. A dedicated and more regular forum (in-between the reviews) to facilitate sharing of experience and peer learning could be considered, including through workshops. Sharing experience in strengthening internal governance and interagency coordination—an issue highlighted by participants across the tiers—would be desirable. Countries should also build capacity to monitor data users’ reliance on the data standards (Annex V).

50. An outreach strategy to elicit the views of market participants would help inform future improvements to the Data Standards Initiatives. Such an outreach will need to involve a more frequent dialogue (perhaps twice during the five-year cycle) with leading global investment banks, rating agencies, and asset managers that play a key role in facilitating orderly access to international financial markets. In addition, the outreach should include market participants in selected countries with well-developed domestic capital markets.

51. Collaboration with other international organizations could be further strengthened to foster synergies and help countries meet their multipronged objectives in data publication and reporting. The Fund will continue collaborating with the international partners, including the World Bank, especially on debt issues, Eurostat, OECD, Bank for International Settlements (BIS), European Central Bank (ECB), Financial Stability Board (FSB), and United Nations, and other regional institutions on initiatives which promote data transparency and support greater data sharing.

ISSUES FOR DISCUSSION

- Do Directors agree with the staff’s assessment of the achievements since the 2015 Ninth Review?
- Do Directors concur that the framework has worked well, including during the pandemic in ensuring continuity in informing the public and markets of macroeconomic developments?
- Do Directors agree to modify the framework to take into account events of force majeure such as the pandemic?
- Do Directors support the staff’s proposal to encourage publication of new data categories reflecting selected emerging data needs?

²⁰ Examples of official data include volumes of monetary policy operations and interest rates (Central Bank Transparency Code, 4.1.3); results of FX market operations; levels (volumes) of FX market activity, and direction of interventions (Code 4.3.3.).

Proposed Decisions

The following decisions, which may be adopted by a majority of the votes cast, are proposed for adoption by the Executive Board:

Decision 1 – SDDS Decision

1. Section III.4 of Decision No. 15256 shall be amended as follows:
 - a. The words “SDDS nonobservance” shall be removed from the third paragraph.
 - b. The fourth paragraph shall be revised to read:

“If a deviation is detected, Fund staff will promptly notify the SDDS coordinator. Technical discussions between staff and the SDDS coordinator will start immediately after a deviation is detected and notified to the SDDS coordinator. Non-serious deviations are expected to be addressed through these technical discussions. Subject to Section III.5 of this decision, the SDDS coordinator will be notified by staff of the initiation of the SDDS nonobservance procedures if a deviation is considered by Fund staff as a serious deviation and it is not resolved through technical discussions mentioned above within three months from the date of notification to the SDDS coordinator for monthly data, or six months from such notification for quarterly and annual data. For other deviations that become serious deviations only after they are not resolved through technical discussions within six months, and subject to Section III.5 of this decision, notification of the SDDS coordinator and initiation of the SDDS nonobservance procedures will begin six months after identification of the compliance issue. In this context, Fund staff will request the SDDS coordinator to undertake the necessary steps to resolve the deviation to Fund staff’s satisfaction. Fund staff will communicate with the subscriber’s Executive Director if the nonobservance remains unresolved after three months following the notification of the SDDS coordinator referred to above. In this communication Fundstaff will seek to engage the Executive Director’s assistance to help resolve the nonobservance. If after three months following the communication with the subscriber’s Executive Director the nonobservance remains unresolved, the Managing Director will send a letter to the subscriber’s Governor for the Fund. This letter will contain a description of the facts giving rise to the nonobservance and a request for the assistance of the subscriber’s Governor for the Fund to solve the nonobservance in a manner that is satisfactory to Fund staff. If the nonobservance remains unresolved for a period of up to three months following the issue of the letter by the Managing Director referred to above, a note on the

nonobservance will be posted on the DSBB. The note will indicate the Fund staff's determination that the subscriber is not in observance of its undertakings under the SDDS, the type of nonobservance, the period in which the nonobservance has remained unresolved, and the authorities' reactions and plans, if any, to address the nonobservance issue. If the nonobservance remains unresolved after a period of twelve months from the posting of the note on the bulletin board mentioned above, the Managing Director will promptly bring the nonobservance case to the attention of the Executive Board explaining the facts originating the nonobservance, the procedures followed by Fund staff with the aim to addressing the nonobservance, the response from the subscriber's authorities, if any, and a proposal to address the nonobservance. This proposal will include a recommendation to delete the subscribers' metadata from the DSBB, and thus, effectively terminating the subscription of the member from the SDDS. The Executive Board in considering the subscriber's nonobservance will decide on the means to address such nonobservance, which could include a decision approving the deletion of the subscriber's metadata from the DSBB. Once a subscriber's metadata have been deleted from the DSBB and its subscription to the SDDS is effectively terminated, the member can re-apply for subscription to the SDDS by following the procedures set forth in Section III above for new subscribers."

2. A new Section III.5 shall be inserted in Decision No. 15256, and the current Sections III.5 and III.6 shall be renumbered accordingly. The new Section III.5 shall read:

5. Effects of force majeure

In the course of the technical discussions envisaged under Section III.4 of this decision, Fund staff, in consultation with the relevant SDDS coordinator, the subscriber's Executive Director, and the Managing Director, may determine that a deviation is the result of force majeure—i.e., exceptional circumstances such as extreme natural disaster, extreme civil unrest, war, or a public health disaster. Where such determination is made, Fund staff may refrain from initiating the nonobservance procedures described in Section III.4 of this decision with respect to the deviation(s) under discussion.

The determination that a deviation is the result of force majeure shall be promptly communicated to the SDDS coordinator. A note will be posted on the DSBB within one week of communicating this determination. The note will indicate the Fund staff's determination that a deviation is due to force majeure, the initial duration of that decision, the nature of the deviation, and the date the deviation began. The subscriber shall post an explanatory note on their own National Summary Data Page as well, and a revised advance release calendar to be approved by staff. To the largest extent possible, subscribers are encouraged to resolve deviations even under force majeure circumstances and to continue to engage in technical discussions with Fund staff.

A determination that a deviation is due to force majeure may have an initial duration of up to 12 months from the time the determination is communicated to the SDDS coordinator but may be revisited at any time in consultation with the SDDS coordinator. Subscribers should update staff regularly on efforts to resolve deviations. If all deviations resulting from force majeure are not resolved within the initial duration of the determination, Fund staff, in consultation with the SDDS coordinator and the Managing Director, shall revisit the determination and may extend its application at intervals no longer than 12 months up to a total duration no more than 36 months.

Once Fund staff determines that a deviation is no longer due to force majeure, staff will promptly communicate this to the SDDS coordinator. To the extent any deviation remains, staff will initiate technical discussions with the SDDS coordinator in line with Section III.4 of this decision and will update the note on the DSBB accordingly.

3. In Table 1 of Decision No. 15256, the section on Fiscal Sector, Central Government Debt shall be replaced by the following:

Coverage			Periodicity ¹	Timeliness ¹
Category ²	Prescribed Components	Encouraged Categories and/or Components		
Central government debt	Total, with disaggregated components: <ul style="list-style-type: none"> • by maturity; and • by residency (domestic, foreign); or • by instrument; or • by currency of issue. Non-central- government debt guaranteed by central government, as relevant.	Debt service projections: <ul style="list-style-type: none"> • Projected interest and amortization payments on medium- and long- term debt, provided quarterly for the coming four quarters, and annually thereafter; and • Quarterly data on projected repayments of short-term debt. 	Q	Q
	For subscribers using the GFSM 2001 framework, see Tables 4.1a and 4.1d of <i>The Special Data Dissemination Standard: Guide for Subscribers and Users</i> .		Q	Q
		General government gross debt at nominal value, classified by debt instrument, currency of denomination, and residence of the creditor; and for memorandum items, general government debt securities and loans classified by remaining maturity, and total debt securities at market value.	Q	4M

Coverage			Periodicity ¹	Timeliness ¹
Prescribed		Encouraged		
Category ²	Components	Categories and/or Components		
		<ul style="list-style-type: none"> • General government gross external debt owed to official creditors; • General government gross external debt (the amounts) by country, owed to the five largest (in terms of shares in total bilateral debt) official creditors; • General government gross external debt owed to multilateral creditors; and • General government gross external debt (the amounts) by institution, owed to the five largest (in terms of shares in total multilateral debt) multilateral creditors 	Q	Q

4. In Table 1 of Decision No. 15256, the section on Financial Sector, Interest Rates shall be replaced by the following:

Coverage			Periodicity ¹	Timeliness ¹
Prescribed		Encouraged		
Category ²	Components	Categories and/or Components		
Interest rates	<ul style="list-style-type: none"> • Short-term and long-term government security rates; and • Policy-oriented rate (for example, central bank lending rate). 	Range of representative deposit and lending rates	D	3

Coverage			Periodicity ¹	Timeliness ¹
Prescribed		Encouraged		
Category ²	Components	Categories and/or Components		
		Financial soundness indicators (FSIs): <ul style="list-style-type: none"> • Regulatory Tier I capital to risk-weighted assets • Regulatory Tier I capital to assets • Nonperforming loans net of provisions to capital • Nonperforming loans to total gross loans • Return on assets • Liquid assets to short-term liabilities • Net open position in foreign exchange to capital • Residential real estate prices 	Q	Q

5. At the end of Table 1 of Decision No. 15256, new sections shall be added that shall read as follows:

Coverage			Periodicity ¹	Timeliness ¹
Prescribed		Encouraged		
Category ²	Components	Categories and/or Components		
Climate change				
Climate change indicators		Taxes on fossil fuels (includes taxes on gasoline, diesel, and other petroleum-based products), both in US dollars and in percent of GDP	Q	12M
Gender				
Gender indicator		Labor force participation rate by gender	Q	Q

Decision 2 – e-GDDS Decision

1. Table 1 of the Annex to Decision No. 15827 shall be replaced by the following table:

Table 1.

**The General Data Dissemination System: Data, Coverage, Periodicity, and Timeliness—
Macroeconomic and Financial Sectors and Socio-Demographic Data**

Data Categories	Components	Periodicity	Timeliness
	Macroeconomic and Financial Data: Encouraged Data		
National accounts (GDP)	GDP in current prices and volume by production approach, or by expenditure approach	Quarterly	1 quarter
Consumer price index		Monthly	2 months
General government operations	Statement of government operations <ul style="list-style-type: none"> • revenue; • expense; • gross operating balance; • net operating balance; • net acquisition of nonfinancial assets; • net lending (+)/net borrowing (-) • net acquisition of financial assets: <ul style="list-style-type: none"> (1) domestic; (2) foreign; • net incurrence of liabilities: <ul style="list-style-type: none"> (1) domestic; (2) foreign; • statistical discrepancy 	Annual	3 quarters
Central government operations	Statement of government operations <ul style="list-style-type: none"> • revenue; • expense; • gross operating balance; • net operating balance; • net acquisition of nonfinancial assets; • net lending (+)/net borrowing (-) • net acquisition of financial assets: <ul style="list-style-type: none"> (1) domestic; (2) foreign; • net incurrence of liabilities: <ul style="list-style-type: none"> (1) domestic; (2) foreign; • statistical discrepancy 	Quarterly	1 quarter
Central government gross debt	Domestic and foreign gross debt	Quarterly	2 quarters
Depository corporations survey	<ul style="list-style-type: none"> • Broad money; • Domestic claims; and • Net foreign assets 	Monthly	1 quarter
Central banks survey	<ul style="list-style-type: none"> • Monetary base • Domestic claims, and • Net foreign assets 	Monthly	2 months

Data Categories	Components	Periodicity	Timeliness
	Macroeconomic and Financial Data: Encouraged Data		
Interest rates	Short and long-term government security rates, policy-oriented rate	Monthly	
Stock market (if applicable)		Monthly	
Balance of payments	<ul style="list-style-type: none"> • Current account • Capital account • Financial account • Net errors and omissions 	Quarterly	1 quarter
External debt ¹	<ul style="list-style-type: none"> • Public and publicly-guaranteed debt, broken down by maturity/ (short-term and long-term); • Public external debt owed to official creditors; • Public external debt (the amounts) by country, owed to the five largest (in terms of shares in total bilateral debt) official creditors; • Public external debt owed to multilateral creditors; • Public external debt (the amounts) by institution, owed to the five largest (in terms of shares in total multilateral debt) multilateral creditors; and • Private external debt not publicly guaranteed, broken down by maturity (short-term and long-term) 	Quarterly	2 quarters
Official reserve assets	Gross official reserve assets	Monthly	1 month
Merchandise trade	Total exports and total imports	Monthly	12 weeks
International investment position	Assets and liabilities, disaggregated by: <ul style="list-style-type: none"> • direct investment; • portfolio investment; • other investment; and • reserve assets (included only in assets) 	Annual	3 quarters
Exchange rates	Spot rates	Daily	
Production index	Manufacturing or industrial, primary commodity, or sector coverage as relevant.	Monthly (as relevant)	12 weeks
Labor market	Employment, unemployment, wages/earnings, as relevant	Annual	3 quarters
Producer price index		Monthly	2 months

Data Categories	Components	Periodicity	Timeliness
	Macroeconomic and Financial Data: Encouraged Data		
Financial soundness indicators	<ul style="list-style-type: none"> Regulatory Tier 1 capital to risk-weighted assets Regulatory Tier 1 capital to assets Nonperforming loans net of provisions to capital Nonperforming loans to total gross loans Return on assets Liquid assets to short-term liabilities Net open position in foreignexchange to capital 	Quarterly	1 quarter
	Demographic and Selected Socio-Economic Indicators		
Population	Population characteristics: size	Annual (Census every ten years)	3-6 months for annual updates 9-12 months for Census
Selection of socio-demographic indicators	Sustainable development goals and other indicators of the authorities choosing		
Climate change indicators	Taxes on fossil fuels (includes taxes on gasoline, diesel, and other petroleum-based products), both in US dollars and in percent of GDP	Annual	12 months

¹ Based on BPM6 categories; BMP5 data should be presented in equivalent detail.

2. Section II. of the Annex to Decision No. 15827 shall be amended as follows:
- a. In Section II.A (ii), fourth paragraph, 3rd bullet, the words “diskettes, tapes, or CD ROM” will be replaced by “and data storage devices”
 - b. In Section II.B (i), the second paragraph under the External Sector header will be replaced by the following:

“The e-GDDS encourages a separate data category for external debt, with the following data components:

 - (1) public and publicly guaranteed external debt, broken down by maturity;
 - (2) public external debt owed to official creditors and the amounts, by country, owed to the five largest (in terms of shares in total bilateral debt) official

creditors;

(3) public external debt owed to multilateral creditors and the amounts, by institution, owed to the five largest (in terms of shares in total multilateral debt) multilateral creditors; and

(4) private external debt not publicly guaranteed.”

c. In Section II. (B) (iii) the paragraph under the Demographic and Selected Socio-

Economic Indicators header will be replaced by the following:

“Except for population and government revenue from taxes on fossil fuels, the e-GDDS makes no specific recommendations concerning which social or demographic indicators should be disseminated. Countries are encouraged to construct indicators to meet their own national needs following good statistical practices.”

3. Section III. of Decision No. 15827, shall be amended as follows:

a. In Section III. (6) Dissemination Standards Bullet Board, the first paragraph will be revised to read as follow.

“The IMF, as a service to its members, has established and maintains an electronic Dissemination Standards Bulletin Board (DSBB) on the Internet, a system to store and disseminate the metadata provided by participants (DSBB). The DSBB identifies the members participating in the e-GDDS and provides easy access to the members’ respective metadata. The responsibility for the accuracy of the metadata and of the economic, financial, and socio-demographic statistics underlying the metadata rests with the member countries. Participants are expected to certify the accuracy of the metadata posted on the DSBB once every two years, similar to the process envisaged for the SDDS (SDDS Decision, Section III.2). Participants are expected to review and update the metadata on either a “best- effort” or “when-merited” basis during the period between certification dates and update their plans for improvement on an annual basis.”

Decision 3 – SDDS Plus Decision

1. In Decision 15257, as amended, Section I paragraph 3 shall be revised to read as follows:

“3. In addition to being an SDDS subscriber in full observance of all SDDS requirements, an SDDS Plus adherent must observe additional requirements for nine prescribed data categories. These nine data categories are: sectoral balance sheets; quarterly general government operations; general government gross debt; other financial corporations survey; financial soundness indicators

(FSIs); debt securities; participation in the Currency Composition of Foreign Exchange Reserves (COFER) database; participation in the Coordinated Portfolio Investment Survey (CPIS); and participation in the Coordinated Direct Investment Survey (CDIS). The SDDS Plus does not prescribe dissemination of COFER data by SDDS Plus adherents. In addition, SDDS Plus encourages adherents to publish data on government debt decomposition by creditor type; the FSI on net open position in FX to capital; data on foreign exchange intervention, and certain indicators related with climate change and gender.”

2. Section II of Decision 15257, as amended, subsection 1.1 shall be revised as follows:

a. The text under the “Fiscal sector” header shall be revised to read:

“The required data categories are general government operations and general government gross debt. General government operations (GGO) data are to be published using the Government Finance Statistics Manual 2001 (GFSM 2001) format (GFSM 2001, Table 4.1) or its successor. The recording basis can be cash, modified accrual, or accrual (full adoption of the GFSM 2001 methodology is not required) and should be clearly identified in the metadata. The dissemination of quarterly GGO data with timeliness of twelve months is required. SDDS Plus countries should continue publishing annual GGO as per the SDDS requirements (independently of the timeliness of quarterly GGO data).

Data on general government total gross debt (GGD) in nominal values, classified by: 1) debt instrument; 2) currency of denomination; 3) residence of the creditor; 4) creditor types (encouraged); and 5) memorandum items are prescribed (See [Table 3](#), a subset of the public sector debt statistics template adopted by the Task Force on Finance Statistics (TFFS) and the World Bank-IMF-OECD public sector debt statistics data-base). Memorandum items include total debt securities at market.”

b. The second paragraph under the “Financial sector” header shall be revised to read:

“As shown in [Table 1](#), data on the seven financial soundness indicators with quarterly periodicity and timeliness are required for dissemination, with one additional indicator (the ratio of the net open position in foreign exchange to capital) to be published on an encouraged basis.”

c. The following text shall be added to the end of the “External sector” section:

“The SDDS Plus encourages SDDS Plus adherents to publish quarterly data on foreign exchange intervention, with one quarter timeliness.”

- d. The following shall be added after the “External sector” section:

“Climate change and gender indicators

SDDS Plus adherents are encouraged to publish quarterly data on government revenue from taxes on fossil fuels, with 12-month timelines. SDDS Plus also encourages publication of quarterly labor force participation rate by gender, with one quarter timeliness.”

- e. Under the header of “Flexibility and transition period,” the first sentence shall be revised to read: “No flexibility options are available for any of the (prescribed) nine SDDS Plus data categories.”

3. In Section III.4 (4.2) of Decision No. 15257, as amended, the first paragraph shall be revised to read: “Any deviations from the SDDS Plus undertakings set forth in this decision with regard to the specific areas described in the previous paragraph will be subject to the same procedures applicable to SDDS subscribers as set forth in Sections III.4 and III.5 of the SDDS decision.”

4. Table 1 of Decision No. 15257, as amended, shall be replaced by the following table:

Coverage		Encouraged	Periodicity ¹	Timeliness ¹
Prescribed				
Category	Components			
Real Sector				
Sectoral Balance Sheets	See Table 2 ²		Q	Q
Fiscal sector				
General government operations (or public sector operations, as relevant)	Table 4.1 <i>Statement of Government Operations in the Government Statistics Manual 2001 (GFSM 2001)</i> at http://www.imf.org/external/pubs/ft/gfs/manual/index.htm		Q	12M
General government gross debt	See Table 3		Q	4M
Financial Sector				

Coverage		Encouraged	Periodicity ¹	Timeliness ¹
Prescribed				
Category	Components			
Other financial corporations survey	Net foreign assets Claims on nonresidents less: Liabilities to nonresidents Domestic claims Net claims on central/general government Claims on central/general government less: Liabilities to central/general government Claims on depository corporations Claims on other sectors Liabilities to depository corporations Other domestic liabilities (except those included in Other Items Net) Shares and other equity Other items (Net)		Q	4M
Financial soundness indicators (FSIs)	<ul style="list-style-type: none"> Regulatory Tier 1 capital to risk-weighted assets Regulatory Tier 1 capital to assets Nonperforming loans net of provisions to capital Nonperforming loans to total gross loans Return on assets Liquid assets to short-term liabilities (or equivalent under the Basel Accords) Residential real estate prices 	Net open position in foreign exchange to capital	Q	Q
Debt Securities ³	Table 5.2—See <i>Handbook on Securities</i> http://www.imf.org/external/np/sta/wgsd/pdf/090710.pdf (stocks only)		Q	4M
External sector				
Coordinated Portfolio Investment Survey (CPIS)	Participation in CPIS—IMF certification		A, (SA beginning in June 2015)	7M
Coordinated Direct Investment Survey (CDIS)	Participation in CDIS—IMF certification		A	9M
Currency Composition of Foreign Exchange Reserves (COFER)	Participation in COFER—IMF certification		Q	Q
Foreign exchange intervention (FXI)		<ul style="list-style-type: none"> FXI by the central bank (or corresponding monetary authority) in 	Q	Q

Coverage		Encouraged	Periodicity ¹	Timeliness ¹
Prescribed				
Category	Components			
		the spot market, net amount; <ul style="list-style-type: none"> FXI by the central bank (or corresponding monetary authority) undertaken with derivative instruments, net amount FXI by other public sector entities undertaken on behalf of, or at the direction of, the central bank (or corresponding monetary authority) in the spot market and with derivative instruments, net amount Transactions by the central bank (or corresponding monetary authority) with other central banks (or corresponding monetary authority), net amount 		
Climate change				
Climate change indicators		Taxes on fossil fuels (includes taxes on gasoline, diesel, and other petroleum-based products), both in US dollars and in percent of GDP	Q	12M
Gender				
Gender indicator		Labor force participation rate by gender	Q	Q

¹ Periodicity and timeliness: ("M") monthly or with lag of no more than one month after the reference date (or the end of the reference period); ("Q") quarterly or with lag of no more than one quarter after the reference date (or the end of the reference period); ("A") annual.

² Provide data by instrument on a best effort basis. The SDDS Plus encourages adherents to classify financial derivatives in a separate functional category, in line with internationally accepted statistical methodologies.

³ Preferably debt securities would be presented at market values, but also could be presented at nominal values or both. Countries are required to indicate the valuation method in their metadata.

5. In Table 3 of Decision No. 15257, as amended, the following shall be inserted before the

“Memorandum items” header:

“By creditor types (encouraged):

Domestic central bank

Other domestic depository corporations (except the central bank)

Other domestic financial corporations

Other domestic creditors

Multilateral creditors

Official bilateral creditors (including a central bank of a currency union)

Other external depository corporations (except the central bank of a currency union, included in official bilateral creditors)

Other external creditors”

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Table A.1. Data Standards Initiatives and Data Provision to the Fund

Data Standards Initiatives		Data Provision to the Fund (Data Needs)	
Current framework		Current required provision (TCIRS) (*)	
<div style="display: flex; flex-direction: column; align-items: center; justify-content: center;"> <div style="background-color: #0070C0; color: white; padding: 5px; writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold;">e-GDDS – 15 categories</div> <div style="background-color: #00A651; color: white; padding: 5px; writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold;">SDDS – 19 categories</div> <div style="background-color: #00B050; color: white; padding: 5px; writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold;">SDDS Plus – 28 categories</div> </div>	<ul style="list-style-type: none"> - Sectoral Balance Sheets - Quarterly general government (GG) operations - GG total gross debt, disaggregated by instrument, currency, residency of creditors (memo item: residual maturity) - Other Financial Corporations Survey - Financial Soundness Indicators, including residential real estate prices - Debt Securities - Coordinated Portfolio Investment Survey - Coordinated Direct Investment Survey - Currency composition of official FX reserves 	<ul style="list-style-type: none"> - Exchange rates - International reserve assets and reserve liabilities of the monetary authorities - Reserve/base money - Broad money - Central bank balance sheet - Consolidated balance sheet of the banking system - Interest rates - Consume price index - GG revenue/expenditure/balance/composition of financing - CG revenue/expenditure/balance/composition of financing - Stocks of CG and CG-guaranteed debt, decomposed by currency, maturity, and residency - External current account balance - Exports and imports of goods and services - GDP/GNP - Gross external debt - International investment position 	
	<ul style="list-style-type: none"> - Production Index - Labor market (employment/unemployment/wages) - Producer price index - International reserves and foreign currency liquidity - Financial Soundness Indicators (encouraged) - <i>Note:</i> Central government (CG) debt total and by maturity, residency, instrument, currency, and CG-guaranteed debt 		Proposed new data provision requirements under the 2022 DPF Review (**)
	<ul style="list-style-type: none"> - National Accounts - Consumer price index - GG operations - Central government operations - CG gross debt - Depository corporations survey - Central bank survey - Interest rates - Stock market - Balance of payments - External debt - Official reserve assets - Merchandise trade - International investment position - Exchange rates 		<p>Public Sector Data</p> <ul style="list-style-type: none"> - Total stock of general government debt - Total stock of general government-guaranteed debt - Total debt stock of non-financial public corporations - Debt stock of GG decomposed by residual maturity, currency, residency, creditor type, individual multilateral and official creditors, instrument, and fixed/flexible interest rate (E) - Debt stock of CG decomposed by creditor type, individual multilateral and official creditors, and instrument - Liquid financial assets of CG/GG - Aggregated profit/loss (or income statement) of non-financial public corporations - Debt stock backed by unrelated collateral within GG and GG guaranteed debt (E) - Liquid financial assets of non-financial public corporations (or balance sheet) (E) <p>Foreign Exchange Intervention</p> <p>Macro-financial Indicators</p> <ul style="list-style-type: none"> - Banks FSIs, including net open position in FX to capital - Other depository corporations: Total assets - Other depository corporations: Total [gross] credit - Other depository corporations: Credit breakdown by borrowing sector - Other depository corporations: Currency breakdown of credit and assets <p>Additional for members with systemically important financial sectors:</p> <ul style="list-style-type: none"> - Other financial corporations: Total assets - Other financial corporations: Total [gross] credit - Other financial corporations: Credit breakdown by borrowing sector - Other financial corporations: Currency breakdown of credit and assets <ul style="list-style-type: none"> - Residential real estate prices
Proposed new encouraged data categories under the Tenth Review		Proposed for further consideration under the 2022 DPF Review (**)	
<ul style="list-style-type: none"> - GG debt by creditor type (SDDS Plus) - GG gross/public external debt owed to official bilateral creditors and by creditor country (SDDS/e-GDDS) - GG gross/public external debt owed to multilateral creditors and by institution (SDDS/e-GDDS) - Net open position in FX to capital (SDDS Plus) and Residential real estate prices (SDDS) - Foreign exchange intervention (SDDS Plus) - Climate change (taxes on fossil fuels) - Labor force participation rate by gender 		<ul style="list-style-type: none"> - Climate change - Socio-political and geopolitical developments - Inequality indicators - Technological change and Demographics 	

Source: Fund staff.

Notes: Green = Common in the current Data Standards Initiatives and the current DPF; Purple = Common in the current Data Standards Initiatives and the proposed DPF; Blue = Common in the proposed Data Standards Initiatives (Tenth Review) and the proposed DPF; (*) Does not include data required in the original list under Article VIII, Section 5, with the exception of exchange rates and IIP; (**) Subject to the Executive Board endorsement; (E) = Encouraged.

Table A.2. Periodicity and Timeliness Requirements/Expectations Under Different Tiers of the IMF Data Standards Initiatives and the Data Gaps Initiative

Data categories	e-GDDS 1/		SDDS		SDDS Plus		DGI-2/	
	Periodicity	Timeliness	Periodicity	Timeliness	Periodicity	Timeliness	Periodicity	Timeliness
Real sector								
National accounts (GDP/GNP)	Q	1Q	Q	1Q	Q	1Q		
Industrial production index or proxy reflecting the structure of the economy	M	12W	M	6W	M	6W		
Sectoral stocks of financial assets and liabilities					Q	4M	Q	4M
Consumer price index (CPI)	M	2M	M	1M	M	1M		
Producer price index (PPI)	M	2M	M	1M	M	1M		
Employment	A	3Q	Q	1Q	Q	1Q		
Unemployment	A	3Q	Q	1Q	Q	1Q		
Wages/earnings	A	3Q	Q	1Q	Q	1Q		
Fiscal sector								
General government operations	A	3Q	A	2Q	Q	12M	Q	
Central government operations	Q	1Q	M	1M	M	1M	Q	
Central government and central government guaranteed debt	Q	2Q	Q	1Q	Q	1Q	Q	
General government debt					Q	4M	Q	
Financial sector								
Central bank survey	M	2M	M	2W	M	2W		
Depository corporations survey	M	1Q	M	1M	M	1M		
Interest rates	M		D	1D	D	1D		
Share price index	M		D	1D	D	1D		
Regulatory tier 1 capital to risk-weighted assets					Q	1Q	Q	1Q
Regulatory tier 1 capital to assets					Q	1Q	Q	1Q
Nonperforming loans net of provisions to capital					Q	1Q	Q	1Q
Nonperforming loans to total gross loans					Q	1Q	Q	1Q
Return on assets					Q	1Q	Q	1Q
Liquid assets to short-term liabilities					Q	1Q	Q	1Q
Residential real estate prices					Q	1Q	Q	1Q
External sector								
Balance of payments	Q	1Q	Q	1Q	Q	1Q	Q	1Q
Merchandise trade	M	12W	M	8W	M	8W		
International investment position	A	3Q	Q	1Q	Q	1Q	Q	1Q
Gross external debt	Q	2Q	Q	1Q	Q	1Q		
International reserve assets and liabilities of monetary authorities	M	1M	M	1 W	M	1 W		
Reserves template			M	1M	M	1M		
Exchange rates	D	1D	D	1D	D	1D		
Coordinated portfolio investment survey					SA	7M	SA	6.5M
Coordinated direct investment survey					A	9M	A	9M
Composition of foreign exchange reserves survey					Q	1Q		
Socio-demographic								
Population	A	9–12M	A		A			

Source: Fund staff.

1/ Expectations under the e-GDDS, with participants to agree with staff on specific terms for publication through the NSDP.

2/ Based on the action plans for the implementation of the DGI-2 recommendations. D/W/M/Q/SA/A indicate daily/weekly/monthly/quarterly/semi-annual/annual periodicity or, for timeliness, with lag of no more than the respective period after the reference date.

Table A.3. Countries with Recent Sovereign Bond Market Access

E-GDDS Participants		SDDS Subscribers		SDDS Plus Adherents	
With NSDP	Without NSDP				
1 Albania		1 Argentina		1 Austria	
2 Angola		2 Armenia, Republic of		2 Brazil	
3 Azerbaijan, Republic of		3 Australia		3 Bulgaria	
4 Bahamas, The		4 Belarus		4 Canada	
5 Bangladesh		5 Belgium		5 Chile	
6 Barbados		6 China		6 Czech Republic	
7 Benin		7 Colombia		7 Denmark	
8 Bhutan		8 Costa Rica		8 Estonia	
9 Bosnia and Herzegovina		9 Croatia		9 Finland	
10 Botswana		10 Cyprus		10 France	
11 Brunei Darussalam		11 Ecuador		11 Germany	
12 Burkina Faso		12 Egypt		12 Israel	
13 Cabo Verde		13 El Salvador		13 Italy	
14 Cambodia		14 Georgia		14 Japan	
15 Cameroon		15 Greece		15 Latvia	
16 Côte d'Ivoire		16 Hong Kong SAR		16 Lithuania	
17 Dominican Republic		17 Hungary		17 Luxembourg	
18 Equatorial Guinea		18 Iceland		18 Netherlands, Kingdom of the	
19 Eswatini, Kingdom of		19 India		19 North Macedonia	
20 Ethiopia		20 Indonesia		20 Portugal	
21 Fiji		21 Ireland		21 Romania	
22 Gabon		22 Jordan		22 Slovak Republic	
23 Gambia, The		23 Kazakhstan		23 Slovenia	
24 Ghana		24 Korea, Republic of		24 Spain	
25 Guatemala		25 Kyrgyz Republic		25 Sweden	
26 Guinea		26 Malaysia		26 Switzerland	
27 Guyana		27 Malta		27 United States	
28 Honduras		28 Mauritius			
29 Jamaica		29 Mexico			
30 Kenya		30 Moldova			
31 Kosovo, Republic of		31 Mongolia			
32 Kuwait		32 Morocco			
33 Lao P.D.R.		33 Norway			
34 Lesotho		34 Peru			
35 Madagascar		35 Philippines			
36 Malawi		36 Poland			
37 Maldives		37 Russian Federation			
38 Mauritania		38 Saudi Arabia			
39 Micronesia, Fed. States of		39 Senegal			
40 Montenegro		40 Seychelles			
41 Mozambique		41 Singapore			
42 Myanmar		42 South Africa			
43 Namibia		43 Sri Lanka			
44 Nepal		44 Thailand			
45 Nigeria		45 Tunisia			
46 Oman		46 Turkey			
47 Pakistan		47 Ukraine			
48 Panama		48 United Kingdom			
49 Paraguay		49 Uruguay			
50 Qatar		50 West Bank and Gaza			
51 Rwanda					
52 Samoa					
53 San Marino					
54 São Tomé and Príncipe					
55 Serbia, Republic of					
56 Sierra Leone					
57 Suriname					
58 Tajikistan					
59 Tanzania					
60 Timor-Leste					
61 Togo					
62 Trinidad and Tobago					
63 Uganda					
64 United Arab Emirates					
65 Uzbekistan					
66 Vanuatu					
67 Vietnam					
68 Zambia					
	1 Afghanistan, Islamic Rep. of				
	2 Algeria				
	3 Antigua and Barbuda				
	4 Aruba, Kingdom of the Netherlands				
	5 Bahrain, Kingdom of				
	6 Belize				
	7 Bolivia				
	8 Burundi				
	9 Central African Republic				
	10 Chad				
	11 Comoros				
	12 Congo, Dem. Rep. of				
	13 Congo, Republic of				
	14 Cook Islands				
	15 Djibouti				
	16 Dominica				
	17 Grenada				
	18 Guinea-Bissau				
	19 Haiti				
	20 Iran, Islamic Republic of				
	21 Iraq				
	22 Kiribati				
	23 Lebanon				
	24 Liberia				
	25 Libya				
	26 Macao SAR				
	27 Mali				
	28 Marshall Islands, Rep. of				
	29 Nicaragua				
	30 Niger				
	31 Palau				
	32 Papua New Guinea				
	33 Solomon Islands				
	34 St. Kitts and Nevis				
	35 St. Lucia				
	36 St. Vincent and the Grenadines				
	37 Sudan				
	38 Syrian Arab Republic				
	39 Tonga				
	40 Tuvalu				
	41 Venezuela, Rep. Bol de				
	42 Yemen, Republic of				
	43 Zimbabwe				

Source: Fund staff.

Note: Countries in green indicate issuers of: (i) US dollar or euro denominated bonds issued under foreign governing law or by euro area members under domestic law, with amount outstanding US dollar/euro 200 million or above and at least one year remaining maturity for bullet bonds or 18 months for amortizing bonds, as of December 2021, and not covered by external guarantees; and (ii) benchmark bonds and bonds issued in domestic currency traded in international markets.

Annex II. Stakeholder Engagement with Membership

1. In preparing the Tenth Review, staff consulted broadly with the membership and other stakeholders. Stakeholder engagement included a presentation to the G20 DGI working group on data sharing (March 2021); engagement with e-GDDS/SDDS/SDDS Plus coordinators as part of data standards monitoring as well as through workshops (see below) and the latest SDDS and SDDS Plus Annual Observance Report exercises. Staff has also met with other international partners and private sector representatives to seek stakeholders' views on data challenges and needs and to explore prospects for continuing the strong collaboration with the partners, including on public debt issues.

2. Three tier-specific workshops with the authorities' e-GDDS, SDDS, and SDDS Plus coordinators were held virtually in October 2021, registering high attendance rate (including representatives from 31 e-GDDS countries, 31 SDDS countries, and 21 SDDS Plus countries). A tier-specific short questionnaire was sent ahead of the workshops to gauge countries' views on the benefits of the Data Standards Initiatives, impact of the pandemic, and potential new data categories for dissemination. The workshops highlighted several cross-cutting issues, including the following:

- Participants welcomed the opportunity to share experience and knowledge and expressed strong appreciation for the workshops. Stressing the benefits of the data standards framework, participants noted the importance of holding annual workshops to engage with coordinators in-between reviews.
- Participants agreed on the importance of effective interagency coordination to implement the data standards, providing examples of institutional arrangements that help strengthen coordination.
- While the pandemic affected data dissemination differently across tiers, participants commonly noted resource constraints, pointing to limited scope for adding new data categories.

3. In addition, tier-specific feedback during the workshops and through the responses to the questionnaire includes:¹

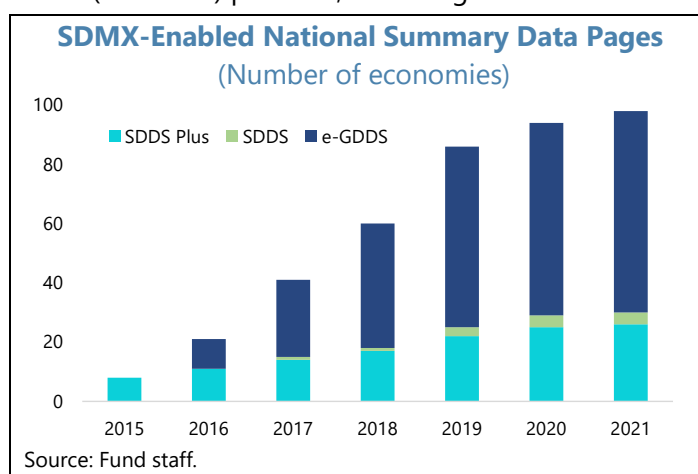
- **e-GDDS.** Most noted the usefulness of the centralized data dissemination platform (NSDP) as a one-stop-shop for data users. There was interest among e-GDDS countries to transition to the SDDS, although some cited resource constraints and difficulties for compiling specific data (general government, merchandise trade, production index).
- **SDDS.** While more than one quarter of respondents had no plans to advance to the SDDS Plus, about one quarter did. Common reasons for delays in SDMX adoption are insufficient IT and technical expertise and the need to upgrade the websites.
- **SDDS Plus.** Overstretched resources and requirements from other data initiatives should be taken into account when considering whether to add new data categories.

¹ Feedback on the questions relating to the usage of NSDP on data dissemination is reported in Annex V.

Annex III. SDMX and Data Standards Initiatives

1. What is SDMX? The Statistical Data and Metadata eXchange (SDMX) is an international initiative aimed at facilitating the exchange of statistical data and metadata. It comprises a model to describe data and metadata, a standard for automated machine-to-machine communication, and a supporting technology. The new SDMX 3.0 has recently been launched. The Fund, as one of the seven sponsors of SDMX, closely collaborates with the World Bank, BIS, Eurostat, OECD, ECB, and the United Nations in implementing SDMX to facilitate efficient data sharing.

2. SDMX and Data Standards Initiatives. SDMX is an integral part of two tiers of the Data Standards Initiatives. The e-GDDS recommends participants to disseminate data on their National Summary Data Pages (NSDPs) using SDMX-based (or similar) platform, and the guidelines for SDDS Plus adherents require dissemination using the technology. Since 2015, the number of countries disseminating key macroeconomic and financial data using SDMX has increased from eight to nearly one hundred, led by countries implementing the e-GDDS (an increase of 68 countries) and the SDDS Plus (an increase of 19 countries by January 2022). The SDDS, the oldest of the three standards, predates the development of SDMX, and the guidelines for SDDS



subscribers differ from those for the SDDS Plus: most SDDS subscribers have been disseminating data on a readily accessible webpage (the NSDP) following a prescribed HTML format. Within the SDDS, only Mongolia, Saudi Arabia, and Senegal have adopted SDMX, with Saudi Arabia being the only SDDS country among the G20 to have adopted SDMX.

3. Benefits of SDMX. SDMX supports data dissemination by: (i) allowing multiple organizations to retrieve data from a single source (i.e., moving from “push” to “pull” dissemination), thus reducing reporting burden; (ii) enabling machine readability which helps improve efficiency and the speed of data exchange, increase scalability, and reduce (human) errors; (iii) utilizing common dimensions, descriptions, and data models to facilitate easy access for users; and (iv) enabling the Fund to easily monitor data releases by the participants of the Data Standards Initiatives, thereby supporting timely dissemination of key macroeconomic and financial indicators.

4. Fund support. Together with regional partners, including the AfDB, the Fund provides extensive capacity development on building and maintaining NSDPs (e.g., use of a user-friendly tool, SDMX central, to create, convert, and read .XML files). Guidance is also provided on coding data categories and their components using the SDMX-based coding structures. The Fund and its partners also conduct regional training seminars on the use of SDMX and the posting of created .XML files on countries’ own webpages or via the AfDB-sponsored ODP.

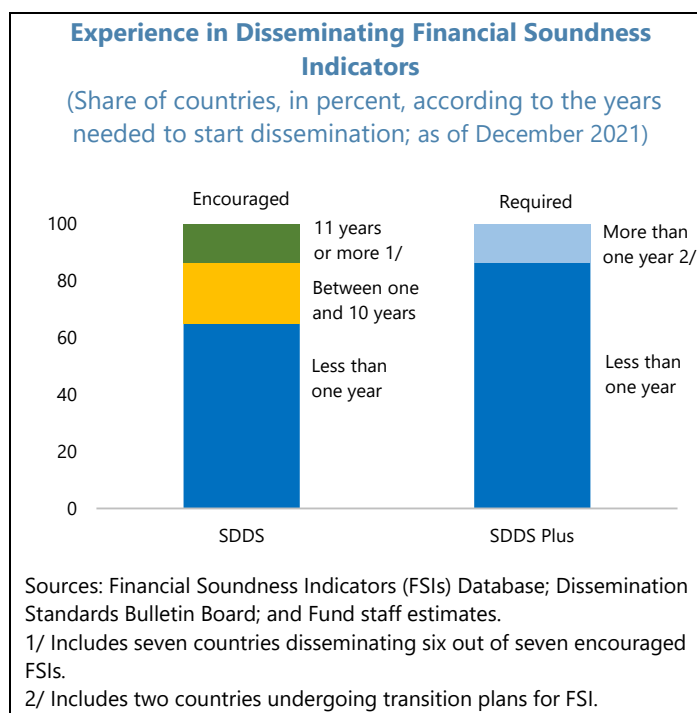
Annex IV. Introduction of New Data Categories Under Previous Reviews

As input to staff proposals on new data categories and, particularly, to ascertain how long it has taken countries to comply with new data publication requirements or recommendations introduced under the previous reviews, staff considered the evidence associated with the financial soundness indicators (FSIs) and international investment position (IIP). Evidence shows that—even after internationally accepted compilation guidance has been issued—countries take time to comply with new requirements/recommendations for publishing additional data categories introduced after countries started participating in the Data Standards Initiatives. Evidence also suggests that countries need varying time periods to launch publication of certain data categories following admission to the SDDS Plus, as this framework allows a five-year transition period—specified in an agreed transition plan—to fully comply with all data publication requirements.

The Experience with Financial Soundness Indicators

1. Background. FSIs were introduced first as an encouraged data category under the SDDS in 2010 (following the Executive Board’s endorsement in December 2008), and as a requirement under the SDDS Plus at the time of its establishment in 2012.¹

2. Analysis. Availability of the FSIs data series for SDDS/SDDS Plus countries in the IMF FSIs database is used as a proxy for timing of publication under the Data Standards Initiatives (absent historical information on country/category-specific vintages of implementation of the Initiatives). For SDDS Plus countries in the database, the analysis is complemented by surveying the respective NSDPs—metadata and availability of longer-term series. The FSIs dissemination lag (in years) is computed as the difference between the first year the complete set of FSIs included in the SDDS/SDDS Plus appeared in the FSIs database and the year of subscription/adherence to the SDDS/SDDS Plus, or the year when FSIs



¹ There is a small difference between the specific FSIs encouraged under the SDDS and those required under the SDDS Plus: the SDDS includes the ratio of the net open position in FX to capital, while the SDDS Plus requires instead the residential real estate prices.

were introduced as a new SDDS requirement (2010) or when the SDDS Plus was established (2012), whichever year is more recent. The country sample includes 22 SDDS Plus countries (out of 27) and 37 SDDS countries (out of 50).

3. The findings, summarized in Text Figure, suggest:

- Among SDDS Plus countries, only two currently do not disseminate all the required FSIs, within the established five-year transition period (Box 6).
- Among SDDS countries (for which FSIs data is only encouraged), six countries had a delay in the past in disseminating the complete set of encouraged FSIs, with an average lag of 3.7 years. Seven countries currently disseminate six out of the seven encouraged FSIs, except the Net open position in FX to capital, with an average ongoing lag of 10 years for the latter.

It should be noted that while the FSIs were introduced as an encouraged category for the SDDS in 2010, the first [FSIs Compilation Guide](#) was completed in 2006, well ahead of the FSIs introduction to the standards.² In addition, the timing of the introduction coincided with the increased interest in strengthening the international reporting of indicators of financial health for monitoring risks in the financial sector following the global financial crisis, as also recommended in the [2009 IMF-FSB report to the G20](#).

The Experience with Data on International Investment Position

4. Background. Dissemination of annual IIP data with six-month timeliness was introduced in 1998 as a requirement for SDDS subscribers, along with a three-year transition period. In 2000, the required timeliness was extended to nine months provided the subscriber was disseminating quarterly external debt data with one-quarter lag. To strengthen understanding of cross-border linkages and facilitate flow and stock data consistency, the Board, in 2010, endorsed a change in the IIP dissemination requirement from annual to quarterly, with a maximum lag of one quarter and a transition period of four years (2014), allowing users to link quarterly balance of payments data to quarterly IIP data to obtain a full picture of external vulnerabilities. SDDS subscribers can take a regular flexibility option for periodicity and/or timeliness of IIP data. The requirements to disseminate IIP data are identical for SDDS subscribers and SDDS Plus adherents. The introduction of the IIP to the standards followed the [BPM5](#) release in 1993, which covered for the first time the International Investment Position, and the publication of the accompanying [Compilation Guide](#) in 1995. Both the [BPM5](#) and the [Compilation Guide](#) covered the IIP although not as comprehensively as the [BPM6](#) released in 2009 and its 2014 [Compilation Guide](#).

5. Analysis. Availability of the IIP data in the STA database on Balance of Payments and International Investment Position Statistics is used as a proxy for timing of publication under the Data Standards Initiatives. The IIP dissemination lag (in years) is computed as the difference between

² During the earlier [Board discussion of FSIs](#) in November 2007, the Board agreed that FSIs should not be included as a required SDDS data category.

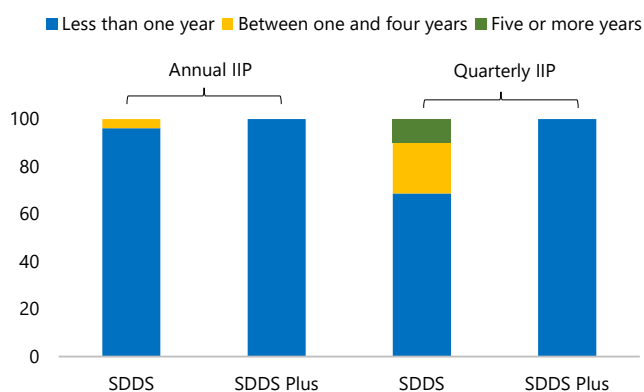
the first year when the country started reporting annual and quarterly IIP to the STA database and the year of subscription to SDDS or the year when IIP was introduced as a new requirement to SDDS (1998 for annual data and 2010 for quarterly data), whichever year is more recent. The country sample includes all SDDS subscribers and SDDS Plus adherents.

6. The findings, summarized in the Text Figure and Text Table, suggest:

- Annual IIP data.** At the time of the introduction of the annual IIP data in 1998, 41 of the then total 47 SDDS subscribers (or almost 90 percent) were already disseminating such data. All SDDS/SDDS Plus participants currently disseminate annual IIP data. Only two SDDS subscribers incurred a delay in disseminating annual IIP data, and the delay was within the established three-year transition period.
- Quarterly IIP data.** At the time of the introduction of the quarterly IIP data in 2010, 54 of the then total 68 SDDS subscribers (or nearly 80 percent) were already disseminating such data. Two SDDS subscribers (with a lag of 11 and 9 years) are yet to disseminate quarterly IIP data as they avail themselves of the flexibility option allowed under the SDDS framework for a total of two data categories. Another 14 SDDS subscribers incurred a delay in disseminating quarterly IIP data in the past, with an average lag of 3.3 years.

Experience in Disseminating Data on International Investment Position (IIP)

(Share of countries, in percent, according to the years needed to start dissemination; as of December 2021)



Sources: Database on Balance of Payments; International Investment Position Statistics; and Fund staff estimates.

IIP Data Introduction: Stocktake of Pre-Introduction

(Share of countries, in percent, according to the years needed to start dissemination; as of December 2021)

Annual IIP: Introduced in 1998	
Number of SDDS Subscribers in 1998	47
o/w: Already disseminated annual IIP data in 1998:	
Number of subscribers	41
Percent of total	87
Quarterly IIP: Introduced in 2010	
Number of SDDS Subscribers in 2010	68
o/w: Already disseminated quarterly IIP data in 2010:	
Number of subscribers	54
Percent of total	79

Sources: Database on Balance of Payments and International Investment Position Statistics; DSBB; and Fund staff.

Annex V. Data Users' Reliance on the Data Standards Initiatives

1. To assess the use of data published under the Data Standards Initiatives, staff relied on a number of sources, primarily based on inputs from stakeholder engagement. Given that the NSDP websites are owned by country authorities (and Fund staff does not have information on access/downloads), inputs on the NSDP usage were requested from countries through a questionnaire. The results suggest that most e-GDDS countries do not record the number or type of users of NSDP, but several countries have plans to set up data analytics to monitor access to data. More than half of the SDDS and SDDS Plus countries report recording access to data, and among them a few use Google analytics to track user statistics. Statistics collected by these countries generally show an increasing trend in the number of NSDP users (visits to the page), with some countries linking the increase to the impact of the pandemic.

2. In addition to directly accessing data on the NSDPs, users mainly access the NSDP information through commercial data providers, such as Haver Analytics, which currently reports NSDP-sourced data for 29 countries, 26 of which are e-GDDS countries.

NSDP Data Added to Haver Analytics Since July 2018

Sources: Haver Analytics; and Fund staff.

Country	Data Category
Angola	Central bank survey; Depository corporations survey; BOP; External debt; Official reserve assets
Bangladesh	CPI (weights); PPI; Central government operations; External debt; Official reserve assets; IIP; Labor market indicators
Bosnia and Herzegovina	Central government operations; General government operations; Government debt
Botswana	Labor market indicators; Production index; Population
Bulgaria	FSI
Burkina Faso	CPI
Cameroon	Central bank survey; Depository corporations survey; Official reserve assets; Exchange rates
Cambodia	Official reserve assets; BOP; Merchandise trade
Honduras	Central bank survey; Depository corporations survey
Jamaica	PPI; Central government debt; Depository corporations survey; External debt; Merchandise trade; Labor market indicators; Population
Kosovo	Central government operations; General government operations; Central government debt; Official reserve assets; FSI
Lao, PDR	Population
Lesotho	GDP; CPI; Central government operations; Central bank survey; Depository corporations survey; Official reserve assets; IIP; Interest rates; FSI
Mongolia	External debt
Montenegro	Central government operations; General government operations; Central government debt; Official reserve assets
Namibia	Official reserve assets; Population
Nigeria	FSI
Oman	CPI; PPI; Central government operations; Central bank survey; Depository corporations survey; Merchandise trade; Official reserve assets; IIP; Interest rates, FSI
Panama	Quarterly GDP
Paraguay	External debt
Rwanda	External debt; Official reserve assets; Production index; IIP
Senegal	Central government debt
Tanzania	IIP
Turkey	International reserves and foreign currency liquidity
UAE	Stock market (Abu Dhabi, Dubai)
Uganda	Central government debt; Stock market; Production index; Population
Uzbekistan	CPI; PPI; Central bank survey; Depository corporations survey; BOP; Merchandise trade by country; External debt; Official reserve assets; IIP; Stock market; Interest rates; FSI; Population
Vietnam	Employment; Underemployment
Zambia	Central government finance; FSI

Note: The data categories in blue (black) are retrieved by Haver Analytics in machine-readable/SDMX (human-readable, e.g., Excel, PDF) format.