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Research Article

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Foreign aid shaped social development in Jordan from 2000 to 2024 by supporting resilience rather than structural transformation

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Abstract

Foreign aid is a central instrument of global development governance, yet its social consequences in strategically located middle-income countries remain contested. This article examines how foreign aid shaped social development in Jordan between 2000 and 2024, a period defined by repeated regional shocks, large-scale refugee hosting, and sustained donor engagement. Using a theory-driven structured case analysis, it triangulates official development finance statistics, sectoral aid allocation data, gender-disaggregated unemployment series, Human Development Index (HDI) values, Human Development Report (HDR) rank and percentile data, and national poverty estimates from the World Bank, UNDP, Jordan's Department of Statistics, and the Ministry of Planning and International Cooperation. Five theoretically derived expectations are assessed against the evidence, which shows a systematic divergence. Aid reinforced state capacity and protected public service delivery through the Syrian refugee influx and the COVID-19 shock, and HDI rose from 0.672 in 2000 to 0.754 in 2023 while Jordan's relative international standing remained broadly stable. Over the same period unemployment rose from 13.7 to 21.4 percent, female unemployment from 21.0 to 32.9 percent, and 2023 poverty estimates range from 24.0 to 35.0 percent against 15.7 percent in the 2017–18 survey. Aid therefore produced resilience but not transformation, a pattern traced to a sectoral composition in which budget support absorbed 45.1 percent of 2020–2023 external assistance while economic development received 5.3 percent. The article contributes to debates on the Sustainable Development Goals by showing that donor-financed progress on human development can coexist with reversal on poverty (SDG 1), gender equality (SDG 5), and decent work (SDG 8), and argues that the decisive variables are institutional ownership, alignment with national systems, and a shift from recurrent support towards productive, employment-generating investment.

Keywords: foreign aid; Jordan; social development; aid effectiveness; refugee hosting; gender inequality; Sustainable Development Goals; SDG 1; SDG 5; SDG 16

1. Introduction

Foreign aid is significant in the study of foreign aid because external aid has traditionally funded development, assisted fiscal adjustment, and helped to maintain political stability at the same time. The political economy of Jordan demonstrates that transfers and grants, and other external rents, played a central role in the formation of the state and regime resilience, not a marginal role in domestic politics (Brynen, 1992; Peters and Moore, 2009). Jordan came into the twenty-first century with limited resources and limited finances and with a series of shocks from outside its borders impacting the Kingdom of Jordan (World Bank 2024a). It has been extensively supported

by bilateral donors, Gulf donors, multilateral institutions, UN agencies, and other official donors in the fields of education, health, social protection, infrastructure, governance, and refugee programming since 2000–2024 (World Bank, 2026a; MOPIC, 2025). The pattern was consistent throughout all the periods of external stress, be it the Iraq war, the global financial crisis, the influx of Syrian refugees, or COVID-19, in that Jordan was able to keep delivering services with the support of aid.

The refugee aspect is key. The Syrian situation has resulted in a transformation of the role of aid as a traditional development tool, making it a hybrid mechanism encompassing humanitarian relief, support to host communities and medium-term sector planning. In 2025, the refugee response was integrated into a nationally coordinated development plan, rather than a refugee emergency programme, with UNHCR also reporting a high refugee caseload and the ongoing pressure on public services, local employment and social protection systems (MOPIC 2025; UNHCR 2025). Aid in Jordan has, therefore, been linked not just to poverty reduction and welfare improvements, but also to burden sharing in a long-standing regional crisis.

The developmental record is still not consistent. In 2023, UNDP recorded an HDI of 0.754, which represented improvements in life expectancy and education, although unemployment rates were still high in 2024 and Jordan had a low level of economic participation by women compared to the rest of the world (World Bank, 2024b). The divide is not just a national policy issue, but an issue of global development governance and directly related to the SDGs. Donor funding for schooling, primary health care, and water is important for maintaining schooling, health, and water services during a crisis, but is not a substitute for structural change and labour market demand to achieve SDG 1 on poverty, SDG 5 on gender equality, or SDG 8 on decent work. Jordan's record with these goals poses a more general question: Can an aid relationship built around stability produce the more inclusive outcomes the 2030 Agenda aims for, or can it replace protection with transformation as World Bank (2016) and Lenner and Turner (2024) suggest?

Answering the question involves a plurality of theoretical approaches. The modernisation-oriented view of scholarship sees aid as easing savings constraints and increasing the supply of human capital to institutions that are able to invest in human resources in a productive manner (Rostow, 1960; Burnside and Dollar, 2000). The dependency and rentier critiques acknowledge the danger of repeated inflows and the potential for these inflows to create an external dependency, policy bias and poor accountability (Frank, 1966; Dos Santos, 1970; Knack, 2001). The aid-effectiveness literature claims that outcomes rely on ownership, alignment, coordination, and donor support of either strengthening national systems or substituting for them (OECD, 2005; Bräutigam and Knack, 2004).

This article examines the effects of foreign aid on social development in Jordan between 2000 and 2024, but does not consider foreign aid as an overall category; rather, it looks at the sectors through which social development is measured: unemployment, HDI and HDR rank, poverty, and composition of foreign aid. The main research question is: How effective was foreign aid in creating

long-term social development in Jordan? The argument here is that assistance was crucial when it enhanced state capacity and provided funding to public service delivery, but has been far less effective on the structural transformation of employment, gendered outcomes in the labour market, and continuing poverty reduction. Section 2 builds the framework and reviews literature, Section 3 outlines methodology, Section 4 follows the sectoral allocation, Section 5 covers aid and growth, Section 6 covers aid and social development, and Sections 7 to 9 provide conclusions, limitations and policy implications.

2. Theoretical framework and literature review

2.1 Concept and measurement of foreign aid

The term foreign aid refers to grants, concessionary loans, technical assistance, food and humanitarian aid, budgetary aid, and other forms of aid for balance of payments support from both bilateral and multilateral public institutions. The standard metric is Official Development Assistance (ODA) defined by the OECD as "official finance that aims at promoting economic development and welfare as its main objective and is provided with a concessional character"; it is also defined in terms of the sectoral distribution of ODA by the OECD based on data collected using the Creditor Reporting System (OECD, 2026). This matter of definition has implications for assessing the impact of foreign aid since the outcome will depend upon how much and when aid is delivered, where it goes, and what type of aid is provided rather than simply the total amount of aid. Thus, foreign aid can be effective in improving human development via protection of schooling, health care, etc., while failing to create employment; similarly, foreign aid can stabilize fiscal balances so as to avoid sudden and drastic reductions in government expenditures but not create new jobs.

2.2 Modernisation, capital transfer, and the two-gap model

Optimistic modernization theory views underdeveloped economies as being hindered from developing further because they have insufficient capital, technology, skill sets, and administrative capacities; hence, external assistance can speed up development through providing capital for investments and sharing knowledge and institutional frameworks (Rostow, 1960). The two-gap model of Chenery and Strout (1966) provided a more structured approach. Developing economies often experience both a savings-investment gap where their domestic savings do not provide sufficient funding for their desired level of investment and an exchange-rate gap where their export earnings are insufficient to fund their necessary imports of capital and intermediate products; therefore, aid could help alleviate one or both gaps. This model is particularly pertinent in the case of Jordan due to its lack of natural resources, ongoing need for foreign financing, and historical dependence upon the importation of capital goods, energy, food, and technology. While this model is helpful in explaining how aid will increase available resources, it does not explain whether these additional resources are used effectively to produce sustainable economic growth, i.e., how the new resources are absorbed into the economy. Absorptive capacity, the quality of projects selected for financing, how public sector investments are managed, and whether the financed projects are productive factors also determine whether there is sustainable growth.

2.3 Fiscal stabilization and resilience

The second channel is fiscal stabilization. Aid can ease budget constraints, safeguard a priority expenditure, and minimize the social cost of a shock. Even if it does not stimulate growth, this kind of external support can be developmentally significant in small economies like this, because it can enable the government to keep funding for social services, rather than suddenly cutting back on health, education and municipal services. The channel is significant for Jordan, which has faced refugee inflows, conflict spillovers, water scarcity, price shocks of energy, debt pressure and COVID-19. The benefits of aid are here to be considered not as a means to 'produce' something, but more as a 'prevention measure', and in this context the counterfactual should be realistic. A methodological word of caution for the channel: large inflows are frequently associated with crisis years, and so high unemployment or poverty in crisis years does not evidence the failure of aid; same-year correlations are not considered causal evidence.

2.4 Human capital and social-development channel

Third channel aid connects to human capital and development. Aid improves welfare when it finances education, health, water and sanitation, nutrition, social protection, and support to host communities. This expands capabilities so that people become healthier, better educated, and better able to participate in economic life. Shirazi, Mannap and Ali (2009) show that aid can measurably contribute to education, health and development outcomes even when growth effects are hard to separate. Because most externally funded programs in Jordan support public services, effects should most clearly show up in HDI outcomes and continuity of service rather than immediate job creation. Capability formation does not automatically translate into employment, though, and this is a key tension in Jordan where educational gains have been large, including for women, but female unemployment is very high. Accordingly, this framework distinguishes formation of capability from conversion of capability.

2.5 Growth, productivity, and structural transformation

There is a fourth channel – that of economic growth and productivity. Aid can assist in building road networks, water supply and sanitation systems, energy and digital infrastructure, as well as supporting the development of trade and exporting capabilities, increasing the productive capacities of the private sector, and providing training programs which will increase skills levels and improve the efficiency of business operations. As a result, aid can positively influence long-term economic growth if aid lowers the costs associated with doing business, leads to increased investment, creates employment opportunities, and supports local businesses. It is this channel of delivery that is most closely related to determining whether aid delivers transformational effects or simply provides welfare protection. Literature in relation to this issue is generally cautious. Burnside and Dollar (2000) indicated that aid will have a positive impact on economic growth when there is supportive policy in place. However, Rajan and Subramanian (2008) found limited robust evidence that aid can lead to increased economic growth once the issues of endogeneity and sample selection bias have been controlled for. Clemens et al. (2012) also observed that some forms of aid will lead to greater investment and growth over time, with delays in implementation that same-year comparisons would fail to identify. Therefore, without direct linkage to areas such as product improvement, private

sector expansion, labor market integration and/or export creation, it should not be assumed that aid will deliver transformative outcomes to the Jordanian economy.

2.6 Dependency, rentierism, and governance critique

There is a fifth critique of aid – dependency critique. Dependency theory asserts that lack of development arises out of the existence of uneven relationships within the global system, rather than solely due to scarcity of capital. Thus, regardless of type, aid can never be neutral. In addition to representing donor interests, aid can either reinforce inequality in terms of bargaining power or serve to maintain dependency. Modern governance theory views dependency as an institutional problem. Knack (2001) contends that excessive reliance on foreign assistance undermines accountability and diminishes the quality of government institutions. Bräutigam and Knack (2004) further argue that excessive dependence upon foreign financing distorts public administration processes, fosters the emergence of separate, often parallel systems of administration, and reduces pressure to develop domestic sources of revenue. Finally, Elayah (2016), in his study of Arab states -- including Jordan -- emphasizes both donor self-interest and inadequate context sensitivity. While Jordan is not an oil-based rentier regime similar to those found in the Gulf States, it has historically depended upon outside resources for its very survival (Brynen, 1992; Peters and Moore, 2009). Consequently, aid may help sustain social order and state capacity at the expense of promoting reform.

2.7 Aid effectiveness, ownership, and coordination

Since both optimistic and skeptical views represent only one aspect of the reality surrounding aid, the theory of effective use of aid examines under what circumstances aid does work. Prior to the establishment of the Paris Declaration, the discussion regarding effective use of aid focused primarily on quantity. Following the adoption of the Paris Declaration, the focus was redirected toward understanding ownership, alignment, harmonization, managing for results, and mutual accountability (OECD, 2005). The establishment of the Jordan Response Plan illustrated many of the coordination challenges experienced by multiple donors operating simultaneously (bilateral donors, multilateral banks, UN agencies, humanitarian organizations and other development financiers) as well as the blurring of lines between humanitarian finance and development finance since 2011. The Jordan Response Plan attempted to establish common goals among all donors based on nationally determined objectives and to link refugee-related support to community development initiatives in hosting communities (MOPIC, 2025). Accordingly, the effectiveness of aid ultimately rests on how it is channeled. Long-lasting benefits are more likely when aid builds upon existing national systems and establishes connections between emergency response efforts and longer-term development activities. Conversely, fragmentation, short-term duration, or provision through non-governmental parallel structures reduce the likelihood of successful outcomes.

Table 1. Integrated theoretical channels linking foreign aid to development outcomes.

Theoretical approach	Key mechanism	Expected implication for Jordan
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Modernisation and two-gap model	Aid fills savings-investment and foreign-exchange gaps and supports capital, technology, and skills transfer.	Useful for explaining why Jordan needs external finance, but insufficient unless resources become productive investment.
Fiscal stabilisation and resilience	Aid relaxes budget constraints, protects priority expenditure, and cushions shocks.	Highly relevant because refugee pressures, water scarcity, regional instability, and debt pressures create continuing service-delivery demands.
Human-capital and social-development channel	Aid finances education, health, water, sanitation, social protection, and municipal services.	Expected to show stronger effects on HDI and service continuity than on immediate unemployment reduction.
Growth and productivity channel	Aid supports infrastructure, firms, exports, skills, and private-sector dynamism.	Potentially transformative, but only if linked to investment, productivity, and labour absorption.
Dependency, rentierism, and governance critique	Aid may substitute for domestic revenue, weaken accountability, create parallel systems, or reinforce external-rent dependence.	Important for assessing whether aid strengthens Jordanian institutions or only maintains short-term stability.
Aid effectiveness and coordination	Aid works better when owned by national institutions, aligned with priorities, harmonised among donors, and measured by results.	Central in Jordan because many donors operate across humanitarian, development, and budget-support channels.

Source: Author synthesis based on Rostow (1960), Chenery and Strout (1966), Frank (1966), Dos Santos (1970), OECD (2005, 2026), Knack (2001), Bräutigam and Knack (2004), and Jordan-specific literature.

2.8 Jordan-specific empirical evidence

The cross-country picture outlined above is not repeated here; this section focuses on the literature specific to Jordan, which reveals a mixed picture. Al-Khaldi (2008) discovered that aid and economic growth were positively correlated between 1990 and 2005, while emphasizing the need to focus aid on productive sectors; Abu Al-Foul (2008) viewed the relationship between aid and growth in Egypt and Jordan as an empirical relationship, rather than as an automatic effect. Seijaparova and van Holst Pellekaan (2004) have concluded that external assistance has helped

alleviate poverty-oriented programming, health and education, and uncovered the implementation and coordination challenges, and Jaradat (2008) has demonstrated that effectiveness is contingent on donor and recipient practices.

The second group of studies is related to external rents and the refugee response. Brynen (1992) and Peters and Moore (2009) have illustrated how external rents have influenced the political economy of Jordan for decades. Regarding the humanitarian–development nexus, Tawakkol and Soederberg (2020) interpret the Jordan Compact as being part of a larger political economy, where humanitarian and development agendas are intertwined with the global economic agenda, and Lenner and Turner (2024) point out that indicator-led formalisation, like counting work permits, leaves visible outputs without enhancing working conditions. A recent series of diagnostics by the development partners concur that the shift since the last inspection is away from macroeconomic stability and towards a more private sector-led growth model, employment generation and social inclusion, particularly of youth and women. Resilience should then be assessed not only in terms of the volume of aid or service outputs, but of how they contribute to increasing productivity, employment and poverty alleviation, as well as gender inclusion (World Bank, 2024a, 2026b).

Table 2. Selected previous studies and their relevance to the Jordan case.

Study/source	Main contribution	Implication for this research
Rostow (1960)	Presents modernisation theory in which external capital, knowledge, and institutional change help move economies toward higher development stages.	Frames aid as a potential catalyst for modernisation, while requiring evidence that resources become productive capacity.
Chenery and Strout (1966)	Develops the two-gap logic: aid can fill savings-investment and foreign-exchange gaps.	Provides the basis for viewing aid as development finance in a resource-constrained economy such as Jordan.
Burnside and Dollar (2000)	Finds that aid is more likely to support growth where policies and institutions are supportive.	Requires the analysis to consider policy context and institutions, not aid volume alone.
Rajan and Subramanian (2008)	Finds little robust evidence that aid automatically raises growth across countries after correcting for selection and endogeneity.	Prevents the study from claiming a simple causal link between aid inflows and GDP growth.

Clemens et al. (2012)	Shows that timing and aid type matter; some growth-oriented aid may affect investment and growth with lags.	Supports lagged, sector-sensitive interpretation rather than same-year causal claims.
Shirazi et al. (2009)	Links aid to human-development outcomes such as education, health, and HDI.	Justifies assessing social development separately from economic growth.
Knack (2001); Bräutigam and Knack (2004)	Argue that aid dependence can weaken governance, accountability, and public-sector incentives under some conditions.	Supports examining dependence and institutional quality as possible limits to aid effectiveness.
Elayah (2016)	Uses Arab cases including Jordan to show that donor interests, weak local policy environments, and poor contextual fit can reduce effectiveness.	Highlights the importance of local ownership and policy fit in Jordan.
Al-Khaldi (2008); Abu Al-Foul (2008)	Jordan-related empirical studies treat the aid-growth relationship as positive but conditional and empirically testable.	Supports examining aid by sector and not only as an aggregate inflow.
Seijaparova and van Holst Pellekaan (2004); Jaradat (2008)	Find that aid supported social sectors in Jordan but that implementation, coordination, and donor-recipient practices shaped results.	Supports a focus on service delivery, coordination, and institutional embedding.
Tawakkol and Soederberg (2020); Lenner and Turner (2024)	Show that refugee-response and Jordan Compact programmes can produce measurable outputs without necessarily transforming labour conditions.	Warns that social-development analysis must distinguish outputs from deeper inclusion and employment effects.
World Bank Jordan diagnostics (2024-2026)	Emphasise that Jordan needs to translate stability into private-sector-led growth, job creation, and social inclusion,	Frames aid as stabilising and socially important but not

	especially for youth and women.	sufficient for inclusive economic transformation.
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Source: Author compilation from the reviewed theoretical and empirical literature.

2.9 Research gap and analytical expectations

The current gap in the literature is that growth studies and social-sector evaluations, governance critiques, and refugee-response studies are typically dealt with in isolation. Research across countries focuses on aid and GDP growth or institutional quality, and Jordan-specific research focuses on any of the three domains: earlier macroeconomic development; external rents; or the post-2011 refugee response. There has been less focus on a long-term synthesis, linking the volume of aid, the sectors in which it is directed and the growth it fosters, with selectivity in labor-market outcomes, disaggregated by gender, as well as with the human-development indicator (HDI) and the human-development rank (HDR) of recipient countries, for the entire 2000-2024 period; and less attention on an integrated framework that links the capability concept (Sen, 1999) to the structural transformation theory (McMillan and Rodrik, 2011, 2016) to explain why human-development gains need not lead to labor-market inclusion. This study fills that vacuum and looks at foreign aid as both a resource transfer, a stabilizer, a social-development input, a political relationship, and a co-ordination problem.

The following five expectations are used for the empirical analysis based on the theoretical channels mentioned above. First, the fiscal-stabilization and human-capital channels anticipate that there is a distinct positive relation between aid and service continuity and HDI-type outcomes. Second, the two-gap and growth-productivity channels suggest an indirect link between the two, with the link being productivity, private investment, and implementation capacity. Third, the dependency and governance critique states that the impacts on unemployment will be weaker if there is no explicit link with labor-demand expansion. Fourth, the capability-conversion framework (Sen, 1999) suggests that gender-disaggregated unemployment will show the extent to which educational and social improvements lead to inclusive labor-market opportunities. Fifth, the rentier-aid critique envisions that continuing dependence can help to maintain stability but provide a way to delay structural change (Brynen, 1992; Peters and Moore, 2009).

The framework thus does not ask "Was aid good or bad for Jordan?" but "What impact did aid have, on which indicators and through which channels?" The heart of the difference is between resilience and transformation. Resilience is the ability of public services, social indicators and fiscal balances to remain resilient in the face of shocks without degrading; transformation is structural change that will lead to a durable improvement in economic inclusion, manifest in a sustained decline in the rate of unemployment, convergence of female and male outcomes, and durable erosion of poverty. Aid can help build resilience without change if it helps pay for stabilization and continuity of services, but does not invest in changing the structural conditions that perpetuate unemployment and poverty. This is the key analytical contribution of the paper. The study confronts the question of why sustainable financing has not impeded development on human development as SDG 1, SDG 5 and

SDG 8 did, and what this means for the institutional conditions captured by SDG 16 and SDG 17 (which were set in 2030 Agenda terms).

3. Methodology and indicators

This study aims to pursue four goals: to construct both theoretical and empirical frameworks to understand possible impacts foreign aid might have on economic and social development; to measure trends of aid by sector and time; to analyze the relationship between foreign aid and growth; and to analyze the relationship between aid and development measured by unemployment and labour market outcomes disaggregated by gender, HDI scores and HDR ranks and poverty levels. The methodology used is theory-driven and structured case analysis using congruence testing suggested by George and Bennett (2005). They ask these questions for each expectation: Is the empirical pattern congruent, incongruent, or ambiguous with expectations? Evidence was considered with respect to direction of trend, timing relative to aid times, size, and comparison to the average for lower-middle-income countries. Indicators chosen were selected from the 2000 to 2024 range and are relevant to distinguishing resilience from transformation and sourced from trusted primary data. The study does not claim causality because aid levels are endogenous to shocks: Jordan tends to see higher levels of aid when there is conflict, refugee pressure, and rising fiscal stress. To avoid reading causality backwards, the analysis looks for changes in indicators after decisions on aid seem plausible within a reasonable delay. For example, influx from Syria after 2011, Compact agreement in 2016 and response to COVID 2020-21. Where data allows, competing explanations are noted as well. There is no causal relationship among associations.

Not all indicators are valid until 2024. Net ODA availability runs from 2000 to 2023; unemployment availability runs from 2000 to 2024 (partial data for 2025). HDI is available from 2000 to 2023, and HDR rank and percentile from 2000 to 2024. National poverty estimates are survey-based: official estimates are 13.0 percent in 2006, 13.3 percent in 2008, 14.4 percent in 2010, and 15.7 percent from 2017 to 2018. Two estimates for 2023 are also shown: one from the government at 24 percent of the national poverty line and another from the World Bank using an international poverty line at \$6.85 per day PPP (2017). These are not comparable and are shown separately. Three conventions apply. Baselines for unemployment are drawn from 2000 rather than 2004 because there is at least 16.5 percent unemployment among females in 2004, which is 9.4 points lower than in 2005. HDR values are not measured year to year but edition to edition, so a value staying in the same position in successive reports does not indicate stability. The comparable measure is percentile and is calculated as $(N - \text{rank}) / N$ because coverage varies country by country, ranging from 162 to 193 countries.

All data analysed in this study were retrieved from publicly accessible databases and repositories, namely the World Development Indicators database and the Macro Poverty Outlook of the World Bank Group (<https://databank.worldbank.org/source/world-development-indicators> and <https://www.worldbank.org/en/publication/macro-poverty-outlook>), the online statistical database of the Department of Statistics of Jordan (<https://dosweb.dos.gov.jo>), the Human Development Report

Data Center of the United Nations Development Programme (<https://hdr.undp.org/data-center>), the Country Partnership Strategy of the Arab Fund for Economic and Social Development (<https://www.arabfund.org>), the Jordan Response Plan published by the Ministry of Planning and International Cooperation (<https://www.mop.gov.jo>) and the Operational Data Portal of the United Nations High Commissioner for Refugees (<https://data.unhcr.org/en/country/jor>). The specific series and indicator codes drawn from each database, and the tables and figures in which they are analysed, are listed in the Data availability statement; the values themselves are reproduced in Tables 3 to 6 and Figures 1 to 8.

4. The development of aid to Jordan by sector

Jordan is very aid-dependent, but aid has evolved. The total net ODA received by Jordan was approximately US\$317.9 million in 2000 and US\$320.1 million in 2010. The series was relatively stable in nominal terms during the 2000s, and the 2010s were significantly more volatile. The maximum value, which is an outlier, is 2023, which has an estimated value of approximately US\$2.834 billion. Net ODA and official aid highlight the increases in support as a result of the crisis, increasing from approximately US\$0.881 billion in 2010 to US\$2.697 billion in 2014, but declining back to US\$2.141 billion in 2015, in response to the refugee crisis in Syria.

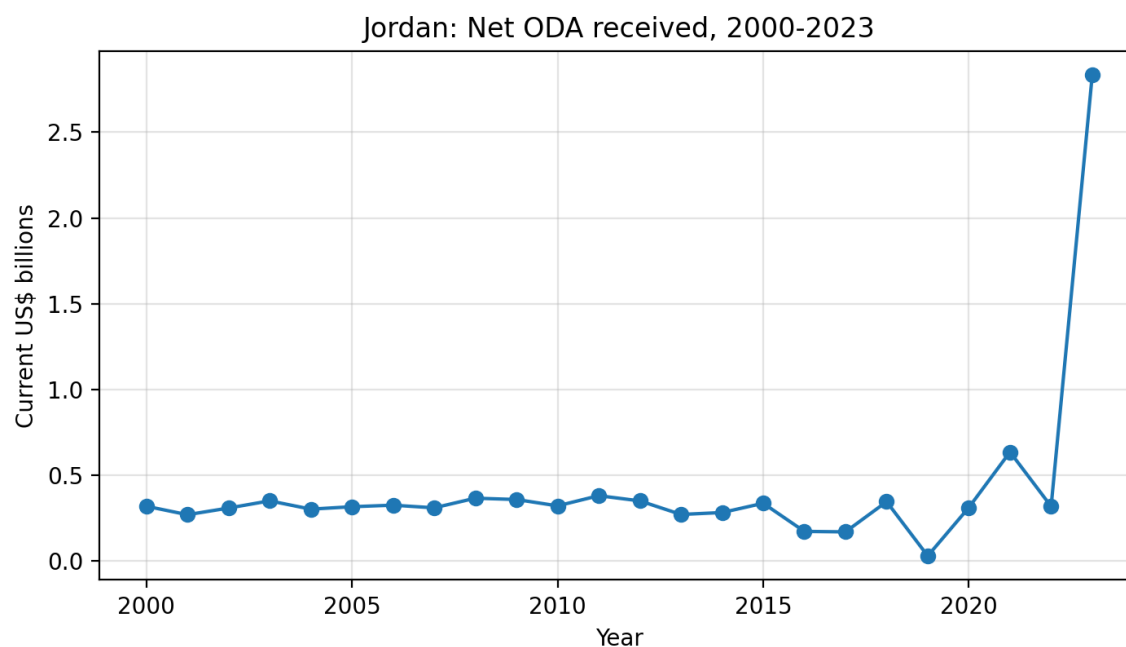


Figure 1. Jordan: Net official development assistance received, 2000-2023.

Source: Author's elaboration using World Bank World Development Indicators, series DT.ODA.ODAT.CD (net official development assistance received, current US\$), Jordan, 2000–2023 (World Bank, 2026a).

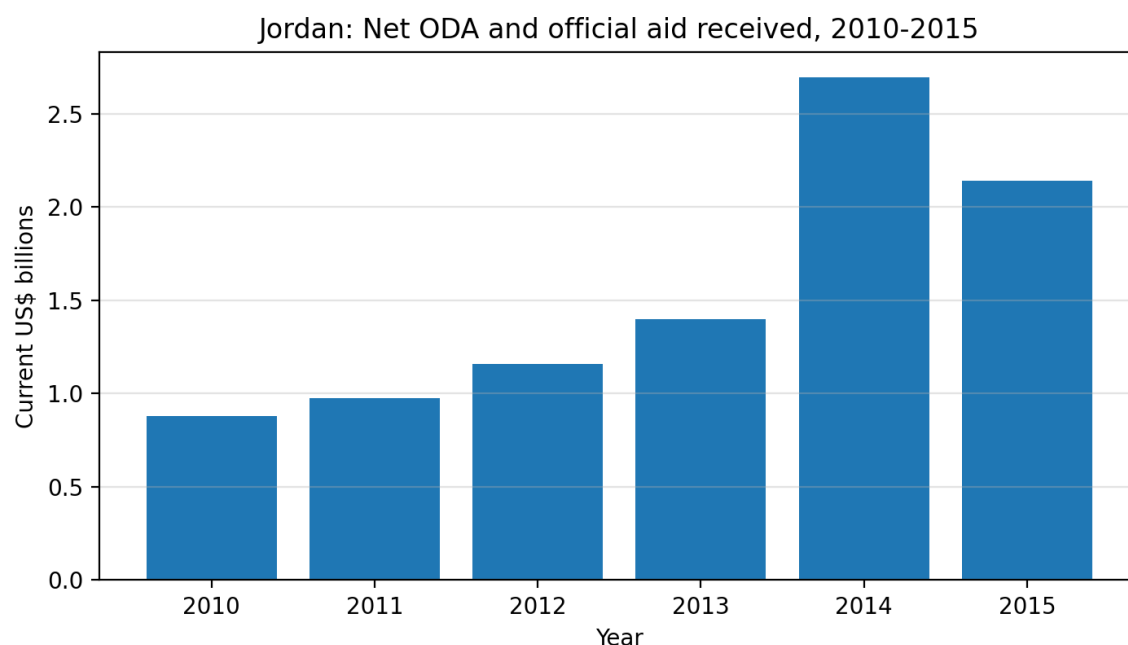


Figure 2. Jordan: Net ODA and official aid received, 2010-2015.

Source: Author's elaboration using World Bank World Development Indicators, series DT.ODA.ALLD.CD (net official development assistance and official aid received, current US\$), Jordan, 2010–2015 (World Bank, 2026a).

Sectoral information indicates that approximately \$18.15 billion in external aid commitments were made by donors from 2020 – 2023. Of this amount, \$7.00 billion consisted of grants, \$7.85 billion was concessional loans, and \$3.28 billion constituted support to the Jordan Response Plan. Budget Support comprised approximately 45.1% of the categories, followed closely by Water & Sanitation at 17.3%, Social Protection at 9.8%, Education at 5.8%, Economic Development at 5.3%, Energy at 3.6%, Agriculture/Food Security at 3.4%, Health at 3.3%, and Others at 6.4%. All percentages are based on AFESD (2025), which obtained them from MOPIC (2025), and as such, they are consistent with MOPIC's reporting. Comparable sectoral distributions for prior time frames have not been available; therefore, pre-2011 donor priorities will be described qualitatively.

Table 3. Sectoral allocation of external assistance to Jordan, 2020-2023.

Sector	Share of external assistance, 2020-2023	Approximate amount from US\$18.15 billion total
Budget support	45.1%	US\$8.19 billion
Water and sanitation	17.3%	US\$3.14 billion
Social protection	9.8%	US\$1.78 billion
Education	5.8%	US\$1.05 billion

Economic development	5.3%	US\$0.96 billion
Energy	3.6%	US\$0.65 billion
Agriculture and food security	3.4%	US\$0.62 billion
Health	3.3%	US\$0.60 billion
Others	6.4%	US\$1.16 billion

Source: Percentages and total external assistance from AFESD (2025), based on MoPIC information; amounts are author calculations.

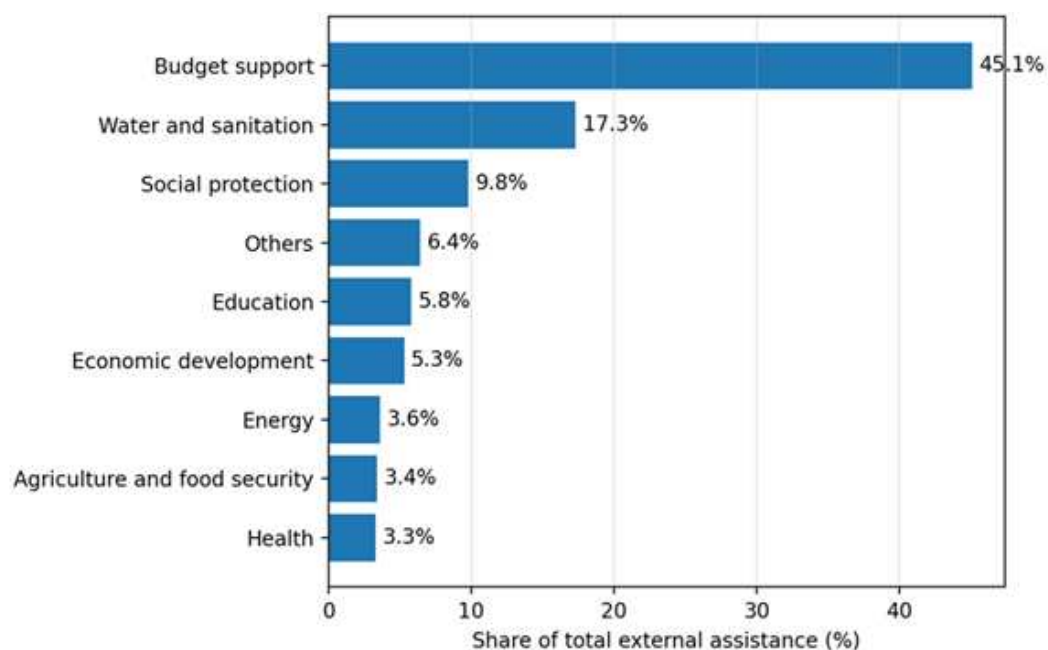


Figure 3. Sectoral allocation of external assistance, 2020–2023.

Source: AFESD (2025), based on information from Jordan's Ministry of Planning and International Cooperation.

The distribution shows that aid has been dominated by stabilisation and basic-service priorities. Budget support alone accounts for nearly half of 2020–2023 assistance, and water and sanitation form the second category, consistent with severe water scarcity and the infrastructure pressures of refugee hosting. The comparatively small share for economic development helps explain why high aid volumes have not generated stronger job creation.

5. Foreign aid and economic growth

The link between foreign assistance and economic growth in Jordan is indirect. Foreign assistance contributes to growth if it funds infrastructure projects that create productivity, fosters private sector growth, ensures macroeconomic stability, or preserves the capacity to deliver human-capital

sustaining services. However, foreign assistance has very little effect on growth if it is primarily used for budget support, humanitarian responses, or short-term stabilization. Both channels were present in the data from Jordan. The data demonstrated that the stabilization channel is significantly more powerful than the growth channel.

Recent diagnostics illustrate why the distinction is important. In 2023, Jordan's GDP per capita in U.S. dollars was \$4432. Between 2011 and 2023, the real GDP annual growth rate in Jordan was about 2.3 percent. This compares unfavorably to the approximately 4.8 percent that countries classified as lower middle-income experience (World Bank, 2026a). For the period 2020-2023, private consumption made up nearly 84 percent of the Gross Domestic Product (GDP) in Jordan. Also, service industries dominate Jordan's economy, and there is a significant role for the government sector (AFESD, 2025). The April 2026 Macro Poverty Outlook from the World Bank reported that real GDP growth in Jordan was 3.1 percent in 2023; 2.6 percent in 2024; and estimates that GDP will grow by 2.8 percent in 2025, and will be 2.7 percent in 2026. Additionally, the report identifies translating macroeconomic stability into private sector-driven growth and jobs as the major policy issue (World Bank, 2026b).

Year	Real GDP growth at constant market prices	Status
2023	3.1	Recent history
2024	2.6	Recent history
2025e	2.8	Recent history
2026f	2.7	Forecast

Table 4. Recent real GDP growth in Jordan.

Source: World Bank Macro Poverty Outlook, April 2026. e = estimate; f = forecast.

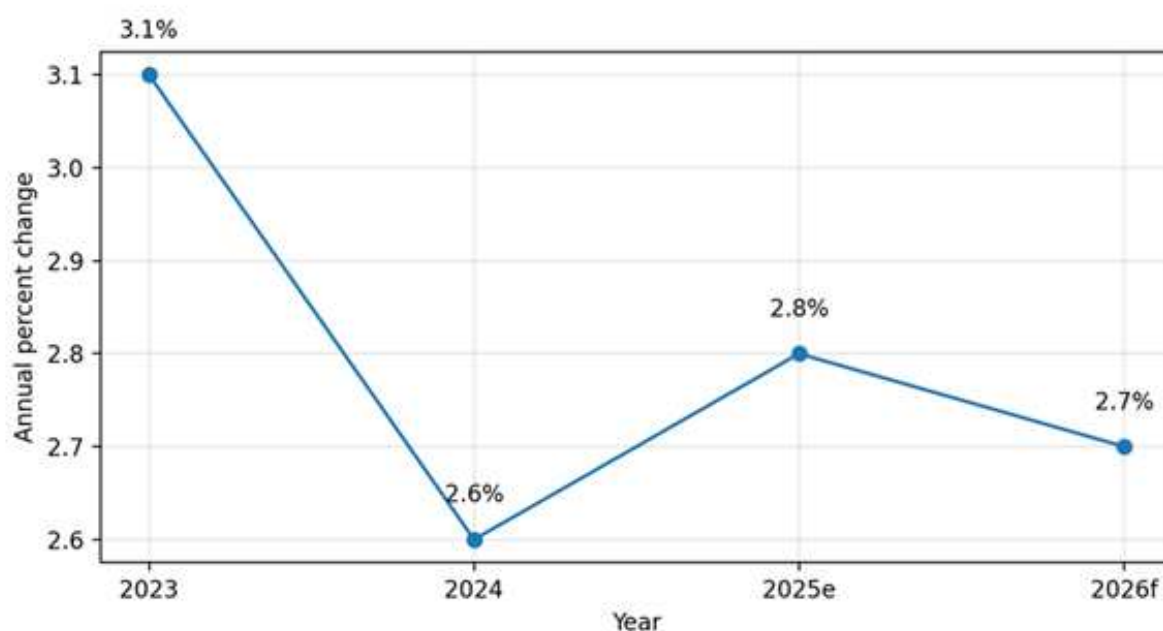


Figure 4. Jordan: Recent real GDP growth, 2023-2026.

Source: World Bank Macro Poverty Outlook, April 2026.

The aid–growth pattern can be read in three phases, which are related to the two-gap and growth–productivity expectations. In the 2000s, the level of ODA was relatively moderate, and growth was around 5 to 7 percent in 2003–2008, largely due to regional trade, investment, and domestic reforms, not aid, which is only partly in line with the two-gap model. Average real growth in the 2010s declined significantly during 2011–2023 under refugee-related and fiscal pressure (+2.3 percent compared to the lower-middle-income average) but slightly increased during 2014–2024 (+2.6 percent) due to the declining trend in the 2020s and increasing prices in recent years. Aid continued to be relevant in the 2020s for fiscal and social resilience, as growth remained at mid-2 percent, which was far too low to bring unemployment down. The evidence thus does not suggest that bigger aid inflows are always likely to lead to a faster growth rate: aid cushioned downside risks and safeguarded public expenditures, but aid increases growth only when domestic investment, private-sector dynamism, exports, firm productivity, and labor-market reform are in place.

6. Foreign aid and social development

Social development is assessed through unemployment, gender differences in unemployment, HDI, HDR rank and percentile, and poverty. These indicators show a more mixed picture than the aid-volume data: aid appears to have supported social resilience and human-development continuity without producing broad labour-market inclusion or sustained poverty reduction.

6.1 Labour-market outcomes

The best evidence for the imperfect transmission is the labour-market evidence. From 2000 to 2024, unemployment among Jordanians aged 15 and older grew from 13.7 per cent to 21.4 per cent. The deterioration was more pronounced for women, as the unemployment rate for females increased

from 21.0 to 32.9 percent, while the male rate increased from 12.3 to 18.2 percent; the difference is now 14.7 percentage points compared with 8.7 before. Most of the increase was after 2015. There are two partial observations from the Department of Statistics (2025b) and the World Bank for the Q3 2025 population, but they are not comparable: 16.2 percent of the total resident population is non-Jordanians, and 21.4 percent of the resident population is Jordanians. The second approach is used here, as in the annual series in Table 5, World Bank (2026b) and the Department of Statistics (2025a; 2025b).

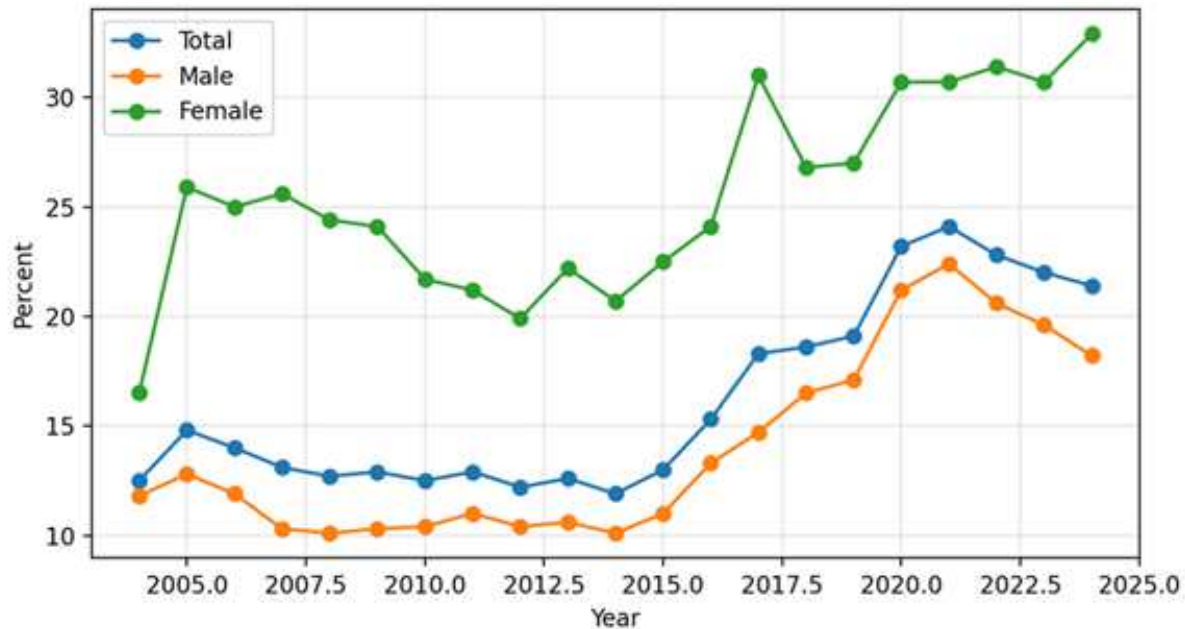


Figure 5. Jordanians age 15+: unemployment by sex, 2000–2024.

Source: Author's elaboration using annual unemployment rates for Jordanians aged 15 and above, Department of Statistics, Jordan (2013, 2022, 2023, 2025a).

These data show aid did not overcome deep structural reasons for weak job creation: limited absorption by the private sector, mismatches of skills, high barriers faced by women, clustering of activity in sectors with low intensity of employment, and effects of external shocks. Aid can finance training, infrastructure, and service delivery, but job gains require firms to expand and workers to enter appropriate jobs.

6.2 Gender and the limits of capability conversion

The gender pattern should be treated separately due to the fact that this is where the difference between the concepts "resilience" and "transformation" is best seen. Female educational levels now match or surpass those of males as far as higher education is concerned. Also, during this time frame, the health and education portions of the Human Development Index (HDI) consistently rose. However, female unemployment has never fallen for more than two consecutive years. The 2024 value of 32.9 percent represents the largest percentage of unemployed females ever reported. As Sen (1999) explained, the ability to form capabilities and the ability to convert capabilities into action proceeded in opposite directions. In other words, there was no indication that the mechanism

described by the human-capital model – i.e., that education financed through foreign aid would lead to increased employment- worked in Jordan.

Three conversion barriers exist and can be identified. Each barrier is only weakly alleviated by how foreign assistance has been provided. The first is that sectors receiving the majority of assistance (budget support, water & sanitation, energy) produce relatively few types of jobs entered by Jordanian females. At the same time, the sectors where female employment primarily exists (education, health, public administration) are limited by fiscal ceilings which reinforce conditionality associated with budget support. The second is that participation costs fall disproportionately on women. Specifically, both the lack of reasonably-priced childcare options and the way public transportation systems functionally make working an economic impossibility for some households at current wage rates. Finally, the Jordan Compact, along with its associated programs focused upon creating work permits and providing employment opportunities for refugees. Employment opportunities for Jordanian women were considered a secondary goal (World Bank, 2016; Lenner and Turner, 2024). Therefore, a decade of considerable amounts of financial assistance from outside Jordan resulted in a growing instead of a diminishing gender gap. Consequently, the goals established by UN Sustainable Goals 5 and 8 failed to meet their objectives.

6.3 Human development and relative international standing

HDI (Human Development Index) gives a more optimistic view than that of the Human Poverty Index, increasing from 0.672 in 2000 to 0.754 in 2023. A comparative element was added with HDR rank, as Jordan went from 92nd place of 174 countries in 2000 to 99th place of 193 countries in 2024. Also, the normalized percentile increased from 47.1 to 48.7. Since report coverage changed over the years, the normalized percentile is used as an equivalent measure. Overall across 2000-2024, there has been variation in the ranking by year, with the lowest being 86th of 177 in 2006, and the highest at 104th of 191 in 2020; the average normalized percentile has remained around 48.2.

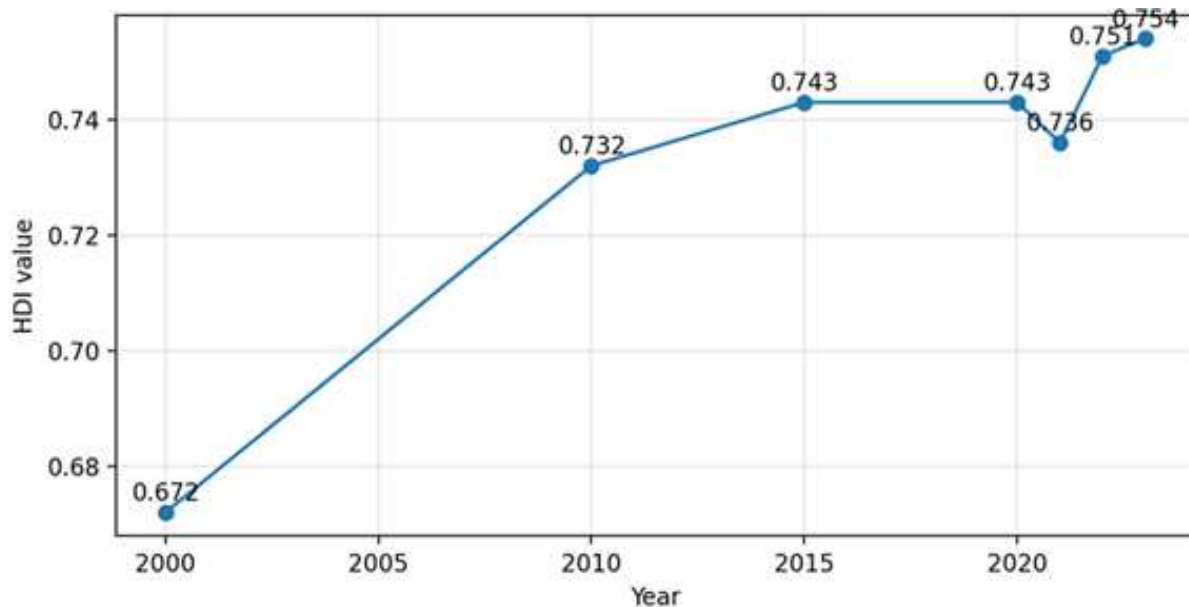


Figure 6. Jordan: HDI benchmarks, 2000-2023.

Source: Author's elaboration using HDI values for Jordan reported in the statistical annex of the UNDP Human Development Report 2025 (UNDP, 2025).

The majority of the rank evidence supports this view (i.e., a downward move toward the middle is much more likely than a dramatic rise toward the top): in 2000 the percentile was 47.1; it rose to a peak of 51.4 in 2006; then declined to 45.5 in 2020; and increased again to 48.7 in 2024. A more detailed examination of the data for each time segment makes the disparity clearer: over 2010-14 the average unemployment rate was approximately 12.4 percent while the average percentile for this same time span was 49.8; conversely, from 2020 through 2024 the average unemployment rate was approximately 22.7 percent while the average percentile was 47.4. When comparing the overall ranking of Jordan at different times — rather than when trying to compare two rankings to see if they are correlated — one can infer that Jordan's relative standing decreased somewhat (but only moderately) as labor market pressure increased beginning around 2015 — as expected (Expectation 1); and as also expected (Expectation 3).

Table 5. Unemployment and Human Development Report rank indicators, 2000-2024.

Year	Male (%)	Female (%)	Both (%)	HDR rank	HDR percentile
2000	12.3	21.0	13.7	92/174	47.1
2001	13.7	20.6	14.7	88/162	45.7
2002	14.0	21.9	15.3	99/173	42.8
2003	13.4	20.8	14.5	90/175	48.6
2004	11.8	16.5	12.5	90/177	50.8
2005	12.8	25.9	14.8	90/177	49.2
2006	11.9	25.0	14.0	86/177	51.4
2007	10.3	25.6	13.1	89/177	49.7
2008	10.1	24.4	12.7	87/178	51.1
2009	10.3	24.1	12.9	88/178	50.6
2010	10.4	21.7	12.5	91/180	49.4
2011	11.0	21.2	12.9	91/180	49.4
2012	10.4	19.9	12.2	90/181	50.3
2013	10.6	22.2	12.6	92/184	50.0
2014	10.1	20.7	11.9	93/186	50.0
2015	11.0	22.5	13.0	96/185	48.1
2016	13.3	24.1	15.3	97/187	48.1
2017	14.7	31.0	18.3	99/189	47.6
2018	16.5	26.8	18.6	102/189	46.0
2019	17.1	27.0	19.1	102/189	46.0
2020	21.2	30.7	23.2	104/191	45.5
2021	22.4	30.7	24.1	102/191	46.6
2022	20.6	31.4	22.8	100/193	48.2
2023	19.6	30.7	22.0	100/193	48.2
2024	18.2	32.9	21.4	99/193	48.7

Source: Author compilation. Unemployment rates for Jordanians aged 15 and above from Department of Statistics, Jordan (2013, 2022, 2023, 2025a); HDR rank and country coverage from UNDP Human Development Reports (UNDP, various years). Percentile is calculated as $(N - \text{rank}) / N$, where N is the number of countries covered by the relevant Report edition; higher values indicate a better relative position. Rank and percentile values are aligned to Report editions rather than calendar years, so identical values in consecutive years reflect the absence of a new edition rather than measured stability.

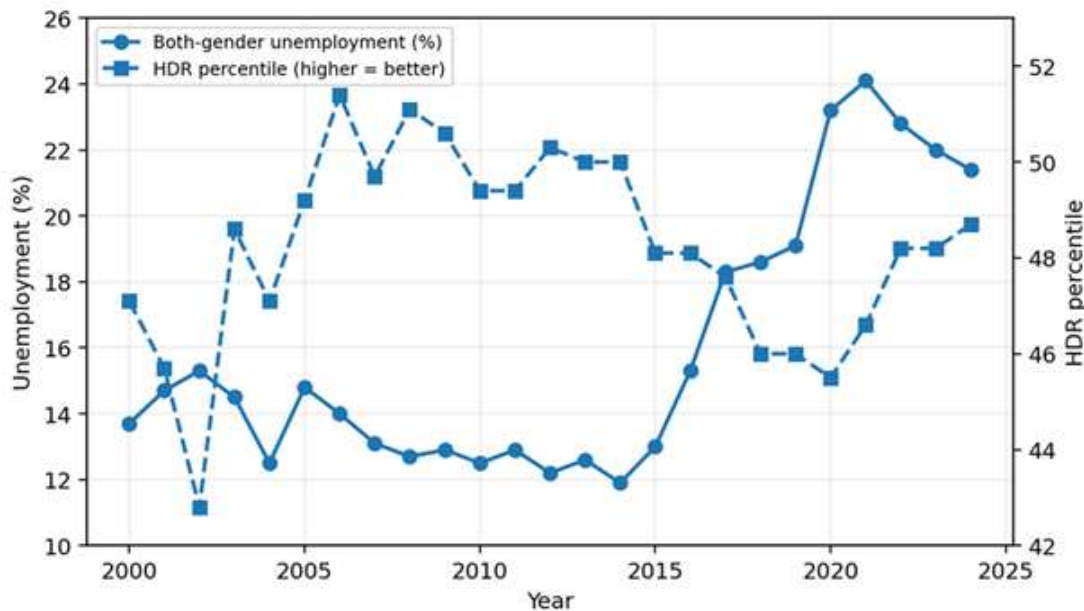


Figure 7. Jordan: both-gender unemployment and HDR percentile standing, 2000-2024.

Source: Author chart based on the unemployment and HDR percentile series in Table 5.

6.4 Poverty

Poverty is harder to assess because the national rate is survey-based and not published annually. The official values are 13.0 percent in 2006, 13.3 percent in 2008, 14.4 percent in 2010, and 15.7 percent in the 2017–18 survey (Department of Statistics, 2010; see also World Bank, 2004). More recent estimates are considerably higher: a government release for 2023 put the national rate at 24.0 percent, while World Bank Atlas data place it at 35.0 percent. The gap reflects differences in methodology, poverty lines, and coverage, but jointly the figures indicate that poverty worsened substantially after 2018, reinforcing the conclusion that aid did not produce a durable poverty decline.

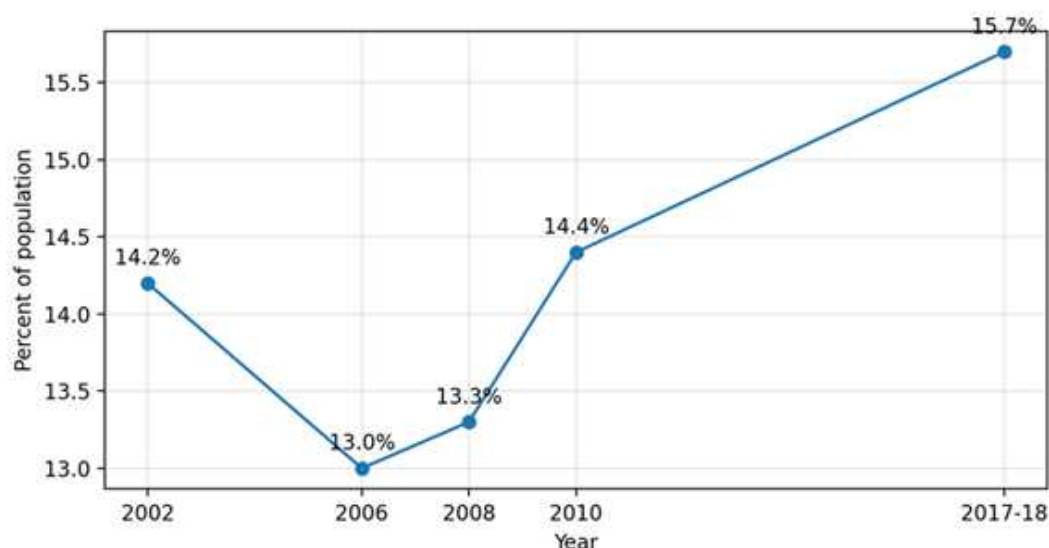


Figure 8. Jordan: National poverty rate, selected survey years and 2023 estimates.

Source: Author chart based on Department of Statistics household surveys (2006, 2008, 2010, 2017-18), Jordan Government press release (2023), and World Bank Atlas Data (2023).

Indicator	Baseline	Latest available	Interpretation
HDI value	0.672 (2000)	0.754 (2023)	Gradual improvement in human development
HDR rank / percentile	92 of 174 / 47.1 (2000)	99 of 193 / 48.7 (2024)	Relative standing broadly stable while unemployment worsened
Unemployment, Jordanians 15+	13.7% (2000)	21.4% (2024)	Worsened substantially after the mid-2010s
Female unemployment	21.0% (2000)	32.9% (2024)	Gap widened from 8.7 to 14.7 percentage points
Male unemployment	12.3% (2000)	18.2% (2024)	Also worsened, but less than female unemployment
National poverty rate	13.0% (2006)	24.0% (2023 Government press release); 35.0% (2023 World Bank Atlas Data)	Substantial worsening after 2018; 2023 estimates indicate poverty between 24% and 35% depending on source

Table 6. Summary of social-development indicators.

The combined evidence supports a differentiated conclusion mapping onto the five expectations. Expectation 1 is confirmed: HDI rose from 0.672 to 0.754 and the percentile remained broadly

stable. Expectation 2 is confirmed by the gap between rising aid volumes and stagnant growth after 2011. Expectation 3 is strongly confirmed, since unemployment nearly doubled despite rising aid. Expectation 4 is confirmed in the negative, the female–male gap having widened (Sen, 1999). Expectation 5 receives qualified support: social stability and service continuity were maintained while structural reform remained limited. The strongest effect is found in resilience and the weakest in transformation.

7. Discussion and Conclusions

Beginning with the foreign-aid relationship with Jordan's economy, while there were clearly some positive effects – i.e., aid allowed the government to cover budget deficits, protect essential public services, and maintain macroeconomic stability- the net effect was quite limited. This can be seen by the fact that during 2023-25 Jordan experienced essentially stable per capita income at approximately 2.6 – 3.1% per annum. Therefore, despite financial support to stabilize and grow the economy as a whole, Jordan has struggled to convert this economic stability into increased private sector jobs.

Foreign aid also has a clearer relationship with social development. While both the fiscal stabilization and human capital channels have been supported by evidence of improvement in social indicators, the growth/productivity channel has shown little gain. Specifically, although the Human Development Index (HDI) for Jordan improved from 0.672 to 0.754 during 2000-23 and Jordan maintained its relative position in the global distribution of HDI values, similar to Shirazi et al. (2009), and consistent with the general theoretical assumption of aid effectiveness that aid channeled through national institutions can provide durable improvements in service delivery, however, Jordan's rate of GDP per capita growth averaged only 2.3 percent annually over 2011-23 compared to an average annual growth rate of 3.9 percent for low and middle income countries reported by Rajan and Subramanian (2008).

While some parts of the dependency/rentier critique of foreign aid are supported by evidence of negative trends in certain areas of social development, including rising female unemployment rates and increasing levels of poverty (from 15.7 percent in 2017-18 to approximately 30 percent in 2023 [Brynen, 1992; Peters and Moore, 2009]), other elements of this critique are not supported. For example, unemployment among men did not rise significantly in recent years. Thus, these trends suggest that if foreign aid is going to have a transformative effect on the lives of ordinary people in recipient countries, it must be targeted toward productive sectors (Al-Khaldi, 2008).

Therefore, based on all of this evidence, we can conclude that foreign aid provided Jordan a great deal of positive benefits and opportunities, but many significant challenges remain before it will truly become a transformative force for change. This is consistent with our conceptualization of a "resilience-transformation" model of how foreign aid impacts developing countries. In particular, foreign aid strengthened the ability of governments in Jordan to continue providing essential services during periods of political instability and civil unrest (i.e., producing "resilience") and contributed to continued progress in achieving human development goals such as improving health care access, educational attainment, and living standards (i.e., contributing to "development").

However, foreign aid failed to contribute substantially to reducing unemployment, improving gender equity, or creating new jobs and reducing poverty (i.e., contributing to "growth").

Thus, in addition to emphasizing the importance of targeting foreign aid more effectively toward specific productive sectors as suggested by Al-Khalidi (2008) and others, we argue that the goal of transforming societies should be placed at the center of foreign aid policy-making efforts.

Moreover, where foreign aid is organized primarily around maintaining the stability of a strategically located country, recipients may achieve their human development objectives but struggle to meet those requiring more fundamental changes. As argued previously in relation to our analysis of SDG 16 and SDG 17, closing this gap requires a focus on designing institutions that can allocate resources more effectively to maximize the potential of foreign aid to drive transformative change.

8. Policy implications

Five implications follow. First, Jordan should maintain stabilization and social aid because the country remains vulnerable to both regional shocks and climate shocks. Monitoring indicators should be whether enrollment in education and use of primary health services are protected when aid rises during shocks, with MOPIC ensuring that budget support conditions safeguard floors for social spending. Second, the share going towards productivity, exports, employment-intensive infrastructure and firm growth should rise to at least 15 percent of commitments within five years, monitored through per capita GDP and gross formation of capital. Third, female employment should be the main outcome rather than a secondary social issue: unemployment among women stands at 32.9 percent, so the Ministry of Labor and donors leading gender programs should set binding participation targets and childcare and transport identified as major obstacles. Fourth, the Department of Statistics and the World Bank should commit to a cycle of four-year household surveys because the interval from 2017 to 18 and the divergent 2023 estimates prevent effective targeting.

9. Limitations and future research

The findings in this report provide guidance to potential studies on several factors that limit the scope of future work. The country-specific nature of this study (Jordan) limits generalizability and would increase external validity if compared to other countries such as Morocco, Tunisia, and/or Lebanon. Although the results suggest an association with sustained refugee flows in Jordan, causal inference based upon the absence of a formal comparison group indicates that attributing causality remains speculative. In addition, while sectoral data are available from 2020-23, prior to this time the sectoral composition of exports can only be estimated through qualitative analysis until additional OECD CRS data become available.

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Ethics declarations**Ethical approval**

Not applicable.

Contributions declaration

The author contributed to all aspects of this work.

Clinical trial number:

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Consent for publication

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Data availability

This study is based entirely on the secondary analysis of previously published, publicly available data. No new primary data were generated or collected, and no new dataset was created. All quantitative series analysed are reproduced in full in Tables 3 to 6 and Figures 1 to 8 of this article, and the repositories from which they were obtained are also identified in Section 3 of the main text. The datasets analysed and the databases and repositories from which they were retrieved are the following.

(1) World Development Indicators (WDI) database, World Bank Group. Direct link: <https://databank.worldbank.org/source/world-development-indicators>. Series analysed: net official development assistance received, current US dollars, indicator code DT.ODA.ODAT.CD, <https://data.worldbank.org/indicator/DT.ODA.ODAT.CD>; net official development assistance and official aid received, current US dollars, indicator code DT.ODA.ALLD.CD, <https://data.worldbank.org/indicator/DT.ODA.ALLD.CD>; and GDP per capita and real GDP growth series for Jordan and for the lower middle income aggregate. These series are analysed in Figures 1 and 2 and in Section 5.

(2) Macro Poverty Outlook, April 2026 edition, World Bank Group. Direct link: <https://www.worldbank.org/en/publication/macro-poverty-outlook>. Data analysed: real GDP growth outturns and projections for Jordan for 2023 to 2026, analysed in Table 4 and Figure 4.

(3) Department of Statistics of Jordan (DoS) online statistical database. Direct link: <https://dosweb.dos.gov.jo>. Data analysed: annual unemployment rates for Jordanians aged 15 years and above, disaggregated by sex, taken from Jordan in Figures 2013, 2022 and 2023, <https://dosweb.dos.gov.jo/product-category/jordan-in-figures/>, and from the Department's unemployment releases, <https://dosweb.dos.gov.jo/category/news/unemployment-rate/>; and national poverty estimates from the Report of Poverty Status in Jordan, based on the Household Expenditure and Income Survey. These data are analysed in Table 5, Table 6, Figures 5, 7 and 8 and in Section 6.

(4) Human Development Report Data Center, United Nations Development Programme (UNDP). Direct link: <https://hdr.undp.org/data-center>. Data analysed: Human Development Index values for Jordan for 2000 to 2023 as reported in the Human Development Report 2025, <https://hdr.undp.org/content/human-development-report-2025>, and Human Development Report rank and country coverage for successive Report editions, from which the normalised percentile reported in Table 5 was calculated by the author. The statistical annexes and underlying series may be downloaded from <https://hdr.undp.org/data-center/documentation-and-downloads>. These data are analysed in Table 5, Table 6 and Figure 6.

(5) Country Partnership Strategy Jordan 2025-2029, Arab Fund for Economic and Social Development (AFESD). Direct link: <https://www.arabfund.org>. Data analysed: sectoral shares of external assistance to Jordan for 2020 to 2023 and the corresponding total commitment figure, which the Arab Fund compiled from the Jordanian Ministry of Planning and International Cooperation. These data are analysed in Table 3 and Figure 3; the approximate sectoral amounts shown in Table 3 are author calculations from these published shares.

(6) Jordan Response Plan for the Syria Crisis 2025, Ministry of Planning and International Cooperation (MOPIC), Jordan. Direct link: <https://www.mop.gov.jo>. Information used: contextual information on refugee response planning and financing.

(7) Operational Data Portal, United Nations High Commissioner for Refugees (UNHCR). Direct links: <https://data.unhcr.org/en/country/jor> and <https://data.unhcr.org/en/situations/syria/location/36>. Data used: registered refugee population figures, used as background context.

The two divergent 2023 national poverty estimates discussed in Section 6.4 and shown in Figure 8 and Table 6 are taken from the sources cited at those points in the article, namely a Government of Jordan press release for the estimate at the national poverty line and World Bank data for the estimate at the international poverty line of 6.85 US dollars per day in 2017 purchasing power parity terms. All of the datasets listed above are publicly accessible at the web links given and none of them are subject to access restrictions or to any third party licence held by the author. The repositories listed above do not issue accession numbers for these datasets; they are identified instead by the indicator codes and publication titles given above together with the direct web links to each database or repository.

References

- Abu Al-Foul, B. (2008). Foreign aid and economic growth in Egypt and Jordan: An empirical analysis. Economic Research Forum Working Paper No. 418.
- Al-Khaldi, M. D. (2008). Impact of foreign aid on economic development in Jordan (1990-2005). *Journal of Social Sciences*, 4(1), 16-20.
- Arab Fund for Economic and Social Development [AFESD]. (2025). Country Partnership Strategy: Jordan, 2025-2029.
- Bräutigam, D. A., & Knack, S. (2004). Foreign aid, institutions, and governance in Sub-Saharan Africa. *Economic Development and Cultural Change*, 52(2), 255-285.
- Brynen, R. (1992). Economic crisis and post-rentier democratization in the Arab world: The case of Jordan. *Canadian Journal of Political Science*, 25(1), 69-97.
- Burnside, C., & Dollar, D. (2000). Aid, policies, and growth. *American Economic Review*, 90(4), 847-868.
- Chenery, H. B., & Strout, A. M. (1966). Foreign assistance and economic development. *American Economic Review*, 56(4), 679-733.
- Clemens, M. A., Radelet, S., Bhavnani, R. R., & Bazzi, S. (2012). Counting chickens when they hatch: Timing and the effects of aid on growth. *The Economic Journal*, 122(561), 590-617.
- Department of Statistics, Jordan. (2010). Report of poverty status in Jordan: Based on the Household Expenditures and Income Survey data 2008.
- Department of Statistics, Jordan. (2013). Jordan in figures 2013.
- Department of Statistics, Jordan. (2022). Jordan in figures 2022.
- Department of Statistics, Jordan. (2023). Jordan in figures 2023.
- Department of Statistics, Jordan. (2025a). Department of Statistics: 21.4 unemployment rate for 2024.
- Department of Statistics, Jordan. (2025b). Unemployment rate declined in the Kingdom to 16.2% in Q3 2025.
- Dos Santos, T. (1970). The structure of dependence. *American Economic Review*, 60(2), 231-236.
- Elayah, M. (2016). Lack of foreign aid effectiveness in developing countries between a hammer and an anvil. *Contemporary Arab Affairs*, 9(1), 82-99.
- Frank, A. G. (1966). The development of underdevelopment. *Monthly Review*, 18(4), 17-31.
- George, A. L., & Bennett, A. (2005). Case studies and theory development in the social sciences. MIT Press.

- Jaradat, R. (2008). The impact of donor and recipient government policies and practices on the effectiveness of foreign aid to a middle income developing country: Case studies from Jordan (Doctoral thesis, University of Huddersfield).
- Knack, S. (2001). Aid dependence and the quality of governance: Cross-country empirical tests. *Southern Economic Journal*, 68(2), 310-329.
- Lenner, K., & Turner, L. (2024). The Jordan Compact, refugee labour and the limits of indicator-oriented formalization. *Development and Change*, 55(2), 302-330.
- McMillan, M., & Rodrik, D. (2011). Globalization, structural change, and productivity growth. NBER Working Paper No. 17143. National Bureau of Economic Research.
- Ministry of Planning and International Cooperation. (2025). Jordan Response Plan for the Syria Crisis 2025.
- OECD. (2005). Paris Declaration on Aid Effectiveness: Ownership, harmonisation, alignment, results and mutual accountability.
- OECD. (2026). ODA by sector: Indicator definition and source dataset information.
- Peters, A. M., & Moore, P. W. (2009). Beyond boom and bust: External rents, durable authoritarianism, and institutional adaptation in the Hashemite Kingdom of Jordan. *Studies in Comparative International Development*, 44(3), 256-285.
- Rajan, R. G., & Subramanian, A. (2008). Aid and growth: What does the cross-country evidence really show? *Review of Economics and Statistics*, 90(4), 643-665.
- Rodrik, D. (2016). Premature deindustrialization. *Journal of Economic Growth*, 21(1), 1-33.
- Rostow, W. W. (1960). The stages of economic growth: A non-communist manifesto. Cambridge University Press.
- Seijaparova, D., & van Holst Pellekaan, J. W. (2004). Jordan: An evaluation of World Bank assistance for poverty reduction, health and education: A country assistance evaluation. World Bank Operations Evaluation Department.
- Sen, A. (1999). Development as freedom. Oxford University Press.
- Shirazi, N. S., Mannap, T. A. A., & Ali, M. (2009). Effectiveness of foreign aid and human development. *The Pakistan Development Review*, 48(4), 853-862.
- Tawakkol, L., & Soederberg, S. (2020). The humanitarian-development nexus and the Jordan Compact: Tensions and trajectories in global capitalism. *Journal für Entwicklungspolitik*, 36(4), 129-154.
- United Nations Development Programme. (2025). Human Development Report 2025: A matter of choice: People and possibilities in the age of AI.

United Nations Development Programme. (various years). Human Development Reports: Statistical annexes and rank tables.

United Nations High Commissioner for Refugees. (2025). Jordan fact sheet 2025. UNHCR Operational Data Portal.

World Bank. (2004). Jordan poverty assessment: Main report.

World Bank. (2016). US\$300 million to improve employment opportunities for Jordanians and Syrian refugees.

World Bank. (2024a). Jordan: Country Partnership Framework for the period FY24-FY29.

World Bank. (2024b). Jordan Economic Monitor. World Bank Group.

World Bank. (2026a). World Development Indicators: Jordan country and ODA indicators.

World Bank. (2026b). Jordan Macro Poverty Outlook, April 2026.