The Black Market for Trading Work Permits and the Price of Formality¹

Abstract

Millions of low-skilled migrant workers seek temporary and long-term jobs in a variety of destination countries worldwide. As with Palestinian workers employed in Israeli firms, migrants or non-citizen commuters are often in a weak bargaining position and face exploitative recruitment practices and contract substitution, both in their countries of origin as well as in the destination countries. Perhaps, the practice that has gained the most attention by international organizations involves the extraction of illicit payments from migrant workers in return for securing residence visas or work permits in the destination country. Unfortunately, most datasets provide limited information on how workers are matched to their employers in the destination country, let alone the role of the employer in securing a residence visa/work permit for the employee. Such constraints have limited the ability of researchers and policymakers to question the degree in which institutional shortcomings negatively affect different subgroups of migrant workers.

By collecting novel data on Palestinian migrant workers in Israel, we are able to distinguish between those who illegally paid for work permits (payers) by participating in the market for illicit trading in permits and formal workers hired full-time by Israeli employers (non-payers). Our data allows us to ask two main questions: How do payers and non-payers differ in terms of individual and job-related characteristics? Among payers, to what extent do observable characteristics predict the permit price set by intermediaries and employers?

We find that payers and non-payers earn similar hourly wages (net of the permit price) but the former have more flexible work schedules, switch employers more frequently and report higher levels of job and life satisfaction, suggesting that workers in the formal labor market pay a higher price in the price of lower quality jobs. This paper contributes to studies on the rising rate of informal employment and/or alternative work place arrangements, and the growing literature on corruption and bribery. We have preliminary evidence that permit prices vary according to industry, skill level, tenure in Israel, municipality of residence, and commute time, lending credence to anecdotal evidence that sellers of work permits use their access to information on the worker's personal circumstances to maximize revenue generated from high permit prices. The paper concludes by assessing the implications of a forthcoming reform approved by the Israeli government, which aims to protect the legal rights of workers and to enhance efficiency in the allocation of permits.

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I. Introduction

Millions of low-skilled migrant workers seek temporary and long-term jobs in a variety of destination countries worldwide. As with Palestinian workers employed in Israeli firms, migrants or non-citizen commuters are often in a weak bargaining position and face exploitative recruitment practices and contract substitution, both in their countries of origin as well as in the destination countries. Specifically, since Palestinians in the West Bank are not citizens of Israel, work permits facilitate the entry into Israel for Palestinian workers who are not eligible for employment in Israel without a work permit. The resulted bargaining power of Israeli employers brings about a wide-scale illicit market for work permits, which are sold to the worker by permit traders, some of whom include Israeli employers.

Note that while institutional features vary from one context to another, policymakers from a variety of countries face similar challenges. For example, in most countries, there are explicit laws in place asserting the illegality of charging workers recruitment fees to compensate employers for the costs of residence visas; nevertheless, it is common for such abuses to take place. The case for Palestinians is slightly different because they cannot reside in Israel. However, the same illicit practices are ongoing for the black market for trading work permits.

Indeed, the phenomenon of trading work permits and residence visas by extracting illicit payments from low-skilled migrant workers, in many developing and advanced economies including countries with progressive labor laws and regulations, has gained the most attention by international organizations and policymakers (UNODC, 2015; Andrees et al., 2015; Ollus et al., 2013). Nevertheless, little has been done to understand the decision involving participation into the black market and how this decision influences various labor market outcomes after a migrant secures a job. Unfortunately, most datasets provide limited information on how workers are matched to their employers in the destination country, let alone the role of the employer in securing a residence visa/work permit for the employee. Such constraints have limited the ability of researchers and policymakers to question the degree in which institutional shortcomings negatively affect different subgroups of migrant workers.

By collecting novel data on Palestinian migrant workers in Israel, we are able to distinguish between those who illegally paid for work permits (payers) by participating in the market for illicit trading in permits and formal workers hired full-time by Israeli employers (non-payers). Our data allows us to ask three main questions: How large is the industry of illicit trading of work permits in Israel? How do payers and non-payers differ in terms of individual and jobrelated characteristics? Among payers, to what extent do observable characteristics predict the permit price set by intermediaries and employers?

We estimate that 20,000 Palestinian workers, constituting 30 percent of all Palestinian migrant workers with permits, purchased work permits illegally for an average monthly payment of about NIS 2,000 (about 20 percent of their gross monthly income). Annual revenue of the illegal permit trade is conservatively estimated at about NIS 480 million, with estimated annual profits of about NIS 120 million (approximately \$30 million). We find that payers and non-payers earn similar hourly wages (net of the permit price) but the former have more flexible work schedules, switch employers more frequently and report higher levels of job and life satisfaction, suggesting that workers in the formal labor market pay a higher price in the price

of lower quality jobs. This paper contributes to studies on the rising rate of informal employment and/or alternative work place arrangements, and the growing literature on corruption and bribery. We have preliminary evidence that permit prices vary according to industry, skill level, tenure in Israel, municipality of residence, and commute time, lending credence to anecdotal evidence that sellers of work permits use their access to information on the worker's personal circumstances to maximize revenue generated from high permit prices.

The paper concludes by assessing the implications of a forthcoming reform approved by the Israeli government, which aims to protect the legal rights of workers and to enhance efficiency in the allocation of permits, by allowing workers to switch between employers within industry. We show that such a reform can substantially reduce the trade in permits, increase workers' net income, boost the profits of employers with little access to hire Palestinian workers at the expense of employers with high access to migrant workers. Moreover, overall social welfare and workers' productivity are expected to increase.

The next section describes the institutional setup of the formal employment of Palestinians in Israel. Section III presents the data sources used for assessing the informal trade in work-permits. Section IV describes our findings on wages and permit-prices, and Section V concludes and evaluates the expected impact of the reform. The appendix briefly presents a simple model of the labor market for paying and non-paying Palestinian workers and plausible implications of the reform.

II. Contemporary permit regime for Palestinian workers in Israel

The work permit regime in Israel² in the last few decades has bestowed much bargaining power on Israeli employers, who have permit quotas. Yet, it aims to use regulation and inspection to secure the legal rights of Palestinian workers. The application process for a work permit and its cancelation are currently initiated by the Israeli employer. First, the employers need to clear their entitlement to employ Palestinians. Employers in construction and agriculture need to apply and get a firm level quota, while employers in manufacturing and services are required to provide evidence from the Employment Service that there are no suitable Israeli workers for the position. In the second stage, the employer requests to sponsor work permits for specific workers he deems fit for his firm. After the worker's biographic information is screened by the relevant government agencies, the regulator issues a work permit (The governmental portal; COGAT, 2015; Ministry of Agriculture).

The permit typically includes the name of the worker and the details of the sponsor. Both of them commit to be in direct employment relations. The sponsor also commits to employ the worker in a full-time position (broadly defined), provide transportation to and from the entry gates of Israel, and submit payroll taxes as well as other fees related to the employment of the worker. Sponsors who do not pay the taxes and fees in the subsequent month, risk losing the permits. The worker formally commits to work only for the employer specified in his permit. Remarkably, the sponsor can simply revoke the permit with an email requesting the regulator to remove a specific worker from his roster of workers (The governmental portal, B).

² The permit regime in Israeli settlements and Israeli industrial zones in the West Bank differs than the regime in Israel and is not restricted by quotas.

Employers in the construction industry are also able to retain their firm-level quota even if they revoke their workers' permits.

In practice, however, the above obligations of employers and the workers are not well enforced. In fact, some sponsors do not actually employ the workers but rather sell the permit to workers, who independently find employment in the Israeli labor market (see details section IV). For instance, an Israeli court convicted a ringmaster for trading in 1,341 work permits between 2007 and 2010 (Court sentence, 2013). Despite the conviction of the ring master, the illicit trade in permits continues to flourish as suggested by a report by Kav-Laoevd (2014), media reports (Eldad, 2016; Kashti, 2017) and multiple sales ads on Facebook . In order to quantify the magnitude of this illicit-trade, and the rents derived from it we conducted a survey of Palestinian workers, whose results are reported below.

From a theoretical perspective, the trade in permit is explained by the failure of the administrative process to allocate permits to the employers with the highest marginal product. In other words, the workers' productivity – and wage – are lower when they are employed by some sponsors in comparison to employers without permit quota. Therefore, workers, who want to work for higher wage in the free market purchase their permit from the quota holders. Assuming that workers can switch between the two types of employers, the price of the permit is expected to be equal to the difference between wage of non-paying workers employed by the sponsors, and workers, who purchased the permit and employed in the free market. Indeed, the net wage of the paying is expected to be equal to the wage of non-paying workers (for further details see appendix).

In 2014, the State Comptroller criticized the regulator's failure to allocate work permits to construction firms according to reasonable economic criteria, and advised the government to examine the protocol and decision-making authority of the regulator in issuing and allocating work permits (State Comptroller, 2014). In light of these findings the cabinet adopted a reform, which aims to protect the workers' rights by allowing them to switch employers and thus enhancing their bargaining power. The reform and its expected outcomes are described in the last section.

III. Data: Designated Survey, Labor Force Survey, and Facebook Sale Ads

This note uses three data sources for the analysis of formal employment in Israel and the illicit trading of work permits. First, we commissioned a survey of formal Palestinian workers at the entry gates to Israel in June 2018 to explore labor supply, wages, trade in permits of these workers, and whether the workers employed by the formal employer or in the free market. Second, we use the microdata of the official 2018 Palestinian Labor Force Survey for calibrating weights for our survey. Finally, we collected a small sample of Facebook ads, where permits are offered at specific prices, to evaluate whether data on permit prices in the survey are reasonable.

1. Entry Gates Survey (EGS, June 2018)

We commissioned the Entry Gates Survey (EGS) to collect data on employment outcomes of workers who, paid for a work permit and those who did not, as well as permit prices. 1,271 workers were interviewed in June 2018 during their entry to and exit from Israel, via the 4

largest entry gates used by Palestinian workers employed in Israel.³ The survey covers mainly workers from the south and the center of the West Bank, who are close to areas of high labor demand in Israel. We under-sampled workers from the north of the West Bank and intentionally did not sample Palestinians working in Jerusalem or the settlements.⁴

The questionnaire includes conventional questions on personal status, education, labor supply, and daily wages, which were copied from the Arabic questionnaire of the Palestinian Labor Force Survey. In addition, we included detailed questions about how the permit was procured: whether the worker paid for the permit, the value of one time or monthly payments, and whether the worker is employed by the sponsor named in the permit. Finally, we included questions on the number of employers the worker had in the recent period. This question allowed us to assess whether paying workers benefited from greater mobility in the free market, which could explain outcomes in the market.

2. The Palestinian Labor Force Survey

The Palestinian Labor Force (PLFS) survey is a household survey conducted by the Palestinian Central Bureau of Statistics (PCBS). The questionnaire of the PLFS includes standard questions on demographics, education and other questions, which appear in other LFSs. In addition, it includes questions, which are suited specifically for the Palestinian labor market. For our research study, two questions are of critical importance: the question on the place of employment, which specifies Israel and the settlements as one of the possible answers, as well as whether the worker has a permit for employment in Israel or not.

We use the microdata of the sample of workers who were both, employed in the Israeli economy and the settlements, during the week prior to the interview, and had a work permit, for calibrating the weights for the EGW. Unfortunately, the microdata of the Palestinian LFS do not distinguish between formal workers in Israel and formal workers in the settlements. We partly address this bias by dropping from our sample workers younger than 25 years, who until recently could not get a work permit in Israel but did get permits for employment in the settlements. As a result, we reduce the population of permit holders represented in the microdata by 10% (see Table 1).⁵

Table 1: Distribution of represented population in and out of our research group by age and working days

			18-27		
		1-17 Days	Days	28-31 Days	Total
		(i)	(ii)	(iii)	
	In\out of				
	Sample	Out	ln	Out	
Age<25	Out	1,837	4,742	78	6,657
24 <age<60< th=""><th>ln</th><th>12,545</th><th>47,341</th><th>96</th><th>59,982</th></age<60<>	ln	12,545	47,341	96	59,982

³ The gates are Eyal, Shaar Ephraim, Tarqumiya, and Meitar. The number of observations in each gate were determined according to the share of Palestinians passers in these gates in 2017.

⁴ The permits for employment in Israeli settlements in the West Bank are subject to a different permit regime than the permits for employment inside Israel.

⁵ According to the published LFS report, the share of workers in the settlements out of the workers with or without permits in 2018 was 17% (PCBS, 2019).

59 <age< th=""><th>Out</th><th>253</th><th>228</th><th></th><th>481</th></age<>	Out	253	228		481
Total		14,635	52,312	174	67,121

Source: Calculations based on the Palestinian LFS

The main selection bias in the EGS stems from the place of the interview. Since the EGS sampled workers on their way to work in Israel, while the PLFS sampled households in their residence, workers who worked more days per month are over-sampled in the EGS (Figure A2). In fact, the EGS contains only a handful of workers who report working less than 18 days per month, while the corresponding figure in the PLFS was 22%. In an attempt to account for workers with fewer than 18 days of work that, we make crude out-of-sample extrapolations about the trade in permits among these workers based on regressions. To make the sample of PLFS respondents more comparable to our sample of interest, we drop permit holders (in the PLFS) who worked less than 18 days from the detailed empirical analysis (section V.2).

The combined dataset consists of 960 observations from the 2018 PLFS and 1,179 observations from the EGS representing 47,341 workers with permits, who were 25-59 years old and reported working 18-27 days per month (Middle row in column ii in Table 1). The total number of active workers in the Israeli economy with permits according the PLFS is about 67,100. This number is significantly lower than the more than 77,000 permits for jobs in Israel reported by the regulator, let alone the 30 thousand permits for employment in the settlements (Ministry of Interior Affairs and Gdalyahu, 2019). Part of this discrepancy may stem from the partial utilization of permits in some days of the month, which drop from the PLFS estimates, e.g. permit holders who did not work during the week before the survey. At any rate, our estimates for the number of paying workers, revenues and profits of the permit trade are conservative.

Permits on Sale in Facebook

The last data source we use are Facebook sales ads for work permits and other permits that facilitate entry into Israel, published on Facebook groups of job seekers and local communities in the West Bank. This publicly open venue of trade in permits allows us to access complementary data on prices of various permits as well as other, sometimes peculiar, details of this trade.

We collected data on FB sales ads published in 2016-19 and compiled a small database of 68 offers of work permits on sale in 46 ads. Each ad may include one or few offers of permits of the same type e.g. permit for employment in construction with overnight stays in Israel. A similar permit without overnight stay is classified as another offer. Most ads include just one offer, yet a few include multiple offers such as an ad by a tourism office (May 2018), which advertised four types of work permits. While suffering from some shortfalls, these data provide an external indication of whether the prices reported by workers are excessive.

IV. The Markets for Work-Permits and Formal Palestinian Labor in Israel

This section documents the markets for both work-permits and the labor market for formal Palestinian workers. It examines whether there is an interaction between these markets so the

permit-price equals to the difference of the wage between non-paying workers employed by quota holders and the wage of paying workers employed in the free market.

1. The Market for Permits

Evidence for illegal trade in permits is ample and documented by various sources. The most revealing example is the conviction of an Israeli ringmaster, who bribed two Israeli officials, and used 4 Palestinian middlemen for selling 1,341 work permits between 2007-10 for NIS 4 million (about USD 1 million in 2007-10). Other evidence include a 2014 report by Kav-Laoved (a workers' rights organization) based on interviews with 100 paying workers, a survey commissioned by the authors in June 2018, and a few dozen sales ads we collected on Facebook (details below). Israeli agencies are also aware of this on-going illicit trade. A report by the Ministry of Finance, explicitly associated the expected reform with the government's intention to reduce the trade in work permits. A number of mainstream media reports also addressed the illicit trade in work permits (Court sentence, 2013; Kav Laoved, 2014; Eldad, 2016; Kashti, 2017; Gdalyahu, 2019).

We crudely estimate the number of paying workers at about 20 thousand workers or 30% of the total active workers with permits. This crude estimate is based on summing up the likelihood of paying for the permit in the LFS sample, as projected with a probit regression from the EGS.⁶ This is a conservative estimate as administrative data indicate that the number of work permits in Israel was about 77,400 (Ministry of the Interior), while the PLFS estimated only 67,690 active workers with work permits in Israel as well as in the settlements. The average permit price is NIS 1,987 per month. A rough estimate of the annual revenue of the sales of work-permits is about NIS 481 million (Table 2).

We infer that the average profit per permit sold was about NIS 500 per month, and the annual profits are grossly estimated at NIS 120 million. We evaluate the profits of the illicit permit trade by deducting the average payroll fees and payments for pension paid by sponsors to the regulator according to administrative data from the estimated permit price. To the extent permit traders managed to pay to the regulators less than other sponsors-employers, say by reporting low daily wage or fewer working days⁷, their profits were larger.

Table 2 provides a breakdown of key indicators between the construction industry, which employed about 75% of the paying Palestinian workers, and other industries. We do find that

⁶ The projection is based on a probit regression, where a dummy variable of paying for a permit in the FWS is regressed on personal characteristics (age, education, industry etc.) (Pseudo R²=0.07). In the second stage, we predicted the likelihood of paying for a permit in the LFS using the same variables. One caveat in this procedure is that it provides out of sample projections for the likelihood of paying workers with less than 18 days of work, since they are not represented in the EGS. Yet, as the likelihood of paying for a permit is positively correlated with the working days, we project that only 1,870 workers, or 15% of workers who were employed less than 18 days, paid for the permit.

⁷ For instance, in between April and December 2007 employers reported that more than 70% of the Palestinian workers' wage was exactly the minimum wage (Eckstein Report, 2011 p. 29). Similarly, the verdict of the ringmaster who sold 1,340 permits describes how he tried to report a low as possible number of days of work, and thus reducing his payment to the regulator and increasing his profits (Court verdict 2013).

the average permit price in construction was higher by 25% than in the other industries and the profit per-permit is more than double. Therefore, profits from the selling permit for employment in the construction industry are about 87% of the total profits.

Table 2: The Market for Work Permits for Active Palestinian Workers in ages 25-59

	Total	Construction	Other Industries
Number of paying workers ¹	20,166	15,054	5,112
Total workers with permit ¹	67,690	49,766	17,924
Average monthly permit price (NIS) ²	1,987	2,102	1,649
Share of monthly wage	19.4%	19.6%	19.0%
Average monthly payroll fees (NIS) ²	1,482	1,514	1,389
Monthly profit per permit (NIS) ²	505	588	260
Annual revenues (NIS million) ³	481	380	101
Annual profits (NIS million) ⁴	122	106	16

Sources: Estimations based on EGS and PLFS and administrative data from the Ministry of Interior Affairs

Notes:

- 1. The number of payers (sum of the probability to pay) and total workers with permits are estimated from the PLFS. The probability of a worker to pay is projected by a probit regression on the probability to pay in the FSW.
- 2. Permit price (payroll fees) in construction and other industries is estimated based on the FSW (administrative data), and the overall average permit price (payroll fees) is an average based on the estimated number of payers from the PLFS.
- 3. Multiplication of monthly permit price, number of payers and 12 months.
- 4. Multiplication of monthly profit per permit and 12 months.

The distribution of permit prices in the construction industry and in other industries suggests that while almost all of the permits in the construction were sold for NIS 2,000-2,500 per month, the majority of the permits in other industries were sold for NIS 1,500 but some for NIS 2,000-2,500 per month. A comparison of the distribution of permit-prices in our survey with the distribution of prices requested in the sample of 68 permit-sales offers posted on Facebook in 2016-19, demonstrates that the requested prices on Facebook are typically higher, but not significantly so. Indeed, the ask prices in Facebook ads suggest that the prices reported in our survey are not excessive.

Facebook ads also provide anecdotes shedding light on reasons for the variation in permit prices. For instance, in the same ad, permits with clearance for night stayovers are sometimes sold for NIS 200 more than permits without stayovers (Apr 5 & 25; June 10, 2018). One ad dated to April 2018 suggested a NIS 200 reduction for the month of Ramadan, when working hours of Palestinians are shorter and salaries are presumably lower (Figure 3). Finally, another ad offered the workers to sign an agreement to secure their rights, probably for a permit or payback, in this illegal transaction (17 December 2018). Facebook is also used as a platform for matching employers without quota permit and workers who purchased a permit.

by Industry and Sales Ads on Facebook

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Figure 2: Distribution of price of permits in the Formal Workers Survey by Industry and Sales Ads on Facebook

Sources: Facebook ads (2016-18) and Formal Workers Survey (June 2018)

Other industries



Figure 3: Facebook ad offering work permits and its translation

Source: Facebook (April 25, 2018)

2. Does the Permit Price Match Wage Difference Between Payers and Non-payers?

This section compares the characteristics, including wages, of paying and non-paying workers with permits according to the EGS to evaluate whether the prices paid for the permits cleared this labor market.⁸

⁸ The current sub-section is based on data for workers employed more than 18 days per months, and thus the averages are slightly different from those reported in the previous sub-section.

Payers and non-payers share some demographic characteristics, including a similar number of kids, education level, ability to speak Hebrew, and virtually all permit-holders were married. Paying workers are almost 2 years younger than non-payers, worked in Israel two years fewer, and held a permit for a shorter tenure. The two types of workers are also employed in the same industries in similar shares (Table 3, panel 1). The most important difference for this study is that over 90% of the non-payers are employed by the sponsor registered in their permit as required by the regulation. On the other hand, more than 70% of the paying workers report being employed by employers other than the sponsor. In addition, payers are more likely to rotate between employers in comparison to non-payers.

Table 3: Characteristics of paying and non-paying workers (25-60 years old, 18-27 working days per month)

	Paid for a permit	Did not pay	Difference		
1. Personal and employment characteristics					
Age	36.8	38.5	-1.7**		
Ever Married	94%	96%	-2%*		
Number of Kids	4.5	4.4	0.1		
Secondary Education or higher	34%	33%	1%		
Speaks Hebrew Fluently	57%	57%	0%		
Speaks English Fluently	6%	3%	3%**		
Years employed in Israel	8.3	9.6	-1.3*		
Years holding a work permit	8.0	9.4	-1.4**		
More than one employer in the last 3 months	54%	42%	11%***		
Employed by the sponsor named in the permit	28%	91%	-63%***		
Working hours last week	34.8	35.8	-1.0		
Daily commute (hours)	2.5	2.2	0.3***		
Construction	67%	63%	4%		
Agriculture	17%	12%	5%***		
Manufacturing	11%	14%	-3%		
2. Labor supply and income					
Working days last month	21.7	21.1	0.5***		
Daily wage (NIS)	465.0	371.0	94.0***		
Gross monthly labor income ¹ (NIS)	10,067	7,824	2,243***		
Monthly payment for permit (NIS)	1,955		1,955		
Monthly income net of permit price (NIS)	8,112	7,824	288**		
Daily wage net of permit price ² (NIS)	373.6	371.0	2.6		
Represented population (thousands)	19.9	27.4			
Observations	561	622			

Source: Crossings survey

Notes: 1. Daily wage multiplied by days of work per month; 2. Monthly income net of permit price divided by the number of working days. Significance levels (*** p<0.01, ** p<0.05, * p<0.1)

The daily wage of the paying workers (NIS 465) is 25%, higher than that of the nonpayers (NIS 371). Payers also work an additional half a day per month in comparison to non-payers. Plausibly, paying workers, who paid a monthly sum for the permit and face higher daily wages,

opt to maximize the benefits of their access to Israel to generate higher income. The higher daily wage and the additional half a day of work result in a much higher monthly gross labor income for the paying workers (about NIS 10,067) than for the non-payers (about NIS 7,825), a difference equivalent to 28% of the income of the paying workers (Table 3, panel 2). This difference covers the average permit price (about NIS 1,950°) and leaves the payers with an additional net income of about NIS 290 in comparison to the income of the non-payers. Most of this difference is explained by the formers' additional half working day. Indeed, the difference between the daily wage net of the permit-price 10 of payers and non-payers is negligible: less than NIS 3.

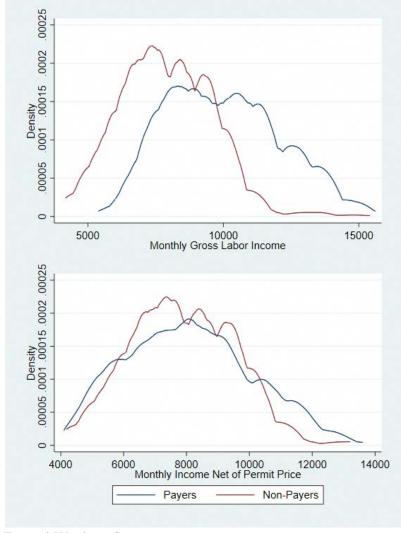


Figure 4: Gross and Net Labor Income of paying and non-paying workers

Source: Formal Workers Survey

⁹ The average price of permit in this sub-section is based on the EGS for workers who worked 18-27 days per month, while the permit price in the previous sub-section is projected to all active workers in Israel according to the PLFS including workers who worked less than 18 days per month.

¹⁰ The daily wage net of the permit price is the gross daily wage minus the permit-price divided by working days per month.

Curiously, the deduction of permit prices from the gross monthly income of payers shifts the whole distribution of the net income of the payers leftwards to resemble the distribution of the income of the non-payers (Figure 4). The higher average net income of the payers is a result of a small share of the paying workers whose gross monthly income was above NIS 12,000. Indeed, the similarity of the distributions of net wages suggest that the permit traders pocket almost all of the rent generated by the permit regime.

V. Expected implications of a future reform of the permit regime

In December 2016, the Israeli Cabinet approved a reform (decision 2174) aimed at protecting the rights of Palestinian workers and improving the efficiency of work-permit allocation by transferring the control on the permit from the employer to the worker. According to the decision, new permits will be issued to new workers, who will pass a test in vocational skills without involvement of an Israeli employer. After the issuance of the permit, the worker will be expected to find an employer, and the process of employee-employer matching will be enhanced by a new dedicated internet based matching mechanism created by COGAT. Veteran manufacturing and services workers will be moved to the new system, while construction workers will be able to switch to the new system with a simple request.

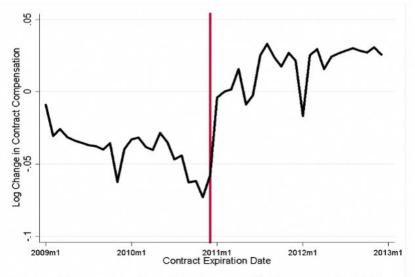
The ability for legally switching employers under the same permit and the new matching mechanism are expected to increase the efficiency of the allocation of permits and dilute the bargaining power of sponsors, and particularly of the permit traders. We expect that a well planned reform will allocate workers to employers with the highest productivity, who will be able to employ more workers pay the workers lower gross wages. Such reform will enhance the bargaining power of all workers and increase their wages net of the permit price. On the other hand, the profits of sponsoring employers will shrink as they will employ fewer workers at a higher wage. Overall, the increase in the wages and in the profits of employers without permit quota will be larger than the decrease in the profits of the sponsors and the overall social welfare will increase as the allocation of the workers will be more efficient. The analytical model in the appendix demonstrates the current market structure and the expected impact of the reform.

Two examples reflect the expected improvement in the conditions of the workers following the abolition of the employers' control on the permit. Ida (2012) found that a similar 2005 reform in the employment of foreign construction workers (e.g. from Bulgaria, Moldova, and China) in Israel was followed by an increase in the workers wages and a reduction in the illegal employment by unlicensed employers. Similarly, Naidu et al. (2016) documented that revoking the worker's dependency on his employer in the UAE's Kafala system in 2010 improved the workers' welfare. This reform allowed workers to switch employers without permission of the old employer when a work contract was expired. This change led to an almost immediate 10% increase in the compensation of workers whose contract terminated after the reform in comparison to the compensation of workers, whose contract terminated before the reform (Figure 5).

Thus far, the implementation of Decision 2174 is partial. Currently, and only workers in Atarot industrial zone (in North Jerusalem) can move between employers within this zone as a pilot starting March 2019. The implementation of the reform in the construction industry is expected

to take place in late 2019, and no date was determined for implementation in the services and manufacturing industries.

Figure 5: The Impact of a Similar Reform in the UAE on Change in Compensation



This shows the average log change in real compensation from one contract in time t to the next contract in t+1 where t is the month of expiration of the preceding contract. Compensation includes the value of earnings and benefits defined in the contract. The sample is the MOL data.

Source: Naidu et al. (2016)

Many details of the reform are yet to be determined following the pilot in Atarot, and there are multiple considerations, including economic and social ones. We note, however, that some details in Cabinet Decision 2174 are expected to limit the mobility of workers between employers and as a result the workers' bargaining power. First, veteran construction workers stay by default in the old system and need to formally apply to move to the new one. Second, according to the decision, a permit holder who does not find an employer for a full month within 60 days after his separation from his previous employer loses his permit. This stipulation can result in a market for permit traders when Palestinian workers who approach the 60 days deadline may pay an Israeli employer to report employing them. In addition, employers in the new regime are required to employ Palestinian workers for at least a month, which may also generate a market for permit traders for workers employed in short term projects. On the other hand, COGAT's future internet based matching system could enhance competition and reduce periods of underutilization of permits.

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Appendix: Theoretic Analysis of The Work Permit Regime

This appendix presents a simple model for the formal labor market for Palestinian workers before and after the reform. It aims to describe the impact of the permit regime in both states on the allocation of workers, productivity, wages, and distribution of profits from employment of Palestinian workers between formal sponsors, other employers, and workers.

The model includes two labor markets: A market of employers, who had permit quota and employ non-paying workers (illustrated in blue in Figure A1 and the number of worker increases from left to right) and a free labor market of employers without permit quota who employ paying workers (illustrated in black and *the number of worker increases from right to left*). The demand for labor is standard in both markets: the number of demanded workers increases as the wage decreases.

The overall quota of permits is set in advance by the regulator and is depicted by the distance between the blue and black vertical axes. Every permit is either used by a non-paying worker and a sponsor, or by a paying-workers employed by an employer without a permit quota. Assuming that the administrative allocation of permits is not efficient, there are some employers without permit quota, who are willing to pay higher wage than sponsors. In other words, we assume that the administrative allocation diverges from a market-based allocation.

Sponsors with low demand for labor may offer the permits for sale. The ask price is set according to the expected loss to the sellers due to the illegality of the transaction and the alternative profit from direct employment of the workers. These sponsors with low demand for labor are practically permit traders.

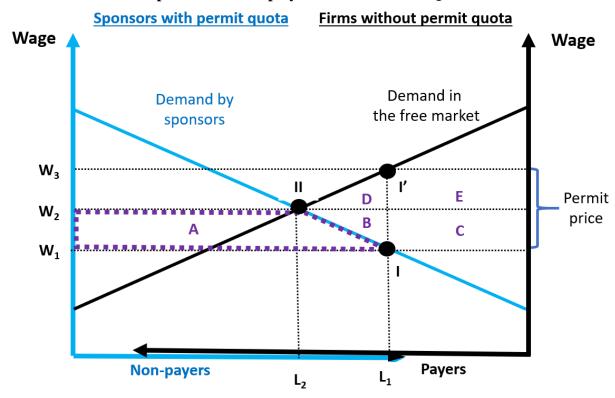


Figure A1: A Model for The Labor Markets of Palestinian Formal Workers by Sponsors and Employers without Permit Quota

We examine the equilibria in the labor markets before and after the reform:

Contemporary permit regime: according to the conditions of the permit, workers are allowed to work only for the sponsor designated in the permit. Full implementation of this condition adversely affect labor productivity as some free market employers, who did not get permit quota, are interested to hire to workers for high productivity jobs, and are willing to pay higher wages in comparison to the wages of the sponsors. Similarly, workers will prefer to be employed in the free market by employers without permit quota for a higher wage. Therefore, sponsors with low demand for labor sell the permits to part (L-L₁) of the workers, who are employed in the free market.

In equilibrium in the current permit regime represented by points I and I', L_1 workers are employed by sponsors for wage W_1 while $(L-L_1)$ workers are employed in the free marker for gross wage of W_3 . The permit price is expected to be the difference in the wages between these labor markets (W_3-W_1) , and the net wage of the workers in the free marker is expected to be equal to the wage of workers for the quota holders. The permit traders revenues are the number of sold permits multiplied by the permit price $(L-L_1)$ (W_3-W_1) , which are marked in Figure A1 by areas C and E.

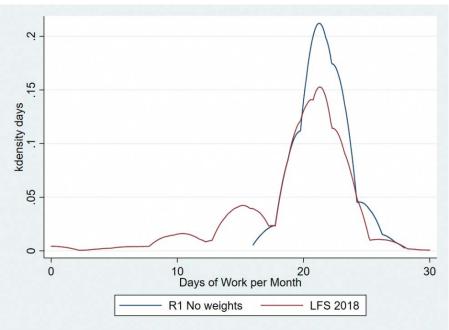
Following the implementation of the reform: Workers will be able to legally switch employers and specifically formally work for employers without permit quota. Workers will choose employers according to the offered wage and wages in the two markets will be equal. In a post reform equilibrium, fewer workers L_2 ($L_2 < L_1$) will work for employers who had permit quota, while more workers (L-L₂) will work for other employers and both types of

workers will earn higher net wage W_2 ($W_1 < W_2$). The new equilibrium is represented by point II.

The reform – represented by the move from points I & I' to point II – is expected to enhance the welfare of workers and of employers without permit quota: The workers net wage will increase from W_1 to W_2 and the total increase in wage will be equal to areas A+B+C. The employers without permit quota will employ more workers and lower gross wage and the increase in their profits will be equal to areas D+E. On the other hand, the sponsoring employers will employ fewer workers at higher wage and the decrease in their profits is represented by area A, and the permit traders will lose all their profits that is the permit price multiplied by the number of paying workers depicted in areas C+E.

The total income of the workers and employers of all types will increase following the reform by the size of triangles B+D. This increase represents efficiency gains of the move from administrative allocation of workers by quotas to allocation of workers by market according to economic criteria. Indeed, a well implemented reform can achieve its goals: Enhancing the efficiency of the permit allocation and increasing the wages of the workers.

Figure A2: Distribution of formal workers in the EGS and PLFS by days of work per month



Source: PLFS(2018) and EGS (2018)