

International Practices Task Force

DOCUMENT FOR DISCUSSION

Monitoring Inflation in Certain Countries

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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
South Sudan	4
Sudan	5
Venezuela	5
Zimbabwe	5

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

Islamic Republic of Iran	6
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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)

There are no countries in this category for this period.

3. Countries with recent three-year cumulative inflation rates exceeding 100% after a spike in inflation in a discrete period (ASC 830, Case C)

Angola	7
Suriname	7

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

Democratic Republic of Congo	8
Liberia	8
Yemen	9

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. One such country, for example, is Syria. 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 2019 (“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	
	2015	2016	2017	2018	2019	2020
Annual inflation rate	N/A	N/A	25%	48%	57%	39%
Cumulative three-year rate				N/A	190%	223%

N/A = not available

The IMF WEO Report does not provide annual inflation data for 2015 and 2016, an index at the end of 2015, and includes a warning about the data, as follows:

“The consumer price data for Argentina before December 2013 reflect the consumer price index (CPI) for the Greater Buenos Aires Area (CPI-GBA), while from December 2013 to October 2015 the data reflect the national CPI (IPCNu). The government that took office in December 2015 discontinued the IPCNu, stating that it was flawed, and released a new CPI for the Greater Buenos Aires Area on June 15, 2016 (a new national CPI index has been disseminated starting in June 2017). At its November 9, 2016, meeting, the IMF Executive Board considered the new CPI

series to be in line with international standards and lifted the declaration of censure issued in 2013. Given the differences in geographical coverage, weights, sampling, and methodology of these series, the average CPI inflation for 2014, 2015, and 2016 and end-of-period inflation for 2015 and 2016 are not reported in the October 2019 WEO.”

As a result of the above, the Task Force is unable to calculate the actual cumulative three-year rate at the end of 2018. Based on the projected indices reported in the IMF WEO Report, the calculated projected cumulative three-year inflation amounts to 190% at the end of 2019.

Alternative Calculations

The three-year cumulative inflation rates presented below were not reported in the October 2019 IMF WEO Report, but were calculated based on monthly amounts from various indices published by the National Institute of Statistics and Census of Argentina (INDEC), as follows:

Indices Considered	As of 12/31/16	As of 12/31/17	As of 12/31/18	As of 9/30/19
1 Various indices used — Greater Buenos Aires (CPI-GBA) to December 2013, IPCNu January 2014 to October 2015, City of Buenos Aires only index (IPC-BA) November 2015 to April 2016, new CPI-GBA from May 2016 to May 2017, new National Index from June 2017 to relevant period-end	104%	106%	156%	167%
2 Same as #1 except that the San Luis province index (IPC-SL) was used instead of the IPC-BA for November 2015 to April 2016	102%	104%	145%	167%
3 National Wholesale Price Index (WPI)	91%	77%	177%	196%

The WPI is included for consideration for the following reasons:

- Concerns about the accuracy and consistency of published CPI data.
- The CPI data is not a national average for all periods.
- The WPI has consistently provided national coverage and historically has been viewed as the most relevant and reliable inflation measure by practitioners since Argentina moved to International Financial Reporting Standards (IFRS).

South Sudan

Calendar year	ACTUAL				PROJECTED	
	2015	2016	2017	2018	2019	2020
Annual inflation rate	110%	480%	118%	40%	36%	11%
Cumulative three-year rate				1,667%	314%	111%

Sudan

Calendar year	ACTUAL				PROJECTED	
	2015	2016	2017	2018	2019	2020
Annual inflation rate	13%	30%	25%	73%	57%	67%
Cumulative three-year rate				182%	240%	353%

Venezuela

Calendar year	ACTUAL				PROJECTED	
	2015	2016	2017	2018	2019	2020
Annual inflation rate	181%	274%	863%	130K%*	200K%	500K%
Cumulative three-year rate				4.7M%*	>1B%	>1B%

* Data is estimated.

Zimbabwe

Calendar year	ACTUAL				PROJECTED	
	2015	2016	2017	2018	2019	2020
Annual inflation rate	-2%	-1%	3%	42%	183%	9%
Cumulative three-year rate				46%	316%	340%

Actual Subsequent to 2018
(Source: Reserve Bank of Zimbabwe)

Calendar date	March 31, 2019	June 30, 2019	Sept 30, 2019
Annual inflation rate	67%	176%	353%
Cumulative three-year rate	72%	185%	381%

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% in 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:

Islamic Republic of Iran

Calendar year	ACTUAL				PROJECTED	
	2015	2016	2017	2018	2019	2020
Annual inflation rate	8%	12%	8%	48%	31%	30%
Cumulative three-year rate				79%	110%	152%

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 for this period.

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:

Angola

Calendar year	ACTUAL					PROJECTED	
	2014	2015	2016	2017	2018	2019	2020
Annual inflation rate	7%	12%	41%	24%	19%	17%	12%
Cumulative three-year rate			69%	96%	107%	72%	55%

Actual Subsequent to 2018
(Source: National Bank of Angola)

Calendar date	March 31, 2019	June 30, 2019	Sept 30, 2019
Annual inflation rate	18%	17%	16%
Cumulative three-year rate	94%	82%	73%

Suriname

Calendar year	ACTUAL					PROJECTED	
	2014	2015	2016	2017	2018	2019	2020
Annual inflation rate	4%	25%	52%	9%	5%	7%	5%
Cumulative three-year rate				108%	76%	23%	18%

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:

Democratic Republic of Congo

Calendar year	ACTUAL				PROJECTED	
	2015	2016	2017	2018	2019	2020
Annual inflation rate	1%	11%	55%	7%	6%	5%
Cumulative three-year rate				85%	75%	19%

Change in data in the IMF WEO Report:

The April 2019 IMF WEO Report presented 24% annual inflation for 2016 while the October 2019 IMF WEO Report presented 11% for the same period, with a corresponding change to the indices at the end of the relevant periods. This resulted in the 2018 cumulative three-year rate decreasing from 105%, as presented in the May 21, 2019 Document, to 85% as presented above.

Liberia

Calendar year	ACTUAL				PROJECTED	
	2015	2016	2017	2018	2019	2020
Annual inflation rate	8%	12%	14%	29%	21%	19%
Cumulative three-year rate				65%	76%	84%

Yemen

Calendar year	ACTUAL				PROJECTED	
	2015	2016	2017	2018	2019	2020
Annual inflation rate	34%	12%	47%	14%*	15%	36%
Cumulative three-year rate				88%*	93%	79%

* Data is estimated.

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 2019).
- 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., 2015-2018); 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 2018): $(2018 \text{ End of Year CPI} - 2015 \text{ End of Year CPI}) / 2015 \text{ End of Year CPI}$.

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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