

International Practices Task Force

DOCUMENT FOR DISCUSSION

Monitoring Inflation in Certain Countries

November 9, 2022

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Introduction

Registrants are responsible for monitoring inflation in countries in which they have operations. Under U.S. GAAP (ASC 830), the determination of a highly inflationary economy begins by calculating the cumulative inflation rate for the three-year period that precedes the beginning of the reporting period, including interim reporting periods. If that calculation results in a cumulative inflation rate in excess of 100%, the economy should be considered highly-inflationary in all instances. However, if that calculation results in the cumulative rate being less than 100%, historical inflation rate trends and other pertinent factors should be considered to determine whether such information suggests that classification of the economy as highly inflationary is appropriate. Registrants should be especially prudent when monitoring inflation data in countries where there is a concern about the reliability of the inflation data.

Additionally, significant professional judgment is required when determining if there is sufficient evidence to conclude the country should no longer be classified as highly inflationary.

In an effort to facilitate greater consistency, the CAQ International Practices Task Force (the “Task Force”) developed a framework for compiling inflation data to assist registrants in monitoring inflation statistics in connection with their determination of the inflationary status of countries in which they have operations. The information herein may be helpful to management in applying ASC 830, in conjunction with its internal controls over financial reporting to reach a conclusion on whether a country’s economy should be considered highly-inflationary.

The Task Force compiled cumulative inflation data by country (for those countries for which the International Monetary Fund [IMF] publishes data), and then categorized the countries based on their cumulative inflation rates and the implementation guidance in ASC 830. (See the Appendix for a detailed description of how inflation rates are calculated.) In addition, the Task Force identified countries where projected cumulative inflation rates would have been categorized into categories considering the guidance in ASC 830 and in circumstances where there was not consistent reliable data.

The categories, the countries in each of the categories for this period, and reference to the page in this Document where inflation data is provided, are as follows:

1a. Countries with three-year cumulative inflation rates exceeding 100% (ASC 830, Case A)

Argentina	3
Ethiopia	4
Iran	4
Lebanon	4
South Sudan	5
Sudan	5
Suriname	6
Turkey	6
Venezuela	6
Yemen	6
Zimbabwe	7

1b. Countries with projected three-year cumulative inflation rates greater than 100% in the current year
None

2. Countries with three-year cumulative inflation rates exceeding 100% in recent years, but with three-year cumulative inflation rates between 70% and 100% in the last calendar year (ASC 830, Case B)
None

3. Countries with recent three-year cumulative inflation rates exceeding 100% after a spike in inflation in a discrete period (ASC 830, Case C)
None

4. Countries with three-year cumulative inflation rates between 70% and 100% in the current year, or with a significant (25% or more) increase in inflation during the last calendar year, or

a significant increase in projected inflation in the current year, or with projected three-year cumulative inflation rates greater than 100% in the next year

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Ukraine	10 New in October 2022

There may be additional countries with three-year cumulative inflation rates exceeding 100% or that should be monitored which are not included in the below analysis because the sources used to compile this list do not include inflation data for all countries or current inflation data, for example, Syria and Afghanistan. Numerous other countries that are not members of the IMF are not included in the WEO Reports.

The data referred to herein is derived from the IMF World Economic Outlook Report Database – October 2022 (“IMF WEO Report”), unless otherwise indicated. The IMF WEO Report presents inflation data on a calendar year basis. Data presented in the IMF WEO Report as estimated is identified with an “*”.

While the below data may be a useful resource for registrants, management should have adequate controls to independently verify and analyze any data on which they are basing a conclusion about an economy’s highly inflationary status.

Below is a discussion of the countries included in each of the above categories.

1a. Countries with three-year cumulative inflation rates exceeding 100%

Case A in ASC 830-10-55-24 provides an example when the three-year cumulative rate exceeds 100% requiring a company to classify the economy as highly inflationary.

According to data obtained from the IMF WEO Report and other sources identified below, the following countries have three-year cumulative inflation rates exceeding 100%:

Argentina

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	48%	54%	36%	51%	95%	60%
Cumulative three-year rate				216%	301%	371%

Ethiopia

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	11%	20%	18%	35%	32%	26%
Cumulative three-year rate				91%	111%	126%

Additional Information

The October 2022 WOE report projects that the three-year cumulative inflation rate would exceed 100% by the end of 2022. Below is the data published by the Ethiopia Bureau of Statistics for the months of July, August, and September 2022. Based on the data, the actual three-year cumulative inflation rate exceeded 100% before the end of 2022.

Source: Ethiopia Bureau of Statistics			
As of:	July 2022	August 2022	September 2022
Annual Inflation Rate	33%	33%	31%
Cumulative three-year rate	106%	107%	109%

Iran

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	49%	22%	49%	35%	45%	35%
Cumulative three-year rate				144%	190%	164%

Lebanon

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	4%	7%	146%	N/A	N/A	N/A
Cumulative three-year rate				N/A	N/A	N/A

Additional Information/Observations/Questions

The October 2022 IMF WEO Report did not provide any estimates for 2021, 2022 or 2023 so the alternatives below were considered to facilitate review of data. Additionally, the annual inflation rate for 2020 exceeded 100%, therefore, the cumulative 3-year inflation rate for 2021 and 2022 will exceed 100% regardless of the actual inflation rates in 2022.

Alternative Calculation

The three-year cumulative inflation rates presented below for three years ended December 31, 2021 and August 31, 2022 were not reported in the October 2022 IMF WEO Report, but were calculated based on monthly amounts from the applicable indices published by the Central Administration of Statistics. The historical data below uses a base year of January 2013 and does not match the IMF WEO Report which uses a base year of December 2010. The amounts are as follows:

Indices Considered	As of 12/31/21	As of 8/31/22
CPI	753%	1,270%

South Sudan

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	31% (1)	30%	88% (2)	2% (2)	28%	15%
Cumulative three-year rate				150% (2)	147%	51%

Additional Information

(1) In the October 2022 WEO the IMF changed the 2018 annual inflation, and corresponding index at the end of 2018, from the previously reported 40% to 31%. This did not result in a significant change in the 3-year cumulative rate or change in category.

(2) In the April 2022 WEO report, the 2020 and 2021 annual inflation were estimates. In the October 2022 WEO annual inflation was updated to actuals through 2021.

Sudan

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	73%	57%	269%	318%	129%	49%
Cumulative three-year rate				2325%	3444%	1334%

Suriname

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	5%	4%	61%	61%	35%	23%
Cumulative three-year rate				169%	249%	167%

Additional Information

Based on the information in the October 2022 WEO report and consistent with the April 2022 WEO report, the three-year cumulative inflation rate in 2021 exceeded 100%.

Turkey

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	20%	12%	15%	36%	73%	37%
Cumulative three-year rate				74%	171%	223%

Additional Information

The actual annual inflation rates presented below were calculated based on information provided by the Turkish Statistical Institute. The actual 2022 annual inflation rate and three-year cumulative inflation rate are in line with the October 2022 WEO projected inflation rate. Based on the data below the three-year cumulative inflation rate already exceeded 100%.

Source: Turkish Statistical Institute			
As of:	June 2022	July 2022	August 2022
Annual Inflation Rate	79%	80%	80%
Cumulative three-year rate	136%	139%	140%

Venezuela

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	130K%	9.5K%	3.0K%	686%	220%	150%
Cumulative three-year rate				2.3M%	76.9K%	6.2K%

Yemen

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	14%	10%	35%	58% (3)	29%	8%
Cumulative three-year rate				135% (3)	176%	120%

Additional Information:

(3) In the October 2022 WEO, the information for 2021 is an estimate. It was updated from the previous estimate of 85% in the April 2022 WEO.

Zimbabwe

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	42%	521%	349% (4)	61% (4)	547%	100%
Cumulative three-year rate				4379%	4567%	1981%

Additional Information

(4) In the October 2022 WEO, the 2020 and 2021 annual inflation is an estimate.

1b. Countries with projected three-year cumulative inflation rates greater than 100% in the current year

According to data obtained from the IMF WEO Report, the following country has a projected three-year cumulative inflation rate greater than 100% by the end of the current year but has not yet exceeded 100% as of the most recent year-end and any subsequent comparable monthly data available as of the meeting date. Under ASC 830-10-45-12, an economy must be classified as highly inflationary when the cumulative three-year rate exceeds 100%. However, if that calculation results in the cumulative rate being less than 100%, historical inflation rate trends (increasing or decreasing) and other pertinent economic factors should be considered to determine whether such information suggests that classification of the economy as highly inflationary is appropriate sooner. ASC 830-10-45-13 states that the definition of a highly inflationary economy is necessarily an arbitrary decision requiring judgment and in some instances, the trend of inflation might be as important as the absolute rate.

Registrants should have appropriate controls in place to monitor more current reported inflation data and consider other pertinent economic indicators to determine if and when the following country should be considered highly inflationary:

There are no countries in this category.

2. Countries with three-year cumulative inflation rates exceeding 100% in recent years, but with three-year cumulative inflation rates between 70% and 100% in the last calendar year

Case B in ASC 830-10-55-25 provides an illustrative example of a country where an economy continues to be classified as highly inflationary even though the three-year cumulative rate is below 100%

because there is no evidence to suggest that the drop below 100% is other than temporary and annual inflation has been high on a consistent basis.

Countries in this category should be monitored by management, who should apply judgment in determining when there is sufficient evidence to conclude the country should no longer be classified as highly inflationary.

There are no countries in this category.

3. Countries with recent three-year cumulative inflation rates exceeding 100% after a spike in inflation in a discrete period

Case C in ASC 830-10-55-26 provides an illustrative example where a country's economy no longer exceeds 100% for the cumulative three-year rate and the classification as highly inflationary resulted from an isolated spike in annual inflation. ASC 830-10-55-26 states that this country's economy should no longer be classified as highly inflationary.

According to data obtained from the IMF WEO Report, the following countries three-year cumulative inflation rates have exceeded 100% after a spike in inflation in a discrete period. Countries in this category should be monitored by management, who should apply judgment in determining when there is sufficient evidence to conclude whether the country should be, or should no longer be, classified as highly inflationary:

There are no countries in this category.

4. Countries with projected three-year cumulative inflation rates between 70% and 100% in the current year, or with a significant (25% or more) increase in inflation during the last calendar year, or a significant increase in projected inflation in the current year, or with projected three-year cumulative inflation rates greater than 100% in the next year

According to data obtained from the IMF WEO Report, the following countries have projected three-year cumulative inflation rates between 70% and 100% in the current year, or a significant (25% or more) increase in inflation during the last calendar year, or a significant increase in projected inflation in the current year, or projected three-year cumulative inflation rates greater than 100% in the next year.

Registrants should have appropriate controls in place to monitor more current reported inflation data and consider other pertinent economic indicators to determine if and when the following countries should be considered highly inflationary:

Angola

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	19%	17%	25%	27%	15%	11%
Cumulative three-year rate				86%	83%	62%

Ghana - New in October 2022

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	9%	8%	10%	13%	32%	17%
Cumulative three-year rate				34%	64%	74%

Haiti

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	13%	20%	25%	13%	31%	15%
Cumulative three-year rate				69%	86%	71%

Moldova - New in October 2022

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	1%	8%	0%	14%	30%	8%
Cumulative three-year rate				23%	49%	60%

Sierra Leone - New in October 2022

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	14%	14%	10%	18%	29%	24%
Cumulative three-year rate				48%	69%	89%

Sri Lanka - New in October 2022

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	3%	5%	4%	12%	70%	9%
Cumulative three-year rate				22%	98%	108%

Additional Information

The actual annual inflation rates presented below were calculated based on information provided by the Sri Lanka Central Bank for the National Consumer Price Index (NCPI). The actual 2022 annual inflation rate and three-year cumulative inflation rate are in line with the October 2022 WEO projected inflation rate. Based on the data below the three-year cumulative inflation rate is approaching 100%.

Source: Sri Lanka Central Bank			
As of:	July 2022	August 2022	September 2022
Annual Inflation Rate	67%	70%	74%
Cumulative three-year rate	89%	93%	96%

Ukraine – New in October 2022

Calendar year	ACTUAL				PROJECTED	
	2018	2019	2020	2021	2022	2023
Annual inflation rate	10%	4%	5%	10%	30%	N/A
Cumulative three-year rate				20%	50%	N/A

Additional Information

In the October 2022 WEO, there was no projected information provided for 2023. The projected annual inflation rate in 2022 of 30% is significant and qualifies for inclusion as a type 4 country.

Appendix: Description of how inflation rates are calculated

For all countries, data is extracted from the International Monetary Fund (“IMF”) website. IMF data is extracted from www.imf.org as follows:

- On the home page, select the “Data” tab, and then click “World Economic Outlook Databases” link.
 - Select the [most recent database](#) (October 2022).
- Select “By Countries (country-level data)”.
- Select “All Countries”, then click the “continue” button.
- Under the “Monetary” subject header, select “Inflation”, “end of period consumer prices” (both the index and percent change); then click the “continue” button.
- Select a date range (e.g., 2018-2023); click “prepare report” and a table is produced with the data; click the “download” link to export to excel. The data table includes the actual and estimated end of period price indices for each country.

The IMF World Economic Outlook (WEO) report estimates inflation when actual inflation data has not been obtained. The text of the report describes the assumptions and conventions used for the

projections in the WEO. The data that are estimated are highlighted. While the IMF data has limitations (projected inflation data and varying dates through which actual data is included in the table), the calculated three-year cumulative inflation allows us to determine which country's calculations require further analysis.

Note: From time to time the WEO refines or updates previously reported actual Consumer Price Index (herein referred to as "Index" or "CPI") data for certain countries.

Using the downloaded table, the three-year cumulative inflation rate is calculated as follows (assuming the current year is end of year 2022): $(2022 \text{ End of Year CPI} - 2019 \text{ End of Year CPI}) / 2019 \text{ End of Year CPI}$.

It should be noted that the IMF inflation data used to summarize inflation could be different from the inflation data reported by the respective countries' central banks or governments. The Task Force has not performed procedures to identify any potential differences. Accordingly, this summarized IMF information should be supplemented, to the extent considered necessary, with other pertinent information that may be available.

For registrants that need additional information to monitor inflation for operations in certain countries, it should be noted that annual or month-end CPI information can be obtained from some countries' central bank or government websites or other publicly available information but that data may differ from the inflation data reported by the IMF and may need to be converted because of differences in presentation or other reasons (for example, some countries have reset their base index back to 100 during recent years). While inflation data published by a central bank or government is often more current than the IMF data, each country releases its inflation data at different times and inflation data for some countries may not be otherwise publicly available.

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