# **Policy Brief**

# Minimum and Living Wages in Jordan and Tunisia: Implications for Social Protection Floors

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# In a nutshell

- While the majority of workers in Jordan and Tunisia earn at least minimum and poverty wages, only a minority of workers earn a living wage.
- Whether workers meet wage benchmarks depends on the characteristics of their workplaces, their specific work (especially job formality and skills required), and workers' demographics.
- Providing universal basic income to the level of even minimum or poverty wages would be, fiscally, extremely difficult. Transfers that target the gaps between minimum or poverty wages and current wages to help the working poor would be more feasible.
- There are complex tradeoffs in increasing the minimum wage or its enforcement. However, improving the design of minimum wages, for instance so that they are simpler and annual adjustments occur based on inflation, could help workers meet their basic needs.

The authors appreciate the support of the Ford Foundation, through a grant to the Economic Research Forum for the project "A New Social Contract: Reimagining Social Protection in Jordan and Tunisia." The authors are grateful to Ilhaan Omar for her research assistance with the literature review. The authors appreciate the comments of Irene Selwaness, Hamada AbuNijmeh, Afef Daoued, and participants in project workshops.



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# Introduction

Social protection floors were a key policy and anti-poverty focus globally, even before the challenges presented by the COVID-19 pandemic (UNDP, 2014). In line with the global push for social protection floors, low- and middleincome countries have been creating and expanding cash transfer programs targeted to the poor. A variety of countries are also experimenting with universal basic income (UBI), a form of social protection floor (Hanna & Olken, 2018; International Monetary Fund (IMF), 2017). These newer efforts build on a long-term focus on poverty. Yet another important and longstanding aspect of social protection and ensuring basic needs are met focuses on workers, specifically minimum wage policies. An important question for minimum wage policies is whether they ensure above-poverty or living wages, such that workers can meet their basic needs.

The question of the role of minimum and living wages in social protection, ensuring workers can meet their basic needs, and addressing poverty is particularly pertinent in the Middle East and North Africa (MENA) region. For instance, Jordan and Tunisia had both struggled with high rates of unemployment (particularly female, educated, and youth unemployment) and limited female labor force participation even pre-pandemic (Assaad et al., 2021; Assaad, Ghazouani, & Krafft, 2018; Assaad, Krafft, & Keo, 2019). Returns to education in the labor market are relatively low (Galal & Said, 2019; Krafft, Branson, & Flak, 2019; Limam & Ben Hafaiedh, 2018; Pellicer, 2018). Jobs in the public sector are preferred by workers due to their better work conditions and job security (Assaad, 2014; Assaad et al., 2021).

This policy brief discusses the design of minimum wages in Jordan and Tunisia. We first describe how minimum wages are set. We compare Jordan and Tunisia's minimum wages to those in other countries. We then investigate and compare whether workers earn minimum, poverty, median, and living wages. We use these wage metrics to estimate the cost of UBI as well as more targeted social assistance. The brief concludes with a discussion of implications of our findings for the design of minimum wage and social protection policy.

# Minimum, poverty, and living wages in Jordan and Tunisia

In Tunisia, the minimum wage is fixed and readjusted under a governmental decree by the National Committee for Social Dialogue chaired by the Minister of Social Affairs (Ben Chaabane, 2014). Maintaining social stability and employment security are important goals of the wage policies and labor organizations in Tunisia (Ben Chaabane, 2014). There are two types of minimum wages: the interprofessional guaranteed minimum wage (SMIG) for non-agricultural sectors and the guaranteed minimum agricultural wage (SMAG) for the agricultural sector (Ben Chaabane, 2014). The SMIG amounts to 429 Tunisian Dinars (TD) per month in 2020 for a work week of 48 hours per week and 366 TD for a work week of 40 hours per week. The SMAG is fixed per day and amounts to 16.5 TD (Tunisia Central Bank, 2021).

In Jordan, the minimum wage is fixed and readjusted by a tripartite committee formed by the council of ministers and composed of the Ministry of Labor and representatives of the government, employers, and workers (Alhawarin & Kreishan, 2017). Originally, the law excluded the agricultural and clothing sectors from the minimum wage. Moreover, the law did not cover nonwage family and domestic workers. These groups were added over time. Jordanians have a different minimum wage, a higher one, than non-Jordanians. The minimum wage has not had built in cost of living adjustments to take into account inflation rates and is updated irregularly as the result of a political process (Ministry of Labor (Jordan), 2021; Qandah, 2020).

Figure 1 shows monthly minimum wages and per capita poverty lines in Jordan and Tunisia. Figures are presented in both real (2020)<sup>1</sup> and nominal terms. Jordan's adjustment of minimum wages has been quite sporadic, with large adjustments in 2008, 2012, 2017, and 2021 for the main Jordanian minimum wage. Tunisia had been almost annually updating the minimum wage, with a very gradual increase over time, and then substantial increases around the Arab Spring, followed by a decline in real terms.

# How do Jordan and Tunisia's minimum wages compare to other countries?

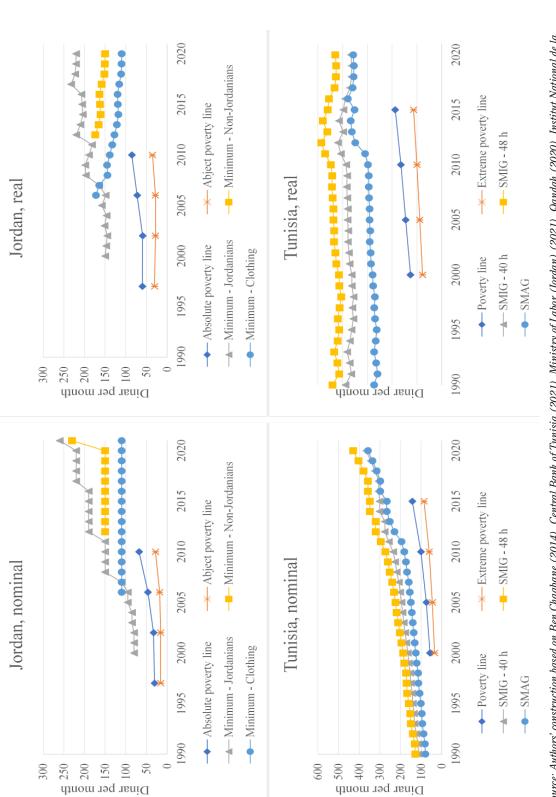
In the low and lower-middle income countries with data available,<sup>2</sup> shown in Figure 2, the minimum wage is set, on average, as 40% of the mean wage. Tunisia is above the average level with a minimum wage that was 59% of the mean in 2014, while the minimum wage in Jordan was



<sup>&</sup>lt;sup>1</sup> Real numbers for 2021 not presented because the 2021 price indices are not yet available.

 $<sup>^2</sup>$  Only low income (\$1,045 per year per capita or less) and lower-middle income economies (\$1,046 to \$4,095 per capita per year). Includes the most recent available year for each country for all countries with data.





Source: Authors' construction based on Ben Chaabane (2014), Central Bank of Tunisia (2021), Ministry of Labor (Jordan) (2021), Qandah (2020), Institut National de la Notes: For comparative purposes, we show the SMAG for a five-day work week in monthly terms. Statistique (INS) (2021), Department of Statistics (Jordan) (2021), and World Bank (2022).

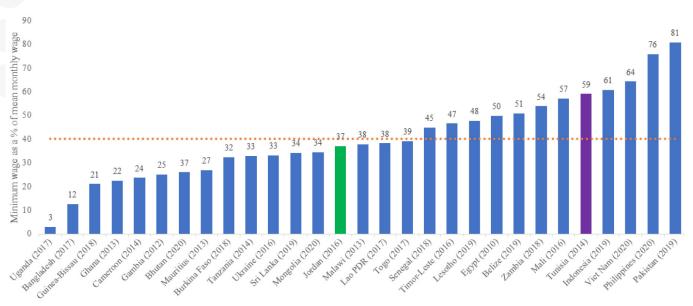


Figure 2. Minimum wage as a percentage of the mean monthly wage in low income and lower-middle income countries

Source: Authors' construction based on ILOSTAT (ILO, 2022) minimum wages and mean monthly wages, most recent year available, all low and lower-middle income countries with data available. For Jordan and Tunisia, mean monthly wages based on JLMPS 2016 and TLMPS 2014 (Krafft & Hannafi, 2022).

Notes: Dotted orange line denotes mean, averaging across countries.

set at 37% of the mean in 2016. The minimum wage as a percentage of the mean wage varies from 3% in Uganda to 80% in Pakistan. From the other MENA countries with available data, Egypt has an above average ratio (50%). The low ratios (less than 30%) correspond to either low-income countries such as Uganda, Guinea-Bissau, and Gambia or lower middle-income economies such as Cameroon, Ghana, and Bangladesh. Higher ratios (more than 60%) mainly are in lower-middle income economies, many from the East Asia and Pacific region such as Indonesia, Vietnam, and the Philippines. From the Sub-Saharan African countries, Burkina Faso and Tanzania have low ratios (less 35%) while Senegal, Lesotho, Zambia, and Mali have more than the average level (between 40% and 60%). Tunisia's minimum wage is thus, relative to the mean wage, high, in comparison to other countries, while Jordan is slightly below average.

# Who earns minimum and living wages in Jordan and Tunisia?

Examining wages requires microdata on wages and the characteristics of the workers who earn them. We therefore assess who earns minimum, poverty, median, and living wages using the Jordan Labor Market Panel Survey (JLMPS) 2016 and Tunisia Labor Market Panel Survey (TLMPS) 2014 data.<sup>3</sup> These are the most recent microdata with wages available for Jordan and Tunisia. We calculate whether an individual earns a minimum wage based on the minimum wage that would apply to them at the time they were interviewed. We use per capita poverty lines and the number of earners in a typical household to calculate poverty wages. Living wages are based on recent estimates of meeting food, decent housing, and other essential needs (Global Living Wage Coalition, 2020; WageIndicator Foundation, 2020).<sup>4</sup> We also calculate a measure of relative poverty from the JLMPS and TLMPS themselves: earning below the median wage (being in the bottom 50% of wage earners). In Krafft & Hannafi (2022) we present detailed descriptive and multivariate results for worker, work, and firm characteristics that predict earning at least these various benchmarks. We summarize the results here.

The majority of wage workers in Jordan and Tunisia earn at least a minimum or poverty wage, but only a minority earn a living wage. Figure 3 shows the percentage of wage workers earning various benchmarks, overall and by the formality of their work and the firm they work in, based on whether they (or other workers in the firm) have social insurance. In Jordan, 90% of wage workers earn the minimum wage, 79% the poverty wage, 50% the median wage, and 10% a living wage. In Tunisia, 74% of wage workers earn the minimum wage, 78% earn a poverty wage, 51% the median wage, and 29% earn a living wage.



<sup>&</sup>lt;sup>3</sup>Data are publicly available from the Economic Research Forum at www.erfdataportal.com (Assaad, Ghazouani, Krafft, & Rolando, 2016; Krafft & Assaad, 2021; OAMDI, 2016, 2018).

<sup>&</sup>lt;sup>4</sup> Both living and poverty wages are based on estimates for different years than our data, but we adjust for inflation.

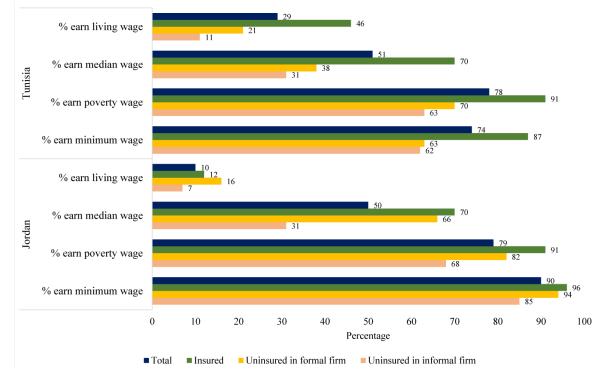


Figure 3. Percentage of wage workers earning various wage benchmarks, by country and social insurance

Source: Authors' construction based on Krafft & Hannafi (2022)

The chances of meeting the various earnings benchmarks are closely related to a number of worker and work characteristics. As Figure 3 shows, formal workers, with social insurance, are the most likely to meet various wage benchmarks. In Tunisia, for example, 46% of workers with social insurance earn a living wage, but only 21% of informal workers (without social insurance) working in formal firms and only 11% of informal workers working in informal firms. In Jordan there are small differences between informal workers in formal forms and formal workers, suggesting firm-level differences are important, whereas in Tunisia, there are smaller differences between informal firms, suggesting worker-level differences are important.

As well as highlighting the importance of worker and firm formality, the results of the models show that having an indefinite duration work contract, working regularly, and working in a larger firm tend to predict a higher chance of meeting various wage benchmarks. Workers in agriculture tend to be the least likely to meet the various wage benchmarks. After accounting for other characteristics, workers in the private sector are less likely to meet wage benchmarks in Jordan, but the opposite is true in Tunisia.

Moreover, men and women have similar chances of earning various wages in Jordan, but not in Tunisia, where unmarried young women are at a particular disadvantage. Younger workers are particularly likely to fall short of the various benchmarks, especially in Tunisia. When workers' jobs require specific skills or higher education levels, they are much more likely to earn minimum, poverty, median, or living wages.

# What would it cost to provide universal or targeted basic income transfers?

Countries around the world, including Jordan and Tunisia, are working to design social protection floors to ameliorate poverty, cushion families from shocks, and ensure citizens can meet their basic needs (Schüring & Loewe, 2021; UNDP, 2014). The Sustainable Development Goal target 1.3 includes social protection floors for all, measured by the proportion of persons covered by social protection floors (Schüring & Loewe, 2021). Wage policies are a key target of sustainable development goals to reduce inequality and poverty (International Labour Organization, 2020).

While sometimes framed as separate and a complement to social protection systems, other times minimum wages are framed as a "transformative" part of social protection systems (Devereux & Sabates-Wheeler, 2004; UNDP, 2016). Jordan, for example, discusses minimum wage policy as part of its national social protection strategy



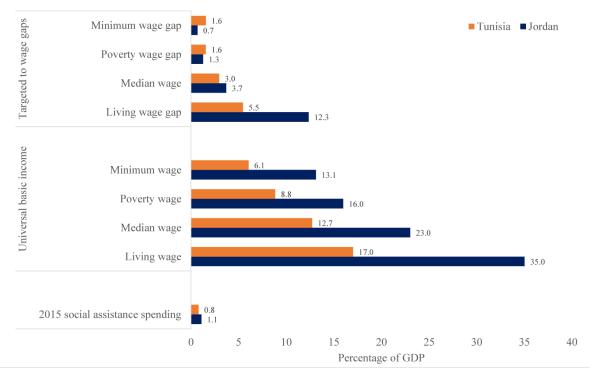
(Hashemite Kingdom of Jordan, 2019). Countries around the world are also discussing UBI, as a form of social protection floor (Hanna & Olken, 2018; International Monetary Fund (IMF), 2017). Tunisia, for example, placed developing a social protection floor at the center of its 2016-2020 five-year national plan and undertook feasibility and costing research, including for a potential UBI scheme (UNICEF, Centre de Recherches d'Etudies Sociales, & International Labour Organization, 2019).

Using our benchmarks for minimum, poverty, median, and living wages we simulate the cost of UBI schemes. We also examine the cost of more targeted schemes to close the gap between wages earned and various benchmarks, for those who earn less than a minimum, poverty, median, or living wage. Figure 4 presents the results of these simulations, as a percentage of GDP. As a benchmark, in 2015, social assistance spending amounted to 1.1% of GDP in Jordan and 0.8% of GDP in Tunisia (World Bank, 2015).<sup>5</sup>

A UBI would substantially exceed current spending, even to confer only a minimum wage (13% of GDP for a minimum wage in Jordan and 6% in Tunisia) much less a living wage (35% of GDP for a living wage in Jordan and 17% in Tunisia). Achieving a living wage through solely targeting living wage gaps would cost 12% of GDP in Jordan and 6% in Tunisia. Such levels of spending are well above current spending levels and are very unlikely to be fiscally feasible.

Targeted median wage transfers are also substantially above current spending levels, 4% of GDP in Jordan and 3% in Tunisia. Targeted efforts to close poverty and minimum wage gaps may be more achievable; doing so would cost 1.6% of GDP for either policy (gaps are similar) in Tunisia, and 1.3% of GDP for closing the poverty wage gap or 0.7% of GDP for closing the minimum wage gap in Jordan.

# Figure 4. Simulations of universal basic income and targeted wage-gap transfers (as a percentage of gross domestic product [GDP])



Source: Authors' construction based on Krafft & Hannafi (2022)

<sup>&</sup>lt;sup>5</sup> Social assistance statistics are for cash transfers, fee waivers and subsidies, in-kind assistance, and other social assistance. They do not include social pensions, which are primarily received by retirees (contributory) or elderly/disabled (also non-working) individuals. This focus on social assistance is logical, as social pensions are outside of our analysis of wage earners.

### Policy implications

### Design of UBI, targeted transfers, or social protection floors

Providing a UBI at a level that prevents poverty is very unlikely to be fiscally feasible in Jordan or Tunisia. Similar results were found in simulations of UBI in twelve sub-Saharan African countries (Lustig, Jellema, & Pabon, 2021). Countries interested in providing a UBI will therefore need to target lower spending levels. For example, Tunisia has considered a transfer of 350 dinar per year for children (UNICEF, Centre de Recherches d'Etudies Sociales, & International Labour Organization, 2019). Targeted transfers, helping close the gap between what workers earn and what they need to meet their basic needs, are a more fiscally feasible policy as well. Targeted transfers, however, require accurate targeting mechanisms, which may be difficult to achieve (Coady, Grosh, & Hoddinott, 2004; Nasri, 2020). Politically, there may also be trade-offs between more targeted transfers that are larger and target those at the greatest risk of poverty, versus smaller, but more widely available or universal transfers.

The COVID-19 pandemic has underscored the importance of expanding the social safety net and building social protection floors, particularly for groups who are typically outside employment protections, such as informal wage workers and the self-employed (Krafft, Assaad, & Marouani, 2021). One potential funding source for new or expanded social protection floors is subsidy reforms. Jordan has already shifted from fuel and bread subsidies to cash transfers (Hashemite Kingdom of Jordan, 2019). Tunisia, however, continues with its subsidies programs (Nasri, Helmy, & Amara, 2022). Subsidy reform is an important idea for financing a social protection floor (UNICEF, Centre de Recherches d'Etudies Sociales, & International Labour Organization, 2019).

### Design of minimum wages

For wage workers, minimum wages can act as an important component of social protection and ensuring workers can meet their basic needs. Most wage workers in both Jordan (90%) and Tunisia (74%) were earning minimum wages. Additional enforcement on the firm level and worker levels could potentially increase these rates. However, additional labor inspectors do not necessarily translate directly into higher compliance (Bhorat, Kanbur, & Mayet, 2012).

Either increasing enforcement or raising the level of the minimum wage has important tradeoffs. Jordan did not have unusually high minimum wages, although Tunisia was already above average. Raising the minimums can have complex labor market effects. In low- and middle-income countries higher minimum wages have mixed impacts on employment and earnings overall, and tend to lead to a decrease in employment in the formal sector and a rise in informal employment (Broecke, Forti, & Vandeweyer, 2017; Neumark & Corella, 2021).

Beyond the level of minimum wages, there are a number of aspects of minimum wage policy design to consider. Jordan, in 2020, planned to tie minimum wages to inflation starting in 2022, but held off on implementing any minimum wage increase in light of the pandemic (Mustafa, 2022). Tunisia had historically had minimum wages that tracked inflation, but this was not set by formula or policy (Angel-Urdinola, Nucifora, & Robalino, 2015), and after the revolution there has been greater fluctuation in real minimum wages. Consistently adjusting minimum wages based on inflation can improve predictability, but may lead to divergence between minimum wages and market fundamentals, such as labor productivity (Cunningham, 2007).

Jordan and Tunisia both have sector-specific wages, for agriculture in Tunisia and for clothing and domestic work in Jordan. These wages may be intended to help these sectors, but lack a clear economic or social policy justification; workers in these sectors have the same basic needs. Simplification of minimum wages could, potentially, increase their effectiveness and enforcement (Bhorat, Kanbur, & Stanwix, 2017; Rani, Belser, Oelz, & Ranjbar, 2013). A similar argument applies to ending Jordan's nationality-specific minimum wages, which may have some trade-offs in terms of reducing employment for Syrian refugees and raising the costs of goods and services based on non-Jordanian labor. However, the planned end to the different wages by nationality may also help with Jordanians' employment (Mustafa, 2022), if they are willing to take jobs currently held by non-Jordanians once wages are higher.

One important policy design issue to consider is whether minimum wages should be monthly or hourly. Women globally face difficulties in reconciling unpaid domestic labor and paid work outside the home, but these challenges are particularly acute in MENA, which has the largest gender disparity in unpaid work (Assaad, Krafft, & Selwaness, 2022; Economic Research Forum & UN Women, 2020; International Labour Organization, 2018).



Part-time work can potentially help address difficulties reconciling unpaid domestic work and paid employment (Krafft & Assaad, 2015). However, minimum monthly wages disincentivize the creation of part-time jobs (Ozturk, 2009); minimum wage policies that focus on hourly wages or scale monthly wages accordingly by hours could be helpful.

A further design issue for minimum wages is whether they should be region-specific. For instance, in Tunisia there are different poverty lines for rural, suburban, and urban areas, reflecting variation in cost of living. Higher minimum wages in more costly areas may help make progress towards living wages and ensure basic needs are met. However, they may also disincentivize hiring in more costly locations, while incentivizing hiring (but at lower wages) in areas with lower cost of living. In Tunisia this could, potentially, help the struggling inland region relative to the more urban and better-off coast (Hanmer, Tebaldi, & Verner, 2018), but there are distinct trade-offs with this, and all, minimum wage design decisions.

## References

- Alhawarin, I., & Kreishan, F. (2017). Minimum Wage Compliance in the Private Sector: The Case of Wage and Salary Workers in Jordan. Jordan Journal of Economic Sciences, 4(2), 185–207.
- Angel-Urdinola, D. F., Nucifora, A., & Robalino, D. (2015). Labor Policy to Promote Good Jobs in Tunisia. Directions in Development: Human Development. Washington, D.C.: World Bank.
- Assaad, R. (2014). Making Sense of Arab Labor Markets: The Enduring Legacy of Dualism. IZA Journal of Labor & Development, 3(6), 1–25.
- Assaad, R., Ghazouani, S., & Krafft, C. (2018). The Composition of Labor Supply and Unemployment in Tunisia. In R. Assaad & M. Boughzala (Eds.), The Tunisian Labor Market in an Era of Transition (pp. 1–38). Oxford, UK: Oxford University Press.
- Assaad, R., Ghazouani, S., Krafft, C., & Rolando, D. J. (2016). Introducing the Tunisia Labor Market Panel Survey 2014. IZA Journal of Labor & Development, 5(15), 1–21.
- Assaad, R., Krafft, C., & Keo, C. (2019). The Composition of Labor Supply and Its Evolution from 2010 to 2016 in Jordan. In C. Krafft & R. Assaad (Eds.), The Jordanian Labor Market Between Fragility and Resilience. Oxford, UK: Oxford University Press.
- Assaad, R., Krafft, C., & Selwaness, I. (2022). The Impact of Marriage on Women's Employment in The Middle East and North Africa. Feminist Economics.
- Assaad, R., Krafft, C., Sieverding, M., Al-Hajj, L., Cheung, R., Cortes Mendosa, A., Jubara, A., Tiede, K., & Wahby, S. (2021). Youth Transitions to Adulthood in Jordan: High Aspirations, Challenging Realities. Amman, Jordan: UNICEF.
- Ben Chaabane, M. (2014). La Rémunération Des Salariés, 1989–2014.

- Bhorat, H., Kanbur, R., & Mayet, N. (2012). Estimating the Causal Effect of Enforcement on Minimum Wage Compliance: The Case of South Africa. Review of Development Economics, 16(4), 608–623.
- Bhorat, H., Kanbur, R., & Stanwix, B. (2017). Minimum Wages in Sub-Saharan Africa: A Primer. World Bank Research Observer, 32(1), 21–74.
- Broecke, S., Forti, A., & Vandeweyer, M. (2017). The Effect of Minimum Wages on Employment in Emerging Economies: A Survey and Meta-Analysis. Oxford Development Studies, 45(3), 366–391.
- Coady, D., Grosh, M., & Hoddinott, J. (2004). Targeting of Transfers in Developing Countries: Review of Lessons and Experience. Washington, DC: World Bank.
- Cunningham, W. (2007). Minimum Wages and Social Policy: Lessons from Developing Countries. Directions in Development: Human Development. Washington, D.C.: World Bank.
- Department of Statistics (Jordan). (2021). Poverty Indicators. Retrieved December 30, 2021 from http://jorinfo.dos.gov.jo/ Databank/pxweb/en/Poverty/Poverty\_Poverty\_Indicators/
- Devereux, S., & Sabates-Wheeler, R. (2004). Transformative Social Protection. IDS Working Paper No. 232. Brighton, Sussex, England.
- Economic Research Forum, & UN Women. (2020). Progress of Women in the Arab States 2020: The Role of the Care Economy in Promoting Gender Equality. Cairo, Egypt: UN Women.
- Galal, R., & Said, M. (2019). The Evolution of Wage Formation and Inequality in Jordan, 2010–2016. In C. Krafft & R. Assaad (Eds.), The Jordanian Labor Market Between Fragility and Resilience (pp. 79–99). Oxford, UK: Oxford University Press.
- Global Living Wage Coalition. (2020). Anker Living Wage Reference Value Rural Tunisia 2020.
- Hanmer, L., Tebaldi, E., & Verner, D. (2018). Gender and Labor Markets in Tunisia's Lagging Regions. In R. Assaad & M. Boughzala (Eds.), The Tunisian Labor Market in an Era of Transition (pp. 140–170). Oxford, UK: Oxford University Press.
- Hanna, R., & Olken, B. A. (2018). Universal Basic Incomes versus Targeted Transfers: Anti-Poverty Programs in Developing Countries. Journal of Economic Perspectives, 32(4), 201–226.
- Hashemite Kingdom of Jordan. (2019). National Social Protection Strategy 2019-2025. Amman, Jordan: UNICEF.
- ILO. (2022). Statistics on Wages. ILOSTAT. Retrieved May 16, 2022 from https://ilostat.ilo.org/topics/wages/
- Institut National de la Statistique (INS). (2021). Poverty Line in Tunisia. Retrieved from http://dataportal.ins.tn/fr/ DataAnalysis?27jtngcZbUsIVGoEBcHaw
- International Labour Organization. (2018). Care Work and Care Jobs for the Future of Decent Work. Geneva.
- International Labour Organization. (2020). Global wage report 2020-21: Wages and minimum wages in the time of COVID-19. Geneva.
- International Monetary Fund (IMF). (2017). Fiscal Monitor: Tackling Inequality. Washington, D.C.
- Krafft, C., & Assaad, R. (2015). Promoting Successful Transitions to Employment for Egyptian Youth. Economic Research Forum Policy Perspective No. 15. Cairo, Egypt: Economic Research Forum.
- Krafft, C., & Assaad, R. (2021). Introducing the Jordan Labor Market Panel Survey 2016. IZA Journal of Development and Migration, 12(08), 1–42.
- Krafft, C., Assaad, R., & Marouani, M. A. (2021). The Impact of COVID-19 on Middle Eastern and North African Labor Markets: Glimmers of Progress but Persistent Problems for

Vulnerable Workers a Year into the Pandemic. Economic Research Forum Policy Brief No. 57. Cairo, Egypt.

- Krafft, C., Branson, Z., & Flak, T. (2019). What's the Value of a Degree? Returns to Education in Egypt, Jordan, and Tunisia. Compare: A Journal of Comparative and International Education, DOI: 10.1080/03057925.2019.1590801.
- Krafft, C., & Hannafi, C. (2022). Minimum and Living Wages in Jordan and Tunisia. Economic Research Forum Working Paper Series (Forthcoming). Cairo, Egypt.
- Limam, I., & Ben Hafaiedh, A. (2018). Education, Earnings, and Returns to Schooling in Tunisia. In R. Assaad & M. Boughzala (Eds.), The Tunisian Labor Market in an Era of Transition (pp. 194–234). Oxford, UK: Oxford University Press.
- Lustig, N., Jellema, J., & Pabon, V. M. (2021). Are Budget Neutral Income Floors Fiscally Viable in Sub-Saharan Africa? Center for Global Development Working Paper Series No. 588.
- Ministry of Labor (Jordan). (2021). Raising the Wage Limit to 260 Dinars as of 1-1-2021 (Arabic). Retrieved from https://web.archive.org/web/20210322123616/http://mol.gov.jo/ar/NewsDetails/\_112021
- Mustafa, M. I. (2022). Minimum Wage Increase Deferred Due to COVID Crisis — Labour Ministry. Jordan Times. Amman, Jordan.
- Nasri, K. (2020). Social Safety Nets in Tunisia: Do Benefits Reach the Poor and Vulnerable Households at the Regional Level? GLO Discussion Paper No. 440. Essen.
- Nasri, K., Helmy, I., & Amara, M. (2022). The Landscape of Social Protection in Tunisia. Economic Research Forum Working Paper Series (Forthcoming). Cairo, Egypt.
- Neumark, D., & Corella, L. F. M. (2021). Do Minimum Wages Reduce Employment in Developing Countries? A Survey and Exploration of Conflicting Evidence. World Development, 137 (105165).
- OAMDI. (2016). Labor Market Panel Surveys (LMPS). Version 2.0 of Licensed Data Files; TLMPS 2014. Egypt: Economic Research Forum (ERF).
- OAMDI. (2018). Labor Market Panel Surveys (LMPS). Version 1.1 of Licensed Data Files; JLMPS 2016. Cairo, Egypt: Economic Research Forum.
- Ozturk, O. (2009). Employment Effects of Minimum Wages in Inflexible Labor Markets. MPRA Paper No. 16233. Munich.
- Pellicer, M. (2018). The Evolution of Returns to Education in the Middle East and North Africa: Evidence from Comparable Education Policy Changes in Tunisia. Economics of Education Review, 62, 183–191.
- Qandah, A. (2020, January 7). Should the Minimum Wage Be Raised in Jordan? (Arabic). Al-Ghad.
- Rani, U., Belser, P., Oelz, M., & Ranjbar, S. (2013). Minimum Wage Coverage and Compliance in Developing Countries. International Labour Review, 152(3–4), 381–410.
- Schüring, E., & Loewe, M. (Eds.). (2021). Handbook on social protection systems. Edward Elgar Publishing.
- Tunisia Central Bank. (2021). Annual Report 2020.
- UNDP. (2014). Human Development Report 2014: Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience. New York, NY: UNDP.
- UNDP. (2016). Leaving No One behind: A Social Protection Primer for Practitioners.
- UNICEF, Centre de Recherches d'Etudies Sociales, & International Labour Organization. (2019). Les Garanties Du Socle National de La Protection Sociale: Faisabilitie,

Cout et Financement: Note d'Orientation (French).

- WageIndicator Foundation. (2020). ARCHIVE Living Wage Series - Jordan - September 2020 - In JOD , per Month. Retrieved December 7, 2021 from https://wageindicator. org/salary/living-wage/archive-no-index/jordan-living-wageseries-september-2020/living-wage-series-jordan-september-2020-in-jod-per-month
- World Bank. (2015). ASPIRE The Atlas of Social Protection Indicators of Resilience and Equity. Retrieved December 27, 2021 from https://www.worldbank.org/en/data/datatopics/ aspire/country/jordan
- World Bank. (2022). World Development Indicators. World Bank Databank. Retrieved January 6, 2022 from https://databank. worldbank.org/source/world-development-indicators#



ERF Policy Brief No. 89 | August 2022



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