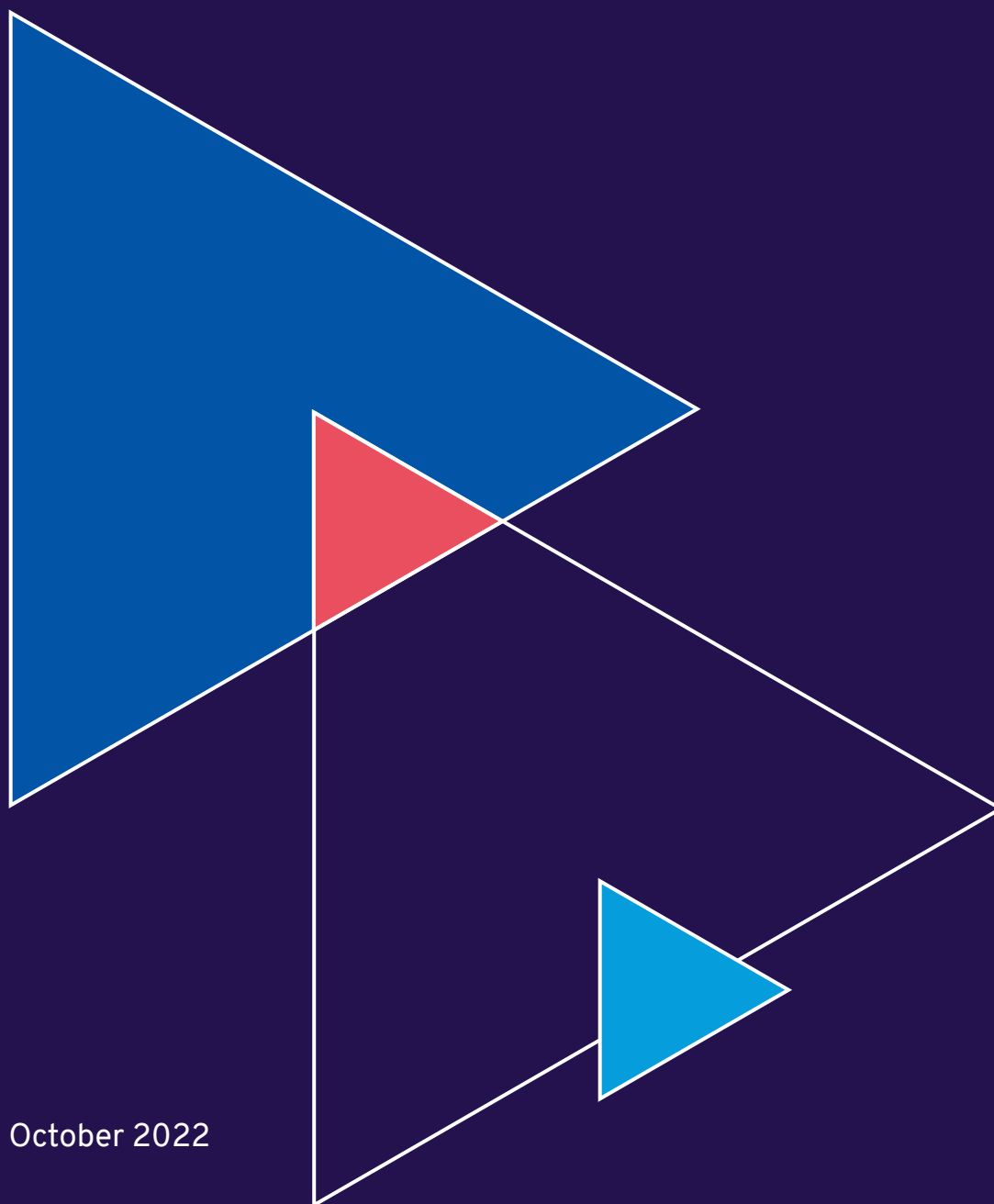


▶ Working Hours and Wages in the Jordanian Garment Sector

Legal Context and Historical Trends



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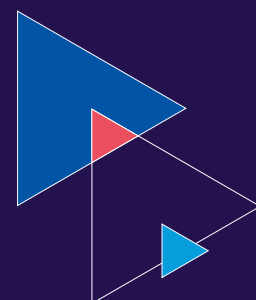
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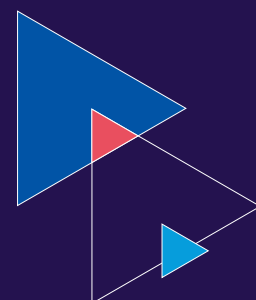
▶ Executive Summary

The garment sector in Jordan employs 62,000 people, the majority of them migrants from Asia, and the majority of them women. Wages and working time are important issues in the sector. Under current Jordanian labour law, there is no legal limit on overtime work as long as workers consent to the extra hours. Stakeholders in the garment sector will re-negotiate a sector-wide Collective Bargaining Agreement (CBA) in the fall of 2022, and negotiators from worker and employer representatives may discuss including a maximum limit on overtime.

The main findings of this report are as follows:

- ▶ Migrant workers work substantial overtime, with the average migrant worker logging almost 60 hours per week while the average Jordanian works 42 hours per week.
- ▶ Setting a cap on overtime hours would affect migrant workers but not Jordanians: setting it at 60 hours per week would affect 38 per cent of migrant workers, whereas setting it at 72 would affect 9 per cent of migrant workers, based on historical data of working hours from 2017-2022.
- ▶ Working hours, especially for migrant workers, dipped during the early part of the pandemic. This had a real and measurable impact on take-home pay which dropped in tandem.
- ▶ Migrant workers' take-home pay is closely tied to the number of overtime hours that they work, and the wage system highly incentivizes overtime work for migrant workers.

In July 2022, key buyers sourcing from Jordan sent a letter suggesting that stakeholders consider a cap on weekly working hours, among other topics. They suggested capping hours at 60 hours per week with an exception for maximum work hours up to 72 hours per week which should not exceed three weeks within any 12-week period. The information in this report aims to help stakeholders make informed decisions by providing an overview of the current legal and practical context in Jordan, the historical range of hours worked, and workers' concerns about pay and working time.



▶ Introduction

The garment sector in Jordan is strategically and economically important. Garment exports make up 21 per cent of total exports and the sector is significant for the economy and labour market.¹ Strategically, the sector is a leader in efforts to establish decent working conditions. The following sections provide a brief introduction to the garment sector in Jordan, the key actors involved in it, and the impact of Covid-19 on the sector. The introduction also provides a brief review of what is known about the impact of long working hours on workers and firms.

The introductory section is followed by an analysis of the legal and practical context in Jordan with regards to wages and working time. This involves a review of national laws, provisions in the sectoral bargaining agreement, international labour standards, and the codes of conduct set by various buyers who source from Jordan. The next section lays out the methodology and data sources used for the analysis of trends in working hours and pay in Jordan's garment industry. The following section presents the main findings of the quantitative analysis. The final section concludes with lessons learned, recommendations, and suggestions for future research.

▶ Jordanian garment sector

Approximately 62,000 workers are currently employed in the export-oriented Jordanian garment sector in over 80 factories. The garment industry is primarily driven by large factories who export directly to the US under the US-Jordan Free Trade Agreement (USJFTA) which allows Jordan to gain preferential duty and quota-free access to the US market. These large exporting factories account for over 80 per cent of employment in the sector. Below these factories in the supply chain are numerous subcontracting factories, smaller factories that produce goods for the direct exporters upon request. Parallel to this system are satellite units, which operate outside of the industrial zones, primarily employ Jordanians, and are typically small.

The garment sector in Jordan is highly feminized and is dominated by migrant workers. Roughly three quarters of workers in the garment industry are women, while 70 per cent of workers are migrants, primarily from Bangladesh. Migrant workers also come from India, Nepal, and Sri Lanka. Migrant workers typically come to Jordan on short-term contracts of 2-3 years and have a work contract with only one employer under the *kafala* (sponsorship) system which regulates the employment of foreign nationals in Jordan. Employers are responsible for providing housing and meals, and most migrant workers live in factory accommodations in the industrial zones, often located in remote areas.

There are several key actors in the sector representing the interests of the government, workers, and employers. The Ministry of Labour, and particularly the inspection department, are invested in ensuring that the sector complies with national labour laws. Workers in the sector are represented by the General Trade Union of Workers in Textiles, Garment & Clothing, the only union legally permitted in the sector.

¹ Author's calculations based on data gathered from the Department of Statistics for 2021. Three HS codes for garment exports are used: garment exports for article of apparel and clothing accessories, knitted or crocheted (HS61), Articles of apparel and clothing accessories, not knitted or crocheted (HS62) and Other made up textile articles, sets, worn clothing and worn textile articles and rags (HS63).

Employers in the sector are currently represented by two main organizations: the Jordanian Garment, Accessories & Textiles Exporters' Association (JGATE), which is focused on the needs of exporting factories, and the Jordan Chamber of Industry (JCI), which takes a bigger sectoral focus to include SMEs and micro enterprises.

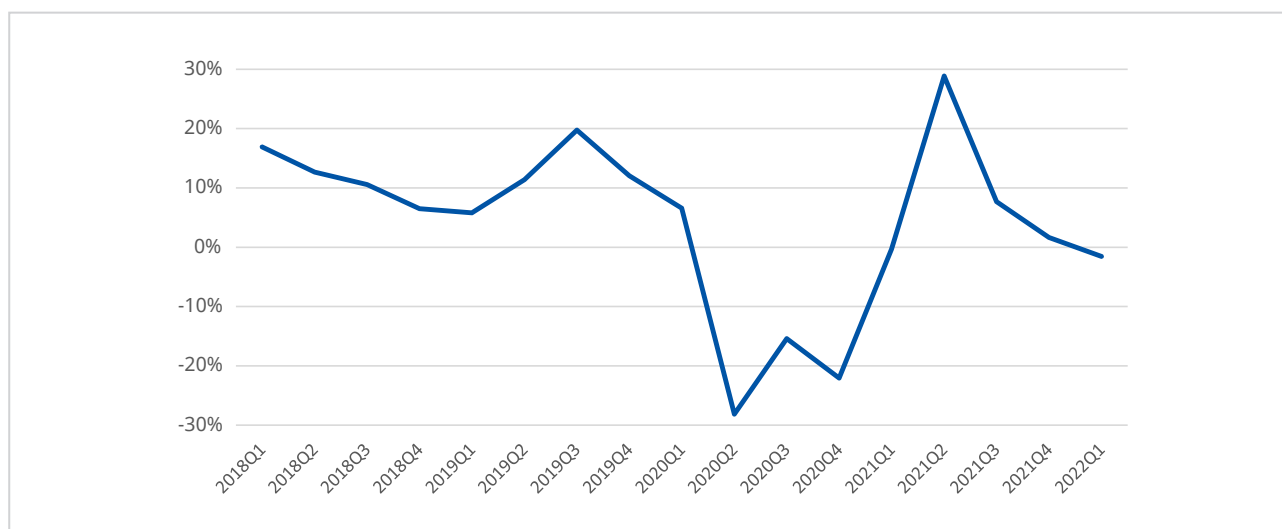
The International Labour Organization is involved in the Jordanian garment sector through several different projects. Better Work Jordan, a partnership between the ILO and the International Finance Corporation, brings together stakeholders from all levels of the global garment manufacturing industry to improve working conditions, enhance respect for labour rights, and boost competitiveness. The programme was established in 2008 at the request of the Government of Jordan (GoJ) and the United States (US) government and is mandatory for garment factories that export to the US under the US-Jordan Free Trade Agreement. Better Work Jordan covers an estimated 95 per cent of garment workers in Jordan – including those from the direct exporting factories, subcontractors and satellite units mentioned above – as most garment-sector employment comes from factories that export to the US. Better Work Jordan conducts yearly compliance assessments of factories with the Ministry of Labour to determine if factories are complying with the Jordanian labour law and key international labour standards.

In addition, the ILO's Work in Freedom programme funds the Workers' Center in the Al Hassan industrial zone which offers many services to migrant workers. These include a space for recreation, exercise, learning and training. The Workers' Center also provides a location for workers to meet and discuss issues and staff members can facilitate these conversations and keep track of issues facing workers. Through regular engagement with workers in the center, ILO staff learn about different issues facing workers in the sector and are sometimes able to take action to address these issues.

▶ Covid-19 and business environment

Covid-19 had a major impact on the Jordanian garment sector in 2020, but the sector has since partially rebounded. In March 2020, the Government of Jordan imposed lockdowns, curfews, and closed the airport in an effort to control the spread of Covid-19. Factories halted production for a short time, and migrant workers were largely confined to crowded dormitories with little to do to pass the time. However, the government listed the garment sector as critical to the economy, which allowed production to resume in short order. During this time, however, many buyers cancelled orders, delayed payments, or waited to place new orders, which led several factories to halt production entirely or shut down, while many operated at a significantly slower pace.

After growing at an average annual growth rate of 12 per cent from 2017 to 2019, exports dropped precipitously in 2020 (see **Figure 1**). By the end of 2020, however, orders started returning as some buyers shifted production from Asia to the Middle East. Exports rebounded at the beginning of 2021 but have recently plateaued. Exports peaked at 1.96 billion USD in 2019, fell to 1.66 in 2020, and rose to 1.8 in 2021. 2021 saw new issues emerge – while orders increased, the workforce was substantially smaller meaning that the remaining workers had to increase productivity or work longer hours. So far in 2022, Better Work Jordan has heard reports of reductions in orders. The number of workers in Better Work Jordan participating factories fell from a peak of 75,000 in 2019 to 65,000 in 2020 and 63,000 in 2021.

▶ **Figure 1: Garment Exports (year-over-year change)**

▶ Impact of long working hours on workers and firms

The negative impacts of long working hours on both workers and firms are well documented in the literature. Long working hours can negatively affect physical and mental health of workers, and can lead to increased risks of workplace accidents. Productivity also decreases with longer working hours.

Long working hours can negatively affect the physical and mental health of workers. There are numerous studies that link working more than eight hours a day with mental health problems and stress.² A meta-review of the literature found that working long hours can lead to physical health problems, such as increased risk of heart disease, in addition to the aforementioned mental health problems.³ However, these studies point out the need to clearly define excess working hours – as a conservative estimate, the researchers looked at working time greater than 8 hours a day or 40 hours a week.

In addition, the risk of accidents in the workplace increases with longer working hours, which can have immediate negative health effects. The risk of accidents increases at an exponential rate above certain thresholds of long working hours.⁴ The mechanism for this is called “reactive inhibition” where fatigue due to repetitive work over long hours leads to less accuracy and precision. As many jobs in the garment sector deal with machinery (such as a sewing machine) this can lead to accidents or injury.

Long working hours can also have a negative effect on firms. Overtime work is more costly as employers are required to pay a premium for overtime (often 125 per cent or 150 per cent of the base wage). There are also indirect effects in the form of lower productivity. While output will increase with over time work, output per hour (productivity) is found to be lower when working hours are longer.⁵

2 Spurgeon, Anne. Working time: Its impact on safety and health, International Labour Office, 2003.

3 Bannai, Akira and Akiko Tamakoshi. “The association between long working hours and health: a systematic review of epidemiological evidence.” *Scandinavian journal of work, environment & health* 40 1 (2014): 5-18.

4 Anxo, Dominique and Mattia Karlsson. “Overtime work: A review of literature and initial empirical analysis.” International Labour Organization, *Conditions of Work and Employment Series No. 104*, 2019.

5 Golden, Lonnie. (2012). *The Effects of Working Time on Productivity and Firm Performance*, Research Synthesis Paper. International Labour Organization, *Conditions of Work and Employment Series No. 33*.

▶ Legal and practical context

Several laws and regulations govern wages and working time in the Jordanian garment sector. These can be benchmarked against international labour standards from the ILO and expectations set by buyers in the form of buyer codes-of-conduct, which can differ among individual buyers.

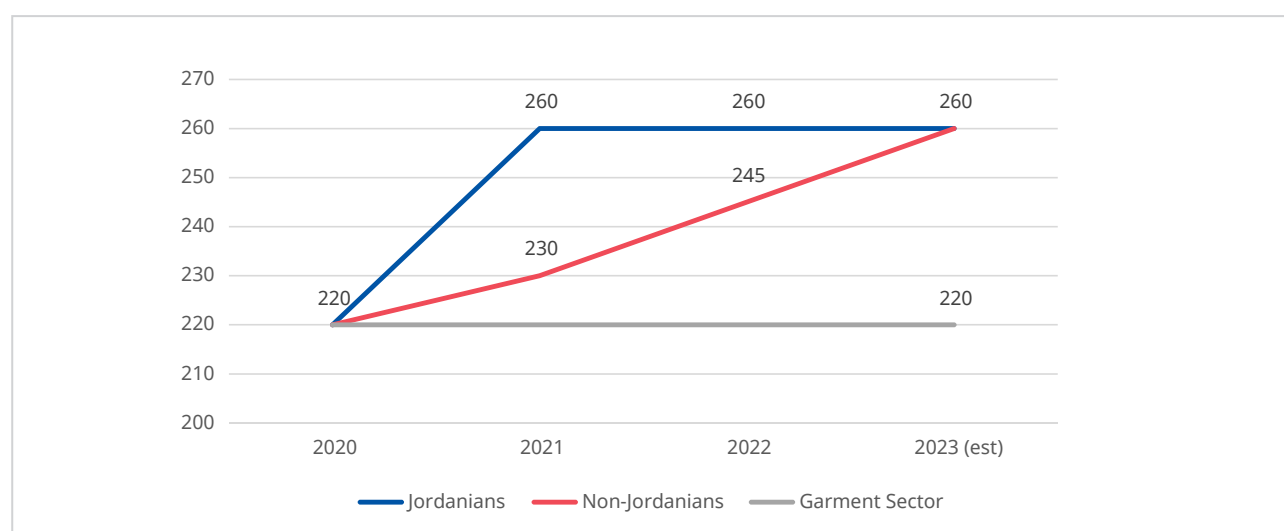
▶ National context

The Jordanian labour market is defined by three main groups of workers – Jordanians, migrant workers, and refugees, with different laws applying to each. Migrant workers are defined as non-Jordanians who have moved to Jordan for employment. As of 2020, there were approximately 222,000 non-Jordanians registered with the Ministry of Labour. Most of the workers come from Bangladesh and Egypt, and are mostly employed in agriculture, construction, manufacturing, and domestic work. Syrians, and other refugees, can also register with the Ministry of Labour and their numbers are sometimes included with migrant workers. However, different policies apply to refugee workers. As the garment sector employs very few refugees (less than 1 per cent of the workforce) this research focuses on the experiences of migrant workers and Jordanians.

Minimum wages

Minimum wages in Jordan are set by the Labour Tripartite Committee and have increased in recent years per a February 2020 decision. Different minimum wages apply for migrant workers and Jordanians. Nationally, the minimum wage is JD 260 for Jordanians and JD 245 for non-Jordanians as of 1 January 2022 (see **Figure 2**).⁶ The minimum wage for non-Jordanians was set at JD 230 starting in January 2021 and will increase by 15 JD per year until reaching parity with the wages for Jordanians. Several sectors, however, are exempt from this minimum wage decision, including the garment sector.

▶ **Figure 2: Monthly minimum wages in Jordan**



⁶ Wages in this report are expressed in Jordanian Dinar (JD). One JD is worth 1.4 US dollars. The current minimum wage is USD 364 per month (\$4,368 per year) for Jordanians and USD 343 per month (\$4,116 per year) for non-Jordanians.

The garment sector’s minimum wage is set in the sectoral Collective Bargaining Agreement. The minimum wage in the garment sector is JD 220 per month, 18 per cent lower than the current national minimum wage. Migrant workers are paid in two parts (cash and in-kind), the combined value of which is nominally equal to the wages of Jordanian workers. Migrant workers are paid a minimum of JD 125 in cash as take-home wage and JD 95 as in-kind (accommodation and food), with the total amount adding to JD 220. According to a study commissioned by J-GATE in 2017, the in-kind element of migrant workers' wages is valued at JD 95. This study and in-kind payment rate, which were included in the 2017 CBA, have not been updated. Article 6 of the 2017 CBA states that the in-kind wage calculation should be updated every three years.

Workers earn regular overtime (OT) pay at a rate of 1.25 the wage, and holiday overtime pay at 1.5 the wage (for a discussion of when OT is triggered, see the section below on working time). Per the 2019 CBA, workers’ full compensation package is used as the base wage for calculating overtime. These differences in base wages translate to different hourly rates for normal work for migrants and Jordanians and different incentives for overtime work. While Jordanians earn 0.92 JD per hour for their normal cash wage, migrant workers only earn 0.52 JD per hour (see **Table 1**). With overtime pay, they both earn 1.15 JD per hour. However, this increase in wage is much more pronounced for migrant workers, who earn 2.2 times their base salary for each hour of overtime, while Jordanians only earn 1.25 times their base salary. This gives migrant workers a significantly higher monetary incentive than Jordanians to work overtime.

▶ **Table 1: Overtime rate vs. normal wage rate for minimum wage workers**

Description	Migrant workers	Jordanians
Normal hours per month (30 days x 8 hours per day)	240	240
Total wage during normal work hours (JOD)	220	220
Cash wage during normal work hours (JOD)	125	220
Hourly normal cash wage (JOD /hour)	0.52	0.92
Hourly overtime wage at 1.25x hourly normal total wage (JOD /hour)	1.15	1.15
Ratio of overtime wage rate to normal cash wage rate	2.2	1.25

In addition to base wages, workers can also earn several other bonuses. All bonuses should be included in the base wage when determining the overtime calculation. Workers are eligible for a 5JD “CBA allowance” based on each year of continuous employment per the terms of the 2019 CBA. This provision will need to be renewed in the 2022 CBA for workers to continue receiving it. Due to Covid-19 and travel restrictions, turnover for migrant workers was lower in 2020 and 2021 than previous years which means that more workers are eligible for bonuses. Productivity bonuses are also widely used in the sector. These bonuses are triggered if workers hit certain productivity targets. These can create incentives for

more efficient work and longer working hours. Seniority bonuses are used in some factories and go beyond the 5JD bonus required in the CBA. Finally, some workers have a base wage above minimum wage depending on the nature of their job and their technical skill level.

Regulations of working time

Normal working hours are defined as those worked at regular pay (pre-overtime hours). The typical workweek is Saturday to Thursday (6 days) and eight hours per day, for a total of 48 hours. Normally, working hours should not exceed 8 hours per day. However, 11 hours per day can be considered as regular work if the total hours per week does not exceed 48 hours. Regular overtime should be paid for any work over 48 hours per week or over 11 hours per day, if total weekly hours are over 48. Holiday overtime occurs for any work on Fridays or during public holidays.

There are no limits on the amount of overtime that can be worked (either daily, or weekly) under Jordanian law, so long hours of work are technically legal. Any overtime work should be voluntarily agreed to by the employee, and the sectoral CBA prohibits forced and involuntary overtime. This means that any amount of overtime work is legal if the worker consents to it.

Golden list criteria

The Ministry of Labour has a “Golden List” for factories that meet certain criteria. The Golden List is publicly shared and is meant to serve as an incentive for buyers to source from Golden List factories. Factories that meet the Golden List criteria can also be eligible for preferential treatment in bringing in migrant workers, for example by exempting them from needing to provide a bank guarantee for migrant workers. The Golden List criteria was updated on 17 April 2022 to include a provision on working time. Now, workers should not work more than four hours of overtime per day for a factory to qualify for the Golden List. This translates to a weekly limit of 72 hours per week.

▶ International labour standards

Several international labour standards govern hours and wages, including specific recommendations for the garment sector. Hours of work were first addressed by the ILO in Convention 1 of 1919 which set normal working hours as no more than 8 hours per day and 48 hours per week, with overtime to be paid at no less than 1.25 the regular rate.⁷ Jordan has not ratified this convention, although the key elements with regards to the maximum daily and weekly normal work and overtime pay rates are in-line with the convention. Minimum wages, on the other hand, are not globally set per the Minimum Wage Fixing Convention, 1970 (No. 131). Rather, they are to be determined at the country level following a consultative process with worker and employer organizations and based on the economic needs of workers and the economic situation.⁸ Jordan has not ratified this convention.

⁷ See C001 – Hours of Work (Industry) Convention, 1919 (No. 1). Article 2 and Article 6.

⁸ See C131 - Minimum Wage Fixing Convention, 1970 (No. 131). Article 1 and Article 3.

It is also important that all working standards and benefits are applied on a non-discriminatory basis. Jordan has ratified the main ILO convention on discrimination, C111 Discrimination (Employment and Occupation) Convention, 1958 (No. 111). In 2019, an amendment to the Jordanian labour law added a definition of discrimination for the first time. There is now a penalty in case labour inspectors find evidence of discrimination. However, proving discrimination is often difficult in practice. Finally, per the Protection of Wages Convention, 1949 (No. 95), wages should be paid on time and accurately per the agreed upon contract.

▶ Buyer code of conduct

Better Work Jordan follows national labour laws in its compliance assessments whereas most buyers have their own set “code of conduct” for maximum weekly hours and consecutive days of work without rest. A review of seventeen codes of conduct for buyers sourcing from Jordan reveals that 13 of them set regular hours at 48 per week and overtime at 12 hours (for a total of 60 hours per week). Most of these codes include exceptions to maximum working hours for “extraordinary business circumstances” or simply “exceptional circumstances”.

In factory assessment reports, Better Work Jordan provides the average weekly working hours in the factory along with the highest weekly working hours recorded in the three months of payroll data. Factories may seek to hide high working hours from their buyers by using two sets of records – one for external audits, and one that accurately captures hours worked. This practice, known as double-booking, occurs occasionally in the Jordanian garment sector. In 2021, there were two factories with questionable overtime records, a potential indication of double-booking. Better Work Jordan has noted that the practice tends to increase when production pressure is higher. During these times, factories are more likely to assign – and attempt to conceal – long working hours.

▶ Methodology

This section is primarily based on quantitative data gathered and triangulated from two different sources. The first source is payroll data directly from factories which was gathered as part of yearly BWJ compliance assessments. The second source is worker surveys conducted by Better Work Jordan over the last four years.

▶ Payroll data

Better Work Jordan records working hours from pay slips during yearly assessment visits. Data includes observations from 2017 to 2022. This data is gathered for three months in the previous year (including the month prior to the assessment and two selected months in the previous calendar year) and for a random sample of between 30-75 workers in each factory depending on the size of the factory. Months are chosen to reflect one peak production month and one low production month. Demographic information is recorded for each worker including gender, migration status (Jordanian or migrant worker), and position in the factory. Hours worked are separated into four weeks, excluding hours on Fridays which are logged separately. See **Table 2** for an example of payroll hours data from a factory.⁹

▶ **Table 2: Example of hours data from December 2020**

Migration Status	Gender	Department	W1	W2	W3	W4	Hours on Fridays	Average weekly hours
Expatriate	Female	Sewing	69	71	72	72	16	75
Expatriate	Male	Cutting	55	69	73	72	8	69.25
Jordanian	Female	Packing	32	32	40	29	0	33.25
Jordanian	Female	Packing	48	48	48	48	0	48

These working hours are aggregated together at the monthly level taking into account the month and year. Data was gathered from assessments that occurred from January 2018 to August 2022, with each assessment covering three months in the preceding year. The full data set includes observations from 9,493 workers covering 28,482 worker-months of data (see **Table 3**). As assessments continue in 2022, additional working hour information will be gathered for 2021 and 2022 as the assessment includes any three months in the previous calendar year. The estimates for 2021 and 2022 should therefore be seen as preliminary numbers that are liable to change as future assessments are conducted.

⁹ Average weekly hours are calculated for the month as the distribution of Fridays worked by week is not known. The formula is as follows: (W1+W2+W3+W4+Hours of Fridays)/N, where N is the number of weeks with data. N is usually 4.

▶ **Table 3: Number of monthly working hours observations over time**

Year	Monthly observations	Number of people
2017	3,063	1,021
2018	7,795	2,598
2019	6,259	2,086
2020	5,121	1,707
2021	4,380	1,460
2022	1,864	621
Total	28,482	9,493

To date, Better Work Jordan has not gathered systematic data on monthly pay directly from factory payroll systems. Factories use different pay systems and have different formulas for calculating monthly pay. Payroll slips from several factories were reviewed to understand the structure of wages and calculation of working hours and pay.

The following is an example of a pay slip used in one factory that includes the set normal and overtime pay rates, the total normal hours and overtime hours worked, the number of days of absence, and the resulting net salary after applying all bonuses and deductions (see **Figure 3**).

▶ **Figure 3: Example of a garment worker pay slip**

Employee No : कर्मचारी संख्या [REDACTED]		Name : नाम : [REDACTED]	
Department : PRODUCTION		Basic Salary (JD) : मूल वेतन (JD) : 125.000	
Total Normal Hours: कुल सामान्य समय:	240.00	Normal Hour Rate : सामान्य घंटा दर:	0.5208
Total Normal OverTime Hours : कुल सामान्य समयोपरि घंटे:	87.00	Normal OverTime Hour Rate : सामान्य समयोपरि घंटे दर:	1.1458
Total Special OverTime Hours : कुल विशेष समयोपरि घंटे:	0.00	Special OverTime Hour Rate : विशेष समयोपरि घंटे दर:	
Absent Days :	1.00	Absent Value :	4.032
JD		JD	
Total Normal Wages : कुल सामान्य मजदूरी:	120.968	Social Security @7.5% सामाजिक सुरक्षा	16.500
Total Normal OT @ 1.25% : कुल सामान्य समयोपरि @1.25%:	99.687	Loan / Advances : ऋण / अग्रिम:	0.000
Total Special OT @ 1.50% : कुल विशेष समयोपरि @ 1.5%:	0.000	Income Tax : आयकर:	0.000
Increment Allowance : निरीक्षण अनुमति	0.000	Labor Union : मजदूर संघ	0.000
Target Allowance : लक्ष्य आवंटन लक्ष	0.000	Other Deductions : अन्य कटौती:	0.000
Other Allowance : अन्य भत्ता	0.000		
Gross Salary : सकल वेत	220.655	Total Deductions : कुल कटौती:	16.500
Net Salary (JD) : शुद्ध वेतन:		204.000	

▶ Workers' survey data

The survey data used in this report contains information of individual workers' weekly working hours and monthly pay with over 8,000 respondents over three years. Survey data also includes demographics, workplace concerns, financial information, and indicators of mental well-being. Surveys were conducted with randomly selected garment workers across most factories participating in the Better Work Jordan programme. The data is not a panel but does capture average responses over time. Surveys were conducted in June 2019, December 2019, July 2020, July 2021 and July 2022.

The survey sample was stratified to reflect the gender and nationality composition of each factory. All migrant workers completed the survey questionnaire on their day off in neutral locations such as the Workers' Centre, trade union offices, and dormitories. Jordanian workers were surveyed on-site during the workweek. The survey was self-administered through personal cell phones or tablets, with translations and audio recording in Arabic, Bengali, Hindi, Sinhalese and Nepalese.

The two main variables of interest are as follows:

- ▶ **Monthly pay.** Last month, what was your total take-home pay (including bonuses, allowances and overtime wages) received from your job in this factory? (In Jordanian Dinars)
- ▶ **Weekly hours.** Per week, how many total hours, including regular and overtime hours, do you usually work? Think about an average week for this time of year in your factory.

The pay question combines many aspects of worker pay, including base wages, any piece-rate or incentivized pay, bonuses, allowances, overtime wages, and seniority bonus. The hours question includes both regular and overtime hours of work, but it does not specify whether to include Friday work. Our understanding is that workers would include any work on Friday in the "week". The question asks about "an average week" and it therefore might fail to reflect temporal changes in hours of work over time. As both hours and pay data are self-reported, there is also a possibility of errors in the reporting. These could be from respondents not understanding the questions, respondents not knowing the responses, or from respondents purposefully answering in what they perceive is a desirable way. Minimal but consistent data cleaning was done across responses and rounds of data collection, especially to remove clear outliers.

▶ Findings

The following sections explore trends in hours and wages over time and provide some preliminary insights into the effect of long working hours on worker mental and physical health.

▶ Working time

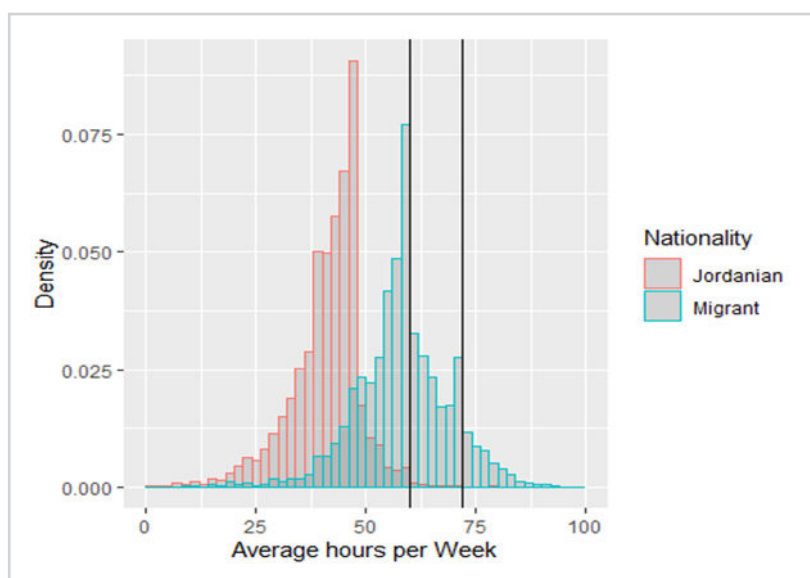
Working time in the garment sector is very different for migrant workers and Jordanians. Migrant workers regularly work two hours of overtime per day, six days a week, with the average migrant worker logging just shy of 60 hours per week (see **Table 4**). Meanwhile, Jordanian workers rarely work overtime and due to absence and short working hours, the average Jordanian only works 42 hours per week (6 hours less than regular working hours). The maximum weekly hours observed in the last five years was 97 hours in one week – almost fourteen hours a day for seven days straight. Men tend to work longer hours than women (56 hours per week versus 51 hours per week), but after controlling for nationality, factory type, month, and year, the difference drops to just one hour per week more for men than women. There are no differences in average hours worked between direct exporting factories and subcontracting factories, although the standard deviation is higher in subcontracting factories. This may reflect the more irregular production schedules and working hours in subcontracting factories. Working hours are the lowest in satellite units.

▶ **Table 4: Working hours summary statistics (2017-2022)**

Category		# of worker months	mean hours per week	Std. Dev.	Min	Max
Overall		28,482	52.3	12.7	1.8	97.0
Nationality	Non-Jordanian	17,850	58.6	10.5	1.8	97.0
	Jordanian	10,632	41.7	8.1	2.0	91.8
Gender	Female	20,563	51.0	12.4	2.0	97.0
	Male	7,919	55.5	12.7	1.8	96.0
Factory type	Direct Exporters	19,018	54.5	11.7	2.0	92.3
	Subcontractor	3,829	54.5	15.2	1.8	97.0
	Satellite Units	5,635	43.3	9.6	2.0	86.5

Hours tend to be clumped around regular working hours – with many Jordanians working 48 hours a week, and many migrants working 60 hours a week, or two hours of overtime per day (see **Figure 4**). Vertical lines are included to demarcate 60 hours and 72 hours per week respectively. Clumps can be observed at 48 hours per week for Jordanians and 60 and 72 hours per week for migrant workers.

▶ **Figure 4: Distribution of working hours by migration status (Payroll Data 2017-2022)**



With stakeholders considering various capping policies for weekly working hours, it is useful to look at the percentage of workers in the sector who would be affected by any proposed changes based on historical data. As almost no Jordanians work overtime, they would not be affected by a cap on weekly working hours (see **Table 5**). To consider the effects of different capping policies, a key metric is the percentage of migrant workers who would be affected. If a cap was set at 72 hours (four hours of daily overtime), 9 per cent of migrant workers would be affected. If a cap was set at 60 hours (two hours of daily overtime), 38 per cent of migrant workers would be affected. Workers working more than 72 hours per week are almost entirely migrant, are more likely to be male, and are more likely to work in a subcontracting factory.

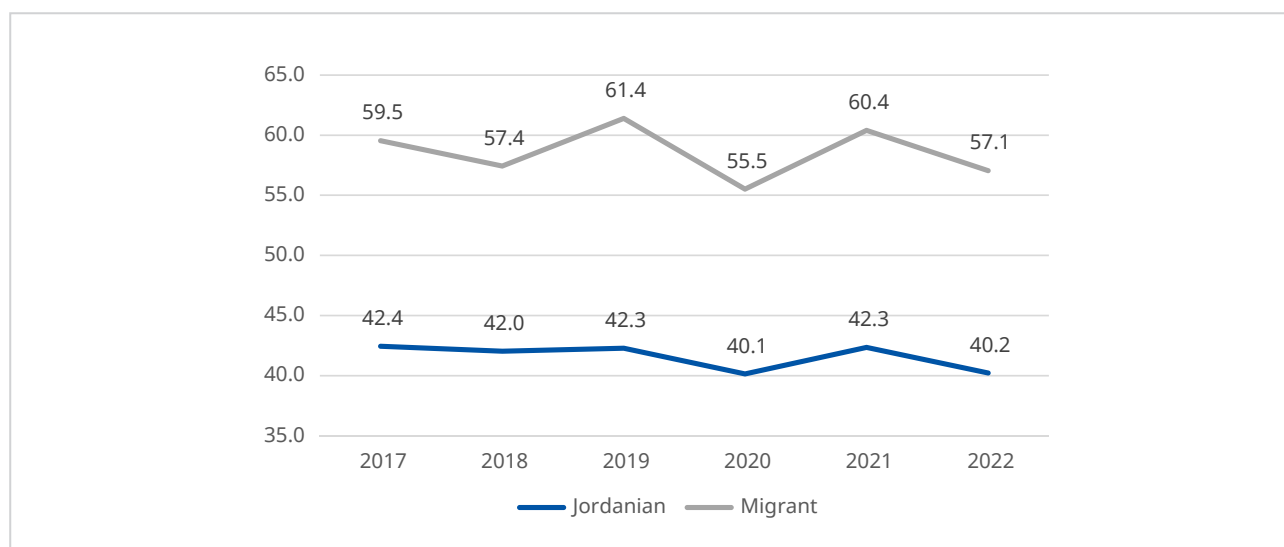
▶ **Table 5: Distribution of weekly hours worked by migration status (Payroll Data 2017-2022)**

	Jordanian	Migrant Workers
48 hours or less	90%	14%
48-60 hours	10%	48%
60-72 hours	0%	29%
More than 72 hours	0%	9%

Working hours, especially for migrant workers, fluctuate over time (see **Figure 5**). During any given year, there are predictable seasonal fluctuations based on the demands of consumers and brands. Factories adjust to these changes by setting higher overtime hours during peak seasons. During the Covid-19 pandemic, government-imposed lockdowns and a significant drop in orders led to much lower working time. Migrant workers and Jordanian workers both had significant fluctuations in hours of work during the Covid-19 pandemic, with migrant workers being affected significantly more. Hours for migrant workers fell by six hours per week in 2020, and rebounded to pre-pandemic levels in 2021. Meanwhile, hours for Jordanian workers fell by two hours per week in 2020 and, just like migrant workers, rebounded to the same level as before the pandemic.

Preliminary data from 2022 suggests that hours of work in the sector are dropping again. This is in line with reports Better Work Jordan has heard from factory managers about reductions in orders from global buyers. Working hours were particularly low in 2022Q2 – partially because of work reductions during the month of Ramadan, and partially because migrant workers in a large exporting factory went on strike for a week in May 2022 to protest the quality of food, misbehaviour from supervisors, low monthly salaries, and not enough overtime work. The current sample size for 2022 is only 621 workers so this estimate is liable to change as new data is gathered (compared to an average sample of 1,800 workers in other years).

▶ **Figure 5: Working hours over time by migration status (Payroll Data)**



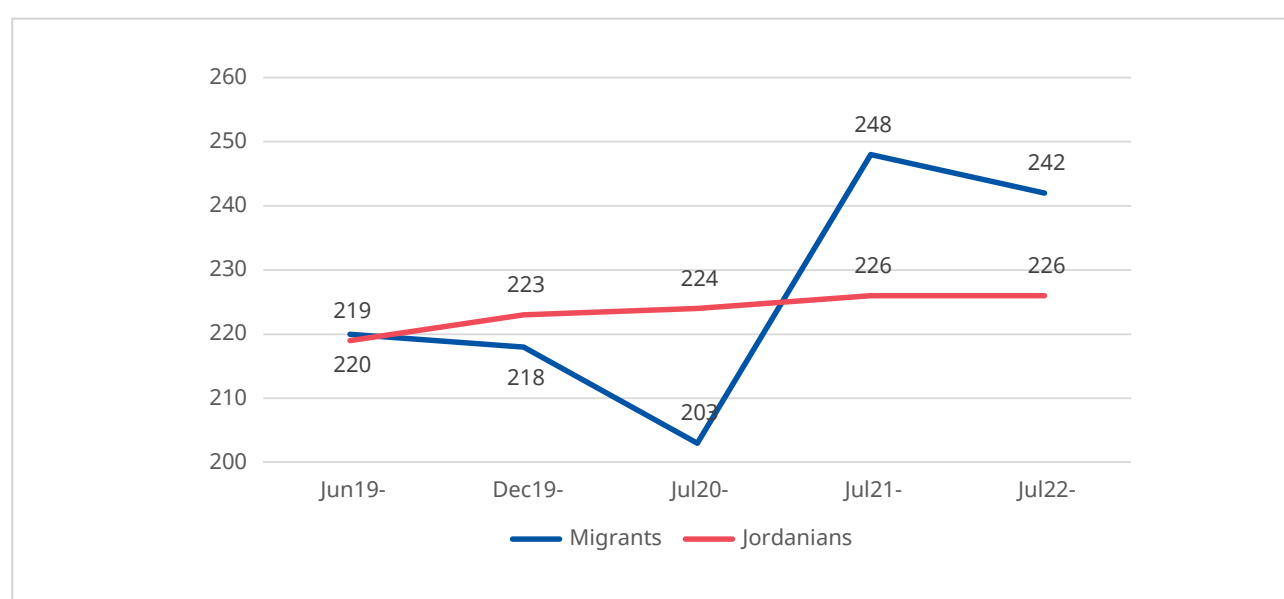
Note: data for 2022 is preliminary and includes assessment reports completed through August 2022.

To quantify the determinants of weekly working hours, an OLS regression was conducted with year and month fixed effects. There are minimal gender differences in hours of work. All else equal, men work on average 1 hour more per week than women. Hours of work tend to fluctuate throughout the course of the year, with peak periods in July and December. Working hours drop considerably during the holy month of Ramadan, when the normal working time is reduced from 8 hours a day to 6 hours a day. As the month of Ramadan shifts from year-to-year in the Gregorian calendar, a separate variable for the month of Ramadan is included in the analysis. For detailed regression results, see **Annex 1**.

▶ Trends in wages

Better Work Jordan worker survey data reveals that Jordanian workers and migrant workers reported similar take-home pay before the pandemic, at roughly 220 JD per month (see **Figure 6**). During the pandemic, however, take home pay for migrant workers dropped off significantly, to 203 JD per month on average. Pay then rose in 2021 to 248 JD per month and remained high in 2022. During this time, pay for Jordanians remained relatively stable, with just a slight rise from 219 JD to 226 per month over the three years.

▶ **Figure 6: Monthly take-home pay by migration status (Survey data)**



Take-home pay is self-reported in anonymous survey data. It is the cash workers get at the end of the month from the factory and does not include the in-kind benefits that migrant workers receive (accommodation and meals). However, it does include overtime pay, seniority bonuses, and any other productivity bonuses.

Pooling data from all five waves of the survey, the following statistically significant differences in wages were observed when controls for gender, nationality, education, age, hours of work, job, experience, and year are included (for more information on the regression conducted, see **Annex 2**):

1. On average, men earn 13 JD per month more than women.
2. There are mixed results for Jordanian workers compared to other nationalities. While Bangladeshi and Sri Lankan workers on average earn more (8 JD and 16 JD per month respectively) than Jordanians, Indian workers and Nepalese workers earn less (11 JD and 6 JD per month respectively) than Jordanians.
3. On average, pay dropped by 7 JD per month from July 2019 to 2020. However, it was 23 JD per month higher in July 2021 compared to July 2019, and 20 JD higher in July 2022.

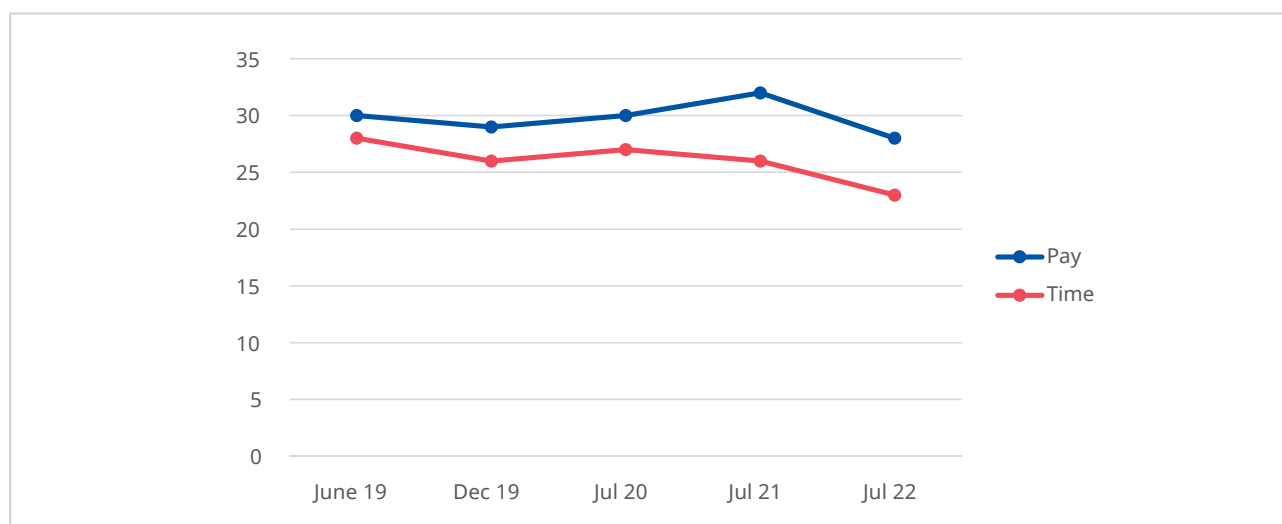
The trends in wages reflect to some extent the trends in working hours. Namely, migrant workers saw their pay decrease significantly in 2020 when working hours also dropped. Migrant worker pay is closely tied to overtime work and without overtime, pay for migrant workers drops significantly.

However, the increase in take-home pay for migrant workers in 2021 is unusually high and cannot be fully explained by the hours data. Hours of work in 2021 were not significantly higher than in pre-Covid years. It is possible that this pay bump is driven by more workers qualifying for seniority bonuses – time employed in a factory is a significant predictor of take-home pay and job tenure is slightly higher in 2021 than previous years. As take-home pay remained high in 2022 for migrant workers (an average of 242 JD per month) it seems that this could be a lasting trend in wages rather than a short-term bump during the Covid-19 recovery period.

▶ Pay and working time concerns

Workers were asked if they had any specific concerns with their pay or working time. They were given the option to choose from many different pay and working time concerns, or to say that they had no concerns. The percentage of workers saying that they had some type of concern is around 30 per cent for pay, and slightly lower for working time (see **Figure 7**). Working time and pay concerns have stayed relatively stable over time. Pay concerns increased slightly in 2021, mostly driven by Jordanians with pay concerns, whereas working time concerns decreased slightly in 2021. Both concerns dropped in 2022 to their lowest levels to-date.

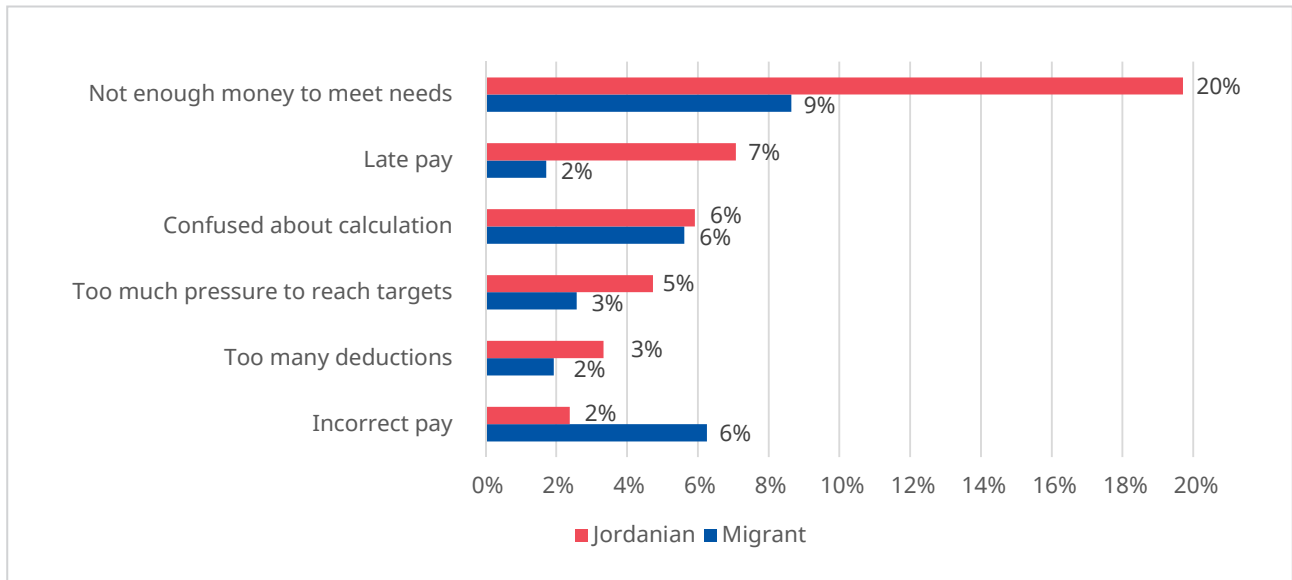
▶ **Figure 7: Percent of workers with concerns with pay and working time**



The detailed worker concerns around pay and working time by migration status are illuminating (see **Figures 8 and 9**). Jordanians are more likely to raise some type of concern about their pay than migrant workers (37 per cent vs 26 per cent). The top pay concern for both Jordanians and migrant workers is not having enough money to meet their needs, although Jordanian workers are twice as likely as migrant to voice this concern (20 per cent vs 9 per cent). Some Jordanian workers say they are concerned with late pay (7 per cent) while some migrants said they were concerned with incorrect pay (6 per cent). The majority of workers discussed these concerns with their co-workers or supervisors. One in ten workers

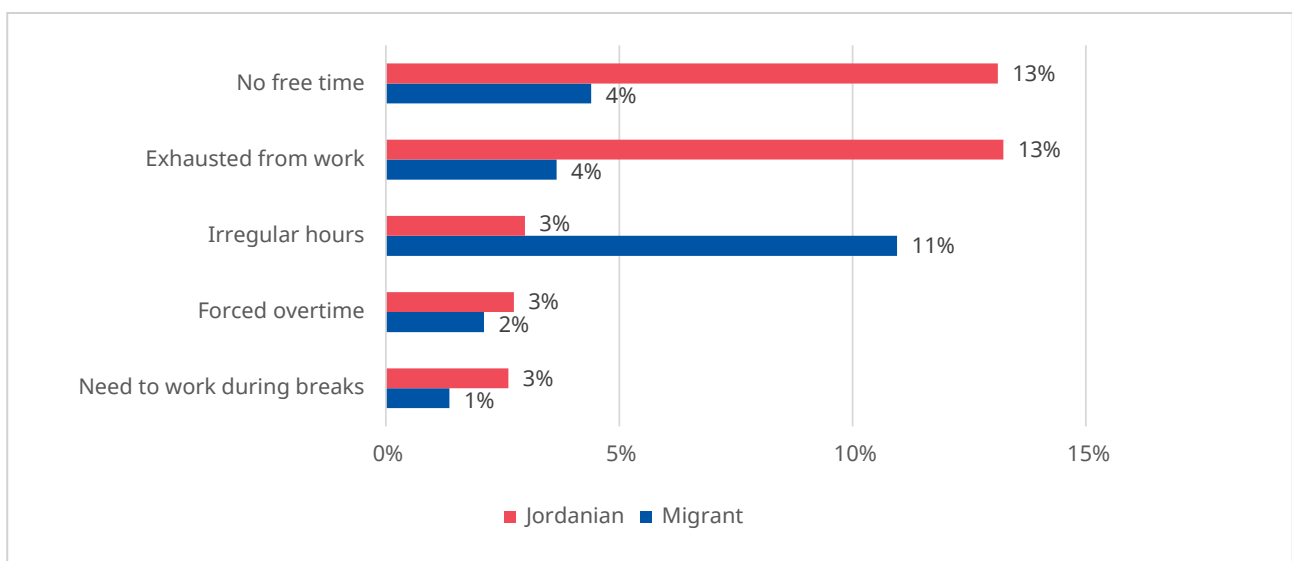
with concerns considered quitting, which is an indication of substantial concerns among a minority of the workforce.

▶ **Figure 8: Detailed worker concerns around pay (2019-2022)**



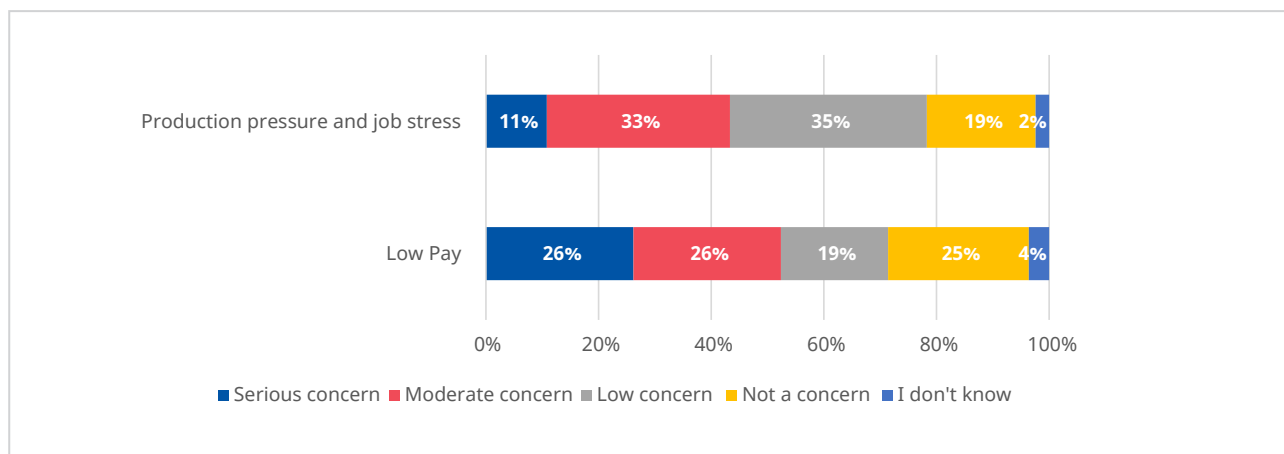
Jordanians are also more likely to raise concerns about working time than migrant workers (29 per cent vs 24 per cent). Despite working much shorter hours than migrant workers, Jordanians are more likely to say that the amount of work they do leaves them exhausted and that they cannot pursue personal interests or meet family obligations. Meanwhile, migrant workers are more likely to voice concerns about irregular working hours.

▶ **Figure 9: Detailed worker concerns around working time (2019-2022)**



Managers in many factories think that their workers are concerned about production pressure and low pay. In a parallel exercise to the workers' survey, Better Work Jordan has surveyed one manager from each participating factory since 2020. Managers were asked to rank the perceived concerns that workers in their factories had with a list of different working conditions, such as communication with supervisors, verbal abuse, and sexual harassment. The highest perceived concern in 2022 was with low wages, with 26 per cent of managers saying that workers in their factories were "seriously concerned" with low wages. A further 26 per cent of managers indicated that workers were moderately concerned with low wages. Fewer managers thought that production pressure and job stress were of concern for the workers in their factories, with 11 per cent of managers rating this as a serious concern and 33 per cent rating it as a moderate concern.

▶ **Figure 10: Manager perceptions of worker concerns (2022)**



▶ Conclusion

Without a legal limit on overtime, factories can assign substantial overtime work especially during peak seasons. As a baseline, workers are expected to work 8 hours a day, 6 days a week (48 hours per week). Overtime work of two hours per day is the norm for migrant workers across the sector (average of 60 hours per week), but during high production times factories will work more overtime and/or work on Fridays. Thirty-eight per cent of weekly hours recorded by migrant workers were more than 60 hours per week.

The structure of wages for migrant workers creates a substantial incentive for overtime work because the base take-home pay is low but any hour of normal overtime work is 2.2 times base pay, while special overtime work is 2.64 times base pay. Volatility in orders leads to high fluctuation in working hours, which has a direct effect on take home pay especially for migrant workers. This effect could be clearly seen in the data during the early parts of the Covid-19 pandemic.

Stakeholders could consider setting a maximum limit on weekly overtime work in the sectoral CBA. This would equalize the playing field between factories (many factories already follow weekly maximums as set by buyers) and would ensure a basic standard for migrant workers and allow workers to rest and have leisure time. However, if this is done independently of addressing wages and the structure of payments in the sector, this policy could have the effect of lowering average take home pay of migrant workers, especially those who rely on overtime work to earn sufficient income.

Further research is needed to better understand worker priorities and to understand incentives from both workers and managers in the current system. Gathering information could be done through careful qualitative methods that help workers consider trade-offs of different overtime and pay schemes. From factory managers, it would be helpful to understand the incentives in the current system and any barriers they might face to hiring more workers and reducing hours per worker. To further advance our understanding of pay in the sector, research could harmonize and aggregate pay data from factory payrolls. This would help to provide more robust pay data rather than relying on self-reported survey data.

Finally, the impacts of long working hours on workers, particularly those in the garment sector, have been well documented in the literature. This research could be brought to bear to further motivate reductions in working time.

▶ Annex 1: Hours of work regression

The following presents regression results for working hours data from factory payrolls.¹⁰ Sample size is 28,450 worker-month observations.

		Estimate	Std. Error	t-value	Pr(> t)	
	(Intercept)	40.82829	0.314338	129.887	0.000	***
Gender (vs Female)	Male	1.0934	0.140197	7.799	0.000	***
Status (vs Jordanian)	Migrant	16.53163	0.137776	119.989	0.000	***
Factory type (vs Exporting)	Satellite units	1.323155	0.169327	7.814	0.000	***
	Subcontractor	-0.70753	0.167625	-4.221	0.000	***
Year (vs 2017)	2018	-0.37371	0.206627	-1.809	0.071	.
	2019	1.756641	0.214272	8.198	0.000	***
	2020	-3.07907	0.220352	-13.973	0.000	***
	2021	1.202538	0.228272	5.268	0.000	***
	2022	-1.97272	0.293681	-6.717	0.000	***
Month (vs January)	February	2.249927	0.251564	8.944	0.000	***
	March	1.529794	0.254292	6.016	0.000	***
	April	2.476921	0.322788	7.674	0.000	***
	May	0.408116	0.355012	1.15	0.250	
	June	0.395217	0.290057	1.363	0.173	
	July	4.792299	0.315797	15.175	0.000	***
	August	2.174559	0.307684	7.068	0.000	***
	September	1.083294	0.283395	3.823	0.000	***
	October	1.151669	0.247595	4.651	0.000	***
	November	0.510329	0.293292	1.74	0.082	.
	December	3.162312	0.235243	13.443	0.000	***
	ramadan	-3.74955	0.273588	-13.705	0.000	***
	eid_adha	-2.0326	0.275854	-7.368	0.000	***
Job (vs Cutter)	Finishing	0.356222	0.314855	1.131	0.258	
	Helper	-3.52292	1.656428	-2.127	0.033	*
	Ironing	0.485477	0.267669	1.814	0.070	.
	Knitting	0.829265	0.865086	0.959	0.338	
	Operator/Sewer	-0.00505	0.18829	-0.027	0.979	
	Other	-0.48049	0.256015	-1.877	0.061	.
	Packer	0.394711	0.256472	1.539	0.124	
	Quality Control	0.933675	0.26497	3.52E+00	0.000	***
	Warehouse	1.670467	0.434185	3.847	0.000	***

Significance codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
 Residual standard error: 9.296 on 28450 degrees of freedom
 Multiple R-squared: 0.4613, Adjusted R-squared: 0.4607
 F-statistic: 785.8 on 31 and 28450 DF, p-value: < 2.2e-16

10 A hierarchical regression with controls for factory-level effects was also conducted as a robustness check. The results are not significantly different.

The following equation was used:

$$\text{hours} = f(\text{Gender} + \text{Nationality} + \text{Type} + \text{year} + \text{month} + \text{ramadan} + \text{eid_adha} + \text{job})$$

- ▶ Gender: Binary variable male/female. All else equal, men work 1 hour more per week than women.
- ▶ Status: Binary variable migrant/Jordanian. All else equal, migrant workers work 16.5 hours more per week than Jordanian workers.
- ▶ Factory type: Three possibilities (exporting, subcontractor, and satellite units). The comparison is to exporting factories. All else equal, workers in satellite factories work 1.3 hours more per week than those in exporting factories, while those in subcontracting factories work 0.7 hours less.
- ▶ Year: Data is included from 2017 to 2022. All years are compared to 2017.
- ▶ Month: All months are compared to January. All else equal, working hours are higher in most months compared to January. The longest working hours were observed in July and December.
- ▶ Ramadan and Eid el Adha are included as binary variables that take a 1 if the month of data collection fell during either holiday, and 0 otherwise. All else equal, hours of work are on average 3.7 hours less per week during Ramadan, and two hours less during Eid al Adha.
- ▶ Job: Several job classifications are compared to the working hours for the job of “cutter”. Quality control and warehouse had longer working hours than cutters, while helpers worked 3.5 hours less per week than cutters.

▶ Annex 2: Wage regression

Wages = f (Gender + Nationality + Age + Education + Hours + Hours2 + Job + Marital Status + Experience + Round)

		Estimate	Std. Error	t-value	Pr(> t)	
	(Intercept)	142.379	7.840	18.160	0.000	***
Gender (vs Female)	Male	13.352	1.886	7.078	0.000	***
Nationality (vs Jordan)	Bangladesh	8.176	1.979	4.131	0.000	***
	India	-11.009	2.726	-4.039	0.000	***
	Sri Lanka	16.145	2.490	6.483	0.000	***
	Nepal	-5.729	3.145	-1.821	0.069	.
	Syria	11.889	8.680	1.370	0.171	
	Other	31.155	13.696	2.275	0.023	*
	Age	0.689	0.113	6.079	0.000	***
	Years of education	0.996	0.203	4.910	0.000	***
	Hours of work	0.939	0.163	5.759	0.000	***
	Hours (squared)	-0.005	0.001	-3.891	0.000	***
Job (vs Cutter)	Dying	-0.493	11.471	-0.043	0.966	
	Finishing	-19.815	4.650	-4.261	0.000	***
	Helper	-21.410	4.270	-5.015	0.000	***
	Knitting	-30.009	10.502	-2.858	0.004	**
	Mechanic	50.440	7.704	6.547	0.000	***
	Sewing Operator	-21.559	4.040	-5.336	0.000	***
	Packer	-16.409	4.734	-3.466	0.001	***
	Quality Controller	-5.897	4.679	-1.260	0.208	
	Spreader	-10.858	6.544	-1.659	0.097	.
	Supervisor	29.713	5.813	5.112	0.000	***
	Ironing	-12.560	5.411	-2.321	0.020	*
Marital status (vs Married)	Never married	-1.199	1.489	-0.805	0.421	
	Widowed	-19.548	4.681	-4.176	0.000	***
	Divorced	-9.637	3.363	-2.866	0.004	**
	Separated	-11.108	4.005	-2.773	0.006	**
Time in Factory (vs Less than 6 months)	6 months - 1 year	12.867	2.252	5.714	0.000	***
	1 year - 3 years	23.847	2.045	11.663	0.000	***
	3 years - 5 years	31.969	2.203	14.510	0.000	***
	6 years - 10 years	39.462	2.757	14.316	0.000	***
	More than 10 years	45.732	3.261	14.025	0.000	***
Round (vs June 2019)	Dec-19	4.553	2.015	2.260	0.024	*
	Jul-20	-7.122	2.006	-3.551	0.000	***
	Jul-21	22.991	2.075	11.081	0.000	***
	Jul-22	19.774	2.039	9.700	0.000	***

Significance codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 55.98 on 7905 degrees of freedom

Multiple R-squared: 0.1844, Adjusted R-squared: 0.1805

F-statistic: 47.03 on 38 and 7905 DF, p-value: < 2.2e-16

