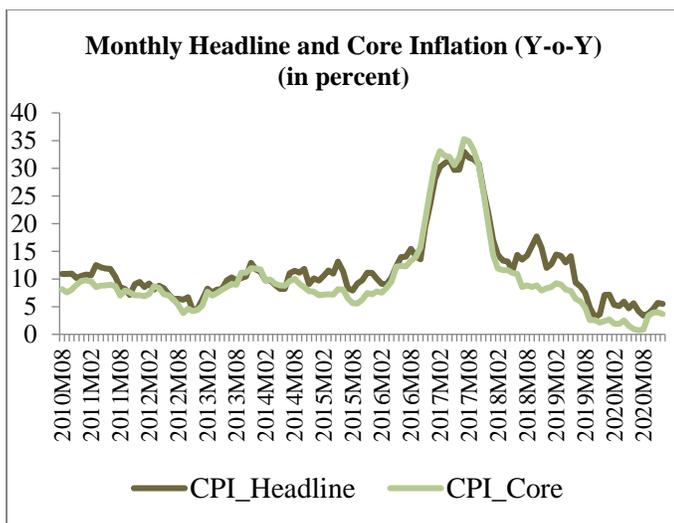


Macro-Note Series "Inflation Note"

Irregular Factors were the Main Drivers of Inflation, during the Fourth Quarter of 2020

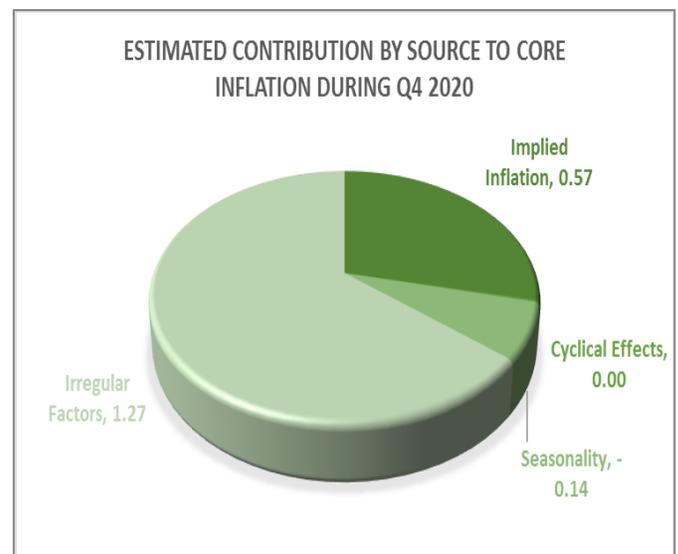
Recent dynamics in headline and core inflation ... Urban headline inflation (Y-o-Y) declined slightly to 5.4% in December, compared to 5.7% in the previous month. The deceleration is driven by monthly developments by -0.4% in December, compared to 0.8% in the corresponding month. Moreover, core inflation (Y-o-Y) remains broadly unchanged to reach 3.8% in December, down from 4.0% a month earlier. This came on the back of a tamed monthly rate of zero% in both November and December 2020.



Source: CAPMAS and Central Bank of Egypt.

...Sources of demand-driven inflation ... During the fourth quarter of 2020, the decomposed series shows that the main source which fuels inflation during this month is mainly attributed to irregular factors accounting for 1.27 percentage points out of 1.7% quarterly rate. This came on the back of the spillovers of the irregularities primarily the effects of COVID-19 the global pandemic.

showing a positive contribution of 0.57 percentage points. Nevertheless, seasonality and cyclical effects have an offsetting impact on inflation this quarter, collectively contributed by -0.14 percentage points. One explanation can be attributed to the seasonal effect of decelerated prices of fruits and vegetables group which usually witness this effect during the fourth quarter of the year.



Source: MAP's Estimation.

* Normally, seasonal factor estimates appear with nil value in case of annual data, while seasonality is a high-frequency data concept that emerges in monthly or quarterly series.

...Forecasts for headline and core inflation ... The implemented forecasts present two scenarios, in addition to the baseline scenario which is calculated using univariate ARIMA model specification. Both optimistic and pessimistic scenarios are induced from a macro-model estimation (refer to the technical annex), wherein the estimation period spans from 1Q 2004/05 through 1Q 2020/21.

Headline and core inflation forecasts for FY2020/21...we updated our forecasts upwards, in light of the released statistics and we still expect that urban headline inflation will be maintained during FY2020/21 at a single digit -albeit with an upward trend, it will be well below the historical average (excluding the overshooting inflation period took place during 2016 and 2017), for all scenarios. For headline inflation, the forecasted figures are on average ranging between 7.3% and 9.6% for FY2020/21.

Further, according to the pessimistic scenario forecasts, inflation will pick up -though below the historical average- to hover around 7.6% - 9.6%. The forecasted inflation is motivated primarily from the macro-economic dynamics concerning expectations of tamed GDP growth accompanied but with lower unemployment rate, which improved significantly during Q3 2020 to register 7.3% down from 9.6%. This is expected to be partially offset by having positive money gaps during the period under investigation.

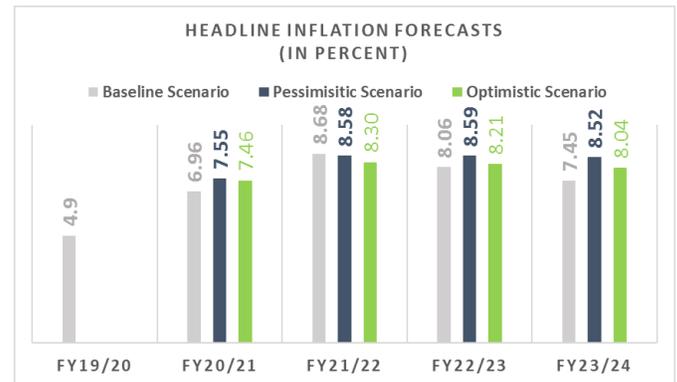
As such, our forecasts show that short-term inflation will be hovering -on the edge- around the target set by the CBE which is 6% (+/-3%) suggesting that the CBE will be able to meet its target.

When shifting to core inflation forecasts, recent dynamics indicate that it will be kept well below its historical average of 8.8% for some time. Evidently, we found that it will show a slight pick-up by Q4 FY2020/21, to reach a maximum of 7.4% as per the baseline scenario; nevertheless, it will be fluctuating around a single digit for all scenarios likewise. Business as usual scenario shows that if economic conditions are *ceteris-paribus*, core inflation will be maintained at a record low of 4.3% on average during FY2020/21.

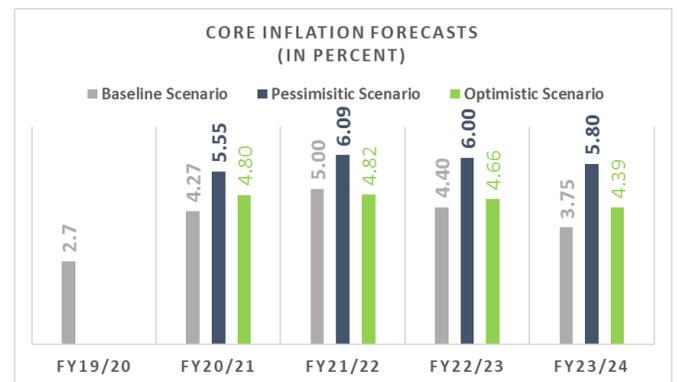
Worth to mention that our (y-o-y) forecasts for Q4 2020 just came in line with the actual figures for both headline and core inflation. For headline inflation, actual figure registered 5.24%, while the forecasted

was 5.56%. As for core inflation, the actual figure is 3.86 compared to a forecast of 3.96%.

We still emphasize that future dynamics in inflation will partially depend on how the economy will perform on the real activity front along with the dynamics in both inflation rate and FOREX market during the next couple of quarters.



Source: MAP's Estimates.



Source: MAP's Estimates.

Headline Forecasts				
	Baseline	Pessimistic	Optimistic	Average All Scenarios
Q1 2020/21				
Q2 2020/21	5.24			
Q3 2020/21	8.47	8.12	7.61	8.07
Q4 2020/21	10.40	9.32	9.56	9.76
Core Forecasts				
Q1 2020/21				
Q2 2020/21	3.86			
Q3 2020/21	4.47	5.44	3.92	4.61
Q4 2020/21	7.14	7.35	6.62	7.04

Source: MAP's Estimates.

Technical Annex: Macro Forecasts Summary

1. Sectoral Real GDP: Factor Cost

All values were calculated as the nominal values adjusted for inflation using the Headline CPI.

Three scenarios were calculated:

- Baseline scenario: the historical averages for the last 15 years were utilized in a univariate framework.
- Optimistic scenario: the simple average for the univariate analysis of 10 leading sectors, which are: Agriculture, extractions, manufacturing, construction, transportation, real estate, finance, Suez Canal and hotels & restaurants and services were implemented. These five sectors constitute about 50% of real GDP.
- Pessimistic scenario: based on a behavioral function of five proxies for three leading sectors (Suez Canal, transportation and extractions) which are affected primarily from geopolitical issues and the Global pandemic impact especially in the light of the second wave of COVID-19.

2. Labor Market: Unemployment Rate and Number of Employed

- Is based on a behavioral equation as a function in GDP (factor cost) and a step dummy to control for the structural and administrative reforms taking place during the second half of FY 2018/19 and beyond.

3. Inflation Forecasts: Headline and Core

- based on a behavioral equation as a function in GDP (factor cost), induced real money gaps and unemployment rate (Philips Curve).

4. Exchange Rate Forecasts:

- Baseline scenario is based on an ARIMA model (1,0,1). While both optimistic and pessimistic scenarios are based on a behavioral equation including inflation and GDP Growth rates.