



G<sup>2</sup>LM|LIC Working Paper No. 61 | January 2022

# Assessing the labor market impact of COVID-19 on women with young children in Egypt

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#### **ABSTRACT**

### Assessing the labor market impact of COVID-19 on women with young children in Egypt

Women's employment in Egypt had been declining for some time even prior to the COVID-19 pandemic. This paper examines the economic impact of the COVID-19 crisis on female labor force participation in Egypt, with a particular focus on the intersection of COVID-19, child care, and women's employment. Closures in schools and nurseries and women's disproportionate role in child care compounded the effects of COVID-19 on women's employment. We find that women with young children in our sample were facing substantial barriers to care access such as information barriers, financial barriers, as well as safety and quality concerns about nurseries. Moreover, gender role attitudes have remained unchanged across generations. Efforts to address women's employment may thus need to address gender norms and care work within the household in conjunction with child care through nurseries.

#### **JEL Classification:**

J22, J13

#### **Keywords:**

female labor force participation, labor markets, child care, employment services, Egypt

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#### Introduction

This paper examines the economic impact of the COVID-19 crisis on female labor force participation in Egypt, with a particular focus on the intersection of COVID-19, child care, and women's employment.

#### Women's employment in Egypt

Even prior to the COVID-19 pandemic, female labor force participation was low and declining in Egypt (Assaad, Hendy, Lassassi, & Yassin, 2020; Krafft, Assaad, & Keo, 2019). As of 2018, female labor force participation in Egypt was only 21%, down from 27% in 2006 (Krafft, Assaad, & Keo, 2019). Only 17% of women were employed in 2018, down from 22% in 2006 (Krafft, Assaad, & Keo, 2019).

The decline of the public sector, weak labor demand overall and particularly for sectors employing women, difficulties reconciling private sector work and domestic responsibilities, discrimination, and restrictive gender norms have all been cited as longstanding potential causes of low rates of employment among Egyptian women (Assaad, Krafft, Rahman, & Selwaness, 2019; Assaad, Krafft, & Selwaness, 2022; Economic Research Forum & UN Women, 2020; Selwaness & Krafft, 2021; World Bank, 2013, 2018). Reconciling employment and domestic responsibilities is particularly difficult for married women; nearly half of those who were employed in the private sector left such work as they prepared to marry and wed (Assaad, Krafft, & Selwaness, 2022; Krafft, Assaad, & Keo, 2019). The availability and affordability of child care may be a particular constraint on women's ability to work (Economic Research Forum & UN Women, 2020).

Women's employment rates had fallen to a low of 12% in 2019 and into the first quarter of 2020, then dropped to 10% in the second quarter of 2020 with the start of the COVID-19 pandemic and associated lockdowns and economic challenges (CAPMAS, 2020a, 2020b, 2020c). Labor force participation also fell for women, from a rate of 16% in 2019 and the first quarter of 2020 to 12% in the second quarter of 2020 (CAPMAS, 2020a, 2020b, 2020c). As a result of how many women left the labor force, their unemployment rate actually dropped from 22% (as a share of the labor force) in 2019 and the first quarter of 2020 to 16% in the second quarter of 2020 (CAPMAS, 2020a, 2020b, 2020c).

#### Early childhood care and education in Egypt

Early childhood care and education (ECCE) services can be an important support for female labor force participation, globally (Attanasio, Carneiro, & Olinto, 2017; Attanasio, Low, & Sánchez-Marcos, 2008; Berlinski & Galiani, 2007; Clark, Kabiru, Laszlo, & Muthuri, 2019; Gathmann & Sass, 2018; Martínez A. & Perticará, 2017).

There are two forms of ECCE in Egypt: (1) Kindergarten (KGs), which are pre-primary classes for ages 4-6 (age six is school entry age) and (2) nurseries, which are intended for children up to age 4 (until they are eligible for pre-primary education) (UNDP & Institute of National Planning, 2008). The Ministry of Education and Technical Education (MOETE) oversees pre-primary education as part of the education system, while nurseries are supervised by the Ministry of Social Solidarity (MoSS) (UNDP & Institute of National Planning, 2008).

Because pre-primary is not universally available (the enrollment rate in 2017 was 26% (Economic Research Forum & UN Women, 2020)), nurseries also often serve children aged 4-6 (UNDP & Institute of National Planning, 2008). However, rates of enrollment, at least in licensed nurseries are also low. Licensed nurseries served only 8% of children aged 0-3 (Economic Research Forum & UN Women, 2020). The availability of nurseries has actually decreased over time, falling from 0.254 nurseries per hundred children in 2006 to 0.195 nurseries per hundred children in 2017 (Economic Research Forum & UN Women, 2020). Estimates from household surveys indicate higher rates of enrollment in ECCE than official statistics, suggesting children often attend unlicensed care (El-Kogali & Krafft, 2015; Krafft, 2015).

ECCE, and particularly private nursery care, may be difficult for families to afford, constraining women's employment opportunities. By one calculation, private kindergarten fees are 75-373% of the per capita poverty line (Krafft, 2015). Although data on private nursery fees is not widely available, government nursery fees were equivalent to 9-45% of the per capita poverty line (Krafft, 2015). Attendance of ECCE in Egypt is highly unequal along socio-economic lines, much more so than for primary or secondary education (El-Kogali & Krafft, 2015; Krafft, 2015; Krafft & El-Kogali, 2021). Research has identified lack of access to affordable child care as a key obstacle to employment among married women (Barsoum, 2017). For women in Egypt who worked prior to marriage and left work, the second most common reason provided for leaving work was "to take care of children" (the most common was husband's objection to working).

In response to the need for ECCE to support both children's development and women's participation in the labor market, the Egyptian government is committed to finding the most effective ways to expand access to nurseries and ensure they are high quality. In 2019, MoSS planned a national project to increase the number of nurseries available, introduce an improved curriculum, and ultimately create job opportunities for women. The program includes four key components: (1) The development of a high-quality system in Egypt focused on nursery performance standards, curriculum, and professional practices; (2) The launch of new home- and NGO-based nurseries in low-income, disadvantaged areas of Egypt. The home nurseries will serve children aged 0 to 6 and have one to two facilitators per nursery; (3) The launch of new privately owned nurseries in middle- and high-income areas of Egypt; and (4) the creation of a unified monitoring and evaluation system for all nurseries in Egypt.

#### Egypt's response to COVID-19

The Egyptian government has undertaken a substantial public health and economic response in the face of the COVID-19 pandemic. COVID-19 cases, deaths, and correspondingly stringency of closures across sectors were somewhat less than in other countries in the region (Krafft, Assaad, & Marouani, 2021a). Although the economy contracted in the second quarter of 2020, there was positive albeit weak growth for 2020 overall and by the fourth quarter of 2020 (Krafft, Assaad, & Marouani, 2021b). While public

<sup>&</sup>lt;sup>7</sup> Authors' calculations based on Egypt Labor Market Panel Survey 2018.

<sup>8</sup> https://gate.ahram.org.eg/News/2677761.aspx

sector and formal private sector workers were relatively protected from economic effects, informal private sector workers, farmers, and the self-employed experienced layoffs, reductions in hours of work and wages, and ultimately reductions in household income (Krafft, Assaad, & Marouani, 2021a). Women working in the private sector were particularly likely to exit employment, potentially due to difficulties reconciling care responsibilities with longer hours and schedules of private sector work (Assaad, Krafft, & Selwaness, 2022; Krafft, Assaad, & Marouani, 2021a; Selwaness & Krafft, 2021).

As well as an overall stimulus plan amounting to 1.8% of GDP, the Egyptian government policy responses specifically targeted economically vulnerable Egyptians (IMF, 2021). The Takaful and Karama cash transfer programs that targeted the poorest households were expanded, including targeting female-headed households, and monthly grants equivalent to approximately a quarter of the informal median wage were provided to irregular, informal workers experiencing job loss (IMF, 2021; Krafft, Assaad, & Marouani, 2021a). Although these programs reached a number of vulnerable households, they reached only a fraction of vulnerable workers (e.g. 14% of irregular workers compared to 11% of Egyptians overall (Krafft, Assaad, & Marouani, 2021a)).

Moreover, the Egyptian government has also adopted some gender-sensitive measures in its pandemic response. In order to integrate women's needs in the decision-making process, the National Council for Women has also launched a bimonthly policy tracker to monitor the policies adopted by the government and assess their gender sensitivity (NCW, 2020). The Prime Minister issued a decree in March 2020 to decrease the physical presence of female employees in the public sector and enable teleworking as well as give exceptional leaves for mothers of children less than 12 years old and pregnant women. An extra 1 billion Egyptian Pounds (EGP) (0.02% of GDP in 2020; ~64 million USD) fund was dedicated to the health sector where a large share of the workforce is women (65% in the private sector and 57% in the public sector) (Economic Research Forum & UN Women, 2020).

Nurseries were also impacted by the pandemic; in mid-March 2020 schools and nurseries temporarily closed. <sup>10</sup> Restrictions were gradually eased in June of 2020, when schools resumed. Nurseries were allowed to re-open starting July 2020 under strict conditions. <sup>11</sup> The conditions included operating at 50% capacity, providing a thermometer at the nursery to take children's and staffs' temperatures each day, and dedicating a separate room for quarantine in case a child showed any symptoms. It is worth noting that despite being technically able to re-open since July 2020, by December 2020 only 27% of the nurseries in our sample (discussed below) were operational. The reason for this was that nurseries could not afford to operate at 50% capacity. The number of operational nurseries increased gradually as

 $<sup>^9</sup>$  https://egypt.unwomen.org/en/news-and-events/stories/2020/04/unw-commands-ncw-efforts-to-ensure-that-a-gender-perspective-is-adopted-in-egypts-covid19-response

<sup>&</sup>quot;Egypt shuts schools, universities for two weeks as virus cases increase". Reuters. 14 March 2020. https://www.reuters.com/article/us-health-coronavirus-egypt/egypt-shuts-schools-universities-for-two-weeks-as-virus-cases-increase-idUSKBN2110SH

<sup>11</sup> https://www.moss.gov.eg/Sites/MOSA/ar-eg/Pages/news-details.aspx?nid=1830

restrictions on their re-opening eased; by August of 2021 all the nurseries in our sample were operating at 100% capacity.

#### Data from Families with Young Children in Greater Cairo

There are three main explanations as to why female labor force participation in Egypt remains low: (1) women's high opportunity cost of time (2) weak labor demand and (3) restrictive gender norms. As part of a project to understand how these constraints interact and might be alleviated, we are undertaking a randomized controlled trial to test the effects of providing child care subsidies and employment services on women's employment. Our project is targeted to women with young children (aged 1-5) in low-income, informal areas (slums) in Greater Cairo. Our target sample is households living in the catchment area of the nurseries included in the experiment who are not yet a client of a nursery.

The baseline interview, which we rely on in this work, collects information about the mother (employment, reservation wages, actual earnings (of the mother and total household earnings), job quality, psychological well-being, and time use), her husband (particularly his labor supply), the child's development, and the household's dynamics (gender role attitudes and time use). The survey questions also capture attitudes and household bargaining power. They are asked to both mothers and their partners. Since these women with young children face particular challenges in light of the pandemic, we included in our baseline survey a number of questions on the economic and social impacts of the COVID-19 pandemic to households in order to assess the gendered impact of the pandemic as well as policy responses.

So far baseline data has been collected from 3,265 households around 46 nurseries spread across 15 poor areas in the Greater Cairo region. Within these households 3,265 interviews were conducted with the mothers and 1,246 were conducted with their spouses. The data collection happened over three separate periods of time due to delays related to COVID-19 restrictions. The pilot phase was implemented in December of 2020 (30 households), followed by another wave of data collection between March and May of 2021 (666 households) and then another wave between August and September of 2021(2,569 households).

In order to assess the impact of COVID-19 on the households in our sample, we will explore questions related to labor force participation, employment, unemployment, household decisions, women's time use and childcare decisions. Whenever possible we compare the results from our sample to the findings from the COVID-19 MENA Monitor survey. The COVID-19 MENA Monitor mobile phone surveys provide nationally representative data on the effect of COVID-19 on individuals and their households in Egypt prior to the pandemic in February 2020 and then in February 2021, a year into the pandemic (Krafft, Assaad, & Marouani, 2021a).

#### Sample characteristics

In our baseline sample to date, 90% of the women interviewed were married, and on average were 32 years of age and lived in a four-person household. A third (36%) had a three-year technical secondary education followed by 14% with a university degree. A third (35%) of the women in the sample had two children followed by 28% that had three children and 23% that had one. Three-quarters (73%) of the mothers had children aged 3 to 5 while 57% had children aged 0 to 2. The women in the sample also had children older than nursery age and up to 18 years old.

#### Childcare

Only 18% of the women interviewed said that they had any help taking care of their children. Among women who did have assistance, 66% of these women stated that their mother was their primary source of help for childcare and 14% listed their mother-in-law (Figure 1). Only 4% said that they depend on their husbands for childcare. These women reported leaving their children with someone else for an average of 5.5 hours a day. The limited role of husbands in providing child care as well as the short days of child care underscore key barriers to women's employment. Although our sample was limited to those not currently enrolled in a nursery at baseline, the patterns observed here are consistent with the national norms for childcare in Egypt. For instance, that the mother and mother-in-law are the primary sources of child care is consistent with the nationally representative Egypt Labor Market Panel Survey (ELMPS). Even among working women, only 19% relied on nursery care, primarily relying on family care (Assaad, Krafft, & Selwaness, 2017).

100 ■ Mother 80 ■ Mother in law 66 Percentage Daughter 60 Sister 40 Grandmother Other relatives 14 20 ■ Husband 2 4

Figure 1. Who the primary caregiver (other than the woman herself) was, women who had assistance with child care (percentage)

Source: Authors' calculations based on baseline survey

When asked about their willingness to send their children to a nursery should the option become available to them, almost 91% of women expressed interest. Furthermore, we asked these women about the maximum amount of money they were willing to pay to send their children to a nursery as well the maximum distance they were willing to travel; on average, mothers were willing to pay a maximum of 160 EGP/month, which represents around 8% of the average household income in our sample. Also worth noting is that the nurseries in our sample charge on average 175EGP/month. Women also indicated that they are willing to walk a maximum of 15 minutes. Despite having at least one nursery in their immediate area, 21% of mothers replied that they were not aware of any nurseries. This highlights the importance of spreading information about the existence of nurseries in the mother's surrounding area.

To further understand mothers' considerations when deciding to send their children to nurseries we asked women to list their top concern with nurseries (Figure 2); almost 25% stated that they worry most

about their child getting sick, followed by 23% most concerned by the cleanliness of the nursery and 14% fearing the safety of the nursery. A further 11% were concerned that the child would not be treated kindly. Fewer mothers were concerned about children's learning and stimulation, which may reflect safety concerns being paramount, or a lack of awareness around the importance of early childhood development and stimulation (Zellman, Karam, & Perlman, 2014; Zellman, Perlman, & Karam, 2014).

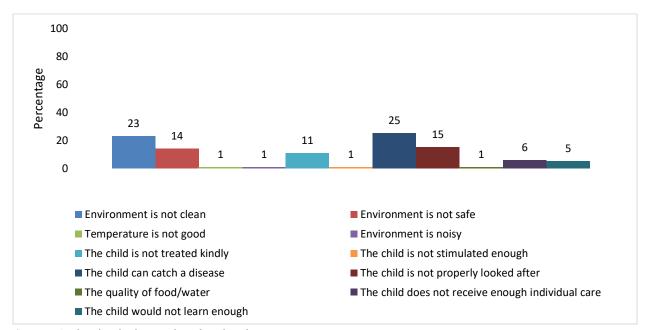


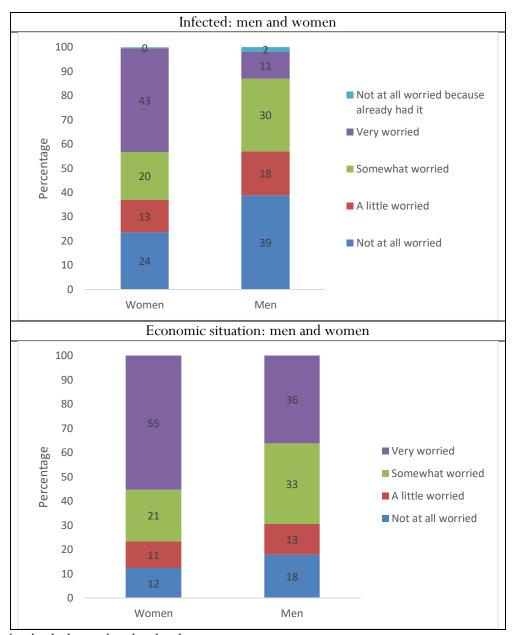
Figure 2. Main concern about sending children to nursery (percentage)

Source: Authors' calculations based on baseline survey

#### Worry over COVID-19

When asking mothers about how worried they are about getting COVID-19 and its economic impact (Figure 3), we see that when it comes to getting infected, 43% of the women were very worried. For the men, the picture is very different; only 11% stated that were very worried and 39% were not worried at all. When it comes to the economic situation, we again see that in general women were more worried than their husbands, 55% reported being very worried compared to 36% for men.

Figure 3. Worry about being infected with COVID-19 and the economic situation (percentages), by sex

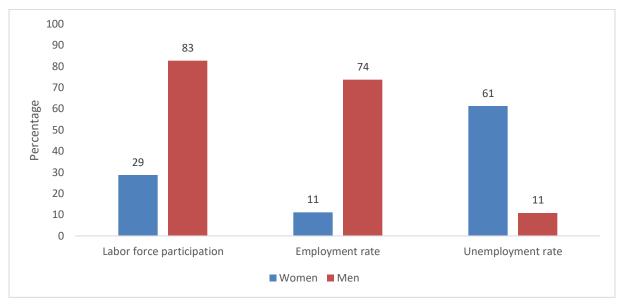


#### Labor market outcomes during COVID-19

#### Labor force participation, employment and unemployment

Overall, 29% of the women in the sample were in the labor force and 11% of the sample of women were currently employed (Figure 4). On the other hand, 74% of the husbands were employed. These results are consistent with the literature on persistent and widening gender gaps in employment, particularly for married women (Krafft, Assaad, & Keo, 2019). For instance, in 2018, only 19% of married women were employed (Krafft, Assaad, & Keo, 2019).

Figure 4. Labor market outcomes for women and their spouses: labor force participation rates (as a percentage of the population), employment rates (as a percentage of the population), and standard unemployment rates (as a percentage of the labor force), by sex



As a point of comparison, according to the COVID-19 MENA Monitor Survey conducted in Egypt female labor force participation (standard, search required definition) was 38% in February 2021, while male labor force participation was 88% (Krafft, Assaad, & Marouani, 2021a). The employment rate for Egyptian men was 76% and the employment rate for Egyptian women 21%. Patterns of disparities are similar, yet it is worth noting that these percentages are higher than what we obtain using our baseline data. This could be due to the that fact our baseline data is collected through in-person surveys, while the COVID-19 MENA Monitor surveys are mobile surveys, meaning the universe of mobile users they cover are disproportionately higher educated, with higher income. Differences, particularly for women's outcomes, could also be because women tend to leave employment at marriage (Assaad, Krafft, & Selwaness, 2022; Selwaness & Krafft, 2021).

#### Business and worker experiences during COVID-19

Figure 5 below explores the operational statuses of enterprises at which women were employed in February 2020. In total, 77% of workplaces had remained open. Only 10% were temporarily or permanently closed. This does not necessarily mean that women were still employed in the same business (indeed, 13% did not know the business status) nor that businesses were operating the same hours; reductions in hours were more common than closures (Krafft, Assaad, & Marouani, 2021a). In fact, 15% of the women employed in 2020 were out of a job by the time of the survey.

100 90 ■ Temporarily closed by government mandate 77 80 ■ Temporarily closed due to 70 **COVID** challenges 60 Percentage ■ Temporarily or permanently closed not due to COVID 50 ■ Permanently closed due to 40 **COVID** challenges 30 ■ Business remains open 20 13 10 Do not know 4 3 2 1 0

Figure 5. Current status of business worked for as of February 2020 (percentage), women employed in February 2020

Figure 6 explores the challenges experienced in the 60 days preceding the survey for those who were wage workers in February 2020. Overall, 76% of employed women reported no change in their status in the past 60 days while 13% have experienced a reduction in working hours, 11% suffered from suspension or layoff and around 6% had a reduction in wage. Additionally, around 72% stated they were able to work from home. Looking at the husbands' experiences in the past 60 days paints a different picture. Only 24% of men stated that there were no changes to their status while 46% were suspended or laid-off, 36% had a reduction in working hours and 20% suffered a reduction in their wages. Some of these differences in experiences between the women and their spouses stem from the different sectors they are employed in; while 85% of the men work in the private sector, 60% of the women do. Women were also more likely to work in government than men (25% compared to 10%). In addition, layoff trends were similar to the COVID-19 MENA Monitor Survey, as they were much more frequent than other challenges (Krafft, Assaad, & Marouani, 2021a). Nearly half of informal private sector wage workers were affected by layoffs during the 60 days preceding the survey, compared to only 6% of public wage employees who experienced layoffs during the same period.

No changes Delay in wage payment. Increase in wage Reduction in wage Increase in hours 37 Reduction in hours 46 Layoff/suspension 0 10 20 30 40 60 70 90 100 50 80 Percentage ■ Men ■ Women

Figure 6. Challenges experienced in the past 60 days (percentage), wage workers, by sex

Notes: Multiple responses possible

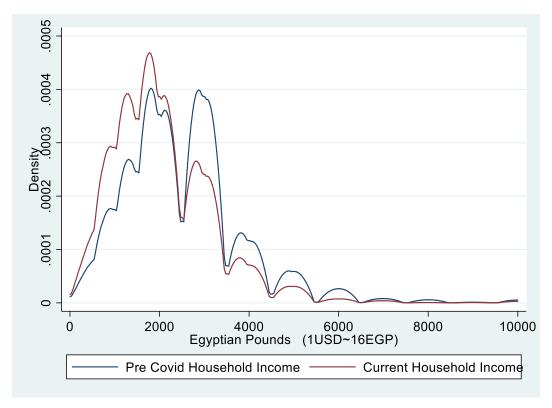
#### Household outcomes during COVID-19

#### Household income

On average household income decreased between February 2020 and September 2021 as shown in Figure 7; the average monthly household income went from 2,240 EGP to 1,928 EGP (almost a 14% decrease). Given that the average household size in our sample is four individuals this indicates the poor nature of our respondents; a family of four has a poverty line of 3,218EGP ( $\sim$ 205USD)<sup>12</sup>.

 $<sup>^{12} \</sup> https://alborsaanews.com/2020/12/03/1403667$ 

Figure 7. Distribution of monthly household income pre- and during COVID-19, in Egyptian pounds.



Almost half of the surveyed households experienced income declines since February 2020. Figure 8 explores changes in household income from February 2020 to data collection. Overall 30% of households saw income decreases of more than 25% while 11% had income decrease between 1% to 25%. 33% of households had their income stay the same and few experienced income increases. These trends are consistent with data from the COVID-19 MENA Monitor as around 42% of the sample interviewed stated having experienced household income decreases between Feb. 2020 and Feb. 2021 (Krafft, Assaad, & Marouani, 2021a). Overall, 22% of the sample saw decreases by more than 25% and 50% said their income did not change over the course of that year.

(percentage) 100 80 Percentage 60 33 40 30 21 20

■ Decreased by more than 25%

11

■ Increased by more than 25%
■ Stayed the same

Figure 8. Change in household income between February 2020 and time of survey

Source: Authors' calculations based on baseline survey

■ Increased by 1-25%

■ Decreased by 1-25%

#### Household food security

0

Households' food security for our sample was greatly impacted;

5

Figure 9 explores the decisions these households needed to take in order to cope with the pandemic regarding food. Overall 59% of the households reported being unable to buy the same amount of food they are used to because of price increases followed by 45% stating they could not buy the same amount because their income dropped. While 31% of the respondents said that there was no change in their household food security, we still observe 25% of the households reduced the number of meals and/or portions.

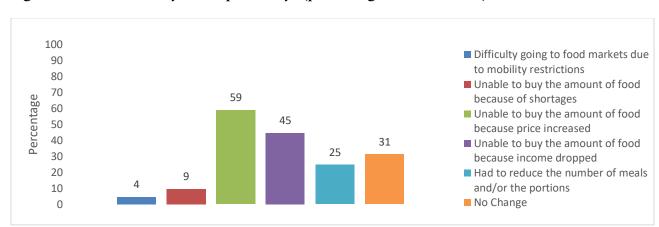


Figure 9. Food insecurity in the past 7 days (percentage of households)

Source: Authors' calculations based on baseline survey

Notes: Multiple responses possible

#### Household coping mechanisms

How have households coped with the challenges presented by the pandemic? In addition to reducing food and meals (

Figure 9), households engaged in a number of other coping strategies (

Figure 10). While 54% of the households turned to borrowing from family and friends, 47% turned to selling assets. Fewer spent savings (10%) potentially because this low-income sample had little savings. Likewise, they may have been unable to borrow formally and thus primarily relied on negative coping strategies and informal social safety networks of friends and family.

100 90 Savings 80 70 ■ Family/ friends Percentage 60 54 47 50 ■ Going back to village or family 40 Borrowing from a bank, 30 employer, or private lender 20 11 10 Selling assets 5 10 Nothing

Figure 10. Coping strategies (percentage of households)

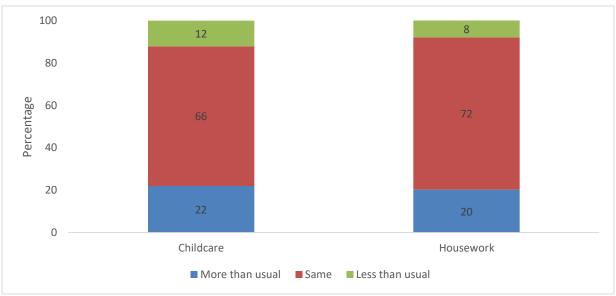
Source: Authors' calculations based on baseline survey

Notes: Multiple responses possible

#### Women's time use during COVID-19

On average the mothers in the sample spent 10 hours per day on childcare and 4 hours per day doing household chores in the week prior to our visit. The amount of time Egyptian women spend on such care work is a major barrier to employment, as it is very difficult to reconcile these hours of care work with employment outside the home (Economic Research Forum & UN Women, 2020). While 66% of mothers have not changed the amount of time spent on childcare in a normal week between February 2020 and September 2021, 22% reported spending more time than usual and 12% reported spending less time (Figure 11). Time spent on household chores shows similar patterns; 72% of women reported no change in the usual time they spend on cleaning and cooking and other tasks compared to February 2020. It is worth noting that this is happening at a time where these women's spouses have often been laid-off from work and so are spending more free hours at home; the unchanged burden of childcare and

housework highlights the gender dynamics within Egyptian households that are difficult to reconcile with



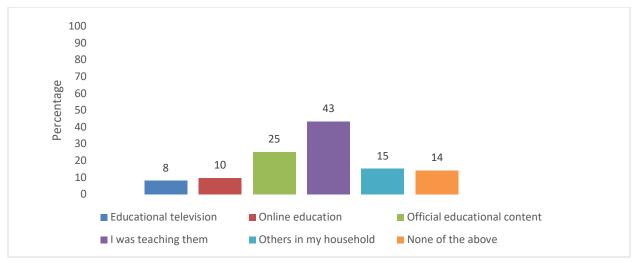
women's employment.

Figure 11. Time spent on child care and housework in the past week compared to February 2020 (percentages)

Source: Authors' calculations based on baseline survey

Egyptian parents are highly invested in the educational success of their children, with mothers playing a particularly important role in helping their children with school work even pre-pandemic (Assaad & Krafft, 2015). During the pandemic, especially when in-person schools were shut down, mothers played a key role in their children's education. When asked about how they coped with children's education during school closures (Figure 12), 43% of mothers said that they took over teaching their children while around 25% depended on official educational written material and 14% reported not doing anything to replace school during its closure.

Figure 12. Educational activities for school-aged children during COVID-19 (percentage, mothers with school-aged children



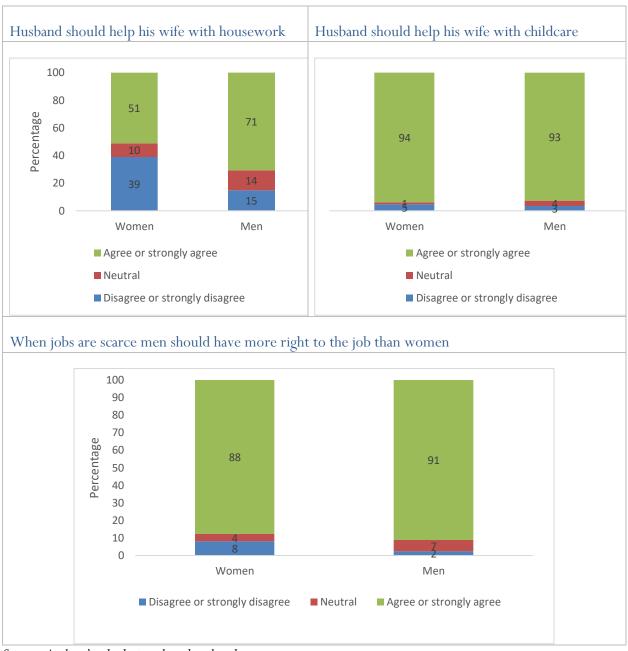
Notes: Multiple responses possible

#### Gender role attitudes

Figure 13 shows gender role attitudes around three issues: household chores; childcare; and access to employment opportunities. In

Figure 1 we saw that only 4% of women get help from their husbands caring for their children. This contradicts the fact that 93% of men agreed that husbands should help their wives with childcare. While 71% of men believed that husbands should help their wives with housework, we still saw in Figure 11 that only 8% of women spent less time on housework despite the fact that 26% of the men are currently not working. The households in our sample had a negative attitude towards women's access to employment opportunities; 88% of women and 91% of men agreed with the proposition that "when jobs are scarce, men should have more right to a job than women." This attitude may have played a role in the fact that during COVID-19 women were more likely to exit employment than men; while 96% of men who were employed in the private sector in February 2020 remained employed at time of survey, 84% of the women did.

Figure 13. Gender role attitudes (percentages), by sex



#### Conclusion, takeaways and way forward

Women's employment in Egypt had been declining for some time. This trend is despite women's rising educational attainment and catch up with men, which we would expect to lead to increased employment (Assaad, Hendy, Lassassi, & Yassin, 2020; Krafft, Assaad, & Keo, 2019). In 2018, only 17% of women were employed, a drop from 22% in 2006 (Krafft, Assaad, & Keo, 2019). Women's employment rates had fallen further to a low of 12% in 2019 and the first quarter of 2020, pre-pandemic (CAPMAS, 2020c, 2020a). Women were thus facing a not only challenging, but also worsening landscape of employment in Egypt pre-pandemic.

COVID-19 has worsened the situation for women. Women's employment dropped to 10% in the second quarter of 2020 with the start of the COVID-19 pandemic (CAPMAS, 2020b). Closures in schools and nurseries and women's disproportionate role in child care compounded the effects of COVID-19 on women's employment. How can policymakers tackle both the longstanding challenges and the new COVID-19 problems that have reduced women's ability to work?

Child care plays a key role in allowing women to work. However, child care has to be available and accessible on multiple levels, as well as high-quality, for mothers to be able to send their children safely and engage in work. In our baseline survey of mothers with young children not currently using nursery care in low-income areas of Greater Cairo, it was clear that there were substantial barriers to care access. First, 21% of women did not know of a nearby nursery, even though, by our sampling criteria, they were necessarily within two kilometers of at least one nursery. Providing information about local nursery availability is thus an important initial step to providing child care.

Second, mothers expressed serious health and safety concerns as their main worry about nurseries. When children attend high-quality ECCE, they gain cognitive and non-cognitive skills (Berlinski, Galiani, & Gertler, 2009; Bernal & Fernández, 2013; Nores & Barnett, 2010; Nores, Bernal, & Barnett, 2019). Although high-quality ECCE can be beneficial for children, low-quality ECCE does not necessarily benefit children (Bouguen, Filmer, Macours, & Naudeau, 2013) and can even be harmful (Hawkinson, Griffen, Dong, & Maynard, 2013; Herbst & Tekin, 2010). Plans by the MoSS to develop a monitoring and evaluation system to ensure nursery quality are critically important; communicating nursery quality information to parents can also be helpful and may even incentivize quality (Bassok, Dee, & Latham, 2019). Greater confidence in the quality of care provided by family members may be one reason women rely on their own mothers or mother-in-laws for care.

Third, care must be of adequate length to allow employment. Women who reported other individuals cared for their children reported 5.5 hours of care per day on average, which is insufficient to engage in full-time employment. Research in the region and globally has underscored the importance of providing full-day ECCE, as well as after school care for older children, to facilitate women's employment (Berthelon, Oyarzún, & Kruger, 2015; Cannon, Jacknowitz, & Painter, 2006; Dhuey, Lamontagne, & Zhang, 2019; Krafft & Lassassi, 2020; Martínez A. & Perticará, 2017). Particularly since women report

spending 10 hours a day on child care and four hours a day on housework, full-day child care as well as time-saving domestic services and goods are much needed (Krafft & Assaad, 2015).

Fourth, care must be affordable. Women reported being willing to pay, on average, 160 EGP per month for child care (8% of average household income; 90% of the average nursery fee). Child care subsidies are one policy that can make child care more affordable, particularly in low-income areas, and increase women's employment (Clark, Kabiru, Laszlo, & Muthuri, 2019).

The COVID-19 pandemic has made meeting these preconditions for women using child care to support paid employment more difficult. Physical access to nurseries was curtailed due to capacity constraints and closures, with school closures compounding challenges as well. As their households have lost jobs and income, families are struggling to afford food in many cases and selling assets or relying on informal social networks to meet basic needs. Paying for childcare may well be out of reach. Gender norms that emphasize priority for men for jobs when job opportunities are scarce (Krafft, Keo, & Fedi, 2019) may further reduce hiring of women. Even when businesses are open and opportunities available, women face substantial barriers in terms of care work responsibilities. Particularly given their concerns about COVID-19 infection as well as the economic situation, women may be averse to paying for child care and sending their children to nurseries. Addressing both safety and affordability concerns may thus be particularly important in the pandemic.

In the long-term, recognizing, redistributing, and reducing the amount of care work women engage in is critically important to supporting their employment (Economic Research Forum & UN Women, 2020). The Middle East and North Africa (MENA) region has the world's greatest inequity between men and women in time spent in care work (International Labour Organization, 2018). Although gender roles are theoretically moderately supportive of men helping with child care and chores (Krafft, Keo, & Fedi, 2019), the reality is that women do the vast majority of care work. Moreover, gender role attitudes have remained unchanged across generations (El-Feki, Heilman, & Barker, 2017). Efforts to address women's employment may thus need to address gender norms and care work within the household in conjunction with child care through nurseries.

#### References

- Assaad, R., Hendy, R., Lassassi, M., & Yassin, S. (2020). Explaining the MENA Paradox: Rising Educational Attainment, Yet Stagnant Female Labor Force Participation. *Demographic Research*, 43(28), 817–850.
- Assaad, R., & Krafft, C. (2015). Is Free Basic Education in Egypt a Reality or a Myth? *International Journal of Educational Development*, 45, 16–30.
- Assaad, R., Krafft, C., Rahman, K. W., & Selwaness, I. (2019). Job Creation in Egypt: A Sectoral and Geographical Analysis Focusing on Private Establishments, 1996-2017. ERF Policy Research Report. Cairo, Egypt.
- Assaad, R., Krafft, C., & Selwaness, I. (2017). The Impact of Marriage on Women's Employment in the Middle East and North Africa. Economic Research Forum Working Paper Series No. 1086. Cairo, Egypt.
- Assaad, R., Krafft, C., & Selwaness, I. (2022). The Impact of Marriage on Women's Employment in The Middle East and North Africa. *Feminist Economics*.
- Attanasio, O., Carneiro, P., & Olinto, P. (2017). Impact of Free Availability of Public Childcare on Labour Supply and Child Development in Brazil. 3ie Impact Evaluation Report No. 58. New Delhi, India.
- Attanasio, O., Low, H., & Sánchez-Marcos, V. (2008). Explaining Changes in Female Labor Supply in a Life-Cycle Model. *The American Economic Review*, 98(4), 1517–1552.
- Barsoum, G. (2017). Educated Young Women's Employment Decisions in Egypt: A Qualitative Account.
- Bassok, D., Dee, T., & Latham, S. (2019). The Effects of Accountability Incentives in Early Childhood Education. *Journal of Policy Analysis and Management*, 38(4), 836–866.
- Berlinski, S., & Galiani, S. (2007). The Effect of a Large Expansion of Pre-Primary School Facilities on Preschool Attendance and Maternal Employment. *Labour Economics*, 14(3), 665–680.
- Berlinski, S., Galiani, S., & Gertler, P. (2009). The Effect of Pre-Primary Education on Primary School Performance. *Journal of Public Economics*, 93, 219–234.
- Bernal, R., & Fernández, C. (2013). Subsidized Childcare and Child Development in Colombia: Effects of Hogares Comunitarios de Bienestar as a Function of Timing and Length of Exposure. *Social Science & Medicine*, 97, 241–9.
- Berthelon, M. E., Oyarzún, M., & Kruger, D. I. (2015). The Effects of Longer School Days on Mothers' Labor Force Participation. IZA Discussion Paper No. 9212.
- Bouguen, A., Filmer, D., Macours, K., & Naudeau, S. (2013). Impact Evaluation of Three Types of Early Childhood Development Interventions in Cambodia. World Bank Policy Research Working Paper No. 6540.
- Cannon, J. S., Jacknowitz, A., & Painter, G. (2006). Is Full Better than Half? Examining the Longitudinal Effects of Full-Day Kindergarten Attendance. *Journal of Policy Analysis and Management*, 25(2), 299–321.

- CAPMAS. (2020a). Annual Bulletin Labor Force Survey 2019. Cairo, Egypt: CAPMAS.
- CAPMAS. (2020b). Quarterly Bulletin of the Labor Force Survey, Second Quarter, Apr/May/Jun 2020. Cairo, Egypt: CAPMAS.
- CAPMAS. (2020c). Quarterly Bulletin of the Labor Force Survey, First Quarter, Jan/Feb/Mar 2020. Cairo, Egypt.
- Clark, S., Kabiru, C. W., Laszlo, S., & Muthuri, S. (2019). The Impact of Childcare on Poor Urban Women's Economic Empowerment in Africa. *Demography*, 56, 1247–1272.
- Dhuey, E., Lamontagne, J., & Zhang, T. (2019). The Impact of Full-Day Kindergarten on Maternal Labour Supply. IZA Discussion Paper Series No. 12507.
- Economic Research Forum, & UN Women. (2020). Progress of Women in the Arab States 2020: The Role of the Care Economy in Promoting Gender Equality. Cairo, Egypt: UN Women.
- El-Feki, S., Heilman, B., & Barker, G. (Eds.). (2017). Understanding Masculinities: Results from the International Men and Gender Equality Survey (IMAGES) Middle East and North Africa. UN Women and Promundo-US.
- El-Kogali, S., & Krafft, C. (2015). Expanding Opportunities for the Next Generation: Early Childhood Development in the Middle East and North Africa. Washington, DC: World Bank.
- Gathmann, C., & Sass, B. (2018). Taxing Childcare: Effects on Childcare Choices, Family Labor Supply, and Children. *Journal of Labor Economics*, 36(3), 665–709.
- Hawkinson, L. E., Griffen, A. S., Dong, N., & Maynard, R. A. (2013). The Relationship between Child Care Subsidies and Children's Cognitive Development. *Early Childhood Research Quarterly*, 28(2), 388–404.
- Herbst, C. M., & Tekin, E. (2010). Child Care Subsidies and Child Development. *Economics of Education Review*, 29(4), 618–638.
- IMF. (2021). Policy Responses to COVID-19: Policy Tracker.
- International Labour Organization. (2018). Care Work and Care Jobs for the Future of Decent Work. Geneva.
- Krafft, C. (2015). Increasing Educational Attainment in Egypt: The Impact of Early Childhood Care and Education. *Economics of Education Review*, 46, 127–143.
- Krafft, C., & Assaad, R. (2015). Promoting Successful Transitions to Employment for Egyptian Youth. Economic Research Forum Policy Perspective No. 15. Cairo, Egypt: Economic Research Forum.
- Krafft, C., Assaad, R., & Keo, C. (2019). The Evolution of Labor Supply in Egypt from 1988-2018: A Gendered Analysis. Economic Research Forum Working Paper Series No. 1358. Cairo, Egypt.
- Krafft, C., Assaad, R., & Marouani, M. A. (2021a). The Impact of COVID-19 on Middle Eastern and North African Labor Markets: Glimmers of Progress but Persistent Problems for Vulnerable Workers a Year into the Pandemic. Economic Research Forum Policy Brief No. 57. Cairo, Egypt.

- Krafft, C., Assaad, R., & Marouani, M. A. (2021b). The Impact of COVID-19 on Middle Eastern and North African Labor Markets: A Focus on Micro, Small, and Medium Enterprises. Economic Research Forum Policy Brief No. 60. Cairo, Egypt.
- Krafft, C., & El-Kogali, S. (2021). Inequalities in Early Childhood Development in the Middle East and North Africa. In H. Hakiman (Ed.), *The Routledge Handbook on the Middle East Economy* (pp. 226–247). Routledge.
- Krafft, C., Keo, C., & Fedi, L. (2019). Rural Women in Egypt: Opportunities and Vulnerabilities. Economic Research Forum Working Paper Series No. 1359. Cairo, Egypt.
- Krafft, C., & Lassassi, M. (2020). Public Preschool and Maternal Labor Supply in Algeria: Evidence from a Natural Experiment. In *ERF 26th Annual Conference*.
- Martínez A., C., & Perticará, M. (2017). Childcare Effects on Maternal Employment: Evidence from Chile. *Journal of Development Economics*, 126, 127–137.
- Nores, M., & Barnett, W. S. (2010). Benefits of Early Childhood Interventions across the World: (Under) Investing in the Very Young. *Economics of Education Review*, 29(2), 271–282.
- Nores, M., Bernal, R., & Barnett, W. S. (2019). Center-Based Care for Infants and Toddlers: The AeioTU Randomized Trial. *Economics of Education Review*, 72, 30–43.
- Selwaness, I., & Krafft, C. (2021). The Dynamics of Family Formation and Women's Work: What Facilitates and Hinders Female Employment in the Middle East and North Africa? *Population Research and Policy Review*, 40(3), 533–587.
- UNDP, & Institute of National Planning. (2008). Egypt Human Development Report 2008: Egypt's Social Contract: The Role of Civil Society. Egypt.
- World Bank. (2013). Opening Doors: Gender Equality and Development in the Middle East and North Africa. Washington, DC: World Bank.
- World Bank. (2018). Women Economic Empowerment Study. Washington, DC: World Bank.
- Zellman, G. L., Karam, R., & Perlman, M. (2014). Predicting Child Development Knowledge and Engagement of Moroccan Parents. *Near and Middle Eastern Journal of Research in Education*, 5, 1–17.
- Zellman, G. L., Perlman, M., & Karam, R. (2014). How Moroccan Mothers and Fathers View Child Development and Their Role in Their Children's Education. *International Journal of Early Years Education*, 22(2), 197–209.