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# 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, as follows:

- 1a. Countries with three-year cumulative inflation rates exceeding 100% (ASC 830, Case A)
- 1b. Countries with *projected* three-year cumulative inflation rates greater than 100%
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 most recent calendar year (ASC 830, Case B)
3. Countries with recent three-year cumulative inflation rates exceeding 100% after a spike in inflation in a discrete period (ASC 830, Case C)
4. Countries with three-year cumulative inflation rates between 70% and 100%, 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

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, 2017 (“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 “E.”

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%:

South Sudan	Calendar Year	ACTUAL				PROJECTED
		2013	2014	2015	2016	2017
	Annual inflation rate	-9%	10%	110%	480%	111%
	Cumulative three-year rate				1,237%	2,472%

Suriname	Calendar Year	ACTUAL				PROJECTED
		2013	2014	2015	2016	2017
	Annual inflation rate	1%	4%	25%	52%	9%
	Cumulative three-year rate				98%	108%

Actual subsequent to 2016 <i>(Source: Suriname Central Bank/National Statistics)</i>	Calendar Date	ACTUAL		
		March 31, 2017	June 30, 2017	September 30, 2017
	Annual inflation rate	42%	20%	12%
	Cumulative three-year rate	99%	103%	106%

Venezuela	Calendar Year	ACTUAL				PROJECTED
		2013	2014	2015	2016	2017
	Annual inflation rate	57%	65%	160%	303%	1,133%
	Cumulative three-year rate				1,622%	12,792%

## 1b. Countries with *projected* three-year cumulative inflation rates greater than 100%

According to data obtained from the IMF WEO Report, the following countries have projected three-year cumulative inflation rates greater than 100% but have not yet exceeded 100% as of the most recent year-end and any subsequent 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% (although other factors could indicate they may be highly inflationary sooner). 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	
		2013	2014	2015	2016	2017	2018
	Annual inflation rate	8%	7%	14%	42% E	23%	18%
	Cumulative three-year rate				74% E	100%	106%

Libya	Calendar Year	ACTUAL				PROJECTED	
		2013	2014	2015	2016	2017	2018
	Annual inflation rate	2%	7%	16%	30%	35%	30%
	Cumulative three-year rate				61%	103%	128%

Argentina <sup>1</sup>	Calendar Year	ACTUAL				PROJECTED	
		2013	2014	2015	2016	2017	2018
	Annual inflation rate	11%	24%	*	*	22%	17%
	Cumulative three-year rate					105%	n/a

\* The IMF WEO Report does not provide annual inflation data for 2015 or 2016 and includes a warning about the data. See footnote 2.

<sup>1</sup> The October 2017 IMF WEO report provides projections for 2017, but does not provide data for 2015 and 2016. Inflation data for 2014 was determined under the IPCNu and 2013 was determined under the CPI-GBA.

The three-year cumulative inflation rates presented below were not reported in the October 2017 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 9/30/16	As of 12/31/16	As of 3/31/17	As of 6/30/17	As of 9/30/17
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	100.2%	104.2%	97.3%	98.5%	100.3%
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	98.3%	102.2%	95.5%	96.6%	98.3%
3 National Wholesale Price Index (WPI)	93.5%	90.9%	75.9%	72.8%	74.4%

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, and
- ▶ 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).

Note: The IMF WEO Report does not provide annual inflation data for 2015 or 2016 and includes a warning about the data.<sup>2</sup>

In addition to Argentina's projected three-year cumulative inflation rate exceeding 100%, there is also a concern about the reliability of inflation data provided by the government as indicated by the IMF WEO's warning. Registrants should be especially prudent when monitoring inflation data and determining if an economy should be considered highly inflationary in countries such as Argentina, among others, where there is a concern about the reliability of the inflation data. As such, registrants with material operations in this country should consider additional available information in making their judgment.

The Task Force notes that in late December 2016, certain U.S. accounting firms submitted a white paper to the SEC staff in the Office of the Chief Accountant (OCA) that indicated that the firms would not require a registrant to consider Argentina's economy as highly inflationary under U.S. GAAP for the reporting period from October 1, 2016 to December 31, 2016. The SEC staff, after reviewing the white paper submitted by the firms, stated that it would not object to a calendar year-end registrant's determination that Argentina's economy would not be considered highly inflationary under U.S. GAAP for the reporting period from October 1, 2016 to December 31, 2016.

The SEC staff indicated that registrants with Argentine operations should continue to closely monitor the economic environment within the country, and have appropriate processes in place to identify relevant inflation data in order to determine whether Argentina should be considered a highly inflationary economy on an ongoing basis.

The three-year cumulative inflation rates presented above reflect inflation data published by INDEC. The data subsequent to September 30, 2016 is consistent with the data as of September 30, 2016, with the WPI (the only consistently calculated national index) improving in 2017.

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<sup>2</sup> The IMF WEO Report included the following warning: "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 new 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 index has been disseminated starting 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 2017 World Economic Outlook."

## 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 most recent 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.

	Calendar Year	ACTUAL				PROJECTED	
		2013	2014	2015	2016	2017	2018
Sudan	Annual inflation rate	42%	26%	13%	30%	21%	17%
	Cumulative three-year rate	144%	158%	101%	85%	78%	85%

## 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 and other sources identified below, the following country's 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:

	Calendar Year	ACTUAL				PROJECTED	
		2013	2014	2015	2016	2017	2018
Ukraine	Annual inflation rate	0.5%	25%	43%	12%	10%	7%
	Cumulative three-year rate				101%	77%	32%

Actual subsequent to 2016 (Source: National Bank of Ukraine)	Calendar Date	ACTUAL		
		March 31, 2017	June 30, 2017	September 30, 2017
	Annual inflation rate	15%	16%	16%
	Cumulative three-year rate	103%	95%	91%

#### 4. Countries with projected three-year cumulative inflation rates between 70% and 100%, 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

According to data obtained from the IMF WEO Report, the following countries have projected three-year cumulative inflation rates between 70% and 100%, 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. Accordingly, registrants should have appropriate controls in place to monitor reported inflation data.

Democratic Republic of Congo	ACTUAL				PROJECTED		
	Calendar Year	2013	2014	2015	2016	2017	2018
	Annual inflation rate	1%	1%	1%	24% E	50%	40%
	Cumulative three-year rate				26% E	87%	160%

Similar to the situation in Argentina, the IMF WEO Report does not include actual inflation data for the Democratic Republic of Congo for 2016. This fact, in combination with the significant change in rates, indicates that determining if prior year inflation data is reliable may be subject to significant professional judgment. As such, registrants with material operations in this country should consider additional available information in making their judgment.

Egypt	ACTUAL				PROJECTED		
	Calendar Year	2013	2014	2015	2016	2017	2018
	Annual inflation rate	10%	8%	11%	14%	30%	12%
	Cumulative three-year rate				37%	65%	65%

Yemen	ACTUAL				PROJECTED		
	Calendar Year	2013	2014	2015	2016	2017	2018
	Annual inflation rate	8% E	10% E	19% E	22% E	23%	24%
	Cumulative three-year rate				59% E	78%	86%

The IMF WEO Report does not include actual historical inflation data for the Yemen, which indicates the reliability of the data may be subject to significant professional judgment. As such, registrants with material operations in this country should consider additional available information in making their judgment.

## 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](http://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, 2017).
- ▶ 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., 2013-2017); 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 2016):  $(2016 \text{ End of Year CPI} - 2013 \text{ End of Year CPI}) / 2013 \text{ End of Year CPI}$ .

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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