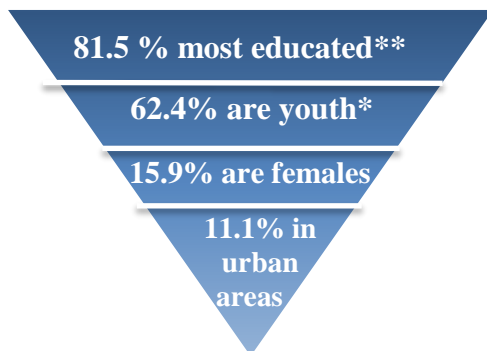# Macro-Note Series
"Unemployment Note"

Unemployment Rate Slightly Inched Up in Q1 2021 Amid Second Wave of COVID-19

May 20, 2021

CAPMAS announced latest unemployment reading for 2021 Q1… unemployment rate inched-up slightly to 7.4% in Q1, up from7.2% in 2020 Q4, and down from 7.7% in 2020Q1. This increase was mainly backed by the surge in Covid-19 reported infections during the second wave of the global pandemic that started in January 2021. The labor force has declined during this quarter registering 29,284 million versus 29,965 million during the previous quarter by 2.3% resulting from the precautionary measures implementation along with the drop in the number of unemployed & employed persons by 0.5% & 2.4% respectively. This leaves the total number of unemployed at 2.155 million persons in Q1 and the total employed persons recorded 27,129 million.

…Egypt's Unemployment Inverted Pyramid… According to the recent unemployment socio-economic characteristics in Egypt's labor market, the inverted pyramid is manifested where unemployment rates in 2021 Q1 rise among the most educated, the youth, the females and in the urban areas.

81.5 % most educated**

62.4% are youth*
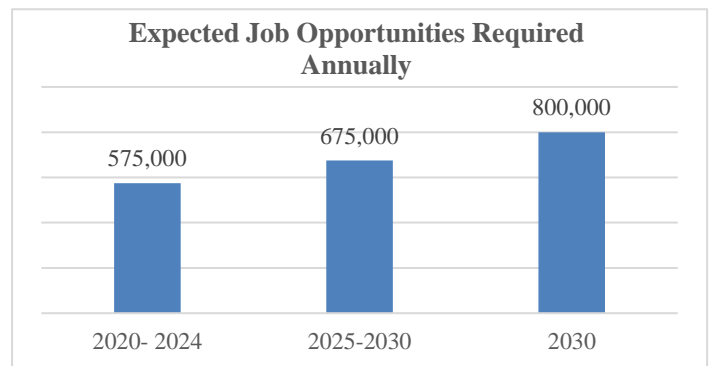
15.9% are females

11.1% in urban areas

Source: CAPMAS, Q1 2021 labor force survey
* Youth : 15 -29 years old
** The most educated: are identified with intermediate educational status, above intermediate, university degree or higher.
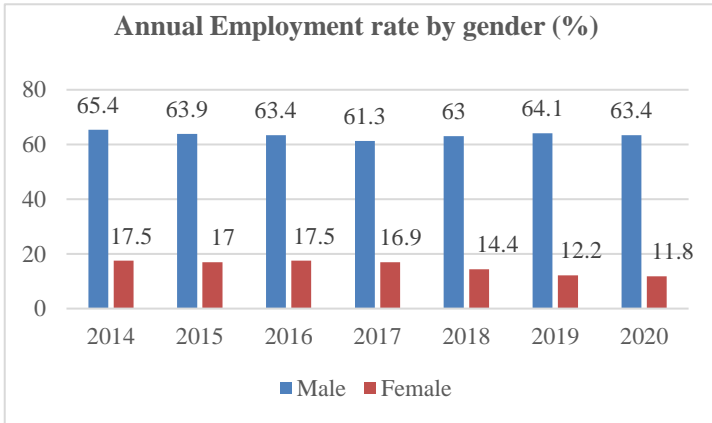
[1] Source: CAPMAS, Census 2017

…Egypt's Labor Market Structure… The unemployment inverted pyramid highlights major structural discrepancies in Egypt's labor market. Whereas at normal conditions, the educated youth are supposed to get better job opportunities in urban areas compared to the rural areas. Such dynamics shed light on three main factors: **the mismatch between education system outcomes and labor market requirements.** High unemployment rates among the most educated representing 81.5% in Q1 2021 despite the slight reduction from 82% in Q4 2020 assures this structural bottleneck. From which, 43.2% of persons with university degrees and higher are unemployed in Q1 2021 down from 45.7% in Q4 2020. **The demographic structure is the second factor**, where the percentage of the youth in working age (ranging 15 -35 years old) has surged proportionally with the population increase reaching 61%, according to 2017 census[1] posing additional pressures on available labor demand. Yet, the pressure is expected to expand over the coming years according to Assad (2020), despite the current decline in labor force noticed during Q1 2021. Whereas, labor force is expected to grow from 1.2% to 2% over the coming decade reflecting the need to create more job opportunities. Therefore, through the second phase of the National Structural Reform Program, the Egyptian Government is working to bolster the economy aiming to achieve balanced and sustainable inclusive growth by targeting the real sector activities for the first time leading to create more decent work opportunities.
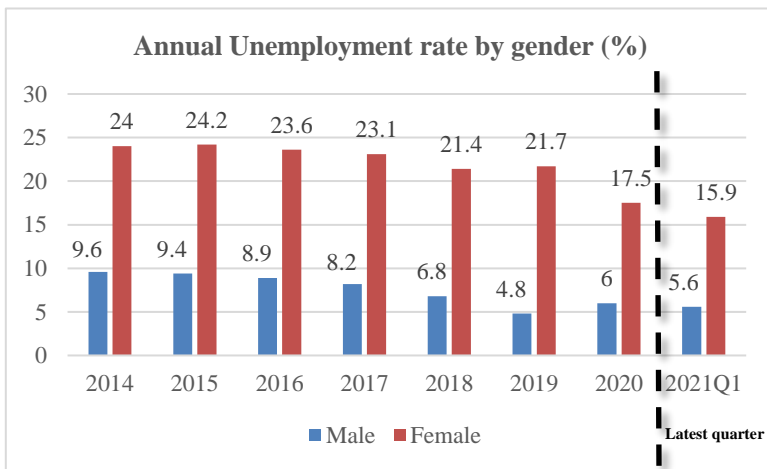
Expected Job Opportunities Required Annually

Period	Value
2020- 2024	575,000
2025-2030	675,000
2030	800,000

Source: Assaad, 2020.

The third factor is the gender gap: the following charts are showing the persisting structural gender gap challenge observed in both employment and unemployment rates over the years reflecting another main aspect that needed to be addressed through the scope of women empowerment vision coupled with the implementation of actionable series of measures and policies. Positive sign is observed in the latest figure of Q1 2021, where the gap is relatively merged in the unemployment rate compared to previous years.
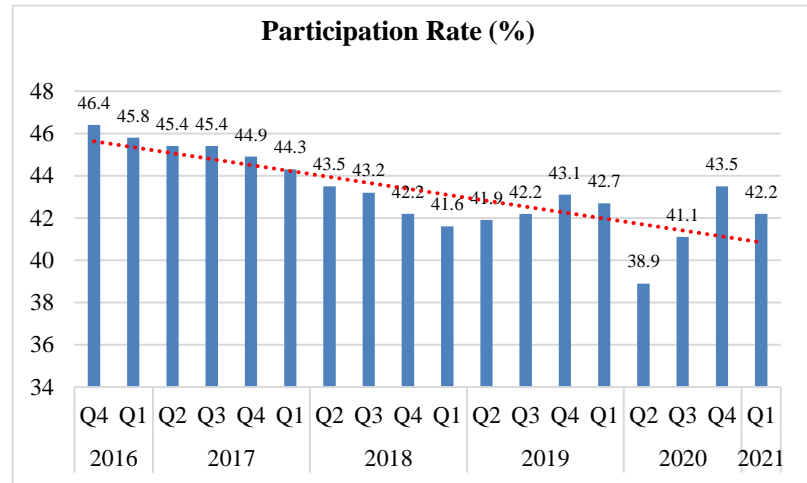
Annual Employment rate by gender (%)

Source: CAPMAS.

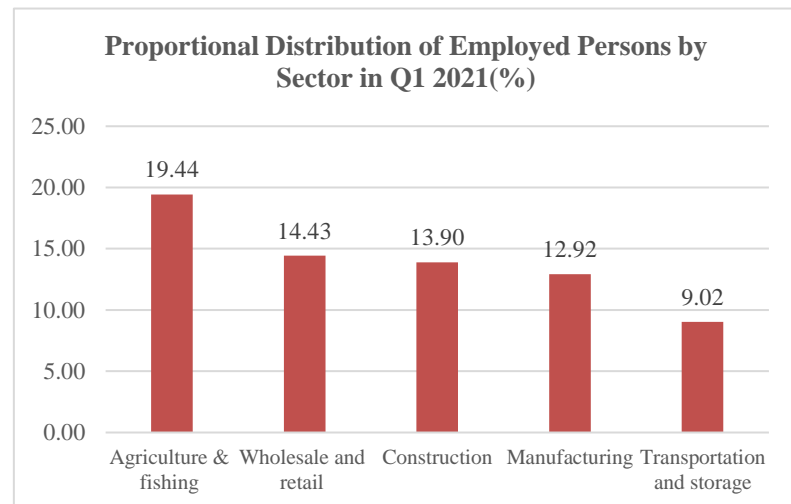**Annual Unemployment rate by gender (%)**

Source: CAPMAS.

…Participation Rates and Sectoral Employment Distribution … The latest unemployment figures showed that participation rates in Q1 2021 followed a downward slope accounted at 42.2% compared to 43.5% in Q4 2020 and 42.7% in Q1 2020 resulted from lower male & female participation at 67.8% and 15.1% in Q1 2021 vs 69.6% and 16.1% in Q4 2020. Such dynamic prevails Covid-19 negative implications on labor market from one side, and the population increase from the other side.

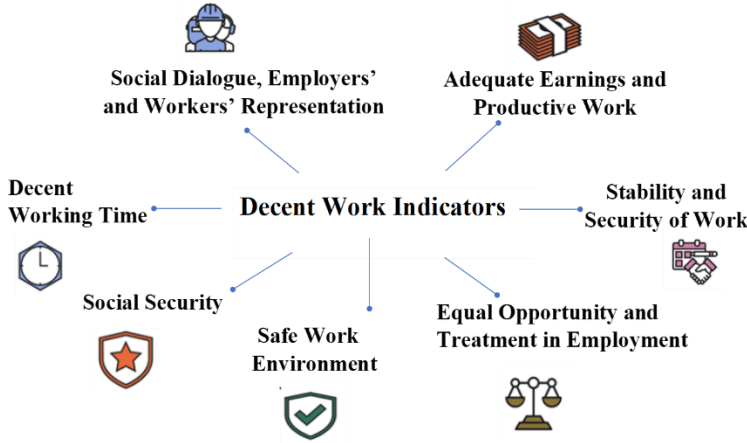**Participation Rate (%)**

Source: CAPMAS.

As for the sectoral distribution of employed persons, Agriculture sector had the lion share of 19.4% of the total employed who constituted about 5.3 million workers. Retail and wholesale sector ranked the second which contributed by 14.4% of the total employed, they accounted for 3.9 million workers. Afterwards, came construction and manufacturing sector, contributed by about 13.9% and 12.9%, respectively to the total employed.

Proportional Distribution of Employed Persons by Sector in Q1 2021(%)
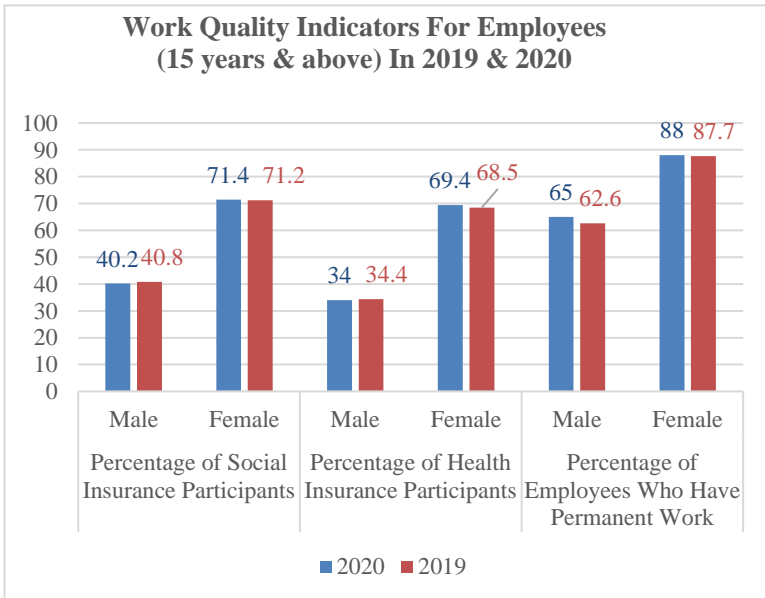

Source: CAPMAS.

Whilst, the economic activities that lost workers during Q1 2021 were agriculture reported 443 thousand lost workers, followed by the wholesale and retail (437 thousand workers), then manufacturing sector losing 56 thousand workers.

… Employment Quality Indicators… According to the ILO, decent work involves opportunities for productive work, with fair income levels, security in the workplace and social protection for families, social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men.
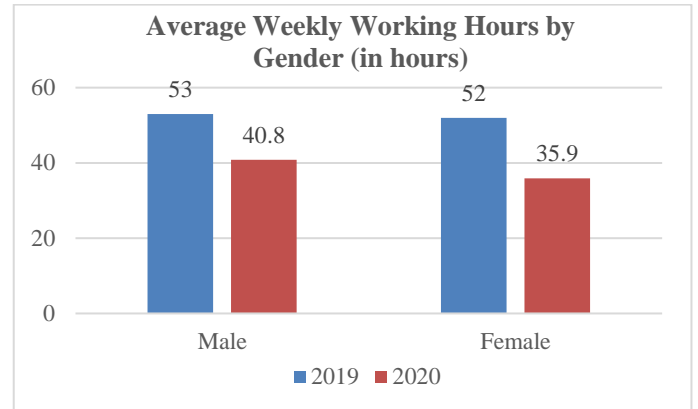

Source: ILO

The latest working environment indicators demonstrate better employment quality conditions for females in 2020, while men in Egypt tend to work in relatively lower quality jobs. As noted in the following figure, 40.2% of men have social insurance versus 71.4% of females in 2020. And, in 2020, only 34% of men participate in social insurance against 69.4% of females.

Work Quality Indicators For Employees (15 years & above) In 2019 & 2020
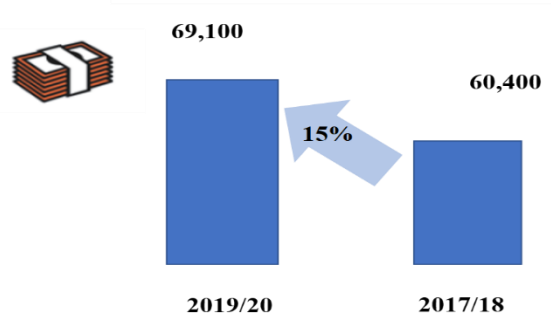
Source: CAPMAS. 2019, 2020

2020 has witnessed a considerable decline in the average weekly working hours in Egypt for male and female resulting from the Covid-19 global outbreak and its repercussions on the working conditions.

Average Weekly Working Hours by Gender (in hours)

Source: CAPMAS. 2019, 2020

On a positive note, **the latest HICKS results of FY 2019/20 released indicates an increase in the average annual net family income at the national level, driven by a 16.3% rise in urban areas** from 69,600 pounds in 2017/2018 to 80,900 pounds in 2020/2019., while the average annual family income of the in rural areas reached 59,700 pounds annually in 2020/2019 up from 52,700 pounds annually in 2017/2018, with a growth rate of about 13 .3%.

The Average Annual Net Family Income at the National level

69,100

60,400

15%

2019/20   2017/18

Source: CAPMAS, HICKS 2019/ 2020

… Covid-19 Implications on Labor Market in Egypt… The Covid-19 pandemic has severely affected workers in Egypt. As reported in the latest CAPMAS study published in June 2020 presenting a closer look on the labor market in light of the Covid-19 crisis, 73.5% of the sample members have declared lower income levels because of the outbreak. In addition, 61.9% of participants

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have faced changes in their employment status among which 26% have completely lost their jobs. Rurals areas have been considerably impacted by the crisis where 77.3% have reported lower income levels. Thus, Egyptian Government pursue to implement a wide range of social protection programs by expanding the number of beneficiaries of the Takaful and Karama program and expanding the implementation of "Hayah Karima" initiative targeting villages in need, as the most prominent tools to enhance the social safety net umbrella.

…Unemployment, Economic Growth and Inflation Rate… Our forecast for GDP for the baseline scenario ranges between 3.1% to 3.5% for the next couple of years. As for the optimistic scenario, it is forecasted at 6.7% during FY2021/22. The IMF expects the GDP growth rate to reach 2.8% during FY 2020/21 and to jump to 5.5% during the FY 2021/22. The developments in forecasted economic activity are mirrored on the labor market. As such, the forecasted unemployment rate come in line with these dynamics and is expected to reach on average about 7.4% for the next quarter.
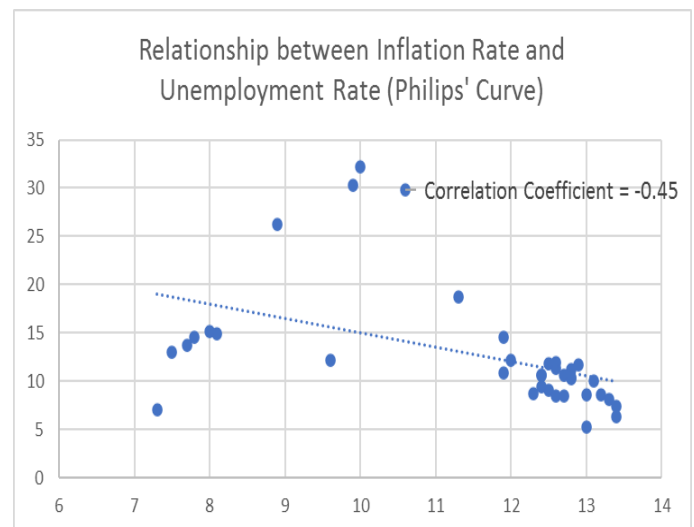
Worth to mention, our forecasts for unemployment rate for Q1 2021 just came in line with the actual figure, we forecasted unemployment rate to reach 7.3% during Q1 2021, which materialized as 7.4% as published by CAPMAS.

Furthermore, the association between the unemployment rate and the inflation rate is considered significantly high, estimated at -1.9 for headline inflation and -1.3 for the core inflation. The estimated coefficient implies that the higher unemployment rate by 1%, the lower inflation on average by a magnitude of 1.9% and 1.3% for headline and core inflation, respectively during the period FY 2005/06 through FY 2019/20.

The latest unemployment rate data revealed that there exists a negative relationship between inflation rate and unemployment rate with a correlation coefficient of -0.45. Noteworthy, the impact of unemployment appears after 1-year period, i.e. inflation rate responds to unemployment with a lag period of 1-year. The magnitude of the impact might appear stronger if the overshooting period of inflation is excluded.

Source: MAP's Estimates and CAPMAS.

Source: MAP's Estimates and CAPMAS.

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 six leading sectors, which are: Agriculture, manufacturing, construction, real estate, hotels & restaurants and telecommunication were implemented. These six sectors constitute about 57% 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 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), plus a step dummy.

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.