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**A Package of Labor  
Market Policies  
Amid the COVID-19  
Pandemic in Egypt**

December 2021

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Alternative Policy Solutions is a non-partisan, public policy research project at The American University in Cairo. Using rigorous, in-depth research and a participatory process of consultations with a diverse range of stakeholders, we propose evidence-based policy solutions to some of the most difficult challenges facing Egypt. Our solutions are innovative, forward-looking and designed to support decision makers' efforts to introduce inclusive public policies.

The views and propositions expressed by Alternative Policy Solutions are those of the project's researchers and consultants and do not reflect the opinions of The American University in Cairo. Inquiries and requests regarding the project's activities should be addressed to the project's team directly.

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## Executive Summary

This policy paper aims to formulate a package of labor market policies in Egypt to foster higher productivity employment (rather than simply labor absorption) in the formal private sector. This is an attempt to boost employment in general and in particular during the COVID-19 pandemic. The paper offers theoretical simulations and empirical evidence using pre- and post-COVID-19 data to show the impact of wage and hiring subsidies on labor market outcomes, particularly job creation. Wage subsidies prove to be effective but expensive, while hiring subsidies are shown to be affordable but slow acting. The policy package therefore includes an essential combination of temporary wage and hiring subsidies, which should phase out progressively with a well-defined exit strategy. This will enable the creation of good quality, formal jobs with flexible

work arrangements (i.e., potentially low-cost jobs for the employer), in order to bridge the gap between the labor supply's job preferences (especially after the new pandemic-inspired work norms) and lackluster labor demand in the private sector. A business environment conducive to the growth of the formal private sector is, however, a necessary complement to these labor market policies. The subsidies should exclusively target: (i) formal private sector industries that have been substantially impacted by the COVID-19 crisis (manufacturing, wholesale and retail, accommodation and food services, arts and entertainment, and information and communication) and (ii) created jobs with flexible work arrangements. Promoting a package of non-wage job benefits in the formal private sector can increase the sector's competitiveness as an employer in Egypt.

# 1. Introduction

## 1.1. Motivation: COVID-19 and the Egyptian context

As the most severe global health and economic crisis in at least seven decades, the COVID-19 pandemic is anticipated to have an unprecedented impact on careers and career aspirations. In Egypt, the pandemic started in mid-March 2020, interrupting a period of macroeconomic stability. Fiscal, monetary, and energy sector reforms, in addition to the emergency measures implemented by the Egyptian government in response to the crisis, are helping Egypt weather the shock (Alnashar et al., 2020). Nevertheless, the crisis has resulted in job and income losses and is thus aggravating the already low rate of job creation in Egypt, notably in the formal private sector. The latest World Bank Economic Monitor on Egypt (Alnashar et al., 2020) shows that employment is increasingly concentrated in sectors of low added value and declining productivity. In short, the Egyptian economy has not been able to generate high-earning jobs at scale.

For households, the COVID-19 shock has been felt primarily in employment. Workers in the informal private sector have been the most severely affected (Alnashar et al., 2020). As elsewhere in the world, in Egypt the main challenges faced by individuals are: (i) to remain attached to their jobs; (ii) to maintain the same working terms and conditions they had before the pandemic; and (iii) to find jobs if they become unemployed due to the crisis. These negative effects are likely to be amplified given conditions in the Egyptian labor market. The gap between the formulation and application of labor market policies since the 2004 liberalization program was already problematic before the pandemic, resulting in stagnant labor market outcomes. The COVID-19 shock will exacerbate the situation, and adjusting to the shock is expected to be a slow and challenging process.

However, the pandemic-related restrictions and measures — social distancing, quarantines, school and daycare closures, remote work — have led people to reevaluate their jobs and give greater weight to non-monetary job attributes. In other words, workers look at the labor market differently and have shifted their work-related priorities, attaching more importance to working conditions and work-life balance after the onset of the COVID-19 crisis (Baert et al., 2020). In contrast, labor policies for the formal private sector have focused mainly on job creation per se rather than on the quality and types of jobs created. This has led to the creation of jobs that merely absorb excess labor rather than increase productivity (Assaad et al., 2020b).

## 1.2. Statement of the policy problem

The policy paper proposes a package of labor market policies that would encourage higher productivity employment (rather than labor absorption) in the formal private sector. The proposed package seeks to boost employment in general and is designed as a response to the COVID-19 pandemic in Egypt in particular. These high-productivity formal jobs are meant to be low cost to the employer and to accommodate the preferences and job aspirations of job seekers, particularly under the socioeconomic conditions imposed by the COVID-19 crisis. The package consists of a combination of wage and hiring subsidies directed toward particular industries and jobs in the formal private sector. The main aim is to increase the competitiveness of the formal private sector as an employer, through subsidies to productive sectors which: (i) have been substantially and negatively impacted by COVID-19, and (ii) are particularly able to generate jobs with flexible work arrangements that accommodate the labor supply's post- COVID-19 job preferences and career aspirations.<sup>1</sup>

<sup>1</sup> By creating jobs with flexible work arrangements, such as the option to work from home, the created job costs the employer less, by saving, for instance, on office space rental, electricity, etc.



While the package of policy responses aims to alleviate the negative effects of COVID-19 on labor market outcomes in Egypt, more importantly it seeks to generate a dividend for the Egyptian labor market — namely, to seize the opportunity to create low-cost,<sup>2</sup> yet good-quality, high-productivity jobs in the private sector that take advantage of the workforce's changing job preferences. The analysis highlights the specific economic sectors and occupations to which incentives would be directed, based on the needs of labor demand and supply, as well as the feasibility of implementing such incentives.

To guarantee the success of the proposed package, the following complements are essential prerequisites:

1. An adequate business environment with reduced or no barriers to entry, to facilitate the establishment and growth of private formal enterprises.
2. A legal/formal framework that facilitates the creation of formal jobs in the private sector (i.e., jobs with a contract and social insurance coverage) with flexible work arrangements and hence avoids further burdening the informal sector.
3. Measures to bridge the gap between wages and benefits offered in the private and public sectors, to ensure the competitiveness of the former. Even though public-sector hiring has slowed substantially in Egypt over the past decade, the lack of an attractive package of non-wage benefits in the formal private sector tends to make labor market outcomes very elastic and vulnerable to changes in the wage and hiring policies of the public sector.

## 2. Literature Review

### 2.1. How do workers value employment in Egypt?

The economic theory of compensating wage differentials pioneered by Adam Smith (1776), posits that workers are often willing to accept lower wages for non-material benefits. Being aware of this, firms include non-wage amenities in their compensation packages as a way to attract workers (Oyer & Schaefer, 2005; Polachek & Tatsiramos, 2008; Feld et al., 2019). Economists have attempted to quantify compensating differentials. The classic hedonic approach proposed by Rosen (1974; 1986) has unsuccessfully tried to do so by estimating the market prices of each non-wage characteristic using the coefficients of a cross-sectional regression of earnings.

Recent attempts to estimate compensating differentials rely on either stated or revealed preferences. The stated preferences approach relies on individuals' response to positive amenities in hypothetical jobs (Eriksson & Kristensen, 2014; Mas & Pallais, 2017; Wiswall & Zafar, 2017) or on incentive-compatible natural field experiments (He et al., 2020). The revealed preferences approach uses matched employer-employee data (Taber & Vejlín, 2016; Lavetti, 2020; Sorkin, 2018). In Egypt, Feld et al. (2019) used stated preference to estimate the willingness to pay for certain job qualities, directly asking job seekers about the value they assign to a number of non-wage attributes in various hypothetical scenarios. They found widely varying estimates depending on the method of elicitation.

These studies reveal the importance of examining how workers value employment as a package — that is, taking into consideration both wages and non-monetary qualities — rather than just focusing on pay. Despite its relevance to the MENA region, this approach has been understudied by both academic

<sup>2</sup> Studies (such as Baert et al., 2020) and the authors' own analysis of CETUS20 datasets show that COVID-19 has impacted job seekers' preferences and career aspirations, in particular the trade-off between wages and non-monetary benefits when making decisions about whether to accept or leave a job.

researchers and policymakers in Egypt. The failure to fully model the value of a job upon which labor market agents (job seekers and employers) base their decisions results in the formulation of policies that are not necessarily effective for quality employment generation. While various active labor market policy programs have been implemented in Egypt, none has taken into consideration the non-wage characteristics of a job, though these are an essential component of the value of the job to both workers, particularly women, and employers. The COVID-19 pandemic and the restrictions it entailed have further influenced workers' job preferences, particularly the value of non-monetary benefits. Non-wage amenities, such as the option to work from home, flexible hours, and proximity to one's residence, have become more important in job valuation and consequently a bigger factor in decision making (Baert et al., 2020).

It is therefore crucial to estimate these compensating differentials in the context of COVID-19 and its aftermath. In addition, optimal hiring incentives and labor market policies that promote positive benefits are essential in order to meet workers' new demands, boost employment and reduce congestion. The present policy paper aims to fill this gap using original data on stated preferences in Egypt, collected after the onset of the COVID-19 pandemic.

## **2.2. Employability and productivity in the private formal sector**

By the dawn of the third millennium, fiscal and budgetary constraints had made it impossible for many countries, Egypt included, to sustain the social contract, long established between governments and citizens, which guaranteed jobs in the public sector for all university graduates (Assaad & Barsoum, 2019; Devarajan & Ianchovichina, 2018; Assaad, 2014). The retreat of the public sector employer led to increased unemployment, particularly among educated youth. In Egypt, the retrenchment of public sector employment over the years has not

been compensated for by a commensurate increase in jobs in the formal private sector, which remained anemic due to an inadequate business environment characterized by barriers to entry and growth. The private sector has failed to absorb the large number of young people entering the labor force and has created insufficient jobs, both in terms of quantity and quality (low-productivity absorbing) jobs (Assaad et al., 2019; Assaad et al., 2020b; Assaad et al., 2020a). Moreover, the quality of the available jobs in the private sector has not been as good as those of the public sector. Deteriorating labor market conditions led to a substantial slowdown in net job creation (Assaad & Krafft, 2015), and even when the private formal sector gradually increased its employment share over the past 15 years (Alnashar et al., 2020), the jobs created remained insufficient in number and of low quality. Productivity remains relatively low, with employment opportunities mostly being created in sectors of low value-added or diminishing productivity. Consequently, the economy's ability to create high-earning, productive jobs, particularly in the private sector, has remained very limited.

While employment in the public sector has remained relatively unchanged, private sector employment has become more precarious, pushing more workers into vulnerable forms of informal and irregular employment. The slack created by the retreat of the public sector has therefore been filled by a boom in informality and irregularity as the only viable options (Rodman, 2007), especially for men who cannot afford to stay unemployed for long periods. A large share of private sector employment remains informal — rising from 24% in 2006 to 31% in 2012 to 39% in 2018 — and working conditions in the sector have continued to worsen over time, particularly during crises like the 2008 global financial crisis, and the 2011 revolution and its aftermath (Krafft et al., 2019). Conditions are expected to deteriorate further with the recent COVID-19 crisis. The pandemic has had a variegated impact on different groups of workers, but has tended to push the poorest ones

into informal, low-quality jobs. Only workers in the top quintile continue to have access to formal jobs in the private sector, while workers in the middle of the wealth distribution face reduced access to formal employment, as the increase in formal private employment fails to compensate for the decline in public employment. This has led and will continue to lead greater numbers of Egyptian workers into informal employment, which generally means low-quality, precarious jobs (Krafft et al., 2019; Devarajan & Ianchovichina, 2018; Diwan, 2013).

### 2.3. Wage subsidies

As a response to COVID-19 and to alleviate the economic and labor market effects of the pandemic, numerous governments have resorted to temporary wage subsidies as a policy instrument (International Labor Organization [ILO], 2020). When carefully designed and implemented simultaneously with other policy measures, wage subsidies in numerous cases have sizable impacts on employment, especially for the disadvantaged and particularly during crises and downturns (De Mel et al., 2010; Bruhn, 2020). Temporary wage subsidies are used to maintain the employment relationship in firms and sectors in order to save jobs and prevent mass layoffs, both during lockdowns and the economic recession following them. Evidence shows that there is no uniquely optimal design for wage subsidies, which should be planned and implemented based on the local context, circumstances, and the nature of the labor market in question (Gentilini et al., 2020). Countries decide whether the subsidies will be paid directly to the affected workers, as in Thailand and Argentina, or to businesses, which must prove that they are passed on to their workers, as in Switzerland, Germany, France, or the UK (ILO, 2020).

In some cases where subsidy schemes already exist, they can be scaled up to provide more generalized temporary wage subsidies. For example, in Germany, Austria, and Belgium, firms facing financial burdens were allowed to reduce the number of working

hours while subsidies compensated for lost wages (Giupponi & Landais, 2020; Gentilini et al., 2020; ILO, 2020). In cases where such programs do not exist, it can be more difficult logistically to start implementing them during a crisis, but they can nevertheless complement other interventions. This is true for Egypt, where wage subsidy schemes did not exist prior to COVID-19.

As for the duration of the subsidy, evidence from other countries shows that a one-off payment should only be implemented in particular cases and sectors when the crisis is predicted to be short term (ILO, 2020). Even if more prolonged subsidization is preferred, the program should always remain temporary and phase out progressively with a well-defined exit strategy, given the high cost of such programs. When applied on their own, particularly in developing countries, wage subsidies are likely not an effective instrument to stimulate job creation (Almeida et al., 2014). They are, however, effective in helping first-time job seekers, particularly from disadvantaged groups, which in Egypt includes youth and women. They also have positive “learning effects,” boosting the employability of those who have experienced long periods of unemployment or inactivity by enhancing their work experience and skill-building. When wage subsidies are designed with these objectives in mind, it has important implications for eligibility and targeting, the implementation and duration of subsidies and the conditions imposed on employers and beneficiaries. The policy package recommended by this paper takes into account the pitfalls of wage subsidies and hence complements them with hiring subsidies, which, when carefully targeted, are proven to be cost effective and have a slow yet real impact on overall job creation and long-term unemployment (Brown, 2015). Moreover, the recommended wage subsidies are targeted to certain economic sectors hard hit by the COVID-19 pandemic and specifically designed to foster the creation of jobs with flexible work arrangements in the private formal sector.

## 3. Data, Methodology and Results

### 3.1. Data

The analysis in this policy paper relies on both pre- and post-COVID datasets as follows:

1. Pre-COVID-19 data: Official aggregate statistics from the Central Agency for Public Mobilization and Statistics (CAPMAS); the 2017 Egypt Labor Force Survey; the 2018 Egypt Labor Market Panel Survey (ELMPS); and population projections from Lutz et al. (2014).
2. Post COVID-19 data: The 2020 COVID-19 Employment and Time-Use Surveys (CETUS20); IMF macroeconomic indicators and projections; and the 2020 CAPMAS bulletins of the first two quarters of the 2020 Egypt Labor Force Surveys. Please see the technical note accompanying this policy paper for more details about the data.

### 3.2. Methodology

The paper adopts the canonical search and matching theoretical model (Yassin & Langot, 2018) calibrated at pre-COVID empirical levels (data moments) of the Egyptian labor market, for wage workers aged 15–54. Simulations were also conducted to estimate the impact of the COVID shock and policy responses. Please see the technical note accompanying this policy paper for a discussion of the methodology.

### 3.3. Results

A summary of the key results of the simulations is listed below. The detailed results are presented in the accompanying technical note.

The first set of results includes descriptive results from the CETUS20. Due to the COVID-19 shock, 25% of the sample stopped working, with fewer

men maintaining their pre-COVID job compared to women (67% for men and 71% for women). However, a larger percentage of men found another job compared to women (11% versus 3%). This suggests that women could not easily find jobs with the kind of flexible work arrangements they needed given the closure of daycare services and educational institutions, which meant more hours spent on domestic work (housework and childcare). The results are different when public employment is excluded from the sample. Of male workers in February, 64% maintained their original job, compared to only 60% of women.

Those who exited to non-employment are mainly informal workers (71.43% for men and 67.04% for women). Meanwhile, the informal private sector is the receiving sector of the job deterioration happening in the other sectors.

The data collected in the survey suggest a change in job seekers' behavior, particularly their job preferences and career aspirations and the value they place on non-wage benefits. Respondents were asked to state the minimum salary required to accept hypothetical job offers with specified non-monetary characteristics in the formal private sector. A third of respondents would have never accepted a hypothetical offer in pre-COVID time; 19% of men and 17% of women would have asked for a higher minimum wage before COVID-19.

The second set of results are the results of the simulation. Results of the model calibrated at the pre-COVID data moments indicate that men had on average a lower annual transition probability to the public sector compared to their female counterparts — independent of original state of employment — which can be explained by the increasing feminization of the public sector during the time period 2013–2017.

Informal workers were the most vulnerable to the COVID-19 crisis; with no employment protections, a greater proportion of informal workers (regardless

of gender) lost their jobs. The COVID-19 productivity shock also made it more difficult for people to find jobs in the private formal sector, with women disproportionately affected. The job-finding rate in the informal sector decreased as well post-COVID. The higher simulated unemployment rates are explained by the inability of the informal sector to absorb job seekers — as it did prior to COVID-19 — and higher separation rates (i.e., job exits) among both men and women and across different sectors.

## 4. Policy Context

Worldwide, the COVID-19 pandemic is already making it challenging for individuals to retain their jobs with the same pre-pandemic terms and conditions, and it is throwing up new hurdles for job seekers left unemployed by the crisis. COVID-19-related restrictions, such as social distancing, quarantines, school and daycare closures and remote work, have led people to reevaluate their jobs and made certain non-material attributes more desirable. In other words, workers look at the labor market in a new light and have different work-related priorities, attaching greater importance to working conditions and work-life balance after the onset of the pandemic (Baert et al., 2020).

As a result of COVID-19, 16 million people in the Arab region are expected to be pushed into poverty, further shrinking the middle class (Economic and Social Commission for Western Asia [ESCWA], 2021). The cumulative loss to GDP in the Arab region is estimated at USD42 billion, and this figure is likely to increase as the virus continues to spread across major economies like the European Union and United States, among others (ESCWA, 2020a; Organization for Economic Cooperation and Development [OECD], 2020b). According to ESCWA (2020a), between January and mid-March 2020, the region lost USD11 billion in net oil revenues and USD420 billion in market capital. In the third quarter of 2020 alone,

12.8% of working hours are estimated to have been lost, equivalent to 15 million full-time jobs (ESCWA, 2021). Unlike the financial crisis of 2008, this crisis has been accompanied by restrictive measures like social distancing and lockdowns, which has destroyed jobs across all sectors. The impact is especially acute in the service sector — the main employment provider in the region — resulting in a 50% reduction of activities and significant job losses.

The economic crisis caused by the pandemic is having an extremely adverse impact on the most vulnerable groups, which include young professionals and informal workers (ESCWA, 2020b), exacerbating pre-existing vulnerabilities. Given mobility restrictions, a bigger burden is borne by informal workers. The informal sector accounts for 63% of total employment in Egypt, and employment in the informal economy is characterized by low wages and no health or social insurance; jobs tend to be of low productivity with almost no chance to work remotely (OECD, 2020a), and workplaces are not necessarily well designed in terms of health and safety standards. As a result, workers in this sector are more vulnerable to poverty due to crises like the COVID-19 pandemic (African Development Bank, 2016).

Accordingly, the Ministry of Manpower allocated EGP50 million to support irregular workers who lost their jobs after the onset of the pandemic, offering a one-time payment of EGP500 (around USD32) to workers who registered in the ministry's database; up to 1.5 million workers, 40% of them women, were found eligible for support. An additional EGP530 million was made available by the Central Bank of Egypt and the Federation of Banks as part of their corporate social responsibility activities (OECD, 2020b). The Egyptian government issued Decree 776/2020 establishing a workers' emergency benefits fund as well as a committee to address the conditions of irregular workers affected by the crisis, composed



of the Ministers of Planning and Economic Development, Minister of Social Solidarity, and Manpower, the chairman of the Information and Decision Support Center, the head of the Suggestions and Complaints Committee of the National Wage Council, the president of the National Council for Women and a member of the Administrative Control Authority. The government also extended the national cash transfer program (Takaful and Karama) to include an additional 160,000 families, focusing on female heads of households. In general, the program's beneficiaries are informal workers and around 88% of them are women (OECD, 2020b).

In tandem with this, the government announced an economic stimulus package containing benefits for the sectors most affected by the crisis such as tourism and agriculture, dedicating EGP50 billion to the tourism sector to keep businesses running. The Labor Emergency Fund also increased subsidy payments for workers in the tourism sector from EGP600 to EGP1,765, which has thus far benefitted 7,500 workers (OECD, 2020a). In addition, in August 2020, the Minister of International Cooperation announced that the ministry had partnered with the International Finance Corporation (IFC) on a three-year advisory program to encourage private sector firms to better engage women in the labor market, eliminate biases against recruiting women and help foster a family-friendly workplace, thus boosting job opportunities for women in Egypt and helping the Egyptian market to become more inclusive and resilient to crises (Egypt Today, 2020). The IFC will work in partnership with the Dutch government and an Egyptian business association to establish a “peer-learning platform” in order to raise awareness and share knowledge on how to improve women's opportunities in the private sector. An action plan will also be developed to collect gender-disaggregated human resource data to analyze gender gaps and help narrow them.

## 5. Policy Options

This section outlines the essential components of the proposed labor market policy package, which, in line with the government efforts outlined above, can help to mitigate the negative conditions of the Egyptian labor market post-COVID-19 and spur the creation of quality jobs in general.

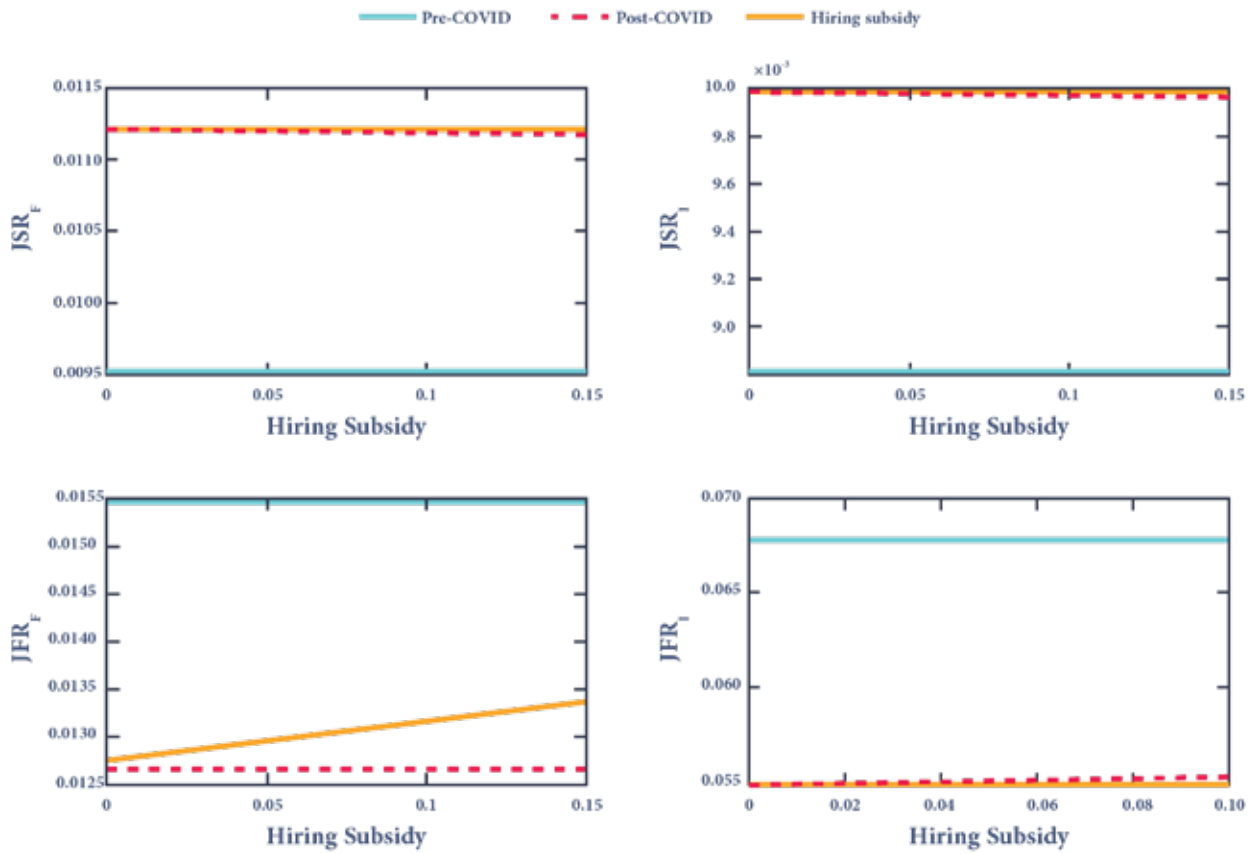
### 5.1. Hiring subsidy

The first component of the package is a one-time hiring subsidy, to be paid by the government to private formal firms when a worker is hired. Generally, this type of subsidy functions as a temporary incentive for firms to create jobs and hire new workers. When sensibly and narrowly targeted, it can be a very cost-effective and efficient means of reducing unemployment and shifting the workforce from the informal to the private formal sector during periods of both economic stability and recovery. The impact of hiring subsidies on labor market outcomes was simulated using the theoretical model of Yassin and Langot (2018).<sup>3</sup> As shown in Figure (1), the subsidy could positively influence the job-finding rate in the formal private sector for both men and women. This could gradually mitigate the impact of the productivity shock and bring productivity back to its pre-pandemic rate (Figure 1). However, as is consistent with Mortensen and Pissarides (2001), the policy seems to have no impact on the unemployment rate (Figure 2). It has been established in the literature that while a job creation or hiring subsidy reduces the duration of unemployment, it tends to increase incidence, therefore having an ambiguous effect on overall employment. Figure (3) also shows that this policy will have no impact, either positive or negative, on the flow of workers to the public sector from the formal and informal private sector.

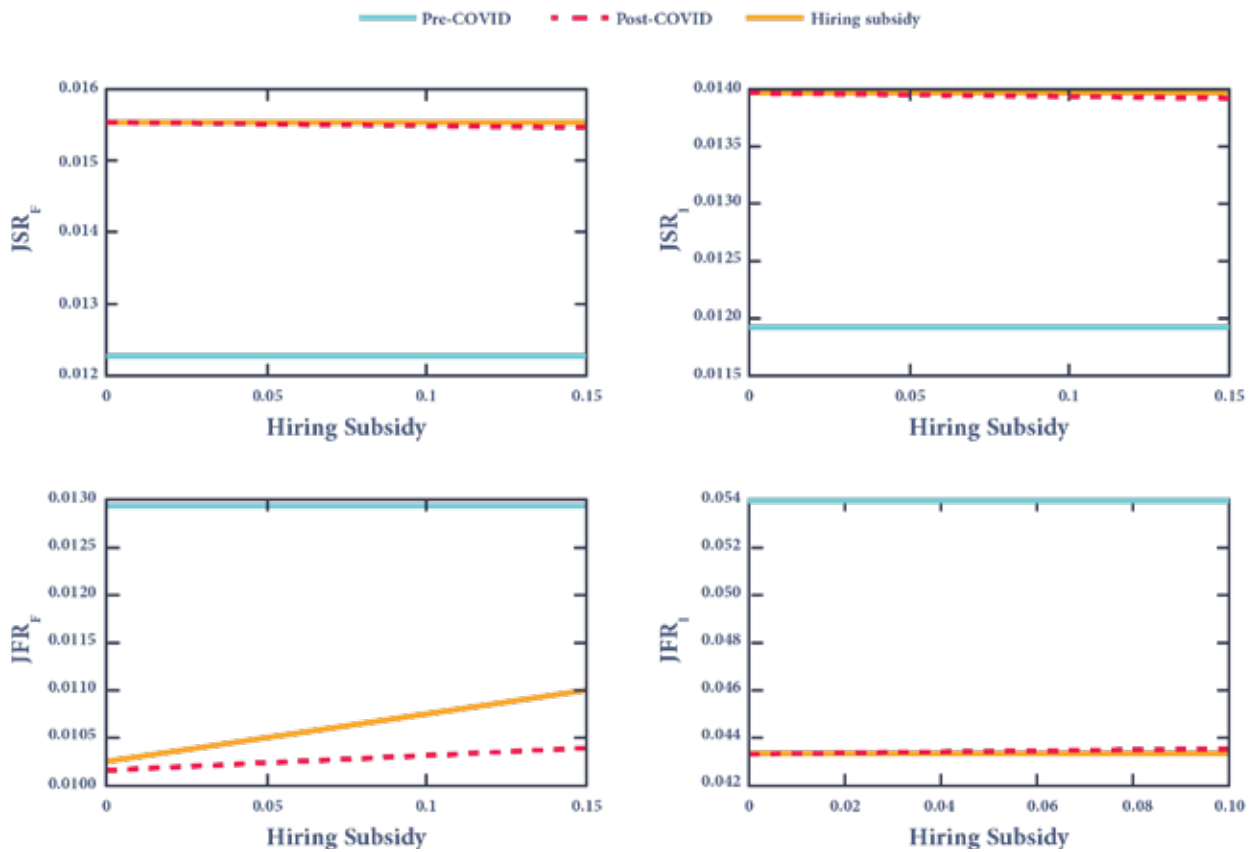
<sup>3</sup> Two models are evaluated for men, with model (1) including unemployed men only and model (2) incorporating both unemployed and inactive.

**Figure 1**  
*Impact of Hiring Subsidy on Flows*

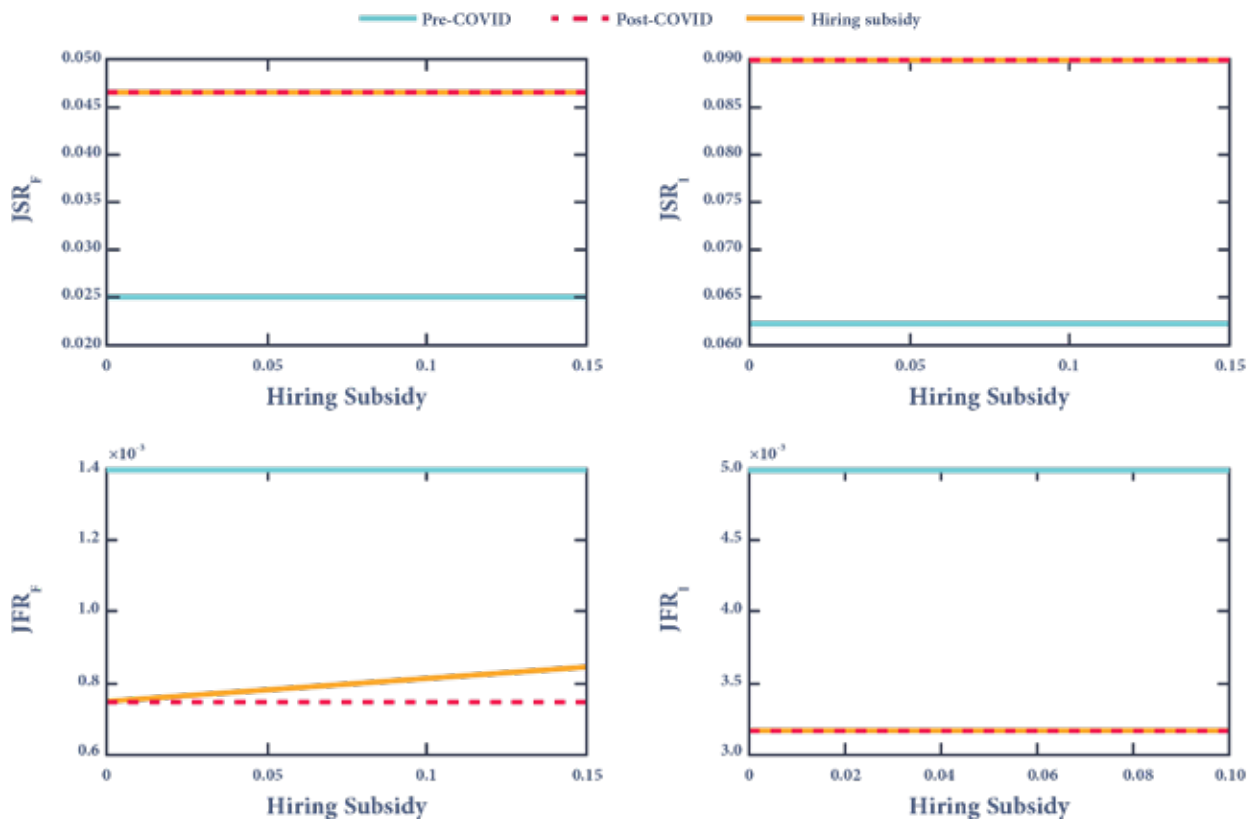
**(a) Males 1**



**(b) Males 2**



(c) Females



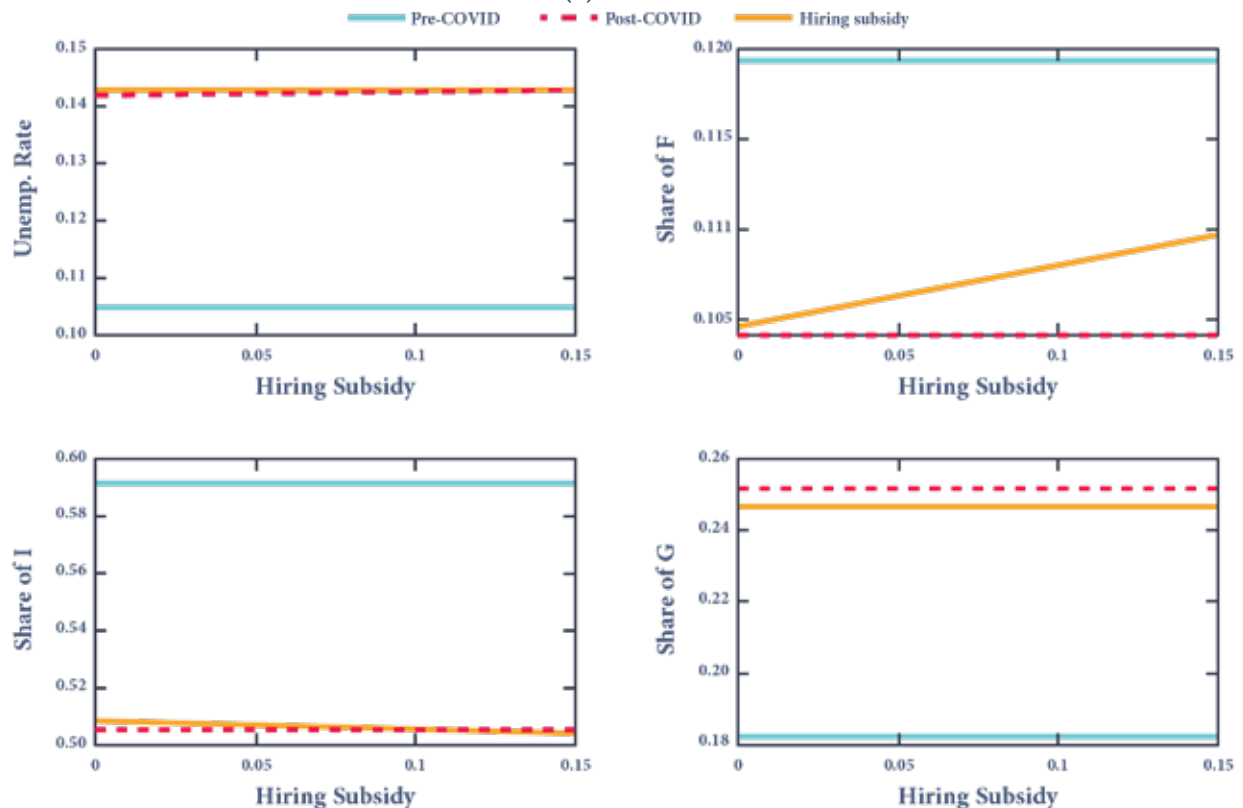
JSR<sub>F</sub> is the job searching rate in the formal private sector. JSR<sub>I</sub> is the job searching rate in the informal private sector. JFR<sub>F</sub> is the job finding rate in the formal private sector. JFR<sub>I</sub> is the job finding rate in the informal private sector.

Source: Authors' simulations based on theoretical moments (Yassin & Langot, 2018) and empirical data moments from ELMPS 2018 and ELFS 2019 and 2020.

Figure 2

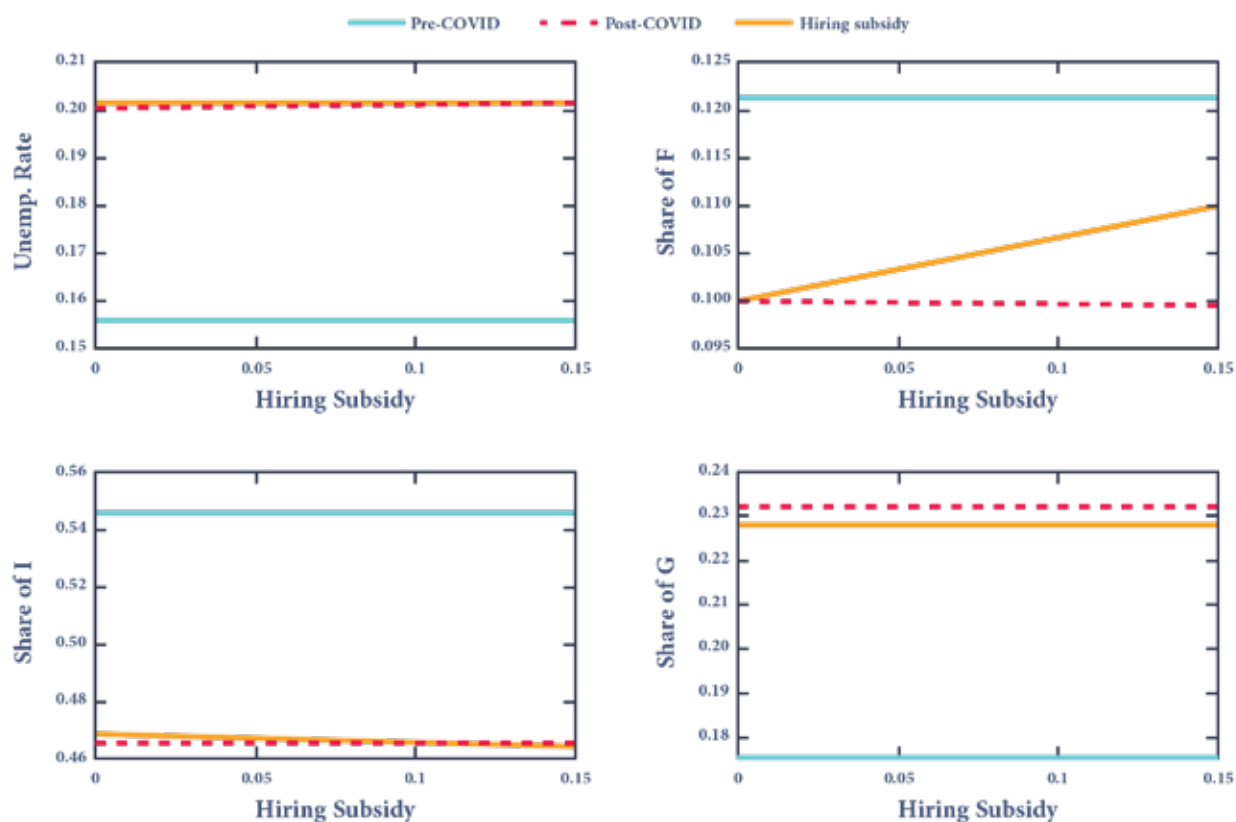
*Impact of Hiring Subsidy on Stocks*

(a) Males 1

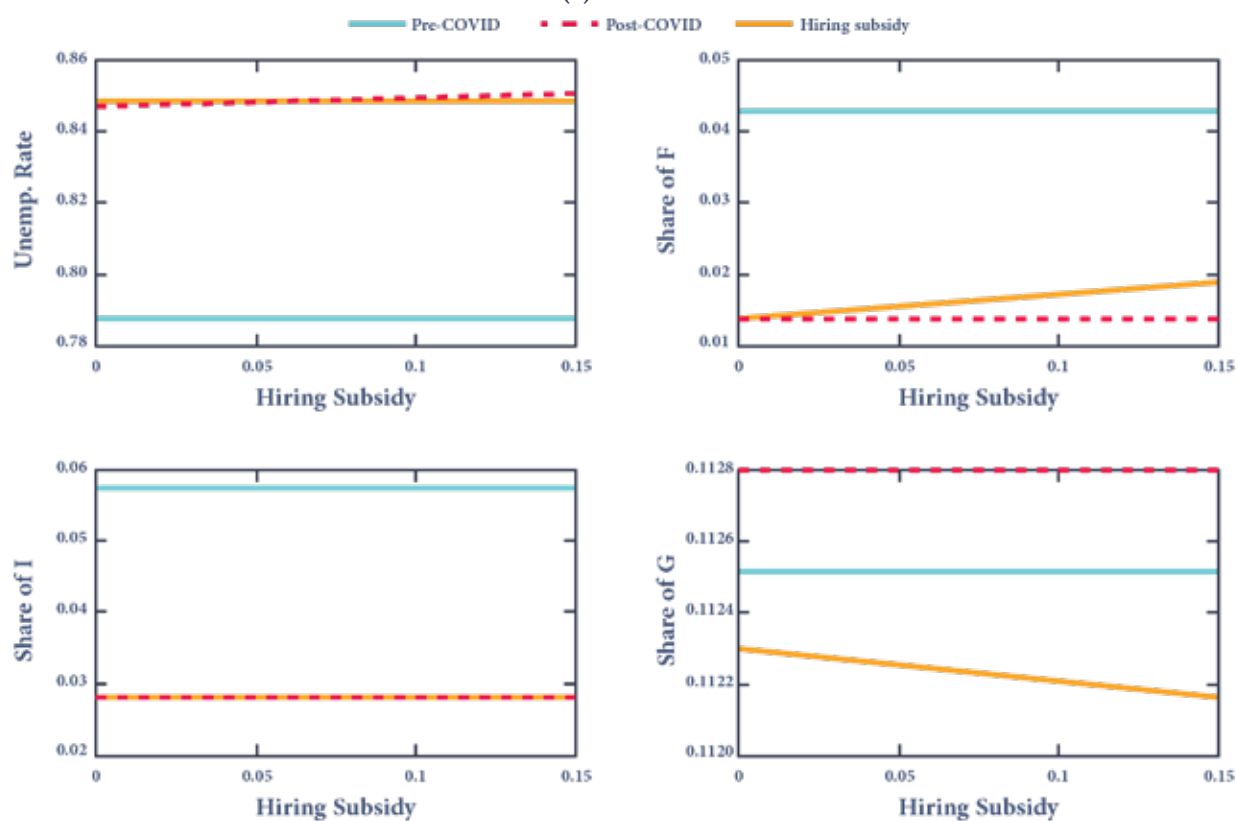




### (b) Males 2



### (c) Females



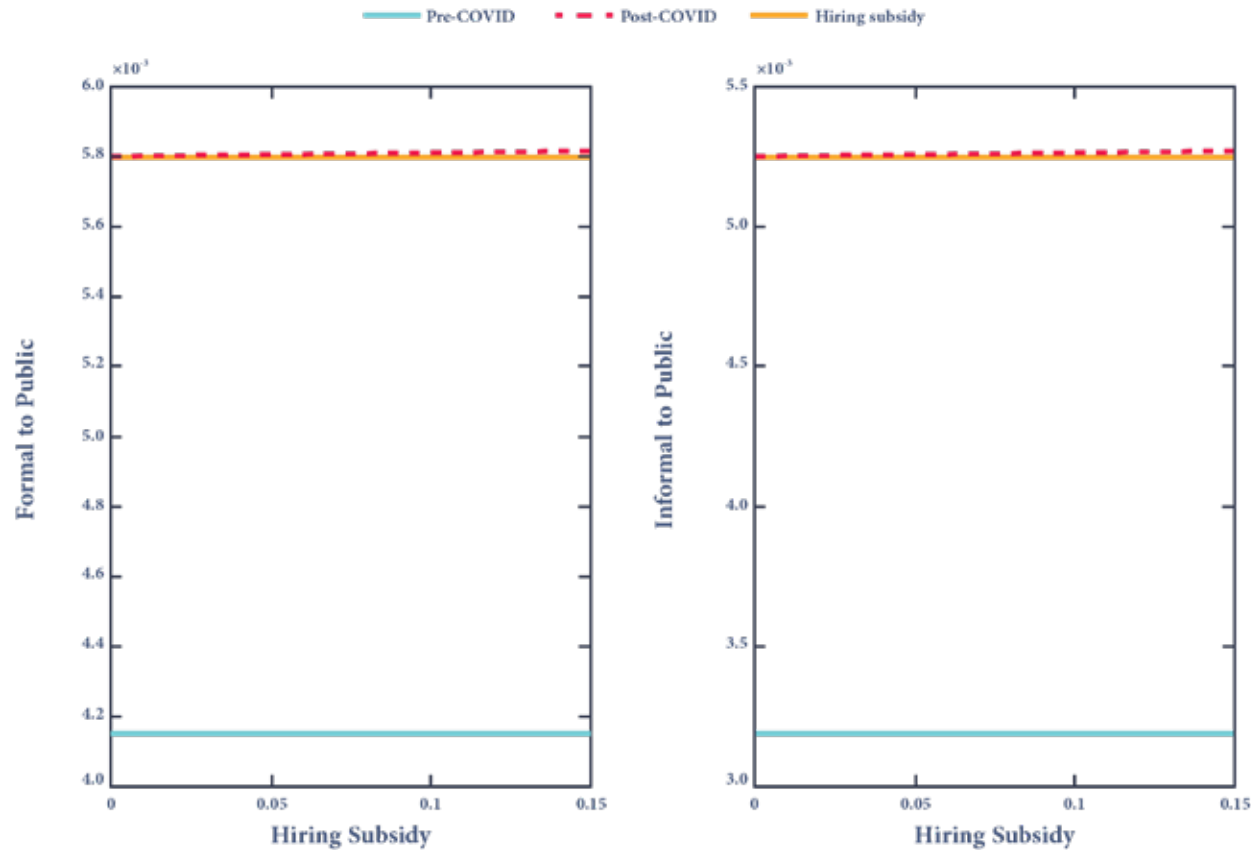
F refers to the formal private sector; I refers to the informal private sector and G refers to the public sector.

Source: Authors' simulations based on theoretical moments (Yassin & Langot, 2018) and empirical data moments from ELMPS 2018 and ELFS 2019 and 2020.

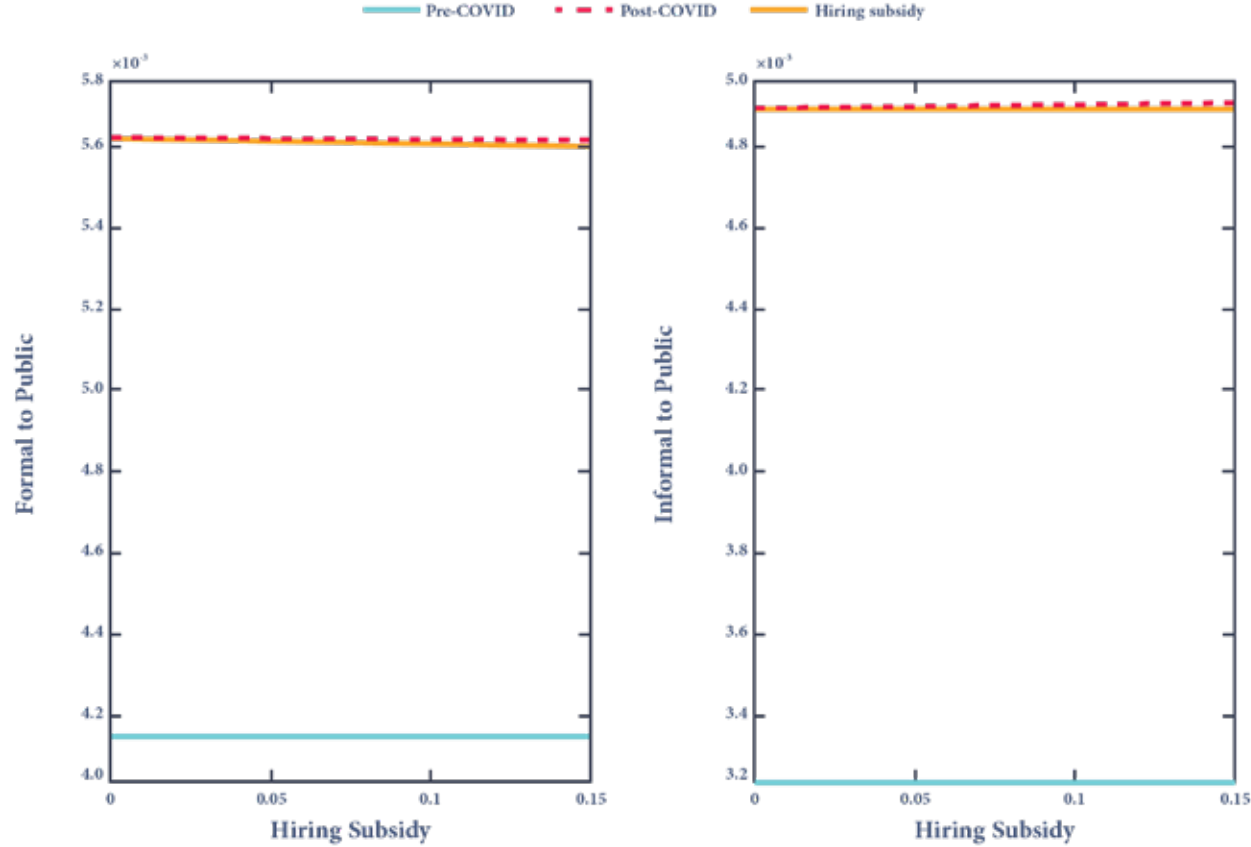
Figure 3

Impact of Hiring Subsidy on Flows to Public Sector

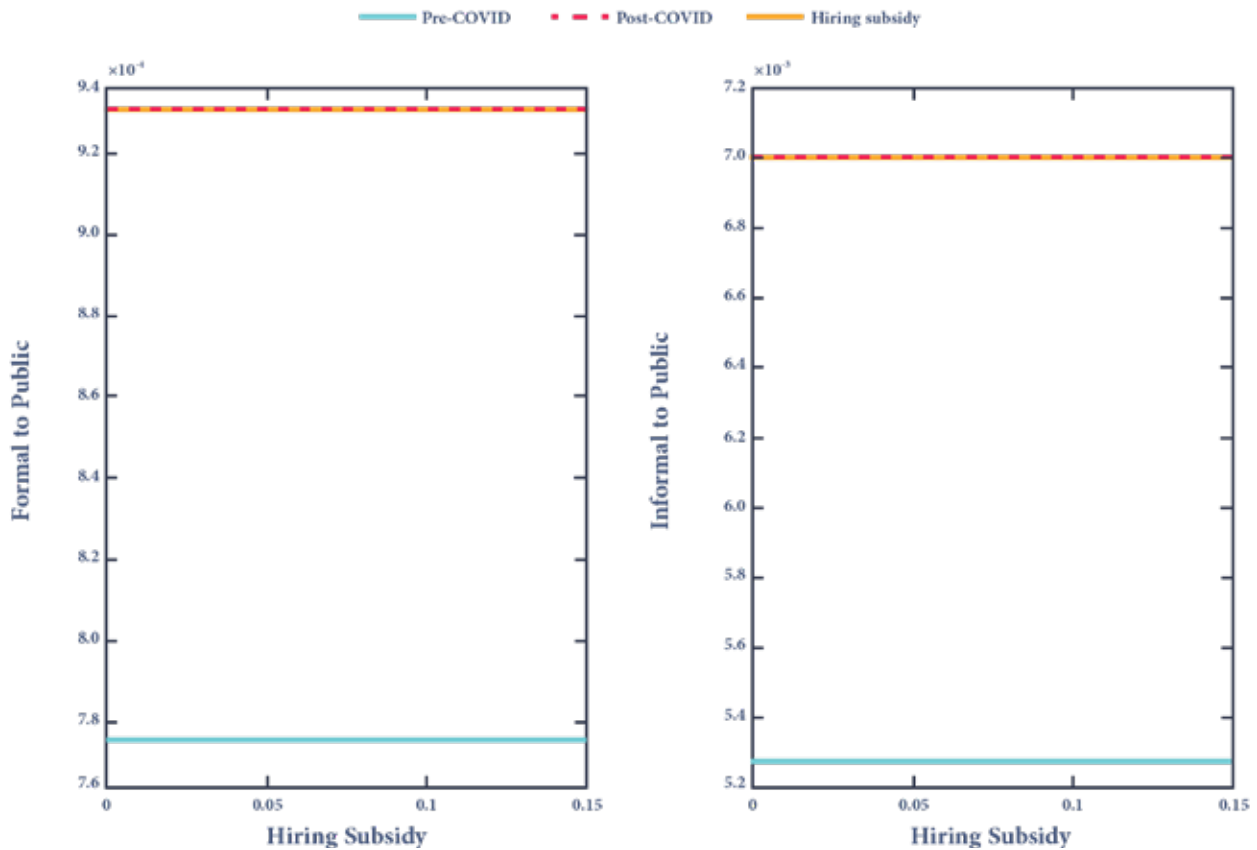
(a) Males 1



(b) Males 2



### (c) Females



Source: Authors' simulations based on theoretical moments (Yassin & Langot, 2018) and empirical data moments from ELMPS 2018 and ELFS 2019 and 2020.

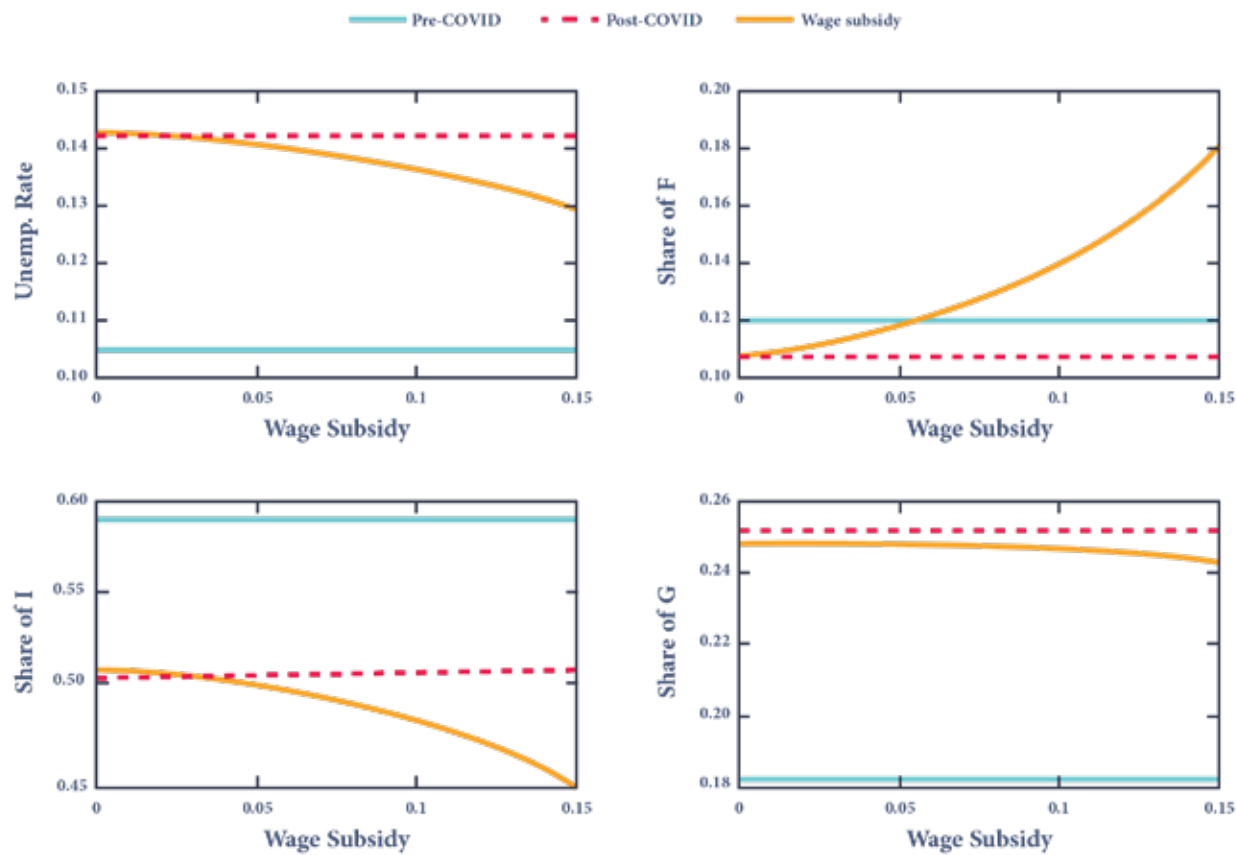
## 5.2. Wage (employment) subsidy

The second policy tool is a wage/employment subsidy, which would be paid by the government on the running cost of the job match (meaning as long as the person is employed). The results of the simulations shown in Figures (4-6) show that this would lead to a decline in the unemployment rate accompanied by an increase in both the job-finding and separation rates in the private

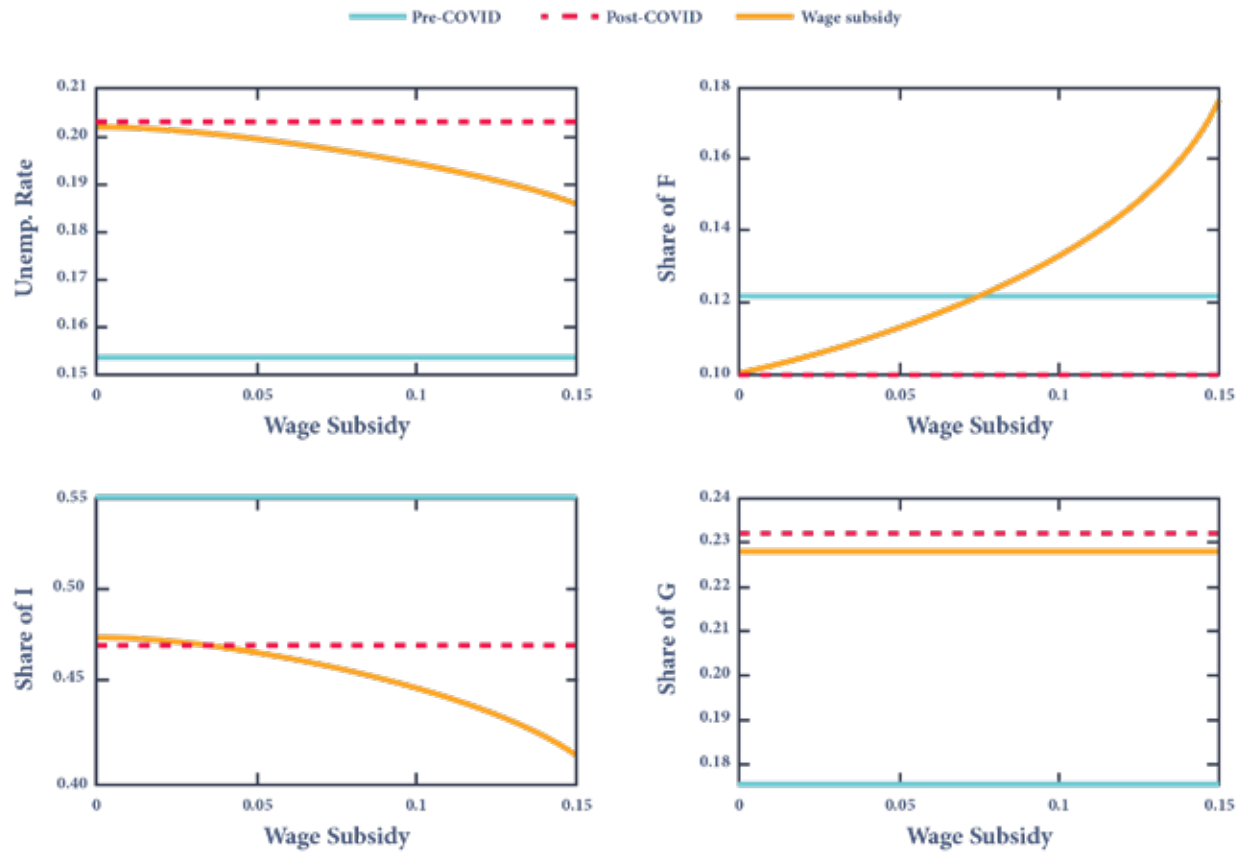
formal sector. This policy will thus lead to a more dynamic Egyptian labor market and improve job productivity in the private sector. It could in fact dampen the effect of the COVID-19 crisis. According to the results and simulations, informal workers are the most vulnerable to layoffs so this policy could help increase employment in the formal sector and encourage more workers to move from the informal to the formal sector.

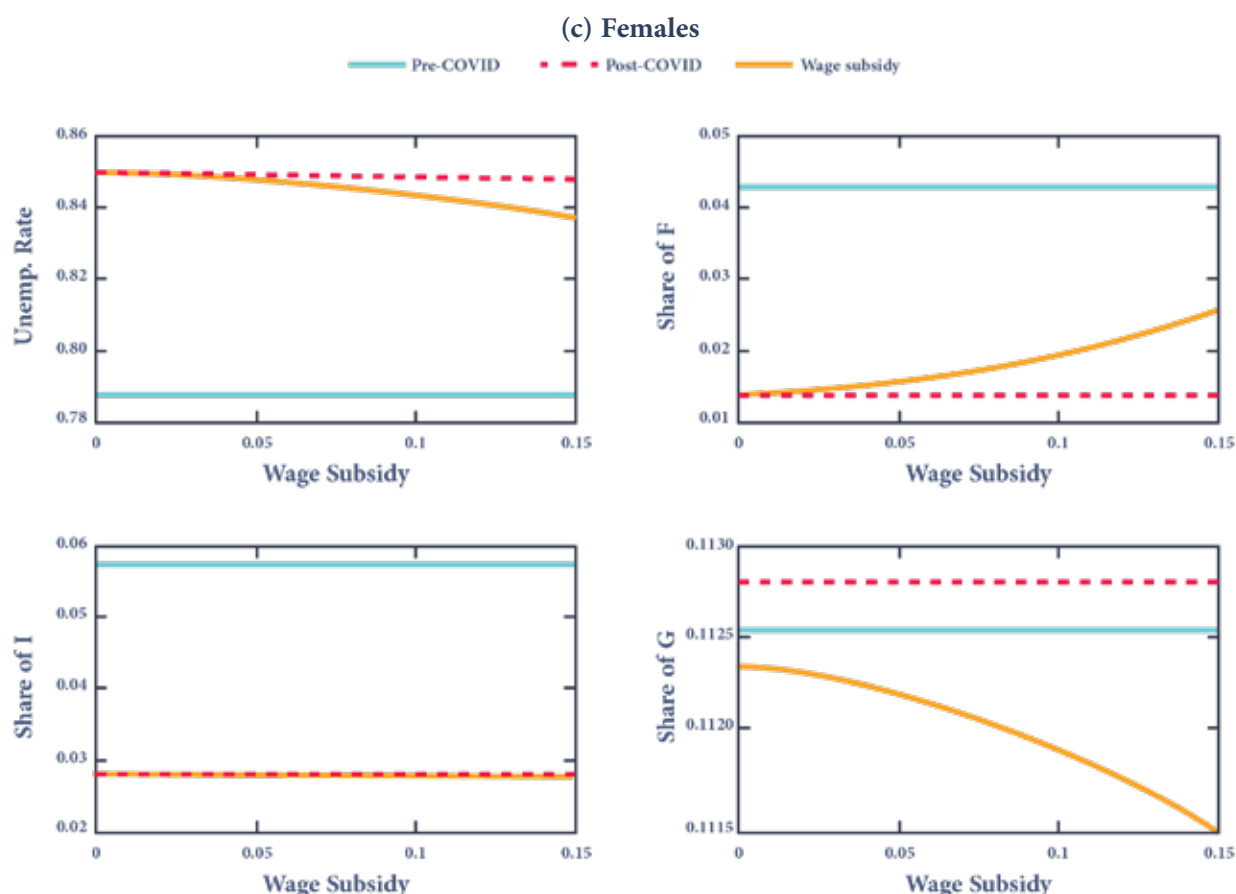
**Figure 4**  
*Impact of Wage Subsidy on Stocks*

(a) Males 1



(b) Males 2



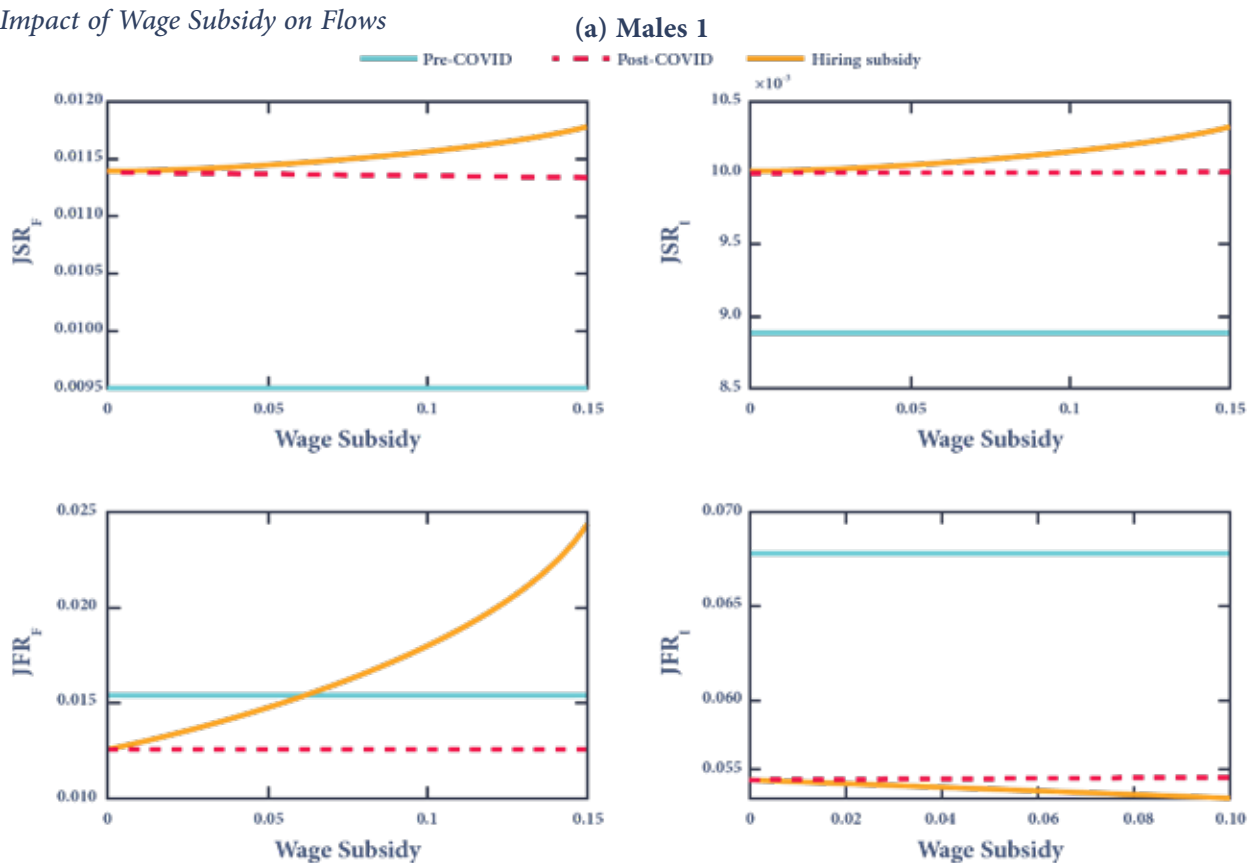


F refers to the formal private sector; I refers to the informal private sector and G refers to the public sector.

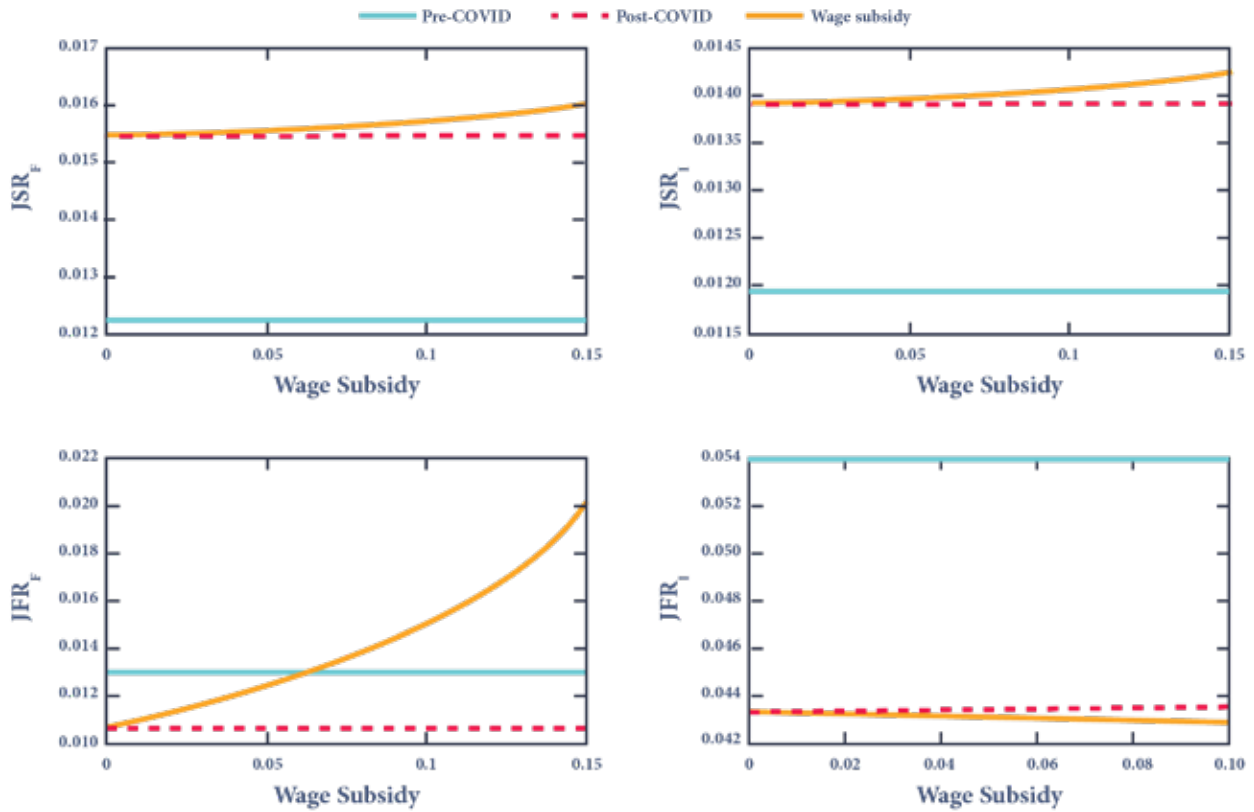
Source: Authors' simulations based on theoretical moments (Yassin & Langot, 2018) and empirical data moments from ELMPS 2018 and ELFS 2019 and 2020.

**Figure 5**

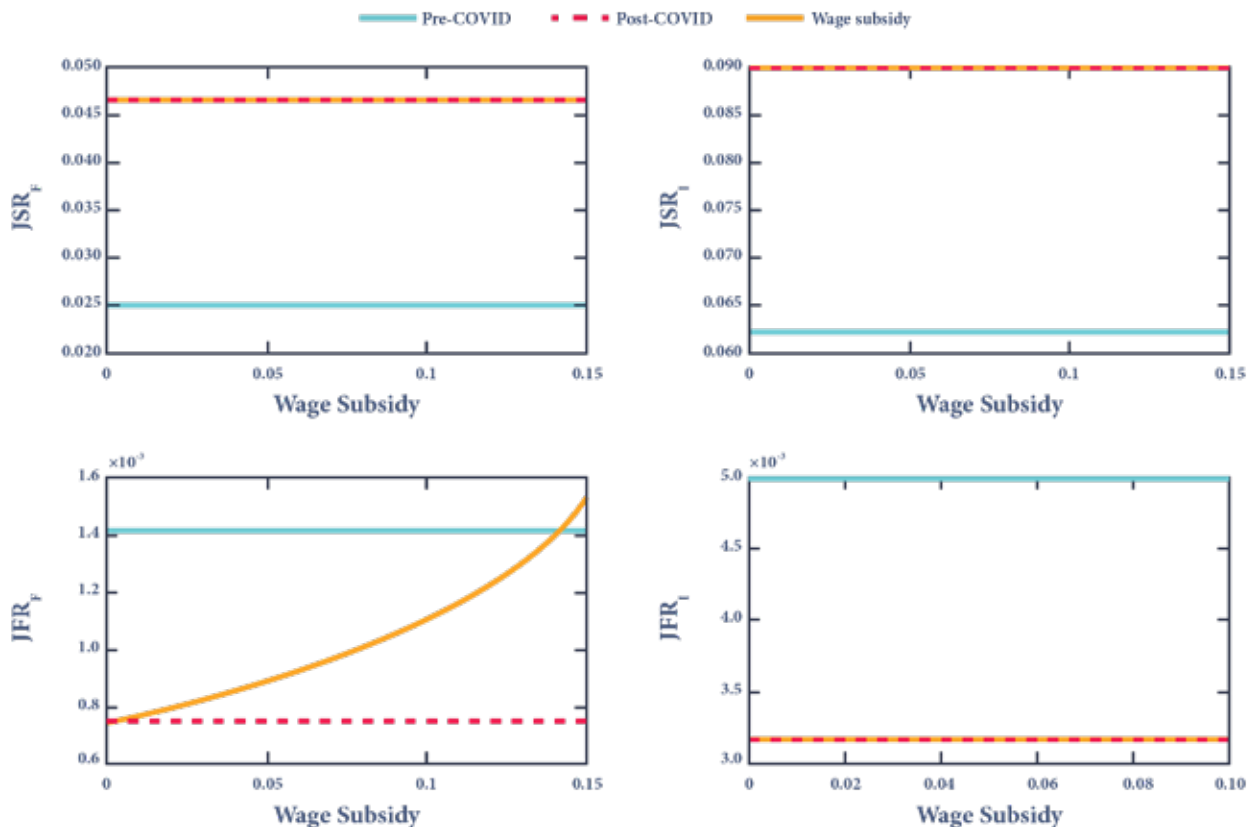
*Impact of Wage Subsidy on Flows*



(b) Males 2



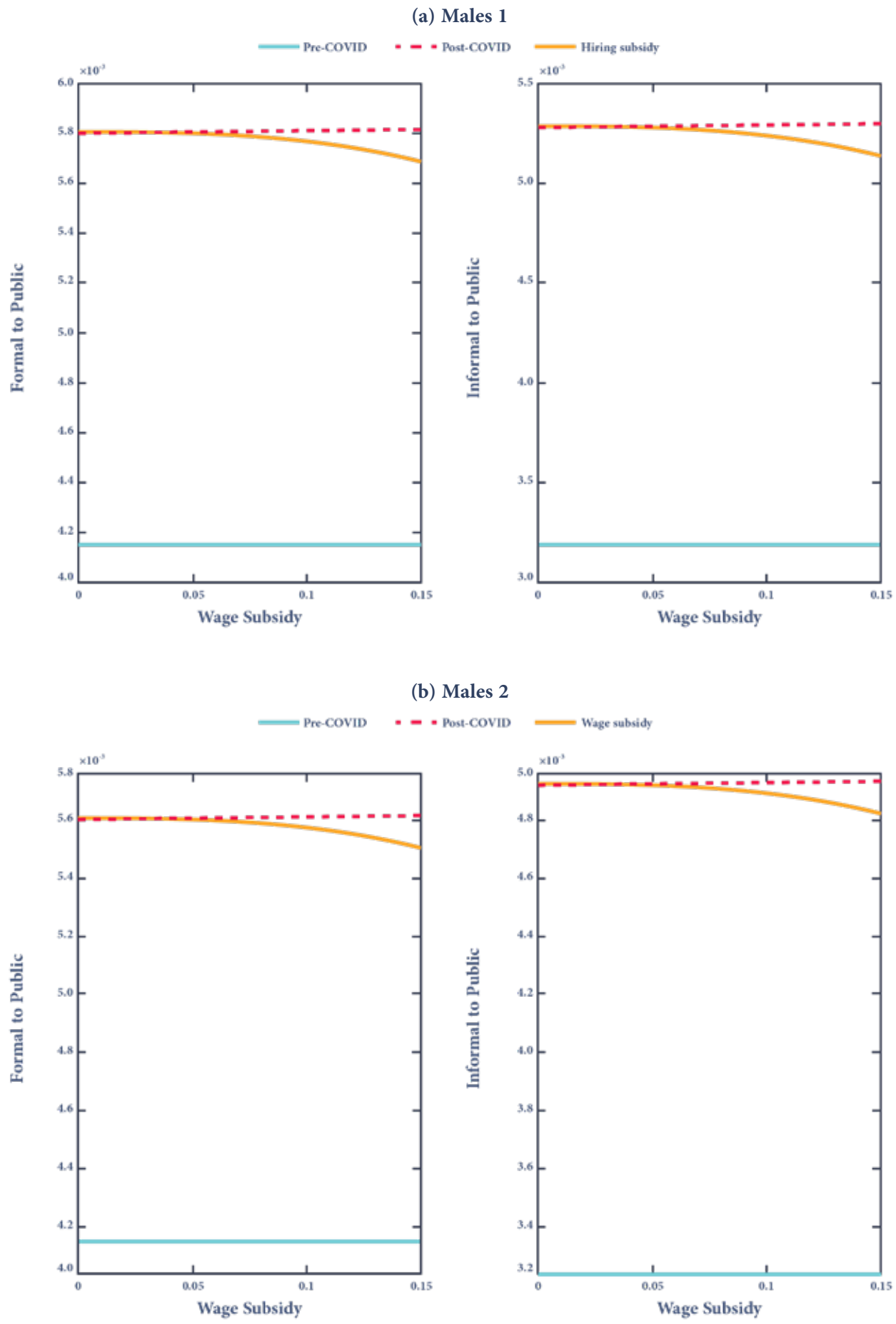
(c) Females



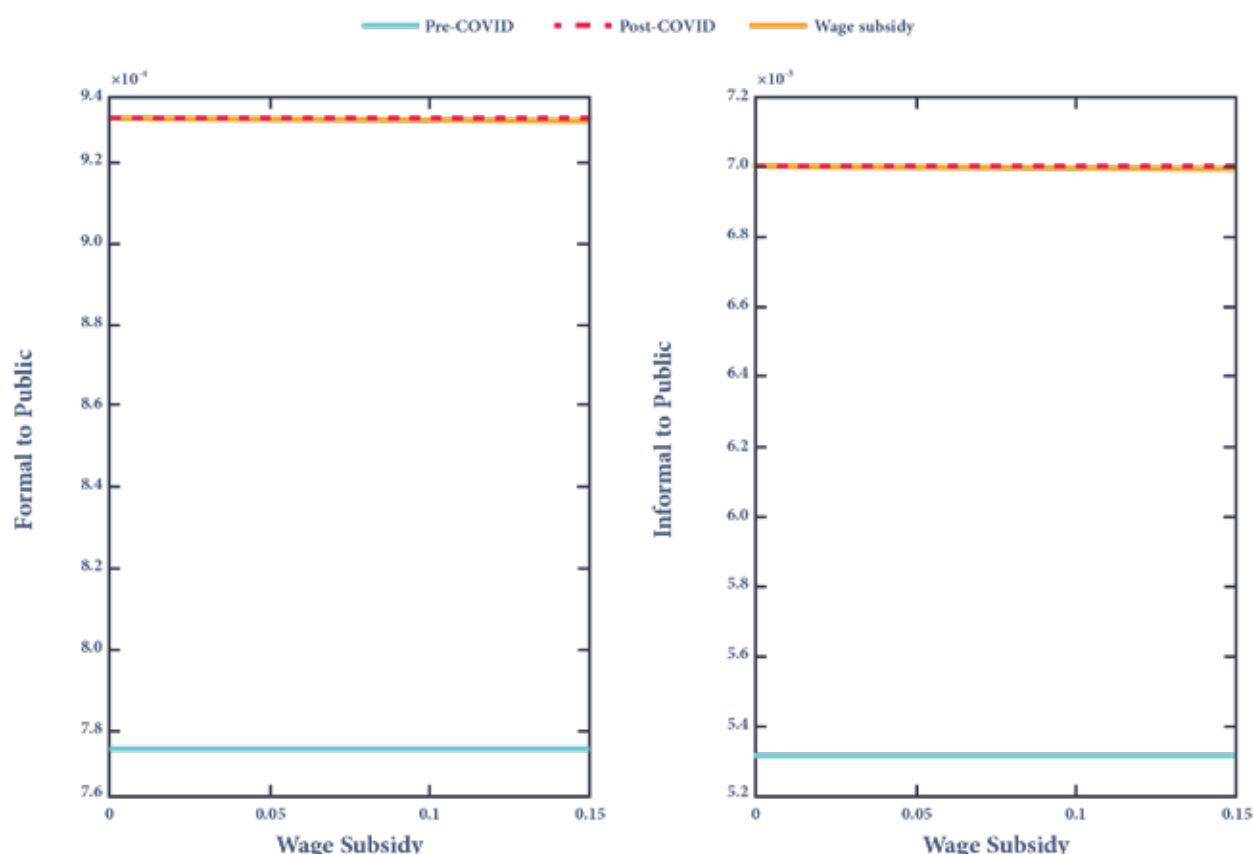
$JSR_F$  is the job searching rate in the formal private sector.  $JSR_I$  is the job searching rate in the informal private sector.  $JFR_F$  is the job finding rate in the formal private sector.  $JFR_I$  is the job finding rate in the informal private sector.

Source: Authors' simulations based on theoretical moments (Yassin & Langot, 2018) and empirical data moments from ELMPS 2018 and ELFS 2019 and 2020.

**Figure 6**  
*Impact of Wage Subsidy on Flows to Formal Sector*



### (c) Females



Source: Authors' simulations based on theoretical moments (Yassin & Langot, 2018) and empirical data moments from ELMPS 2018 and ELFS 2019 and 2020.

### 5.3. Specifications for implementing the proposed policy tools

Firstly, it is crucial to note that the aforementioned policy tools should not be generalized and applied to the entire Egyptian labor market. Rather, these policies should only target jobs with flexible work arrangements. The latter are highly appreciated — post-COVID more than ever before — and are more suited to the aspirations and preferences of job seekers, as our empirical analysis has shown. Employers benefit from these types of jobs as well, since flexible arrangements mean lower hiring costs. For instance, remote employment makes it unnecessary to provide a workplace.

Secondly, these policies are designed to be sector/industry-specific. In other words, to guarantee efficiency, these policies should be time-bound and target only sectors in Egypt that have been substantially affected by the COVID-19 crisis.

Based on the analysis carried out for this policy paper, these priority sectors are manufacturing, wholesale and retail, accommodation and food services, arts and entertainment and information and communication. In fact, a targeted rather than universal policy is more efficient according to the literature, since the wage subsidy is known to increase inequality as it pushes the equilibrium wage upwards.

Finally and most importantly, the weak economic performance of the formal private sector and its inadequate job creation both quantitatively and qualitatively are essentially the result of a business environment permeated by distortions, barriers to competition and excessive red tape, including in the labor market. The success of this package requires changes in strategic policy directives to promote inclusive entry, growth, and formality of private enterprises. Examples of these directives include but are not limited to fostering



competition, realigning incentives and moving toward labor regulations that promote labor mobility and provide support to workers in periods of transition. Finally, the productivity of informal workers must be enhanced through training and skills building, and existing social insurance systems reformed and expanded to attain broader coverage.

## 6. Policy Recommendations

Millions of enterprises and employees have been severely affected by the COVID-19 crisis. This study shows that a wage subsidy is expensive, a hiring subsidy is slow and a temporary combination of both is highly recommended. The government should adopt a labor market policy package that combines both a wage and a hiring subsidy.

- These should target the formal private sector for a specific period of time (1-2 years of employment).
- They should only be directed to industries that have been substantially impacted by the COVID-19 crisis. The success and effectiveness of both the wage and hiring subsidies depend on how well they are targeted and should not be universalized to all industries and occupations. It is therefore recommended that this package be implemented only in priority industries and sectors that have been negatively affected by the COVID-19 crisis and need an employment stimulus. These include manufacturing, wholesale and retail, accommodation and food services, arts and entertainment, and information and communication.
- Moreover, the subsidies should solely be directed to jobs with flexible work arrangements.

- Finally, these subsidies should be limited to low-skilled/low-paid occupations; workers in these occupations are the most vulnerable to job loss in the wake of the pandemic.

## 7. Conclusion

In an attempt to boost employment and job creation in Egypt, particularly in the wake of the COVID-19 pandemic, a number of robust methods, including theoretical simulations, empirical evidence and projections, were used to formulate a consolidated labor market policy package to increase the formal private sector's competitiveness as an employer, as well as to mitigate the negative impact of the COVID-19 shock on the already ailing Egyptian labor market.

The recommended policy package aims for the creation of formal, good-quality jobs with flexible work arrangements. A combination of targeted wage and hiring subsidies is recommended. The main objective of the policy package can only be guaranteed and achieved via the non- or slow increase in public sector pay and benefits.

These policy responses are designed both to address the negative effects of COVID-19 on the precarious labor market in Egypt and, more importantly, to generate a dividend for the Egyptian labor market, by taking advantage of the opportunity to create good-quality, low-cost jobs in the private formal sector that respond to shifts in the workforce's changing job preferences. In turn, this will lead to higher levels of formal employment and labor force participation for both men and women, which is a major engine for development and economic growth.

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