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EVALUATION SYNTHESIS OF UNHCR'S CASH BASED INTERVENTIONS IN JORDAN

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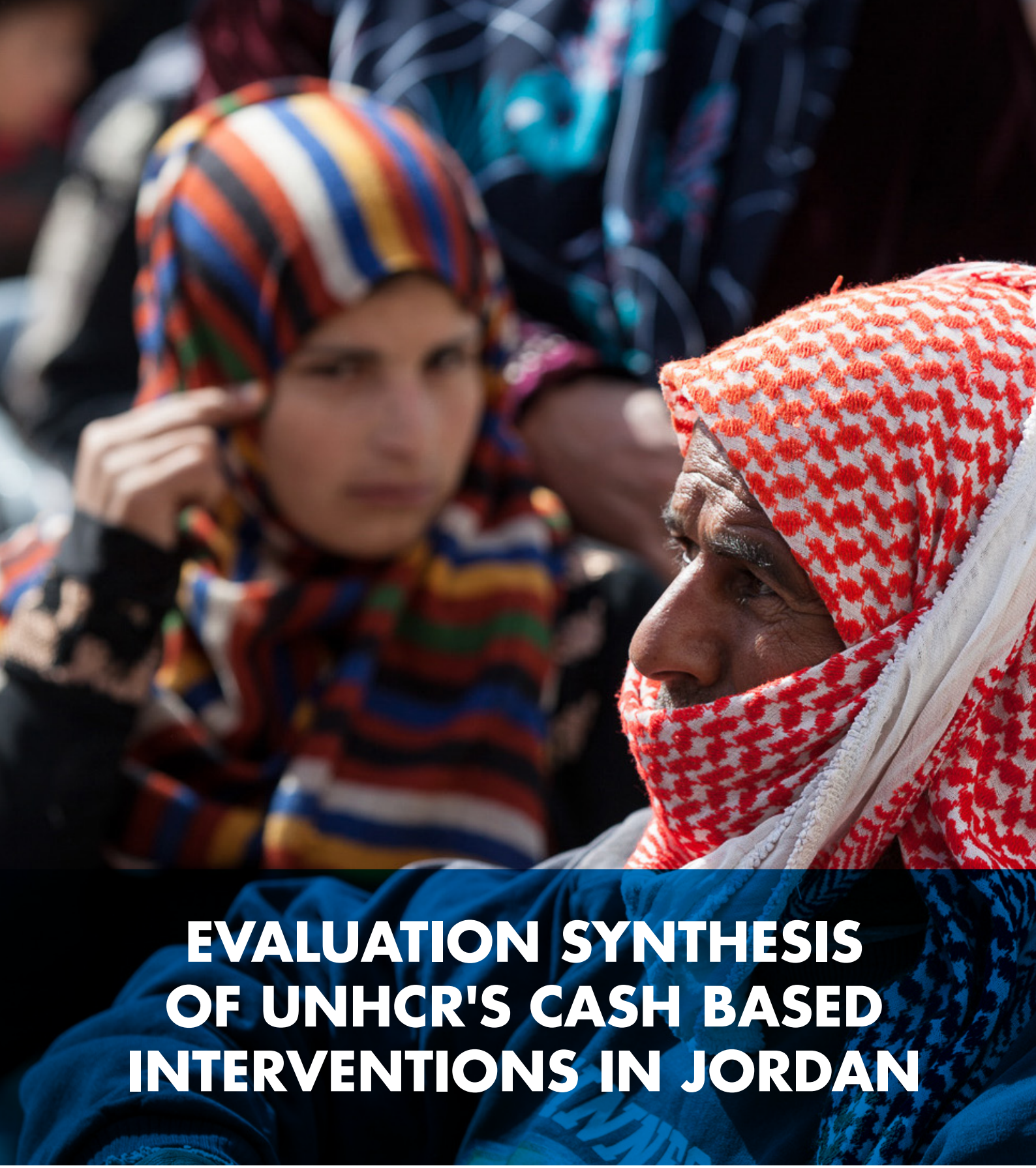

EVALUATION SYNTHESIS OF UNHCR'S CASH BASED INTERVENTIONS IN JORDAN

ACTION AGAINST HUNGER

UNHCR
The UN Refugee Agency

This report was produced for:
The Office of the United Nations High Commissioner for Refugees

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ACRONYMS

ATM	Automated Teller Machine
BNWG	Basic Needs Working Group
BoD	Board of Auditors
CaLP	Cash Learning Partnership
CBIs	Cash-based Interventions
CCF	Common Cash Facility
FSP	Financial Service Provider
GOJ	Government of Jordan
INGOs	International Non-Governmental Organisations
JOD	Jordanian Dinar
MEAL	Monitoring, Evaluation, Accountability and Learning
ODI	Overseas Development Institute
ODK	Open Data Kit
PDM	Post-distribution Monitoring
PWC	PricewaterhouseCoopers
RCM	Refugee Coordination Model
SDGs	Sustainable Development Goals
SMEB	Survival Minimum Expenditure Basket
SOPs	Standard Operating Procedures
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
VAF	Vulnerability Assessment Framework
WFP	World Food Programme
WRG	World Relief Germany

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EXECUTIVE SUMMARY

BACKGROUND OF CBI PROGRAMME IN JORDAN

There is growing evidence that cash assistance represents a highly effective form of aid by providing recipients with the autonomy and dignity to meet their own needs, and is typically a more cost-efficient modality than in-kind aid. In 2015, approximately US$2 billion was spent on humanitarian cash-based programming. In 2016, UNHCR gave nearly US$700 million in cash assistance to 2.5 million people spanning 60 countries. Jordan represented UNHCR's third largest cash operation after Lebanon and Afghanistan. In 2016, UNHCR Jordan's cash-based interventions (CBI) provided a record US$85 million in cash assistance to over 136,000 Syrian refugees in the country.

Underpinning UNHCR Jordan's targeting and delivery of cash assistance is the Basic Needs Approach, and a Vulnerability Assessment Framework (VAF). The VAF provides a basis for UNHCR and partner organisations to target cash assistance to the most vulnerable Syrian refugees. Through the VAF and targeting of most vulnerable refugees, UNHCR has adopted elements of a social protection approach to its cash-based assistance.

On arrival in Jordan, Syrian refugees go through a registration process that entails recording biometric data through iris scanning for everyone above three years of age. A home visit is then conducted to determine their vulnerability based on the VAF. Based on their vulnerability scoring, the most vulnerable refugees are selected for cash assistance. Refugees who are eligible for assistance receive an SMS letting them know when the cash is available.

Refugees can then access their cash assistance directly by scanning their iris at iris-enabled ATMs available in every governorate in Jordan. UNHCR Jordan conducts quarterly/bi-annual post-distribution monitoring (PDM) surveys to monitor the utilisation patterns and effectiveness of the cash assistance, and to assess recipient satisfaction. The findings in turn guide the design and implementation of UNHCR's cash assistance model.

The Common Cash Facility (CCF) is a platform for delivering cash assistance that provides organisations direct and equal access to a common financial service provider (FSP) and payment facility, meaning it is no longer necessary for each agency to establish their own procurement arrangements or open separate bank accounts for recipients. All members of the CCF benefit from the same terms (including low bank fees) and each organisation maintains a separate and direct relationship with the FSP. By the end of 2016, the CCF was used to deliver over 90 percent of the cash assistance given to refugees staying outside camps in Jordan.

OBJECTIVES AND SCOPE OF THE EVALUATION SYNTHESIS

The key objectives of this evaluation synthesis are: to review the operational model chosen to deliver cash to Syrian refugees in Jordan; to process the large volume of data collected; and to identify key themes of change for recipients of UNHCR cash. This evaluation synthesis examines the CBI programme against six key benchmarks, adapted from OECD/DAC criteria and the Core Humanitarian Standards (CHS):

EFFICIENCY Intended as any example demonstrating how the operational model responds to the use of input resources that can maximise scale of outputs and adequate outreach

EFFECTIVENESS	Defined as any evidence demonstrating depth and scale of results in the lives of refugees by considering the CBI programme as causal driver
RELEVANCE	Identified as any operational dimension that further adequate targeting of cash recipients in line with vulnerabilities
COVERAGE	Classified as any operational considerations that link to scale of needs vis-à-vis potential outreach and availability of resources
ACCOUNTABILITY	Reported as any elements defining a strong accountability processes such as feedback loops and complaints mechanisms as part of CBI programme delivery
INNOVATION	Described as any technological and management action that represent a new trend in the sector, with limited comparable examples

The first part of this evaluation synthesis is a consolidation of evidence from a range of reports and studies, aimed at appraising the overall operational dimensions of CBI in Jordan. The second section is a synthesis and analysis of survey data collected during vulnerability assessments (home visits), post-distribution monitoring surveys and the ODI study "A Promise of Tomorrow". The aim of consolidating and analysing this data is to measure the effect the UNHCR CBI programme in Jordan is having on the lives of Syrian refugees, and to statistically prove the strength and direction of the relationships between cash transfers and specific areas of vulnerability.

As such, a theory of change was developed (Figure i) as the basis for validating the effect of cash transfers on terms of short term vulnerabilities (shelter, food and water). By looking at the dataset longitudinally, this report explores the expected medium- and long-term changes cash is predicted to have with regards to: access to and variety of services; generation of income; patterns of expenditure, and ultimately social protection. Though the ability of cash to alleviate short-term needs has been proven both from the ODI and PDM data, multi-causal relationships for medium- and long-term change remained tentative claims requiring investigation through statistical analysis.

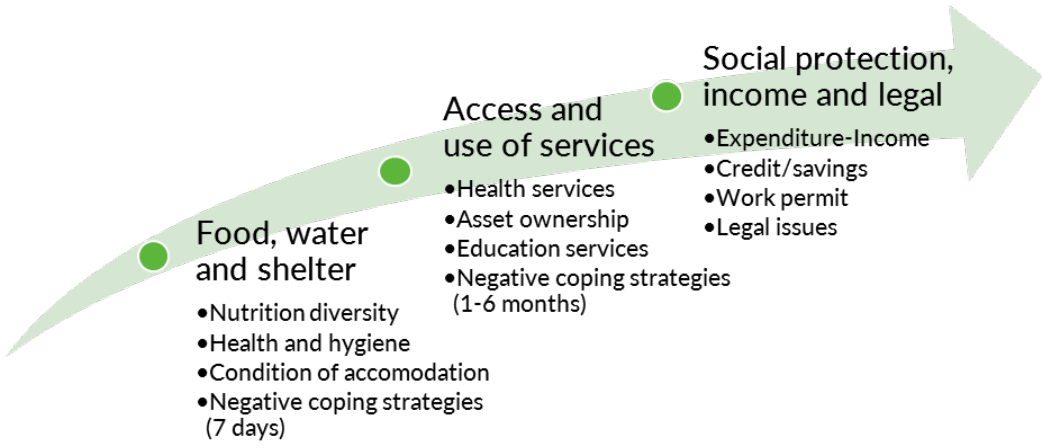


Figure i: Theory of Change model, examining the needs continuum from short- to long-term needs

The theory of change represents the basis from which the key lines of inquiry for statistical analysis were developed. These are organised in sequence, to mirror the theory of change.

METHODOLOGY FOR STATISTICAL ANALYSIS

This synthesis examined three sources of data to better understand the effects and effectiveness of CBI on Syrian refugees in Jordan. The first of these sources was data from five PDM surveys conducted in 2016 and 2017. A random sample representative of the geographical distribution of households is used for each PDM. In 2016, 1,690 families were interviewed and the 2016 winterisation cash assistance PDM added 310 families to the sample. Regarding the first quarter of 2017 (last PDM report available) 554 families were included in the survey.

The second data source was quantitative survey data from the ODI 'A Promise of Tomorrow' report, collected between December 2016 and March 2017. ODI conducted surveys with 2,144 households[1] spread across four governorates (Amman, Irbid, Marfraq and Zarqa), using proportionate multi-stage random sampling. The third data source were responses generated during the vulnerability assessment (home visit), which was used as a baseline for the ODI data. For each of the ODI respondents, the responses from the VAF home visit were sourced and compiled, resulting in 3,120 entries. This was then merged with the ODI dataset (matched for case number) which resulted to give a longitudinal dataset with 5,235 entries, of which over 80 percent can be compared as before and after CBI.

Due to the unique nature of the dataset, quantitative analysis took the following approach: descriptive analysis to illustrate patterns in the dataset using numbers (frequency) and percentage, often drawing comparison between those who are receiving UNHCR cash, and those who are not; longitudinal analysis, which involves looking at how these patterns in the data change over time, and; inferential analysis, which attempts to understand whether the effects of cash are statistically significant at the population level, and how likely it is that a similar cash programme would have similar effect.

RESULTS AND EFFECTS OF CBI PROGRAMME IN JORDAN

In order to demonstrate the extent of validity for the proposed theory of change, a series of lines of inquiry were developed. Their main purpose of these questions is to explore the effectiveness of CBI. Key findings against each of the lines of inquiry are summarised below:

1 How does the provision of UNHCR cash affect the ability of recipients to improve their shelter and living conditions, access to adequate water and sanitation facilities, and ownership of basic items over time?

- Recipients of UNHCR cash assistance are more likely to be living in permanent accommodation
- Recipients of UNHCR cash are more likely to report the standard of their accommodation as acceptable
- Recipients who have access to a latrine, and fewer days without water the previous month are more likely to report their accommodation as acceptable
- UNHCR cash contributes to the ownership of higher value household assets such as fridges, televisions, and washing machines

2 How does the provision of UNHCR cash affect recipients' food security (number of meals per day) and nutritional diversity?

- Recipients of UNHCR cash eat more meals per day on average than those who are not recipients ($p>0.05$)
- Recipients of UNHCR cash are also more likely to consume fruit, eggs and meat, and on average eat a greater number of food groups, with a higher frequency of consumption per week

3 How does the provision of UNHCR cash affect the employment of negative coping

1 In the dataset received 29 of these households were missing information, so removed from the dataset

strategies at seven days (short-term), one month (medium-term), and six months (long-term) at the population level?

- Recipients of UNHCR cash employ short-term coping strategies less frequently than non-recipients (though female headed households were still at an increased risk)
- Recipients of UNHCR cash were less likely to employ the three most common medium-term coping strategies: buying food on credit, taking an exploitative or degrading job, or withdrawing children from education
- Recipients of UNHCR cash were less likely to employ the following long-term coping strategies: sell food vouchers, sell assets, borrow money, buy against credit, deplete savings, irregular work, be unable to pay rent and child labour

4 How does the provision of UNHCR cash affect the overall expenditure patterns of Syrian refugees? Specifically, do the expenditure patterns of recipients (versus non-recipients) evolve over time to favour a higher proportion of financial resources spent in health, education, savings and repaying debt?

- Recipients of UNHCR cash show an increase in total expenditure, and most importantly and increase in the expenditure on health and education. Historically, reported value of debt has been lower with those households who are receiving UNHCR cash

5 How does the provision of UNHCR cash affect access to key services such as health and education?

- UNHCR CBI is not enough to explain whether respondents access health services, though health expenditure is associated with access to services
- UNHCR CBI leads to a nominal (but not statistically significant) increase on health expenditure
- UNHCR cash seems to lead to a reduction in the number of children missing school
- UNHCR CBI leads to a statistically significant increase on education expenditure. Transportation costs are a key driver of education expenditure, along with the number of children missing school

6 Are recipients of UNHCR cash with greater food security, dietary diversity, access to water and improved shelter more likely to accumulate savings, and generate more income than expenditures?

- There is no evidence to suggest that the provision of UNHCR cash contributes to an accumulation of savings
- Respondents with a higher amount of savings have an increased likelihood of depleting their savings as a coping strategy
- Recipients of UNHCR cash are likely to have a higher total income per month. Dietary diversity is also associated with a higher total income, and is itself increased by provision of UNHCR cash
- Recipients of UNHRC cash are likely to generate more income, and to incure higher expenditures. Between 2014 and 2017, there has been a shift towards a positive differential between income and expenditure across households (i.e. families are left with additional funds after all costs are incurred)

7 Are recipients of UNHCR cash who have work permits (and do not have legal issues) likely to generate more income?

- Recipients of UNHCR cash are less likely to earn income in the formal sector, with access to work as a precursor to being less likely to earn income in the formal job market. Income in the formal sector is associated with a reduction in the employment of medium-term coping strategies
- Respondents generating income from assets are less likely to receive UNHCR cash or have a work permit, but they are more likely to reduce their frequency of long-term negative coping strategies

Overall, the hypothesis of cash assistance to address primary needs of recipients seem amply validated whereas the progression towards more complex ones, as proposed in the theory of change, requires further investigation despite some encouraging initial findings.

VALUE FOR MONEY OF CBI PROGRAMME IN JORDAN

The analysis also applies a Value for Money lens by conducting a review of existing global level best practice for cash programming, and by examining select programme documentation (including selected access to a 2017 review conducted by PWC), this synthesis finds that the programme broadly fulfils the four E's of value for money: economy, efficiency, effectiveness, and equity. Some of the key characteristics of the programme which have supported the achievement of these are:

- **Economy:** The delivery of cash using biometric identification through iris-scan technology has been shown to be more economical when compared to 'in-kind' assistance. This was supported by the fact that UNHCR and partner organisations (as part of the common cash facility or CCF) were able to realise economies of scale and negotiate an impressive reduction in bank fees with the financial service provider, which meant that bank fees represent just 1.3 percent of the total cash amount going to beneficiaries. This compares favourably to other contexts where fees can be over five percent.

- **Efficiency:** The delivery of unconditional cash is known to be an efficient means of delivering humanitarian assistance, as it leaves recipients with the autonomy and flexibility to spend cash on their most acute needs. In addition, there is also growing evidence that the cost efficiency of CBI rises when they are delivered through digital payment systems. These have potential for major cost savings compared to manual cash distribution modalities which entail variable costs for the storing and organisation of cash, transport and security. These efficiencies are further emphasised using digital and biometric technologies, which are seen as best practice internationally.

- **Effectiveness:** The proven results of cash on short- and medium-term needs, as shown through the quantitative analysis of this evaluation synthesis, are evidence of the effectiveness of CBI in Jordan. Further inquiry on cost-effectiveness remains necessary, though economic theory suggests cost-effectiveness strongly underpins CBI programming.

- **Equity:** The use of a basic needs approach and the vulnerability assessment framework (VAF) ensure the equitability of the programme. As all UNHCR registered refugees undergo a vulnerability assessment, all members of the Syrian refugee population not living in camps can benefit from UNHCR's cash support based on their exposure to negative coping strategies. The use of biometric registration procedures and biometric technology at ATMs further ensures cash assistance gets to the intended people as possibilities for fraud and other leakages are substantially minimised.

KEY CONCLUSIONS AGAINST EVALUATION BENCHMARKS

In conclusion, the synthesis of existing evidence and statistical analysis allows us to conclude that the CBI programme either fully or partially fulfils all of the key benchmarks considered.

BENCHMARKS	KEY CONCLUSIONS
EFFICIENCY *Fulfilled*	• Use of biometric/digital platform for delivery of cash has ensured efficient delivery of cash at scale • System ensures efficiency through the lack of fraud due to biometric identification • Coordination mechanisms underpinning the CCF allows for a significant reduction in bank fees • Collaborative setup between the VAF and BNWG enable sharing of information and testing of innovative delivery models
EFFECTIVENESS *Fulfilled; partially inconclusive*	• Living conditions: cash assistance has a direct relationship with the perception of improved shelter and access to reliable sources of water • Food security and nutritional status: cash leads to a greater number of meals per day and diet diversity over time • General expenditure and income patterns are increasing faster among recipients • More access and expenditures on educational and health services, though not conclusively • The link between the complex dimensions of livelihood, income generation and socially protected work is less direct and requires further investigation • It has not been possible to confirm the cost-effectiveness of the programme, but the wider literature indicates similar interventions as being cost-effective
RELEVANCE *Fulfilled*	• The existence of a basic needs approach and the overarching VAF linked to monitoring tools that are comprehensive and used for targeting and social protection • The mechanics behind targeting and monitoring multi-sectorial needs could include an ampler spectrum of livelihood needs
COVERAGE *Fulfilled; partially inconclusive*	• The CCF provides a platform for large-scale rollout of cash payments among Syrian refugees living in urban settings but not in camp settings • However, the introduction of mobile wallets as part of the JoMoPay scheme may go some way to expand the access of refugee population to cash assistance • Donor funding remains insufficient to include all eligible and vulnerable groups

ACCOUNTABILITY *Fulfilled*	• The existence of the 'Helpline' mechanism through which Syrian refugees can access information and register complaints helps ensure the programme is accountable to its recipients • The volume of traffic coming through the helpline indicates that refugees are aware of who to call, though how a 'complaint' is defined in both the eyes of recipients and the call system may need to be clarified • A Diversity Mainstreaming Participatory Assessment (AGDM PA) identifies and analyses protection risks of vulnerable groups, and the community support committees (CSCs) • It is important to note this analysis did not seek to test the effectiveness of these accountability mechanisms, or the extent to which they ensured overall accountability to the affected population
INNOVATION *Exceeded*	• Use of biometric iris scan technology means cash reaches its intended beneficiaries, and has been essential in minimising fraud, ensuring collaboration and accountability • Over 90 percent of all recipients are satisfied with this modality of delivery demonstrating contextual readiness to drive technological change within cash programmes

KEY RECOMMENDATIONS

This evaluation synthesis comes at an important time for UNHCR and the CBI programme in Jordan, and as such makes a series of recommendations to UNHCR at the country and global level to help inform the evolution of both the Jordan programme itself, and contextually similar programmes. The following set of recommendations reflect the key findings and conclusions from this evaluation synthesis, and are aimed at addressing the following issues:

A Primary needs are highly inter-related and cash assistance addresses them simultaneously. For instance, cash enhances living conditions linked to access to water and latrines. Additionally, to triangulate subjective and objective evidence, future evaluations require a balance between technical benchmarks that can be rapidly appraised and self-reported values that better act as feedback mechanisms. This triangulation requires the definition of how sector-specific indicators determine multi-directional change and how they are aligned to perception-based acceptability.

B There will always be specific variables that experience significant effects in an unexpected way, for example from the datasets total debt amounts experienced noticeable shifts that were not predicted before the implementation of the cash intervention. It remains important to focus on all the determinants for a given variable, and to unpack its definition. This may mean the introduction of new variables which are missing at the outset.

SECTOR-SPECIFIC RECOMMENDATIONS RELATED TO THE VAF

• Adjust various aspects of the VAF questionnaire, namely questions related to livelihoods, shelter, education, health and nutrition.

• Conduct further analysis and cost-effectiveness studies to better understand some of the key relationships between UNHCR cash, income, debt and nutrition, the interdependencies between these, and their contribution towards social protection and livelihood improvements.

• Introduce variables for collecting key information which is presently missing from the home visit survey, namely livelihood patterns, a more detailed understanding on formal and informal work now that the work permit has been introduced, and exploration of the ownership of productive assets.

C The theory of change underpinning any intervention is inherently limited without regular reviews. The findings are strongly pointing out there are statistical representative relationships between primary needs and cash assistance, but more sophisticated ones like income generation are less clear. Therefore, it is advisable to keep exploring new assumptions based on the evolving needs of recipients and linked to contextual understanding. Emerging employment needs of populations receiving cash assistance for a long period of time are important considerations to keep the intervention as relevant as possible and to identify exit strategies for the benefit of the most vulnerable households.

D The scale of evidence informing a cash-programme is not a sufficient condition to make it effective, if its use remains limited. Effectiveness can be better captured by sharpening the data collection process based on a constant re-defining of priority needs through strengthened accountability mechanisms and reviews of sector-related benchmarks. In addition, it is advisable to use data in a way to encourage cross-functionality by looking at how cost structures and resource allocation of cash programmes links to multiple effect sizes over time.

MONITORING AND EVALUATION RECOMMENDATIONS FOR UNHCR JORDAN

- **Process:** Minimise the overlap between the PDM and home visit data, and instead utilising the PDM survey as a tool for assessing the impact of cash on recipients, and as a means for ensuring quality and accountability, and uncovering protection issues should they arise.
- **Process:** Ensure that the evolution of the home visit survey incorporates questions which recognise the evolving nature of needs and behaviours of refugees as they settle down in urban centres across Jordan.
- **Strategic:** Conduct a cost-benefit analysis to explore further the cost-effectiveness of the CBI programme.

E The example from the CBI in Jordan demonstrates the need to ensure that relevant evaluation work informs global approaches and benchmarks in both social protection, accountability and cost effectiveness. The wealth of information both at the process and result levels from a cash programme lends itself to advise other similar ones more easily given similar cost-structures and the nature of inputs. It remains essential to embed impact-study focused design into programming, with a well-defined control-group so that causality can be proven.

MONITORING AND EVALUATION RECOMMENDATIONS FOR UNHCR AT ORGANISATION LEVEL

- **Process:** Replicate the home visit survey tool across cash-based programmes, utilising this best practice of a comprehensive and relevant multi-sectorial monitoring mechanism.
- **Process:** Ensure a balance between subjective and objective measures of recipients' experiences in any survey tool.
- **Process:** Understand vulnerability from an employment and productivity perspective.
- **Strategic:** Explore qualitative triangulation outside of traditional survey tools.
- **Strategic:** Set up impact studies that allow for rigorous testing and stronger causal claims in large-scale shock settings.

1 INTRODUCTION

1.1 OBJECTIVES AND SCOPE OF THE EVALUATION SYNTHESIS

In 2015, approximately US$2 billion was spent on humanitarian cash-based programming worldwide. That same year, UNHCR distributed US$53 million in cash-based interventions (CBI) to Syrian refugees living in Jordan.[2] By 2016, Jordan represented UNHCR's third largest cash operation, providing US$85 million in cash assistance to over 136,000 Syrian refugees in the country.

There is a large and growing body of evidence on UNHCR Jordan's CBI programme. The key objectives of this evaluation synthesis are: to review the operational model chosen to deliver cash to Syrian refugees in Jordan; to process the large volume of data collected; and to identify key themes of change for recipients of UNHCR cash. Given the size of CBI in Jordan and the availability of evidence, the scope of this evaluation synthesis includes:

1 Describing contextual and operational factors influencing results in Jordan, in order to inform optimisation of cash-based interventions in other countries

2 Measuring the effects of the CBI programme on the lives of refugees, by considering primary and secondary needs

3 Producing recommendations in relation to management, technical and MEAL aspects of CBI in Jordan based on a range of reports and primary data

This evaluation synthesis is framed around six key benchmarks, which provide a common thread for our appraisal of the CBI programme, and are highlighted throughout the report. The benchmarks considered for the study are an adaptation of OECD/DAC criteria and the Core Humanitarian Standards (CHS), with greater focus on coverage and innovation given the nature of the intervention:

EFFICIENCY	Intended as any example demonstrating how the operational model responds to the use of input resources that can maximise scale of outputs and adequate outreach
EFFECTIVENESS	Defined as any evidence demonstrating depth and scale of results in the lives of refugees by considering the CBI programme as causal driver
RELEVANCE	Identified as any operational dimension that further adequate targeting of cash recipients in line with vulnerabilities
COVERAGE	Classified as any operational considerations that link to scale of needs vis-à-vis potential outreach and availability of resources
ACCOUNTABILITY	Reported as any elements defining a strong accountability processes such as feedback loops and complaints mechanisms as part of CBI programme delivery
INNOVATION	Described as any technological and management action that represent a new trend in the sector, with limited comparable examples

2 UNHCR cash assistance: Improving refugee lives and supporting local economies, UNHCR

The first part of this synthesis is a consolidation of critical evidence from a range of reports and studies, aimed at appraising the overall operational dimension of CBI in Jordan. These sections describe strengths and gaps in the targeting, monitoring and delivery frameworks underpinning CBI in Jordan, as well as contextual variables. The latter part of this synthesis focuses on survey data collected during vulnerability assessments (home visits), post-distribution monitoring surveys and data collected during the ODI study "A Promise of Tomorrow".[3] The aim of consolidating and analysing this data is to measure the effect the UNHCR CBI programme in Jordan is having on the lives of Syrian refugees, and to statistically prove the strength and direction of the relationships between cash transfers and specific areas of vulnerability.

1.2 THEORY OF CHANGE TO MEASURE RESULTS AND EFFECTS

A theory of change (Figure 1) has been proposed as the basis for testing and proving the immediate effect of cash transfers in terms of primary needs (food, water and shelter) and, by looking at the dataset longitudinally, to explore the long-term changes we expect to see with regards to: access to and variety of services; generation of income; patterns of expenditure, and ultimately social protection. Though the effect of cash on an alleviation of short-term needs has previously been proven both from the ODI and PDM data, greater access to resources/services and more sophisticated multi-causal relationships for long-term changes remained tentative claims, which required exploration with statistical analysis.

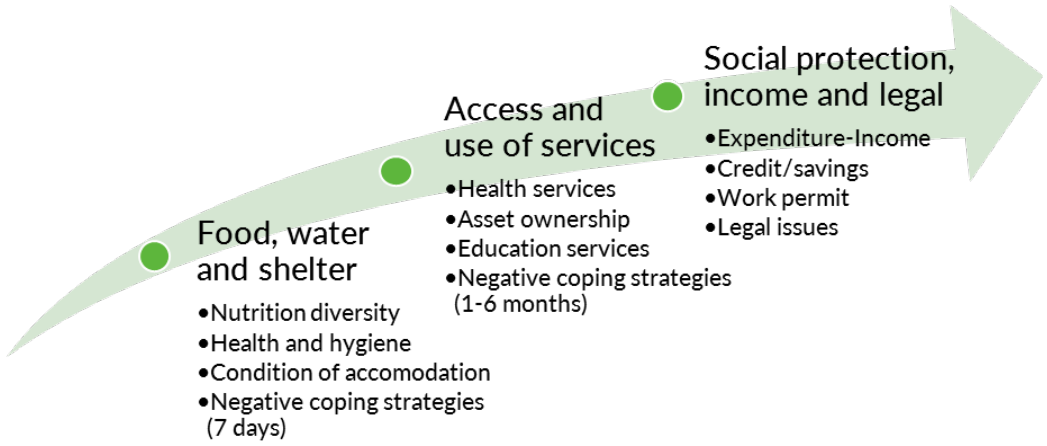


Figure 1: Theory of Change model, examining the needs continuum from short- to long-term needs

3 The ODI study aimed to find out what effects the United Nations High Commissioner for Refugees (UNHCR) and United Nations Children's Fund (UNICEF) cash assistance has had on recipients' lives. It had the following objectives: (1) to evaluate recipient spending patterns and their effect on family well-being; (2) to evaluate the efficiency, effectiveness and accountability of cash assistance provided by UNHCR and the Child Cash Grant (CCG) provided by the UNICEF; and (3) to evaluate the complementarity of (as well as gaps in) programming by UNICEF, UNHCR and the World Food Programme (WFP) in targeting the most vulnerable groups.

The proposed theory of change sets the overarching logic for all the information consolidated in the various sections of the report pertaining to the analysis of homevisit and ODI datasets, as well as the PDM reports and other relevant qualitative sources. It represents a critical basis from which the key lines of inquiry for statistical analysis were developed in sequential order to mirror the theory of change as much as possible. The key lines of inquiry were:

1 How does the provision of UNHCR cash affect the ability of recipients to improve their shelter and living conditions, access to adequate water and sanitation facilities, and ownership of basic items over time?

2 How does the provision of UNHCR cash affect recipients' food security (number of meals per day) and nutritional diversity?

3 How does the provision of UNHCR cash affect the employment of negative coping strategies at seven days (short-term), one month (medium-term), and six months (long-term) at the population level?

4 How does the provision of UNHCR cash affect the overall expenditure patterns of Syrian refugees? Specifically, do the expenditure patterns of recipients (versus non-recipients) evolve over time to favour a higher proportion of financial resources spent in health, education, savings and repaying debt?

5 How does the provision of UNHCR cash affect access to key services such as health and education?

6 Are recipients of UNHCR cash with greater food security, dietary diversity, access to water and improved shelter more likely to accumulate savings, and generate more income than expenditures?

7 Are recipients of UNHCR cash who have a work permit (and do not have legal issues) likely to generate more income?

2 OPERATIONAL CONTEXT

2.1 CASH-BASED INTERVENTIONS

There is growing evidence that cash assistance represents a highly effective form of aid since it provides greater choice and dignity to affected populations and is typically a more cost-efficient modality than in-kind aid. In 2015, approximately US$2 billion was spent on humanitarian cash-based programming, a relatively small amount considering that total international humanitarian assistance was estimated at US$25.7 billion in that year.[4] The Grand Bargain launched at the World Humanitarian Summit called for higher amounts of cash assistance where possible and appropriate, and investment in new delivery models. In respect to refugees specifically, the New York Declaration for Refugees and Migrants, unanimously adopted by UN member states in September 2016, put emphasis on cash transfers to meet both immediate humanitarian needs and longer-term development needs.

2.2 UNHCR CASH-BASED INTERVENTIONS IN JORDAN

In 2016, UNHCR gave nearly US$700 million in cash assistance to 2.5 million people spanning 60 countries. Jordan represented UNHCR's third largest cash operation after Lebanon and Afghanistan.[5] In 2016, UNHCR Jordan's cash-based interventions (CBI) provided a record US$85 million in cash assistance to over 136,000 Syrian refugees in the country. This was a two-thirds (59 percent) increase on the US$53 million distributed in 2015.[6]

A large proportion of cash assistance is provided monthly. In 2016 UNHCR Jordan gave between 80-155 Jordanian Dinar (JOD) per month (depending on household size) to refugee households. This amount enables 80 percent of a family's survival needs to be met. An important feature of the cash support is its unconditional and multipurpose nature. Recipients have the flexibility to choose what the cash is spent on to meet a range of urgent needs. This brings efficiency gains as recipients can spend the cash assistance on what they need most.

Underpinning UNHCR Jordan's delivery of cash assistance is a Vulnerability Assessment Framework (VAF[7]) that provides a basis for UNHCR and partner organisations to target cash assistance to the most vulnerable Syrian refugees. Within the framework, there are common indicators of vulnerability that have been established to facilitate the monitoring of vulnerability, and targeting of assistance on the basis of this. Data on Syrian refugee households is collected against key indicators to give a hierarchy of vulnerability profiles (severe vulnerability, high vulnerability, moderate vulnerability and low vulnerability), and allows UNHCR to target assistance to the most vulnerable households.

Through the VAF and targeting of most vulnerable refugees, UNHCR has adopted

4 Global Humanitarian Assistance Report 2017, Development Initiatives, 2017.
5 Cash Facts UNHCR 2016, UNHCR.
6 UNHCR cash assistance: Improving refugee lives and supporting local economies, UNHCR.
7 For more information, visit the Syria Regional Refugee Response: Inter-agency Information Sharing Portal

elements of a social protection approach to its cash-based assistance. Within the VAF, protection is incorporated by proxy through non-sector specific or universal indicators. This covers predicted welfare as a proxy for economic vulnerability, dependency ratio, documentation status and coping strategies where the VAF questionnaire reveals whether most severe coping strategies are being deployed. According to a VAF guidance note, disability is to be added to the universal indicators in 2017.

2.3 UNHCR MODEL FOR CASH-BASED INTERVENTIONS

On arrival in Jordan, Syrian refugees go through a registration process that entails recording biometric data through iris scanning for everyone above three years of age. A home visit is then conducted to determine their vulnerability based on the VAF. Based on their vulnerability scoring, the most vulnerable refugees are selected for cash assistance. Refugees who are eligible for assistance receive an SMS letting them know when the cash is available.

Refugees can then access their cash assistance directly by scanning their iris at iris-enabled ATMs available in every governorate in Jordan. There is no need for a bank card or PIN, as the ATMs can authenticate recipients by linking to the biometric registration data collected by UNHCR Jordan through a secure network connection (Figure 2). The use of this technology by UNHCR Jordan illustrates an innovation in delivery of cash transfers at scale, especially in relation to fraud and lost cases.

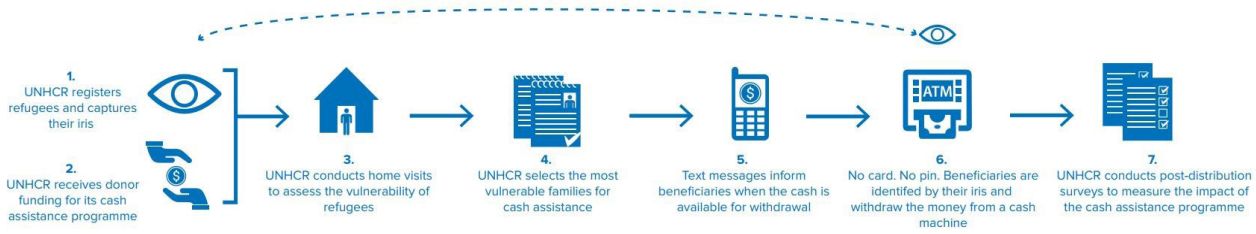


Figure 2: UNHCR's model for providing cash assistance to Syrian refugees in Jordan, 2016[8]

UNHCR Jordan conducts quarterly/ bi-annual post-distribution monitoring (PDM) surveys to monitor the utilisation patterns and effectiveness of the cash assistance, and to assess recipient satisfaction. The findings in turn guide the design and implementation of UNHCR's cash assistance model. In 2016, the main method of cash distribution was via iris scan identification at the ATM point, although ATM cards were also used for those unable to use the biometric technology. Most PDM respondents confirmed that they are satisfied with how money is disbursed (95.5 percent in 2016 and 92 percent in 2017 Q1) (Figure 3).

PDMs from 2016 showed that 95 percent of the respondents received a text message to notify them that cash is available, as planned. However, challenges at the ATM points and with the iris scan continued to affect a considerable amount of the respondents. Indeed, recipients who were not satisfied with the service (8 percent in 2017 Q1) mentioned they had to make several attempts to scan their iris (stated by 68 percent in 2016 and 40 percent in the first quarter of 2017).

8 UNHCR cash assistance: Improving refugee lives and supporting local economies, UNHCR

Several enabling factors supported the adoption of this **innovative** digital, biometric cash delivery model in Jordan. These included: a functioning financial services sector; good communications, technology and banking infrastructure; and pre-existing biometric technology that provided a sound basis for UNHCR Jordan to develop **innovative** partnerships with the private sector.

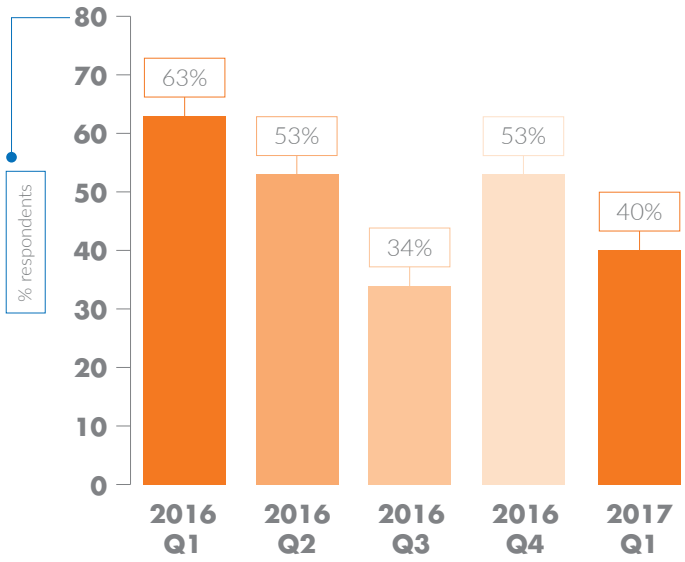


Figure 3: Unsatisfied respondents reporting challenges with iris scan

2.4 UNHCR'S MULTI-AGENCY MODEL

2.4.1 THE COMMON CASH FACILITY

Through a Common Cash Facility (CCF) launched in August 2016, UNHCR Jordan has adopted an **innovative**, collaborative approach for delivering cash assistance to registered refugees living outside camps. The CCF is a platform for delivering cash assistance that provides organisations direct and equal access to a common financial service provider (FSP) and payment facility, meaning it is no longer necessary for each agency to establish their own procurement arrangements or open separate bank accounts for recipients. All members of the CCF benefit from the same terms and conditions and each organisation maintains a separate and direct relationship with the FSP.

By the end of 2016, six organisations were providing cash assistance through the CCF and in that year, it was used to deliver over 90 percent of the cash assistance given to refugees staying outside camps in Jordan.[9] A small percentage of this was delivered to people in transitional or emergency shelter. The agencies which have not joined the CCF adopt different targeting approaches to UNHCR Jordan and have smaller cash transfer caseloads. The number of CCF members has since grown to ten. These include two UN agencies, UNHCR and UNICEF, seven Jordanian municipalities, and eight other humanitarian organisations, namely: the German Red Cross, World Relief Germany (WRG), World Vision, Medair, Première Urgence Internationale, Action Contre la Faim (ACF), Nippon International Cooperation for Community Development, and GIZ.

This multi-stakeholder approach has led to important **efficiency** gains, since CCF members have been able to negotiate much lower transaction fees with the FSP by pooling their funds and realising economies of scale. The CCF also represents a functioning example of public-private partnership between CCF members, the FSP (the Cairo Amman Bank) and a biometric company (IrisGuard). The biometric registration system allows refugees to access their cash assistance through iris-enabled ATMs. After scanning their iris, refugees see a digital wallet indicating the amount allocated by each agency, where applicable.

9 The Common Cash Facility: Partnering for better cash assistance to refugees in Jordan, UNHCR, April 2017.

In the Cash Learning Partnership (CaLP) review, the CCF inter-agency payment system is considered as a stable caseload which provides large-scale multiple or single cash payments, but can also accommodate one-off interventions, such as cash payments for winterisation, urgent cash or cash for health. The CCF can be used for Jordanian recipients through ATM prepaid card services. The banking model is not currently applicable to camp settings due to lack of bank branches and legal requirements, hence limiting its **coverage** potential. Despite these restrictions, the model could be expanded to other population groups in other contexts globally, provided that a regulated FSP and a reliable recipient database are in place.

The CCF is a compelling example of partnership in cash-based interventions, and the approach is being tested in Jordan[10] with the intention of identifying a set of universal requirements for procuring cash transfer arrangements which arepredictable and accessible to all humanitarian agencies. One factor enabling the use of CCF is the ability to secure umbrella contracts with agencies accessing the same FSP channel for multiple payments. In addition, the established database of the recipient population strengthens the predictability of the system and accelerates the spread of biometrics technology. Yet to maximise **coverage** and **relevance**, it is important to imagine a model that also addresses refugees living in camps and to keep promoting a coordinated assistance approach to maximise learning about gains beyond **efficient** reception of cash. To that end UNHCR are in the process of developing such a tool based on the HIES survey which is conducted by the consultancy firm FAFO in the camps.

2.4.2 INTER-AGENCY COORDINATION

In addition to the CCF, the targeting and delivery of cash in the CBI programme relies on multiple layers of coordination. This represents another element of **efficiency** for the programme, given that inter-agency dialogue boosts harmonisation in assessment and delivery. Firstly, the coordination and uptake of the VAF (an inter-agency governance framework) is managed by an Advisory Board, whose role is designed to provide strategic and technical guidance by ensuring representation of multiple stakeholder interests in the application of the VAF. The Advisory Board is composed by five INGOs and four UN agencies, and provides oversight during the execution of the assessment and technical support when reviewing welfare models, baseline/ monitoring results and contextual shifts. The board also liaises with WFP in view of the scale of its operations in Jordan, where approximately 500,000 Syrian refugees benefit from its electronic voucher programme.[11]

A second layer of coordination relates to the Basic Needs Working Group (BNWG), which plays a major coordination function for the targeting and delivery of CBI. Regular monthly meetings provide a platform for all implementing agencies to discuss key issues affecting the management of information, standard operating procedures for coordinated needs assessment, and delivery of additional funds (e.g. winterisation). The latest minutes (Sep-Nov 2017) indicate the essential role that the BNWG has in collecting and processing information to assess contextual variables (e.g. market survey to assess the effect of cash on supply, demand and pricing of goods), to sharpen the delivery model (e.g. graduation oriented to income generation) and to outline the general trends of funds and their utilisation.

The third key layer of coordination links to inter-agency governance mechanisms for engagement with humanitarian partners and the financial service provider. In this case the establishment of a Steering Committee co-chaired by UNHCR Jordan and UNICEF focuses on needs identification, technical guidelines and planning for the development of the CCF. In addition, a coordination linkage with the BNWG boosts the opportunity to directly

10 UNHCR Lebanon and cash partners use a common ATM card approach to distribute cash instead of the IRIS scan modalities adopted in Jordan

11 WFP Jordan country brief, WFP, September 2017.

disseminate information flows from the CCF and to ensure accurate data management. Levels of coordination have also taken place with the Protection and Shelter working groups, which are at different stages of discussion regarding the use of cash transfers to reach sector objectives.

2.5 PROFILE OF SYRIAN REFUGEES IN JORDAN

As of November 2017, there were over 650,000 UNHCR Jordan registered Syrian refugees in Jordan,[12] the equivalent of 7 percent of the country's population,[13] a great case of **coverage** needs that the CBI seeks to address. A small majority of the refugee population is female, although for ages 0 to 17 years (Figure 4), males outnumber females. Most (93 percent) have been registered using biometric technology and the population is compelled to register since it is a condition to receive access to government services, documents and cash assistance.[14]

The remaining 7 percent are awaiting biometric registration or are too young to be registered using iris-scanning. Average household size stands at around four, though the largest share of refugees is in households that have five or more people.[15] The age composition of Syrian refugees is very young. Half of the refugee population is under the age of 18 (51 percent), indicating investments in schooling and healthcare are particularly important.

More than three-quarters of Syrian refugees reside outside camp settings (79 percent). The largest numbers are in the northern governorates of the country – Amman (28 percent), Irbid (21 percent) and Mafraq (12 percent). Together the three governorates host nearly two thirds of the total Syrian refugee population in Jordan (61 percent). There are three refugee camps housing only Syrian refugees: Azraq camp, the Emirati Jordanian Camp, and the largest refugee camp Zaatari, hosting 79,000 Syrian refugees[16] (Figure 5).

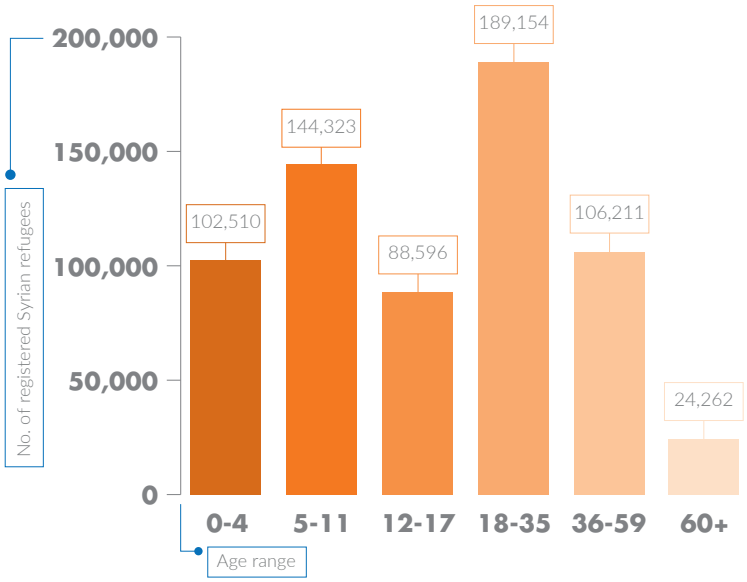


Figure 4: Age composition of UNHCR registered Syrian refugee population in Jordan, November 2017[17]

12 Syria Regional Refugee Response Inter-Agency Information Sharing Portal, 27 November 2017.
13 General Population and Housing Census 2015 report, GOJ, February 2016.
14 Registered Syrians in Jordan, UNHCR, 15 November 2017.
15 The welfare of Syrian refugees: Evidence from Jordan and Lebanon, Verme et al., 2016.
16 The Common Cash Facility: Partnering for better cash assistance to refugees in Jordan, UNHCR, April 2017.
17 General Population and Housing Census 2015 report, GOJ, February 2016.

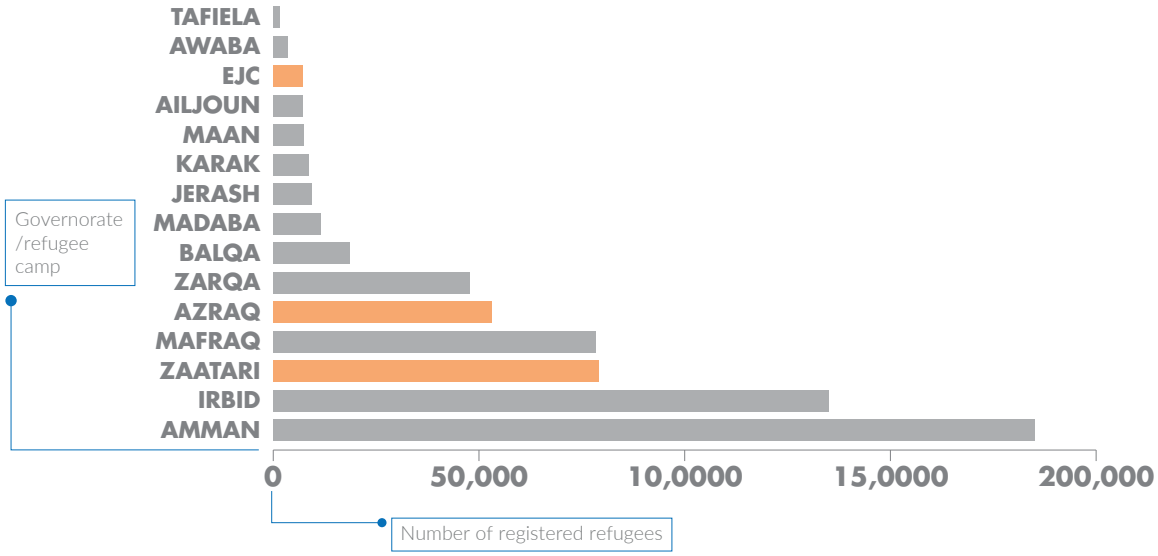


Figure 5: Distribution of UNHCR registered Syrian refugee population in Jordan, by governorate/refugee camp. Note: The bars in orange represent refugee camps.

According to "The welfare of Syrian refugees: evidence from Jordan and Lebanon", in reference to the Jordanian poverty line of 68 JOD[18]/capita/month (established by the Government of Jordan in 2010 based on the Jordanian population), an estimated 69 percent of Syrian refugees in Jordan are poor.[19] The overall poverty rate masks notable sub-national differences. The Tafilah governorate has the highest poverty rate (85 percent) while Amman is the governorate registering the lowest rate of poverty (59 percent). Household size and the share of children in a household are important predictors of poverty with rates of poverty rising as this increase. Poverty is highest for the age group 35–49, and Syrian refugees who came from the Aleppo and Damascus governorates and went to Tafilah are among the poorest. Refugees who entered Jordan in 2012 and 2013 at the peak of the crisis experience the highest poverty rates.

The Syrian refugee population exhibits a high degree of vulnerability despite its educational level. According to one study, only one in ten are non-poor and expected to stay non-poor in the near future.[20] Syrian refugees face several specific needs, for example 7.5 percent or 49,000 have a serious medical condition. In addition, disability applies to 20,000 Syrian refugees (3.1 percent) roughly the same number who are single parents.[21] About 84 percent of Syrian refugees in Jordan have primary education and 11 percent are educated at secondary school level. A high proportion of Syrians aged 15-24 have completed secondary education indicating the progress made by Syria on educational attainment in the years preceding the crisis. However, education and human capital indicators are likely to regress given that more than 100,000 school-aged Syrian children in Jordan were not enrolled at a public school in 2014/15.[22]

Prior to 2016, employment prospects were bleak for Syrian refugees arriving in Jordan because of tight restrictions on access to formal employment and differences in structure between the labour markets in Syria and Jordan. Consequently, Syrians concentrated in the informal economy and faced not only precarious immediate livelihood conditions coupled with risks of exploitation without adequate social

18 Jordan Refugee Response, VAF Baseline Survey, 2016
19 This rises to more than 80 percent if the poverty line for Jordan, a middle-income country, is adopted.
20 Registered Syrians in Jordan, UNHCR, 15 November 2017.
21 General Population and Housing Census 2015 report, GOJ, February 2016.
22 Registered Syrians in Jordan, UNHCR, 15 November 2017.

protection nets, but longer-term developmental challenges as their skills eroded. A loosening of labour market regulations since 2016 has improved employment prospects for Syrian refugees to some degree (see section on recent contextual changes).

On marital status, over 60 percent of the Syrian refugee population are single and have not married. This is higher than the Syrian pre-crisis population and may reflect the relatively young age of refugees and the costs associated with marriage. A higher proportion of female refugees are married, and they marry younger than their male counterparts.[23] Regarding religion and ethnicity, Syrian refugees are Arab Muslims predominantly following Sunni Islam, with a small number of Christians.

2.6 RECENT CONTEXTUAL CHANGES: WORK PERMIT SYSTEM

Nearly half of Syrian refugees in Jordan are of working age (45 percent[24]) and the majority stay outside refugee camp settings[25], but prior to 2016 they did not have the legal right to work in Jordan. Most Syrian workers operated in the informal economy characterised by low wages, long hours and poor working conditions. Following the Syria Donor Conference in February 2016, the Government of Jordan (GOJ) committed to formalising the work of Syrian refugees and providing 200,000 work opportunities linked to World Bank payment indicators for the Syrian refugee population by the end of 2018, in what became known as the Jordan Compact.

In March 2016, the GOJ through the Ministry of Labour gave Syrian refugees the right to work in specific sectors of the economy under a quota system, subject to having a guarantor and payment of a fee. The sectors that Syrians could work in covered agriculture, construction, manufacturing, food and beverage, and cleaning and domestic work. A series of measures were taken by the GOJ to facilitate the issuance of work permits, including waiving permit fees and easing requirements for employers and Syrian workers (Figure 6). In sectors like agriculture where the demand for labour is seasonally-driven, Syrian workers were given some flexibility such that they were not tied to a specific employer.

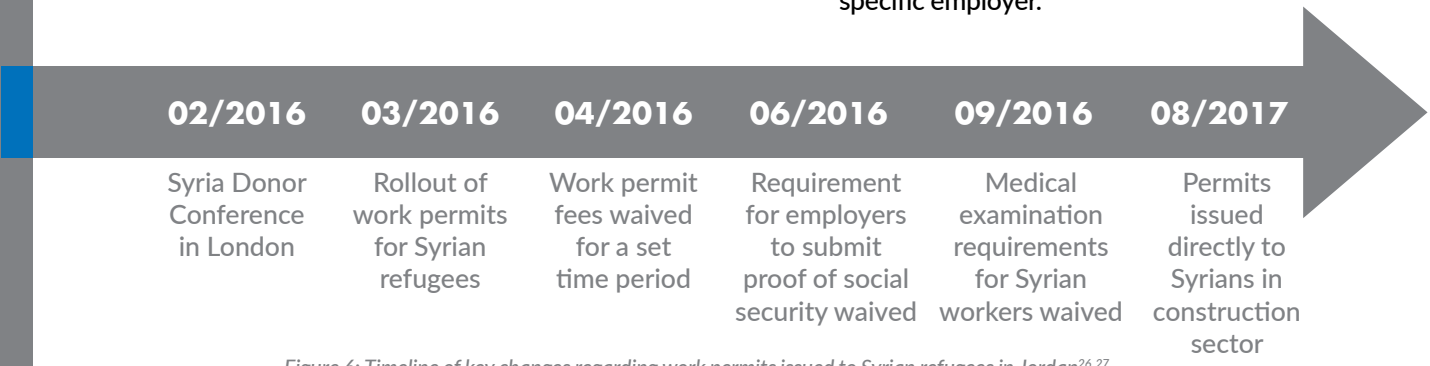


Figure 6: Timeline of key changes regarding work permits issued to Syrian refugees in Jordan[26] [27]

23 UNHCR Lebanon and cash partners use a common ATM card approach to distribute cash instead of the iris scan modalities adopted in Jordan

24 The working age population comprises those aged between 18-59.

25 The Common Cash Facility: Partnering for better cash assistance to refugees in Jordan, UNHCR, April 2017.

26 Work permits and employment of Syrian refugees in Jordan. Towards formalising the work of Syrian refugees, ILO, 2017

27 The work permit initiative for Syrian refugees in Jordan: Implications for policy and practice, Kelberer, February 2017.

These reforms have consolidated a shift in approach to the refugee situation in Jordan that sees Syrian refugees afforded the chance to contribute to Jordan's economic development. As of end of 2017, 70,000 work permits had been issued to Syrians in Jordan, mostly men, up from around 3,000 in December 2015.[28] The majority of formal work opportunities established have been for unskilled work in agriculture and manufacturing with several sectors remaining off limits to Syrian refugees, among them teaching, hairdressing, clerical work and medical occupations.

Syrian women in particular are not taking up work permits on account of family-related obstacles around child care, household responsibilities and family objections. There are also impediments stemming from the structure of the labour market that mean a lack of suitable work opportunities. Almost 60 percent of Syrians with work permits earn between 190-399 JOD per month.[29] At the time of writing, the minimum wages were 190 JOD or 220 JOD for non-Jordanian and Jordanian workers respectively. There is evidence indicating that social capital, referring to peoples' connections and social networks, has supported some Syrians to obtain a permit through their contacts in Jordan.[30]

In August 2017, Jordanian trade unions began issuing the first non-employer- and non-position-specific permits directly to Syrian refugees in the construction sector, removing the need for a guarantor. Under an agreement with the Ministry of Labour, trade unions can issue up to 10,000 of these renewable one-year permits annually. In the same month, Jordan's first job centre for Syrian refugees was established in Zaatari refugee camp to facilitate access to formal work opportunities across Jordan. Under the agreement, refugees who have work permits are allowed to leave the camp for a set period of time.

28 Ministry of Labour's procedures dealing with Syrian Crisis in the Labour Market, Yacoub, 2017.
29 Work permits and employment of Syrian refugees in Jordan. Towards formalising the work of Syrian refugees, ILO, 2017.
30 A promise of tomorrow: The effects of UNHCR and UNICEF cash assistance on Syrian refugees in Jordan, ODI, 2017.

3 TARGETING IN THE CBI PROGRAMME

3.1 THE BASIC NEEDS APPROACH AND VULNERABILITY ASSESSMENT FRAMEWORK

3.1.1 THE BASIC NEEDS APPROACH

The basic needs approach is defined by UNHCR Jordan as a way to enable refugees, based on their socio-economic vulnerabilities, to meet their basic needs through receiving the means to survive and access to services. UNHCR Jordan facilitates the delivery of an immediate safety net which is an integral part of the protection strategy that puts the refugee at the centre of one coordinated and standardised package, in the case of Jordan, a multi-purpose cash grant. The CBI programme applies a holistic approach, which addresses multiple dimensions (Figure 7).

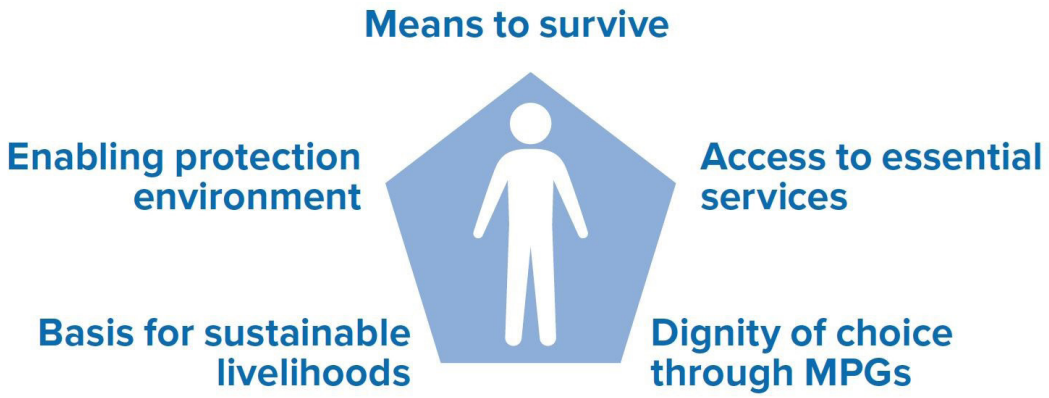


Figure 7: Five dimensions of the basic needs approach[31]

The basic needs approach addresses five dimensions (Figure 7) which are defined through: identity management, multi-sectorial assessments, response analysis, delivery of assistance, referrals, and MEAL of affected groups. CBI represents an end-to-end solution where a comprehensive basic needs assessment links to targeting, implementation and accountability mechanisms, which increases the relevance of the intervention. The delivery model responds to an economic vulnerability analysis, which is a function of the minimum expenditure basket (MEB) that a refugee needs to meet costs for food, shelter and basic household items (see Figure 8 for the latest values).

31 Basic Needs Approach in the Refugee Response, UNHCR, April 2017.

THE MINIMUM EXPENDITURE BASKET (2017)							
HOUSEHOLD SIZE	1	2	3	4	5	6	7
AMOUNT (JOD)	156	235	315	399	456	514	583
THE SURVIVAL MINIMUM EXPENDITURE BASKET (2017)							
HOUSEHOLD SIZE	1	2	3	4	5	6	7
AMOUNT (JOD)	125	162	197	241	263	281	311

Figure 8: Minimum Expenditure Basket and Survival Minimum Expenditure Basket amounts by household size (2017)[32]

Eligibility is a function of predicted welfare linked to the VAF and the Jordanian poverty line. Once an eligible family has been identified, the Survival Minimum Expenditure Basket (SMEB) considering essential needs and family size is used to determine the value of cash assistance for CBI. The cash value would range from 125 JOD for single-headed households to an upper ceiling of 311 JOD, which is paid to families of seven people or more.

The Refugee Coordination Model (RCM) is the framework for coordinating and delivering protection and assistance in refugee operations. The RCM is applicable in all refugee situations, including when refugee and IDP response exist simultaneously, and is adapted according to the phases of the response. In this case it also embeds a basic needs approach as a multi-sector function that engages with and complements the other technical sectors coordinated by partners and the government. The Inter-Agency Refugee Response Plan reflects well the basic needs approach and cash considerations.

As discussed before, the BNWG is the coordination body for the approach in Jordan and its role in reviewing it goes along the provision of key figures about life-saving basic needs support. Its role is key to the intervention and has a different weight given it is a rare occurrence across similar CBIs.

The evaluation team deems the BNWG as a driver of efficiency because the coordination mechanism enables the generation and sharing of multi-sectorial information through home visits, which is critical to steer adequate targeting. For example, the last quarterly reports (April-September 2017) indicated a funding gap of over USD $55 million to support the 12 sites where refugees are living. This is important information to share, since it compels all implementing partners to further adapt their targeting strategies and selective choice of inputs. It also offers the incentive for the working group to pursue further advocacy with major donors by demonstrating the tangible results cash delivers, as described in the following sections.

32 Minimum Expenditure Basket for Syrian refugees: 2017 Guidance note, UNHCR, 2017

3.1.2 THE VULNERABILITY ASSESSMENT FRAMEWORK

The VAF is a tool adopted during home visits to facilitate an evidence-driven and coordinated cash programme in Jordan, another element contributing to the overall efficiency and relevance of CBI. The depth and multi-sectorial nature of the home visit tool renders the evidence collected from all partners extensive both in a qualitative and quantitative sense. The number and depth of questions related to coping strategies along with sector-specific assessments (e.g. diet diversity) serves the purpose of a sophisticated analysis to outline various dimensions of vulnerability, recognising the breadth of primary and secondary needs. Importantly, the main purpose of detailed, or granular, monitoring is to review the targeting in view of key vulnerabilities. A prioritisation component is also added to adjust the speed of assistance. As the intervention evolves, the information collected can be adjusted to measure and explain any changes in vulnerability.

The establishment of a profile of vulnerability and its monitoring over time relies on two types of modelling used to provide a comprehensive spatial analysis of geographic areas with refugee households:

1 The welfare model - each family that is interviewed with the VAF questionnaire is assigned a welfare rating. This is done through an econometric modelling methodology which uses predicted expenditure as a proxy for refugee household 'economic' vulnerability.

2 Sector specific vulnerability models - these are applied (to the same data set) to assign sector vulnerability scores.

The components and models derived from the VAF tool not only allow UNHCR Jordan and its partners to identify and measure the needs and vulnerabilities of the Syrian population in the same way, but also to trigger a collaborative monitoring initiative by donors, UN agencies, other multilateral agencies (e.g. the World Bank) and INGOs operating in Jordan. The strength of evidence-driven coordination represents the quality of the process behind CBI in Jordan and it represents a rare example of

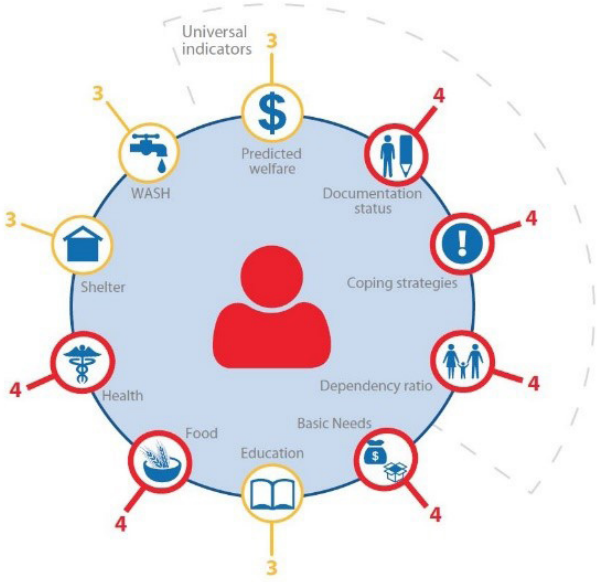


Figure 9: Example of Vulnerability Assessment for a specific household from January-February 2015

integrated monitoring along a common definition of vulnerabilities and thresholds for targeting.

Thanks to this level of coordination, the development of standardised criteria and different thresholds in VAF has allowed for humanitarian actors to define vulnerabilities in numerical form and track those across the refugee population. By using the VAF questionnaire as the standard and agreed tool within broader assessments, data collected by agencies for different purposes are more comparable, contributing to a more comprehensive evidence base than sector-specific assessments alone.

The combination of universal (dependency ratio, coping strategies and documentation status) and sector indicators (basic needs, health, education, nutrition, shelter and WASH) are utilised to compile all the data from each assessment as a synthesis of specific metrics that inform a wide range of dimensions affecting each household. Figure 9 is an example of a severely vulnerable household, where most indicators highlight high/severe exposure to shocks.[33]

33 Vulnerability Assessment Framework Baseline Survey, UNHCR, May 2015.

At baseline in 2015,[34] the key universal indicators showed that 86 percent of Syrian refugees are living below the Jordanian poverty line of 68 JOD per capita per month, and are therefore rated as being highly or severely vulnerable. This corresponds with 68 percent of household/ family units or 'cases'. A further 10 percent of Syrian refugee individuals, or 6 percent of households, are living below the abject poverty line of less than 28 JOD. This demonstrates that, in general, highly and severely vulnerable families are larger and have a greater number of dependents. The evidence collected in 2015 (Figure 10) also indicates the following critical areas per universal and sector indicators (red= severe vulnerability; green= low vulnerability).

Figure 10: Baseline assessment for all dimensions of the Vulnerability Assessment Framework shows areas of highest vulnerability

Aside from documentation, the representative sample of respondents reported critical vulnerability in all other areas. Importantly, the VAF model has identified different kinds of vulnerability and how they translate into a household's behaviours to mitigate or manage intra-sector risks over time. For example, if education and welfare vulnerabilities are high, the risk of removing children from school to generate income is more pronounced. Because of its multi-sectorial nature, the VAF can serve the purpose of examining how relationships between key variables evolve over time, which is the reason why home-visit data was used to prove the effect of cash in this study. Beyond targeting, it could assess the evolution of expenditures and transfers of CBI recipients compared with safety nets[35] available for Jordanians, and other benchmarks.

3.1.3 SOCIAL PROTECTION IN CBI

Along with accountability-related evidence generated through the PDM, the CBI programme is also interlinked with other systems that are prime examples of a fully-fledged social protection approach applied to all interventions in UNHCR Jordan.

One of the key examples is the helpline that refugees can access. A whole team is dedicated to respond promptly to a large range of requests (average of 1,400 calls per day) for inquiries related to, for example, cash assistance, resettlement, registration, protection-related issues. Over 60 percent of calls in October 2017 (more than 14,000) pertained to issues with cash assistance. This indicates the importance of the helpline in providing refugees with relevant information about home visits, eligibility criteria and the waiting list, along with the option of referrals in selected cases.

From early 2018, the helpline will evolve to take up an even greater caseload of calls by automatising messages across over 1,000 scenarios that have been identified since the initial helpline operation in 2008. The automatisation is expected to increase the management capacity of this service from 1,400 to 7,000 calls a day, which is a strong indication of UNHCR Jordan's commitment to further deepen information sharing and improve accountability. The service has proven to be effective in responding to complaints and feedback as an average of 95 percent of tickets are able to be closed immediately after the call.

Along with increasing capacity, UNCHR Jordan is also investing in sensitising the refugee population about the existence of this service. PDM data in 2016 shows that only 41 percent of the respondents knew how to reach UNHCR Jordan staff to report

34 UNHCR is currently finalising the 2017 baseline.

35 For more information, see ILO website on Social Protection and Unemployment Benefits in Jordan

a complaint, this is a clear area of improvement from an efficiency perspective. Challenges remained during the first quarter of 2017, with 70 percent of the PDM respondents stating they did not know how to reach UNHCR Jordan if needed. This could suggest that there was limited visibility and information sharing with recipients. An adequate explanation might be the existence of different definitions surrounding complaints mechanism given the large use of the UNHCR helpline to report issues and concerns with the cash-based assistance.

A second example of accountability mechanisms is the comprehensive 'Age Gender Diversity Mainstreaming Participatory Assessment' (AGDM PA) conducted on a yearly basis to identify and analyse the protection risks of groups that are considered vulnerable by UNHCR Jordan. Through this qualitative exercise of focus group discussions and key informants' interviews (facilitated by volunteers and refugees), key risks are identified with specific consideration of age, gender, diversity and which include some socio-economic dimensions. The assessment is geographically comprehensive and the process results in a detailed report related to specific topics chosen by refugees. The annual study not only informs the planning and programming decisions across all interventions, but it also provides a space for refugee communities to openly share information on key thematic areas that are critical when developing short and long-term responses, as well as to identify gaps in protection and access to services. The CBI Unit refers to this product on an annual basis to validate the design of its Vulnerability Assessment Framework and ensure programmatic alignment.

A third example to explain the depth of accountability mechanisms linked to the CBI is the community-based protection initiative launched in 2013, which has the aim of achieving multiple protection outcomes through community engagement, led by community support committees (CSC). The three key objectives of the CSC model are:

A To contribute to peaceful co-existence and social cohesion between refugees from any country and host communities;

B To create space for the community to have structured dialogue on issues that are of concern to them;

C To plan and implement community-based activities targeting divergent groups.

In 2017, there are 25 CSCs across all governorates, representing a prime example of community engagement led by refugees and host communities to both execute vulnerability assessments along the line of AGDM PA, but also to provide regular assistance and mobile services (e.g. for registration). The committees provide critical linkages between cash assistance programmes like the CBI and the ability to: inform vulnerable groups about context-level changes that can affect their lives, like the introduction of a work permit; support urgent needs that require referrals; and address any inquiry related to registration and eligibility for cash assistance.

The combination of a helpline, participatory assessments and community support committees represent the backbone of accountability in CBI programme, within the wider social protection mandate of UNHCR Jordan. The breadth and reach of these services represent a real strength for the delivery of effective CBIs since they provide multiple entry points for Syrian refugees to both access information and refer critical cases related to cash assistance and protection-related risks. The importance of ensuring the constant mainstreaming of a social protection approach across all interventions is a core mandate of UNHCR, and the efforts of UNHCR Jordan in this regard were found to represent a comprehensive set of systems according to this analysis.

4 METHODOLOGY FOR DATA ANALYSIS

4.1 DATA SOURCES

This synthesis examined three sources of data to better understand the effect CBI is having on Syrian refugees in Jordan.

PDM DATA

The first of these sources was data from five PDM surveys conducted in 2016 and 2017. This report did not examine the raw data from the PDM, but instead collated and synthesised the descriptive summaries provided in the PDM reports , including a report specific to winterisation .

Post distribution monitoring (PDM) of cash assistance was conducted throughout the course of CBI implementation to monitor performance as well as the use of cash and a range of effects on recipients. Data collection methods have evolved from paper copy in 2013, to digital data collection using the Open Data Kit (ODK) and later KoBO, providing another example of applied innovation to improve data quality. PDM surveys are quantitative in nature, allowing broad trends to be identified and contributing to the range of evidence provided by home visits. To increase the validity of trends, findings are triangulated through qualitative methods (e.g. annual participatory assessments and structured focus group discussions). Over time, questions have evolved to reflect policy changes. For example, following policy change in 2016 in relation to work permits to Syrian refugees, questions on household income were updated.

UNHCR Jordan acknowledges the limitation of PDM data, which is currently unable to shed light on long-term effects and behavioural change. Furthermore, it is impossible to ascertain whether the effects highlighted in PDM data are due to UNHCR Jordan's CBI or other external factors (e.g. assistance from other agencies, changes the economy or labour market). As such, UNHCR and UNICEF commissioned ODI to conduct separate research, looking at the long-term effects of CBI. Therefore, results from the ODI 'Promise of Tomorrow' report and home visit evidence is also considered in this analysis.

ODI DATA AND HOMEVISIT DATA

The ODI Study 'A Promise of Tomorrow: The effects of UNHCR and UNICEF cash assistance on Syrian refugees in Jordan' was commissioned with four objectives in mind:

1 To evaluate recipient spending patterns and their effect on family well-being;

2 To evaluate the efficiency, effectiveness and accountability of UNHCR's cash assistance and the UNICEF Child Cash Grant (CCG);

3 To evaluate the complementarity of (as well as gaps in) programming by UNICEF, UNHCR and the World Food Programme (WFP) in targeting the most vulnerable groups; and

4 To provide feedback on monitoring and data analysis processes.

The study had a mixed-method approach, collecting quantitative data through surveys conducted between December 2016 and March 2017, and qualitative data through focus group discussions and key informant interviews. This evaluation synthesis examines the raw quantitative data through both descriptive and inferential analysis, as well as presenting some of the results from the report itself (both qualitative and quantitative) as part of the evaluation synthesis.

ODI acknowledged the following limitations of the data set. Firstly, the data is reliant on self-reported responses for a number of data points, which can be inaccurate or biased if people are unwilling to accurately describe their experiences. Secondly, although the survey was primarily designed to be completed by female caregivers, who are often in a better position to answer questions relating to children and childcare, over 50 percent of respondents were male. This was due to the difficulty in obtaining permission from husbands for their wives to answer questionnaires due to gender norms in this sample.

The last limitation to the ODI dataset, and arguably most pertinent for this analysis, is that there is no comprehensive baseline study against which to evaluate the ODI dataset, and there was insufficient resource to sample a control group. In its place, the homevisit dataset was used as a baseline. The responses of households/ families were matched between the homevisit and ODI datasets where data points would allow. There are two primary limitations to this approach. The first is that the VAF homevisit is primarily designed as an assessment and monitoring tool, and is not designed for research purposes. Because the homevisit questionnaire is designed to assess vulnerability as opposed to impact, and respondents are aware that the answers they provide during the homevisit may qualify them for cash assistance, it is possible there is some underreporting of certain variables, such as ownerships of assets or types of income. Additionally, matching of the datasets is not possible for all data points, so the analysis is limited by those data points which can be matched in both surveys. However, the matching that did occur allows for longitudinal analysis of the data in order to better understand the effect UNHCR cash is having over time for recipients.

4.2 DATA SAMPLING

PDM DATA

PDM surveys are conducted through home visits and phone interviews. A random sample representative of the geographical distribution of households is used for each PDM. In 2016, 1,690 families were interviewed and the 2016 winterisation cash assistance PDM added 310 families to the sample. Regarding the first quarter of 2017 (last PDM report available) 554 families were included in the survey. The average family size ranges from 4.4 to 4.9 between samples, with a mean family size of 4.7 across the sample.

ODI DATA AND HOMEVISIT DATA

ODI conducted surveys with 2,144 households spread across four governorates (Amman, Irbid, Marfraq and Zarqa). These four governorates were selected as 85 percent of Syrian refugees (and 90 percent of cash recipients) live in these areas. Respondents were divided into six groups, namely those who are receiving:

1 UNHCR Cash assistance, UNICEF CCF and full-value WFP vouchers (667 households)

2 UNHCR Cash assistance, UNICEF CCF and half-value WFP vouchers (418 households)

3 UNHCR Cash assistance, and full-value

WFP vouchers (165 households)

4 UNHCR Cash assistance, and half-value WFP vouchers (42 households)

5 Full-value WFP vouchers (251 households)

6 Half-value WFP vouchers (611 households)

From the full list of cash recipients living in the four chosen governorates, households/ families were classified according to their governorate and the type of assistance they received, and a proportionate multi-stage random sample selected. Additional households where added where necessary to compensate for non-respondents and inaccessible households until the appropriate proportionate sample was reached. The sample is understood to be representative of the general population. Household size varied between those receiving/not receiving cash, with those receiving UNICEF CCG having an average household size of 3.8 compared to those receiving only UNHCR cash and WFP vouchers (average households size of 1.5) or only WFP vouchers (1.9). However, all groups were found to be largely similar with regard to their living environment (e.g. type of dwelling, time in dwelling and time in country).

For each of the ODI respondents, their responses from the VAF homevisit were sourced and compiled. This resulted in a dataset comprised of 3,120 entries. Each of these entries represents a homevisit response by a household, with some households selected for the ODI study having completed more than one homevisit survey. This was then merged with the ODI dataset (matched for case number) which resulted to give a longitudinal dataset with 5,235 entries. Although 86 percent of all entries in the merged dataset are repeated, which allows for comparisons over time, the dataset does not represent a perfect longitudinal cohort. Of the entries, 2,386 were not receiving cash at the time of their homevisit survey, and these 'non-recipients' represent the control in the analysis to follow and only 718 were not eligible throughout the whole dataset. Over time, most households become recipients but 48 percent of entries in the home visit data set have shared information at a time when not receiving UNHCR cash.

4.3 STATISTICAL ANALYSIS

The analysis of quantitative data is primarily aimed at addressing the second and third objectives of this study, namely: to process the large volume of data collected; and to identify key themes of change for recipients of UNHCR cash. Building on the information presented in the synthesis of evidence, and to validate the theory of change proposed in Section 2.2.1, this analysis will investigate the following lines of inquiry in relation to UNHCR Jordan's CBI programme:

1 How does the provision of UNHCR cash affect the ability of recipients to improve their shelter and living conditions, access to adequate water and sanitation facilities, and ownership of basic items over time?

2 How does the provision of UNHCR cash affect recipients' food security (number of meals per day) and nutritional diversity?

3 How does the provision of UNHCR cash affect the employment of negative coping strategies at seven days (short-term), one month (medium-term), and six months (long-term) at the population level?

4 How does the provision of UNHCR cash affect the overall expenditure patterns of Syrian refugees? Specifically, do the expenditure patterns of recipients (versus non-recipients) evolve over time to favour a higher proportion of financial resources spent in health, education, savings and repaying debt?

5 How does the provision of UNHCR cash affect access to key services such as health and education?

6 Are recipients of UNHCR cash with greater food security, dietary diversity, access to water and improved shelter more likely to accumulate savings, and generate more income than expenditures?

7 Are recipients of UNHCR cash who have a work permits (and do not have legal issues[36]) likely to generate more income?

Due to the unique nature of the dataset, quantitative analysis took the following approach:

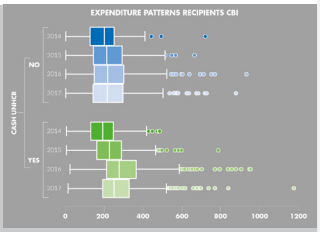
- Descriptive analysis, which primarily involved reporting on patterns in the dataset using numbers (frequency) and percentage, often drawing comparison between those who are receiving UNHCR cash, and those who are not.
- Longitudinal analysis, which involves looking at how these patterns in the data change over time. Similar to descriptive analysis, longitudinal analysis examines how the number and frequency of variables when comparing those who are receiving UNHCR cash to those who are not, but also includes the element of time, in order to try to better understand the role of cash longer term.
- Inferential analysis, which uses the information gathered in the ODI dataset and homevisit dataset to understand whether the effects of cash are statistically significant at the population level. In other words, inferential analysis aims at understanding how likely it is that a similar programme would see cash having a similar effect on the population. If a result is said to be statistically significant, then it is likely that this effect is reliable, and could be replicated at the population level. If it is not statistically significant, then the result may be a result of the sampling process. Inferential analysis uses a series of statistical models, which can be simple or complex in nature.

The simplest models (known as univariate regression analysis) look at only two variables, usually whether or not cash has an effect on another variable (i.e. number of days without water). This analysis also includes complex models containing multiple variables (known as multivariate regression analysis) which aim at understanding the relationships between variables (See Annex 1 for details on regression modelling, and presentation of regression tables). In both cases, models generate a p-value, which is used to determine whether a relationship is 'statistically significant' as described above, and the direction of this relationship (increasing or decreasing). Inferential models cannot be used to confirm the causation of these relationships. However, where appropriate, suggestions of likely causation have been made; further investigation will be required to confirm these hypotheses.

The combination of descriptive, longitudinal and inferential analysis is used to build a comprehensive picture of how UNHCR cash is affecting the lives of recipient households. Figures and graphs are used to support and strengthen our understanding of the effect cash is having on short- and medium-term vulnerabilities. A summary of the figures and graphs used to support this analysis is provided below (Figure 11).

The earlier lines of inquiry, which explore short and medium-term vulnerability by looking at the relationships between a few select variables, tend to utilise descriptive, longitudinal and simple inferential analysis. As the complexity of the inquiries and relationships increases, complex multivariate regression modelling is used. In some cases, inferential analysis is not possible due to the limited availability of data availability (i.e. very few recipients of cash report having savings). Here, descriptive and longitudinal analysis strengthen our understanding of the effect of cash. Similarly, regression analysis commonly generates odds ratios, which are used to represent the 'odds' or chance that event will occur. Given that this dataset is not truly longitudinal in nature, and does not represent a perfect case/control cohort, it is not always appropriate to report the odds ratio for a given model.

36 E.g. a lack of a MOI service card

TYPE OF VISUAL	TYPE OF ANALYSIS CONDUCTED
BAR GRAPHS/ HISTOGRAMS	Shows the number of times that an event occurs, either as a raw number (frequency count) or as a percentage. The horizontal (x) axis represents the variable being measured, and the vertical (y) axis shows the number or percentage of occurrences for each value in the x axis.
DENSITY DISTRIBUTION	Shows the probability of a variable falling within a particular range of values, as opposed to bar graphs/histograms which show the value itself in frequency or percentage. This probability is calculated based on the total area under the line.
BOX PLOTS	Shows the spread of data for a particular variable. The line in the coloured box represents the median (or midpoint) of the data. The bottom and top of the coloured box represent the interquartile range (the 25 and 75 percentiles respectively). The lines at either side of the coloured box end at the lowest and highest values for that variable. Outliers (values which are viewed as unusual) are represented by dots. 
CORRELATION MATRIX	Used to display the correlations between multiple variables at once. The variables are listed down the left-hand side, and then the same variables are listed along the bottom. To understand the correlation between two variables, the reader follows the line to the point at which those variables meet in the matrix. The colour gradient at the same line shows what each colour represents; generally, dark colours represent a negative correlation while lighter colours (pink and cream) represent positive correlation. Purple colours represent little to no correlation. Variables will always be perfectly correlated with themselves, hence the light pink line running diagonally through the matrix.
REGRESSION TABLES	The variable being explored (response or dependent variable) is displayed in the top line as the 'Dep. Variable'. The other variables in the model (explanatory or independent variables) are listed on the bottom left of the table. The column titled 'P>[z]' displays the p value, which indicates whether or not the relationship between the explanatory and response variable is significant. A p value of less than 0.05 is said to be statistically significant. Finally, the column titled 'coef' indicates whether there is a positive or negative relationship between the explanatory and response variable. When introducing each sub-section for each line of inquiry, each explanatory variable with a statistically significant relationship with the response variable is labelled with two asterisks **.

Dep. Variable:	PermanentShelter	No. Observations:	2783
Model:	GEE	No. clusters:	1882
Method:	Generalized Estimating Equations	Min. cluster size:	1
		Max. cluster size:	4
Family:	Binomial	Mean cluster size:	1.5
Dependence structure:	Independence	Num. iterations:	9
Date:	Thu, 23 Nov 2017	Scale:	1.000

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	0.8842	0.596	1.484	0.138	-0.283	2.052
CashFromUNHCR_Yes	0.7226	0.280	2.577	0.010	0.173	1.272
TotIncome	0.0025	0.002	1.672	0.095	-0.000	0.006
WFPFoodVouchers_yes	0.1026	0.351	0.292	0.770	-0.586	0.791
UNICEFCashYes	0.2093	0.320	0.655	0.513	-0.417	0.836

Skew:	-3.6807	Kurtosis:	15.0275
Centered skew:	-0.6159	Centered kurtosis:	56.7627

Figure 11: Summary of the different types of analysis conducted and the methods used to visualise the results.

5 EFFECTS AND RESULTS OF THE CBI PROGRAMME

5.1 KEY INQUIRY 1

How does the provision of UNHCR cash affect the ability of recipients to improve their shelter and living conditions, access to adequate water and sanitation facilities, and ownership of basic items over time?

SUMMARY OF FINDINGS: KEY INQUIRY 1

- Recipients of UNHCR cash assistance are more likely to be living in permanent accommodation.
- Recipients of UNHCR cash are more likely to report the standard of their accommodation as acceptable. However, this is a subjective rating, and at present, there is no objective measure for the acceptable quality of accommodation.
- Recipients who have access to a latrine, and fewer days without water the previous month are more likely to report their accommodation as acceptable.
- UNHCR cash contributes to the ownership of higher value assets such as fridges, televisions, and washing machines, and overall there has been an increase in the average number of assets owned by recipients over time.

5.1.1 RELATIONSHIPS LINKED TO ACCOMMODATION

This section examines whether the type of accommodation in which respondents are living relates to whether they are receiving UNHCR cash, other forms of assistance and their income values. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of perceived housing standards.

BOX 1: RESPONSE VS EXPLANATORY VARIABLES

The table below describes the variables used for the statistical analysis in this section, and will be used to introduce the analysis for each section. The response variable describes the aspect of the data which is being explored, and the focus of that section, while the explanatory variables are the aspects being explored to see if they affect the response variable. In the example below the analysis explores whether the provision of UNHCR cash (the explanatory variable) has an effect on the type of accommodation (the response variable). Each analysis will be accompanied by a more in-depth descriptive investigation of the housing type through selected graphs.

MODEL FOR REGRESSION ANALYSIS (SEE ANNEX 1: REGRESSION TABLE 1)

RESPONSE VARIABLE
Shelter type

EXPLANATORY VARIABLE
People receiving/not receiving UNHCR cash**[37]

Controls:
- Total income
- WFP food vouchers
- UNICEF cash

Most CBI recipients living in Jordan are living in permanent accommodation. Figure 12 shows the number of respondents living in each type of shelter according to whether they are, and are not, receiving cash. Figure 13 shows what percentage of people who are, and are not, receiving cash live in each of the three accommodation types – permanent, transitional and emergency. Less than 4 percent of the people in this sample were living in transitional or emergency shelter (Figure 12). The analysis indicates that people receiving UNHCR cash were more likely to be living in permanent accommodation when compared to those who were not receiving UNHCR cash, and that only the provision of UNHCR cash had a statistically significant effect on the type of accommodation in which a household was living (95 percent CI). Income was also shown to influence the type of shelter, but with only a statistically weak relationship (Annex 1: Table 1).

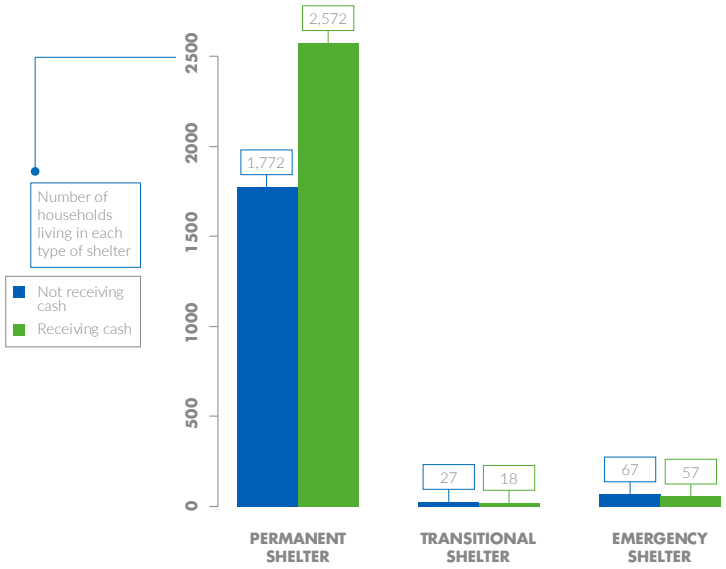


Figure 12: Bar graph showing how the people living in each type of shelter are divided by those who are, and are not, receiving UNHCR cash

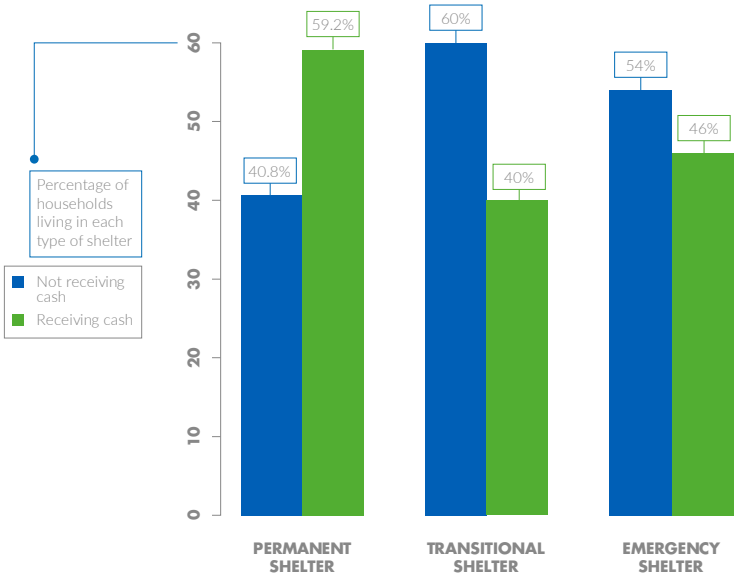


Figure 13: Bar graph showing how the people living in each type of shelter are divided by those who are, and are not, receiving UNHCR cash.

It is important to note that while statistical modelling shows a relationship between the type of accommodation recipients live in, and whether they are receiving UNHCR cash assistance, this does not confirm causality. It might be assumed that those in transitional or emergency shelter are more vulnerable than those in permanent accommodation, and therefore more likely to receive UNHCR cash assistance. This raises the question of whether cash facilitates the move of these vulnerable families into more permanent accommodation, or why those living in transitional and emergency accommodation are not receiving cash (while noting that some may already be on the ''waiting list' for UNHCR cash assistance).

37 In the following list of tested relationships, ** corresponds to significance at CI 95%. For more information on statistical significance, refer to Section 4.3 on Statistical Analysis.

5.1.2 RELATIONSHIPS LINKED TO HOUSING STANDARDS

This section looks at how respondents' perception of their accommodation relates to whether they are receiving cash, other forms of assistance, their income, and the household structure. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of perceived housing standards.

MODEL FOR REGRESSION ANALYSIS (SEE ANNEX 1: REGRESSION TABLE 2)	
RESPONSE VARIABLE **Acceptability of housing standards**	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash** **Controls:** • Total income** • Total expenditure on rent** • WFP food vouchers • UNICEF cash • Governorate • Gender of head of household • Household size

The type of accommodation does not guarantee it is of an acceptable quality to meet international standards, such as the Sphere standards,[38] or the expectations of recipients. This dataset does not contain any variables that objectively measure the quality of accommodation. Instead, the datasets ask respondents to subjectively report on the acceptability of their accommodation, so analysis examines of the relationship between reported acceptability of accommodation against the provision of UNHCR cash assistance. Findings show that the provision of UNHCR cash can be used to predict whether a household report their accommodation as being of an acceptable standard. This supports the findings from the ODI report, which found that 26 percent of households felt that cash assistance led to 'better housing'.[39]

Those receiving UNHCR cash assistance are 26 percent more likely to report their accommodation as being of acceptable standard (See Annex 1: Table 2). Cash is a significant driver for reported acceptability of accommodation, along with total income, household size and governorate. This is displayed visually in Figure 14. Interestingly, the average total income of those reporting the standard of their accommodation as acceptable was significantly lower than those who thought their accommodation unacceptable. Conversely, those spending more on rent, and in smaller households, were more likely to report acceptable living standards.

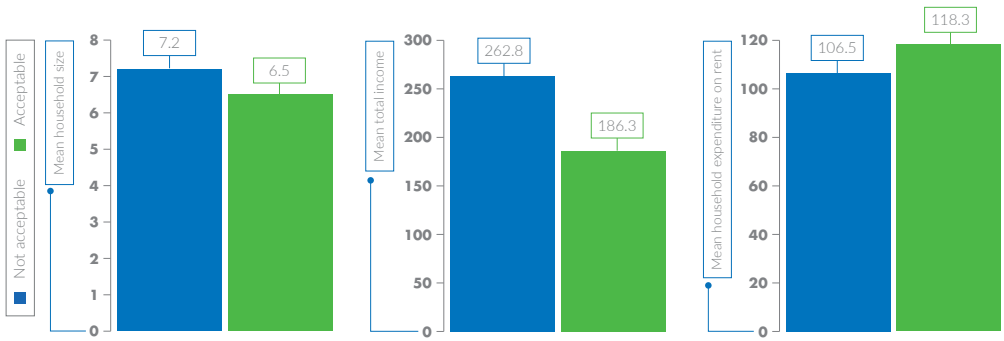


Figure 14: Bar graph showing how those who report their accommodation as acceptable, have a smaller household size, a lower total income, and a higher expenditure on rent than those who are not receiving cash.

38 The Sphere Project (2011) Humanitarian Charter and Minimum Standards in Humanitarian Response.

39 A promise of tomorrow: The effects of UNHCR and UNICEF cash assistance on Syrian refugees in Jordan, ODI, 2017.

5.1.3 RELATIONSHIPS BETWEEN HOUSING ACCEPTABILITY AND ACCESS TO CLEAN WATER/LATRINES

This section looks at respondents' access to latrines and water, their perception of house acceptability, and whether they are receiving cash. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of the factors determining access to water and latrines.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 3 & 4)	
RESPONSE VARIABLE **Access to a private latrine** **Number of days without water**	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash Building Acceptability** **Controls:** • Total income** • Gender of head of household** • Household size** • Number of days without water in the past month

One aspect of vulnerability that has a significant relationship with whether a household describes their accommodation as acceptable is the number of days without water in the past month. This is demonstrated in Figure 15, which shows that households who report their accommodation as acceptable have half the average number of days without water per month when compared to those who do not report their accommodation as acceptable.

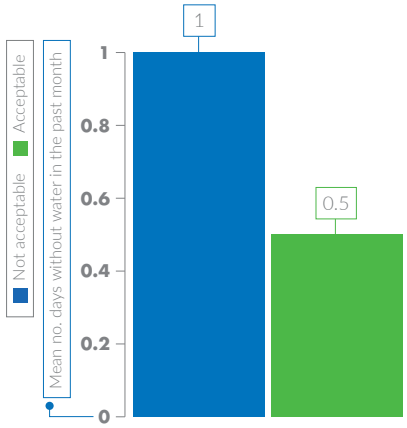


Figure 15: Bar graph showing the average number of days without water in the past month, when comparing households who report their accommodation as acceptable, and not acceptable.

Over 70 percent of households have access to a private latrine and over 25 percent to a shared latrine. Those receiving UNHCR cash are 15 percent more likely to have access to a private latrine than those who are not; however, the significance of this relationship is lost when considering total income at the household level (Annex 1: Table 3 and 4), illustrating that income has a stronger influence than cash on access to basic WASH facilities. Having access to a private or shared latrine makes respondents more likely to report the standard of their accommodation as acceptable.

Though the relationship between the reported acceptability of accommodation and the provision of UNHCR cash assistance was demonstrated above, further investigation will be required to fully understand which dimensions of housing quality contribute to reported acceptability and how. It will be important to understand further how having access to a private latrine, the gender of head of household, the household size and total income influence how 'acceptable' accommodation is reported to be (Annex 1: Table 3 and 4). There are currently no variables that objectively measure the quality of housing against a respondents' perception of its acceptability; future iterations of the VAF home visit survey should seek to address this.

5.1.4 RELATIONSHIPS LINKED TO HOUSEHOLD ASSETS

This section looks at reported number of household assets of recipients and non-recipients of cash assistance. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of the factors determining number of household assets reported.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 5)	
RESPONSE VARIABLE **Ownership of key household assets:** *Blankets; Cabinets; Computer; Floor Mattress; Freezer; Fridge; Kitchen Utilities; Sofa; Stove; Table and Chairs; Television; Washing Machine; Water Heater*	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash** **Controls:** • Total income** • Total expenditure on household items** • WFP food vouchers • UNICEF cash** • Gender of head of household • Household size**

The percentage of households owning certain household assets varies significantly. While almost all households own blankets, floor mattresses and kitchen utilities (87 percent, 92 percent and 95 percent respectively), very few own higher value items such as a computer (1 percent) and freezer (2 percent).

When examining whether the provision of UNHCR cash assistance has affected the likelihood of families owning household assets, it was found that households receiving cash are more likely to own some of the higher value assets in this list when compared to those who are not receiving cash. We might expect that those who are receiving cash, and have therefore been deemed to be most vulnerable would be less likely to own these assets, therefore these findings give a positive indication that cash is contributing to a household's ability to purchase them. The analysis shows that those receiving UNHCR cash assistance were: twice as likely to own a fridge; 46 percent more likely to own a television; and 55 percent more likely to own a washing machine.

When examining how UNHCR cash has influenced the ownership of household assets over time, this analysis looked at the sum of assets owned by each household. In households receiving UNHCR cash assistance, the analysis indicates that there has been a significant increase in the ownership of assets each year since 2014. It was found that both year and the provision of UNHCR cash make households more likely to have a higher number of assets (as do total income, expenditure on household items, and household size - see Table 5 in Annex 1). This relationship is displayed visually in Figure 16, which shows how the average number of reported household assets increases over time.

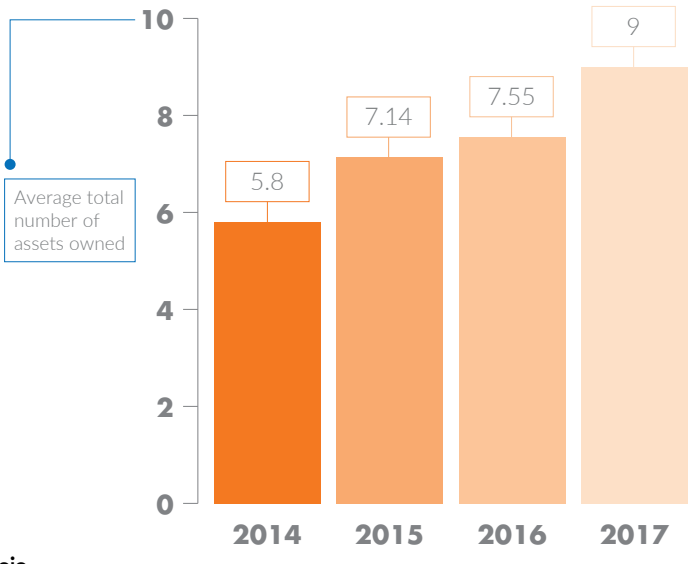


Figure 16: Bar graph showing how the average number of assets owned by each household has changed over time.

It is worth re-emphasising findings from the ODI report, which relate to ownership of household assets. During qualitative interviews, respondent indicated that access to/ownership of assets did not necessarily reflect overall need, and that one of the most common concerns for those taking part in a homevisit survey was that the ownership of these assets may be interpreted as a lack of need, and render them ineligible for cash assistance.

It is also useful to deepen this analysis by considering some of the findings from the PDM data on winterisation. During the winter of 2016, 48,000 families of Syrian refugees received a one-off payment for winterisation support. Two types of packages were provided, either a full package to cover the cost of a heater, gas bottle, gas refill, gas refill contingency, and blanket; or a partial package, which included the same items apart of the heather. Findings from a PDM that followed, confirmed that nearly all refugees required winter support, although not all eligible refugees were targeted. For most people, the support provided met their basic needs for the winter and improved their living condition. A third mentioned that their needs were not met, mostly since the cash provided was not enough to cover all the basic household items for all respondents (such as clothes, shoes, health or cooking fuel).

Furthermore, PDM data from 2016 to 2017 (Q1) indicates that the majority of respondents were able to find the household items they needed at the market (98 percent), but many (over 80 percent) reported an increase in commodities prices over the last six months, this trend is also corroborated by the Consumer Price Index in Jordan which increased by 5 percent between 2016 and 2017 , though the value of the basket of goods in the SMEB did not change significantly according to the latest assessment conducted by UNCHR. Similarly, most winterisation support recipients (95 percent) were able to find the items they needed, but half found that these items were more expensive than in other seasons.

5.2 KEY INQUIRY 2

How does the provision of UNHCR cash affect recipients' food security (number of meals per day) and nutritional diversity?

SUMMARY OF FINDINGS: KEY INQUIRY 2

- Recipients of UNHCR cash eat more meals per day on average than those who are not recipients.
- Recipients of UNHCR cash are more likely to consume fruit, eggs and meat, and on average each a greater number of food groups, with a higher frequency of consumption per week.

5.2.1 RELATIONSHIPS LINKED TO NUMBER OF MEALS PER DAY

This section looks at reported number of meals for recipients and non-recipients of cash assistance. The following table describes the main inference for this section along with a more in-depth descriptive investigation of cash and number of reported meals at the household level.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 6)	
RESPONSE VARIABLE **Number of meals per day**	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash**

Figure 17 shows the number of meals eaten by respondents the previous day (values zero to five seen on the horizontal axis). Sixty-two percent of households reported having only eaten two meals the previous day, and 5 percent reported having eaten only one (when looking at only those in the ODI dataset, these proportions were 73 percent and 10 percent respectively, showing that those interviewed in the ODI survey were reporting fewer meals per day). Only two households reporting having eaten zero. The mean number of meals consumed by recipients of UNHCR cash was higher than those who were not recipients, and this difference was statistically significant (p = 0.000 – See Annex 1: Table 6).

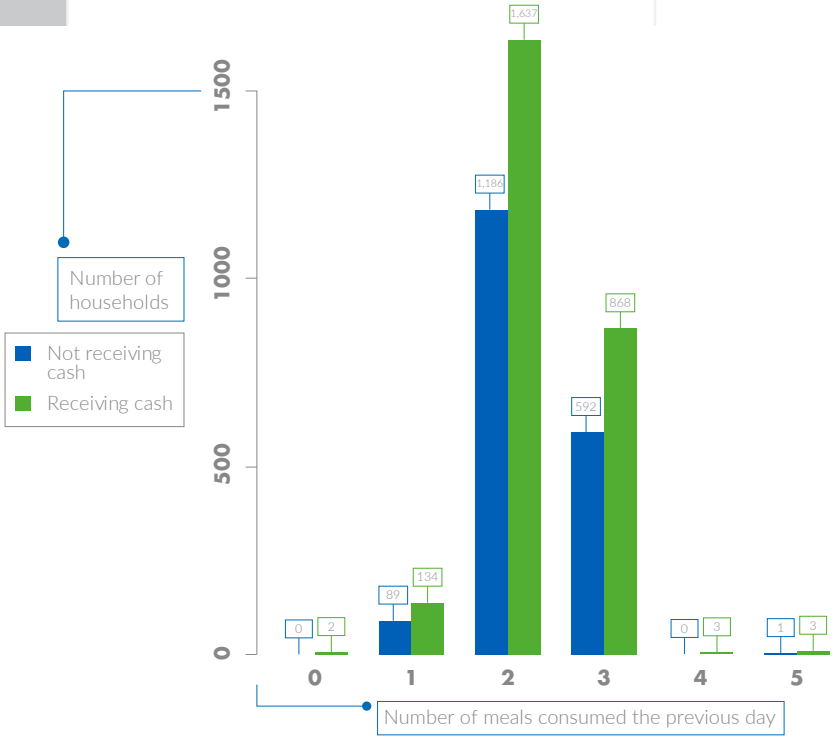


Figure 17: Shows the number of meals consumed the previous day by those who are, and are not, receiving UNHCR cash.

5.2.2 RELATIONSHIPS LINKED TO DIETARY DIVERSITY

This section looks at reported number of food types consumed at the household level and whether respondents are receiving cash assistance. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of the factors determining diet diversity.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 7 & 8)

RESPONSE VARIABLE

In the last seven days, how many times has the family consumed the following foods:
Cereals; Tubers; Vegetables; Fruits; Meat; Eggs; Fish; Pulses and Nuts; Milk and Dairy; Oil and Fats; Sweets; Spices.

1 **Dietary diversity** (no. food groups eaten last week)
2 **Diet score** (average frequency of all food types)

EXPLANATORY VARIABLE

People receiving/not receiving UNHCR cash**

Controls
- Total income**
- WFP food vouchers**
- UNICEF cash**
- Gender of head of household**
- Disability**

The foods consumed most often by households in this sample are: cereals (average 6.4 days per week); oils and fats (average 5.8 days per week); spices (average 5.3 days per week); and sweets (average 5.2 days per week). The foods consumed least were: fish (average 0.2 days per week); fruits (average 0.5 days per week); and meat (average 1.1 day per week). This aligns with the findings from Chapter 7 of the ODI report, which states that families often forgo primary proteins in order to stretch food budgets further, and prioritise the consumption of less nutrient dense foods (including cereals and sweets).[40]

Recipients of UNHCR cash are more likely to report an increased consumption of fruit, eggs, and meat (Figure 18) than those who are not recipients. Though UNHCR cash assistance appears to have a statistically significant effect on the average number of days a family consumes fruit, meat and eggs, it is worth highlighting that total income, and whether families are receiving WFP food vouchers/UNICEF cash assistance also continue to have a significant influence on the consumption of these foods.

These findings illustrate the positive contribution UNHCR cash is having on recipients' nutritional status, given that we already know vulnerable families are inclined to eliminate primary proteins from their diet, and that this has only got worse since the value of WFP food vouchers were halved in 2015.[41] Indeed, these results reinforces the contribution of UNHCR cash to findings from the ODI report, where over half reported that the most important effect of cash assistance (including UNICEF cash grants) was 'eating better'.

40 A promise of tomorrow: The effects of UNHCR and UNICEF cash assistance on Syrian refugees in Jordan, ODI, 2017.
41 Global Humanitarian Assistance Report 2017, Development Initiatives, 2017

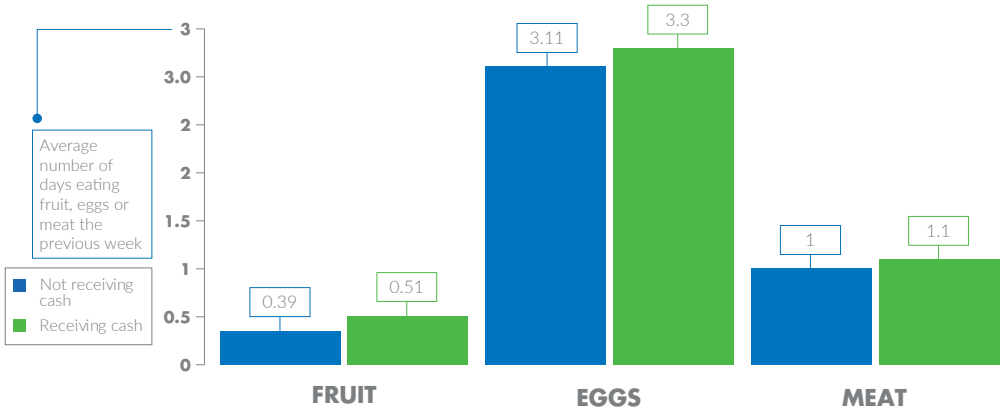


Figure 18: Bar graph shows how those receiving cash eat fruit, eggs and meat more often on average when compared to those who are not receiving cash.

The analysis of dietary diversity score (which looks the number of food groups eaten in the previous week, as opposed to the frequency of these groups), shows that UNHCR cash assistance has a significant effect on the number of food groups eaten the previous week. On average, those receiving UNHCR cash had a dietary diversity score of 8.3 food groups consumed the previous week, while those who were not receiving cash had a dietary diversity score of 7.7 food groups.

When examining how dietary diversity has changed over time, analysis shows there has been a statistically significant decrease in dietary diversity over time when compared to 2014 (Annex 1: Table 7), Specifically, in both 2015 and 2016, households exhibited approximately 44 percent less dietary diversity when compared to 2014. In 2017, there is still a lower dietary diversity than in 2014, but only by 16 percent, showing a gradual increase back to 2014 levels.

This trend is displayed visually in Figure 19, which shows the average dietary diversity score (between 0 and 12 food groups the previous week) from 2014-2017. From this trend, the drop in dietary diversity between 2014 and 2015 may have been due to the reduction in the value of WFP food vouchers at that time, or since refugees no longer had access to free healthcare, which may have diverted some of their expenditure towards health and away from food. When adjusting for total income and those receiving UNICEF/WFP assistance, there is no longer a significant relationship between the provision of UNHCR cash and dietary diversity. In fact, income, WFP food vouchers, UNICEF cash and the year all exhibit a stronger relationship to dietary diversity.

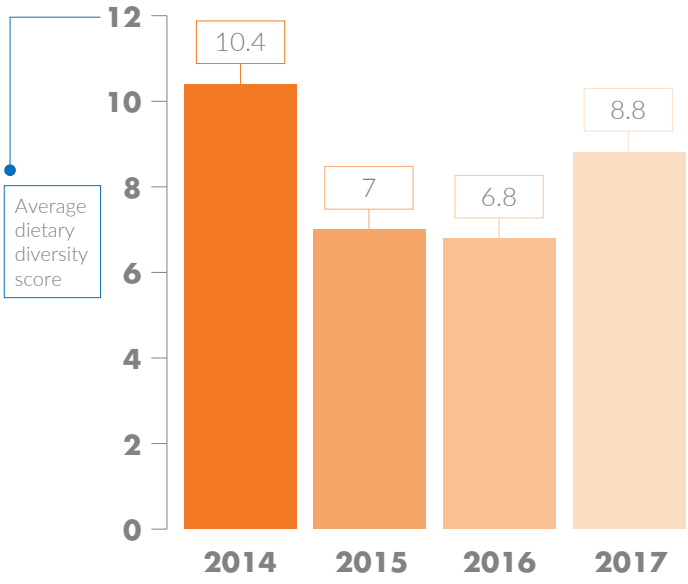


Figure 19: Bar graph showing how the average dietary diversity score has changed over time.

Finally, the frequency of consumption of each food group was averaged across the week to produce the 'diet score', which indicates the average number of days foods are consumed between one and seven. A high diet score is indicative of a variety of foods consumed regularly throughout the week, while a low diet score indicates a low diversity with low frequency of consumption.

Analysis indicates that cash from UNHCR, UNICEF had WFP food vouchers are positive factors in driving up the diet score (Annex 1: Table 8), which indicates that these variables likely contribute to an increased variety of foods, consumed more regularly throughout the week. In the same model, female-headed households and families with disabled individuals have a lower diet score, which is indicative of a less diverse or limited diet, possibly because of marginalisation-related causes. These findings support the findings of the ODI report, which states that larger households, and households headed by women are more likely to experience food shortages.[42]

42 A promise of tomorrow: The effects of UNHCR and UNICEF cash assistance on Syrian refugees in Jordan, ODI, 2017.

5.3 KEY INQUIRY 3

How does the provision of UNHCR cash affect the employment of negative coping strategies at 7 days (short-term), 1 month (medium-term), and 6 months (long-term) at the population level?

SUMMARY OF FINDINGS: KEY INQUIRY 3

- Recipients of UNHCR cash employ short-term coping strategies less frequently than non-recipients (though female headed households were still at an increased risk).
- Recipients of UNHCR cash were less likely to employ the three most common medium-term coping strategies: buying food on credit, taking an exploitative or degrading job, or withdrawing children from education.
- Recipients of UNHCR cash were less likely to employ the following long-term coping strategies: sell food vouchers, sell assets, borrow money, buy against credit, deplete savings, irregular work, be unable to pay rent and child labour.

5.3.1 RELATIONSHIPS LINKED TO SHORT TERM COPING STRATEGIES

This section looks at the employment of short-term negative coping strategies to alleviate food shortage (in the last 7 days), and whether respondents are receiving cash assistance. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of the factors which make the use of coping strategies more likely.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 9)	
RESPONSE VARIABLE **In the last seven days, how many have you employed the following coping strategies:** • *Rely on less preferred/less expensive food* • *Borrow food* • *Reduce number of meals* • *Limit portion size* • *Restrict consumption by adults* **Average number of days employing coping strategies in the last week**	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash** **Controls:** • Total income** • WFP food vouchers** • UNICEF cash** • Gender of head of household** • Governorate

The most common coping strategy employed in the last seven days was households relying on their less preferred food, with over 50 percent of families employing this strategy every day of the previous week. The next most common was reducing the number of meals, with 33 percent of families doing this seven days in the previous week. The least prevalent coping strategy was the borrowing of food from others, which 52 percent of families had not done at all during the previous week, and 6 percent had done daily. For both limiting portions and restricting consumption of adults, a higher proportion of households reported doing this 0 days per week (43 and 58 percent respectively) than those doing it seven days a week (22 and 13 percent).

This analysis indicates that the provision of UNHCR cash can be used to predict whether a household employs certain coping strategies, however, the direction of this relationship varies. For example, those receiving cash are more likely to be rely on their less preferred food than those who are not. However, they are less likely to be borrowing food from others. This trend is displayed visually in Figure 20, where the horizontal axis shows the number of days respondents reported borrowing food in the last week, and the vertical axis shows how many households did so. This pattern is also reflected in Chapter 7 the ODI report, which showed how UNHCR cash reduced the likelihood of a family borrowing food or reducing the number of meals in the last week.

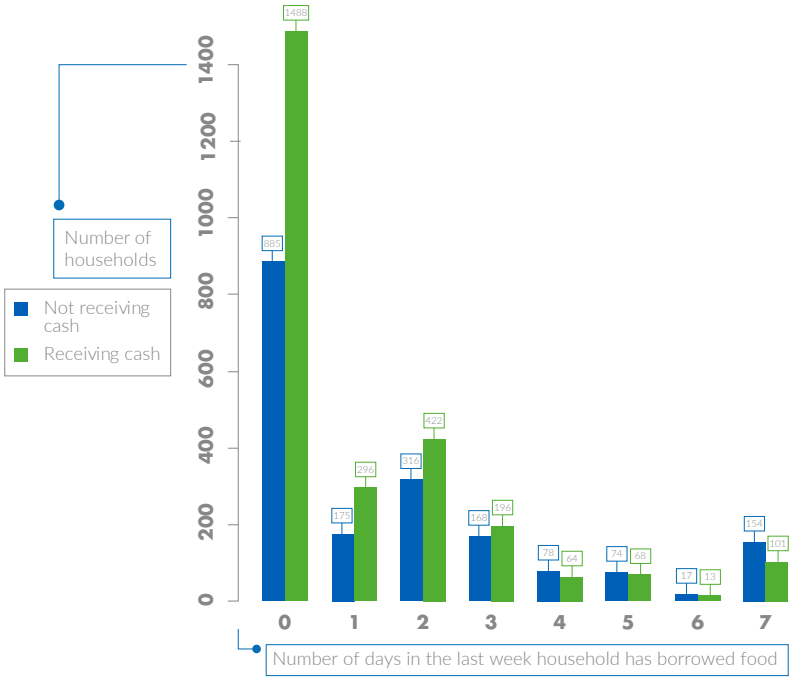
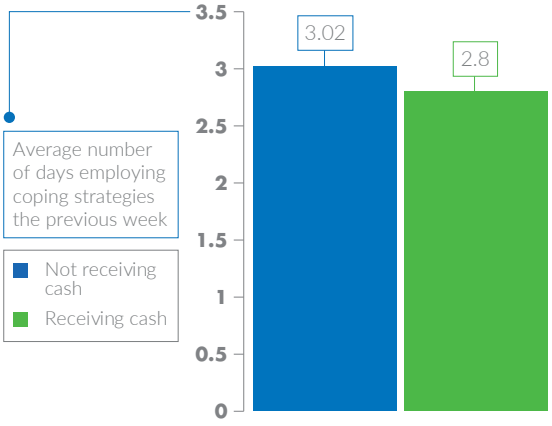


Figure 20: Bar graph showing how many days that households had to borrow food in the last week.

UNHCR cash also significantly reduces the average number of days of coping strategies during the previous week, showing that the provision of cash decreases short-term negative coping. This trend is displayed visually in Figure 21, where it can be seen that recipients of UNHCR cash employ short-term coping strategies less on average than those who are not receiving cash.



While UNHCR cash reduces the likelihood of households employing short term coping strategies, so do total income, UNICEF CCG and WFP food vouchers (See Annex 1: Table 9). Families with a female head of household have a higher average number of days employing coping strategies than those with a male head of household, and households living in Mafraq and Zarqa are more at risk when compared to those in Amman.

Figure 21: Bar graph showing average number of days employing short term coping strategies in the last month when comparing households who are, and are not, receiving cash.

5.3.2 RELATIONSHIPS LINKED TO MEDIUM TERM COPING STRATEGIES

This section looks at the employment of medium-term negative coping strategies to alleviate food shortage (in the last 30 days), and whether respondents are receiving cash assistance. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of the factors which make the use of coping strategies more likely.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 10)	
RESPONSE VARIABLE **In the last thirty days, how many have you employed the following coping strategies to meet basic food needs:** *Spent savings; Bought food on credit; Reduced essential non-food expenditure; Sell household goods; Sell productive assets; Withdraw children from education; Accept high risk, degrading or exploitative job; Send adults to beg; Send children to beg* **Average medium-term (30 day) coping strategy score with extra weight on begging/degrading jobs**	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash** **Controls:** • Total income • WFP food vouchers • UNICEF cash • Household size • Gender of head of household • Governorate

The most commonly employed medium-term (in the last 30 days) coping strategy is buying food on credit, which 40 percent of households report having done. Households also report high incidence of taking a degrading or exploitative job (38 percent) or withdrawing children from education (21 percent). The least commonly employed coping strategies in this group were sending children and adults to beg, which only approximately 20 households reported. Of concern, 40 percent of household reported that their savings had been exhausted and 24 percent reporting having sold all their valuable household goods.

UNHCR cash did not have an effect on whether or not families sent either adults or children to beg in the street, or whether they had exhausted their savings and sold all goods. However, Figure 22 shows that those receiving UNHCR cash are significantly less likely to buy food on credit, have to take an exploitative or degrading job, or withdraw children from education, which are the three most common medium-term coping strategies.

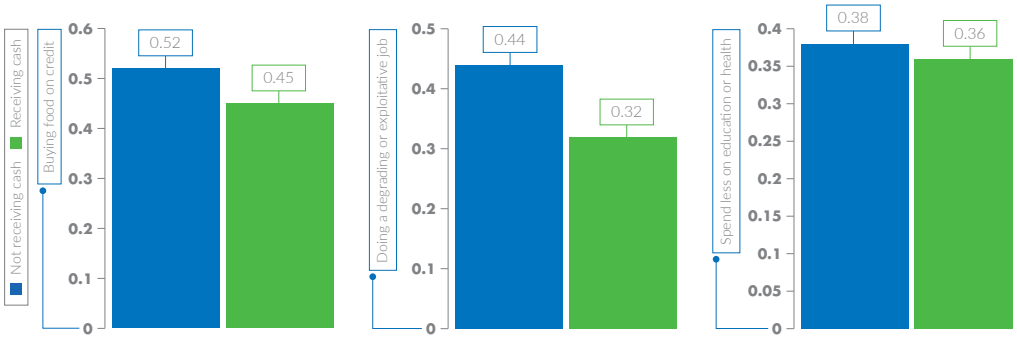


Figure 22: Bar graph showing how those who receiving cash are less likely to employ the three most common medium-term coping strategies.

The results from the model in Table 10 (Annex 1) support the finding that UNHCR cash helps reduce the exercising of 30 days coping strategies. However, when including variables such as total income, WFP and UNICEF assistance, household size, gender of head of household and location, the effect of cash is not statistically significant (though it remains strong). The location of households has a statistically significant influence, with those living in Zarqa being more vulnerable when compared to those living in Amman. This aligns with the findings of the ODI report, which describe how the introduction of UNHCR cash and then the UNICEF CCG have a marked reduction in the percentage of households having to spend savings, borrow from others or reduce non-food expenditure. It is worth highlighting that the qualitative aspect of that report states that the preferred option for coping with food insecurity is to borrow money to cover additional food costs.

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5.3.3 RELATIONSHIPS LINKED TO LONG TERM COPING STRATEGIES

This section looks at the employment of long-term negative coping strategies to alleviate poverty (in the last six months), and whether respondents are receiving cash assistance. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of the factors which make the use of coping strategies more likely.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 11)	
RESPONSE VARIABLE **In the last six months, how many have you employed the following coping strategies to meet basic food needs:** *Living with host family, Sharing cost with host family, Support from family, Support from host community, Humanitarian assistance, Selling properties, Selling food vouchers, Selling assets, Borrowing money, Buying against credit, Children out of school, Child labour, Begging, Savings depletion, Irregular work, Rent going unpaid*	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash **Controls:** • Total income • WFP food vouchers • UNICEF cash • Gender of head of household • Governorate

Inferential and descriptive analysis showed that there was a relationship between the provision of UNHCR cash and long-term coping strategies. UNHCR cash was seen to be associated with a reduction in the employment of: selling food vouchers, selling assets, borrowing money, buying against credit, depleting savings, irregular work, being unable to pay rent and child labour. There was not a statistically significant relationship between the provision of UNHCR cash and whether a family had sent a household member out to beg in the past six months, or the likelihood of them living with a host family. It also showed that those receiving cash were more likely to be receiving humanitarian assistance, or support from a host family or community, though this is not surprising. They were also more likely to have removed children from education in the previous six months. This is in contradiction to the finding that in the medium term, recipients of UNHCR cash were less likely to have withdrawn their children from education, and therefore justifies further enquiry in the future.

The investigation of the relationship between long-term coping strategies and total income, WFP and UNICEF assistance, household size, gender of head of household and governorate, shows that UNHCR cash had a positive effect for all except the depletion of savings and child labour. For the remaining long-term strategies (selling food vouchers, selling assets, borrowing money, buying against credit, irregular work and being unable to pay rent), total income, household size and gender of head of household had a stronger effect that cash.

Even though UNHCR cash has some effects in relation to selected coping strategies, when combining them together, as shown in the results Table 11 (Annex 1), the relationship between cash assistance and long-term coping strategies is not statistically significant. This finding underlines that cash programmes cannot be considered as conclusive solution when tackling longer-term structural issues related to poverty alleviation, though in the short term they result to be quite effective.

5.4 KEY INQUIRY 4

How does the provision of UNHCR cash affect the overall expenditure patterns of Syrian refugees? Specifically, do the expenditure patterns of recipients (versus non-recipients) evolve over time to favour a higher proportion of financial resources spent in health, education, savings and repaying debt?

SUMMARY OF FINDINGS: KEY INQUIRY 4

- Recipients of UNHCR cash show an increase in total expenditure, and most importantly and increase in the expenditure on health and education. Historically, reported value of debt has been lower with those households who are receiving UNHCR cash.

5.4.1 RELATIONSHIPS LINKED TO EXPENDITURES

This section looks at the relationship between expenditure patterns and whether respondents are receiving UNHCR cash assistance. The following table describes the list of expenditures explored descriptively.

MODEL FOR DESCRIPTIVE ANALYSIS OF EXPENDITURE	
RESPONSE VARIABLE • **Total expenditure** • **Total debt** • **Total savings** • **Food expenditure** • **Education expenditure** • **Health expenditure**	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash

The analysis investigating how the provision of UNHCR cash effects recipients' expenditure patterns (including total expenditure and total debt) shows that cash leads to a nominal increase in total expenditure, a small decrease in debt, and that recipients of UNHCR cash are slightly more likely to spend money on health and education. The comparative boxplots[43] in Figure 23 to 26 validate these findings visually, particularly for debt (Figure 24). It can be seen that the total debt reported (horizontal axis) displays a downward trend in median values from 2014 to 2017 in a significant way for both recipients and non-recipients. It is necessary to consider that the process of collection for both the home visit and ODI study did are not fully comparable, however these trends are worth further exploration.

Figure 25 and 26 show the comparison between education and health expenditures when comparing recipients and non-recipients of UNHCR cash. Of particular interest is the relationship between the provision of UNHCR cash and total expenditure on education. Even if these relationships cannot be considered causally linked, both Figures 25 and 26 strongly indicate that UNHCR's CBI intervention affects selected expenditure patterns. Given that Chapter 3 of the ODI recent study highlighted that education spending among this cohort is proportionally small, with only 51 percent of respondents reporting any education expenditure, it is promising to see effect from UNHCR cash (along with the UNICEF CCG). Additionally, though this analysis only shows a small increase in overall expenditures, qualitative interviews during the ODI survey highlighted that families receiving UNHCR cash had 'rescued their families from debt incurred due to emergency medical care', and prevented eviction.

43 For guidance on the interpretation of these boxplots, please see Figure 11.

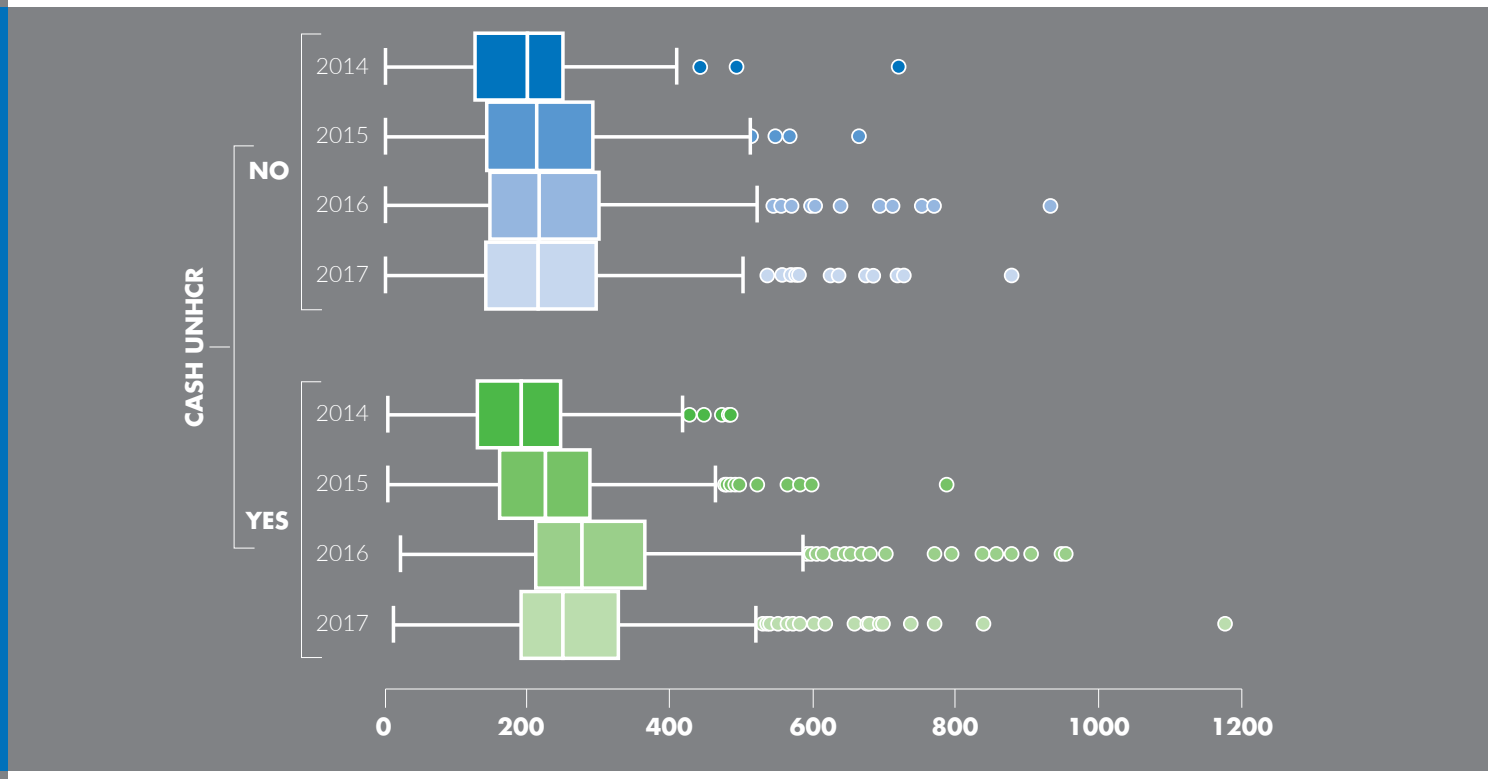

Figure 23: Comparative box plot analysis showing difference in total expenditure per month (shown on horizontal axis, in JOD), for recipients and non-recipients of UNHCR cash, between 2014 and 2017.

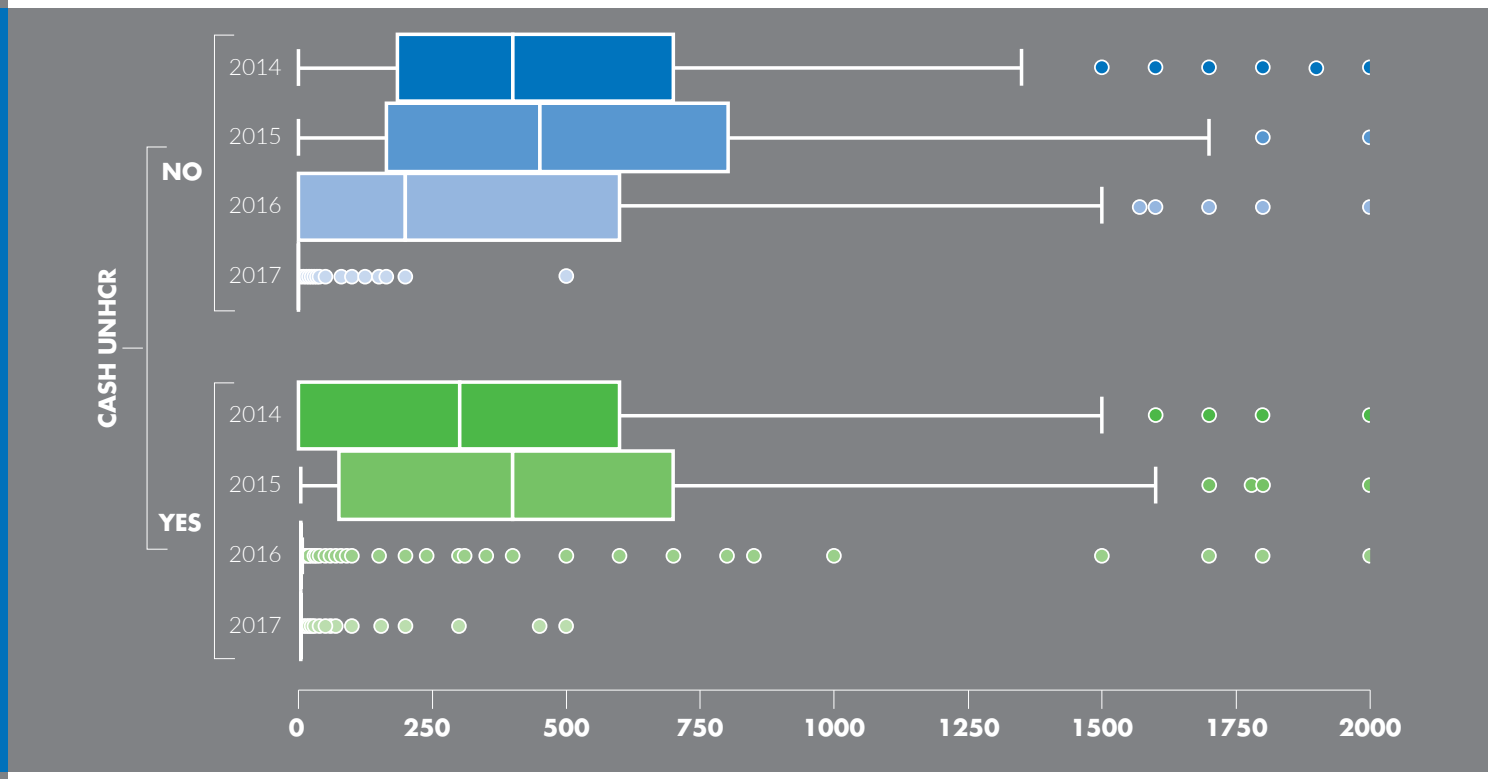

Figure 24: Comparative box plot analysis showing difference in total debt (shown on horizontal axis, in JOD), for recipients and non-recipients of UNHCR cash, between 2014 and 2017.

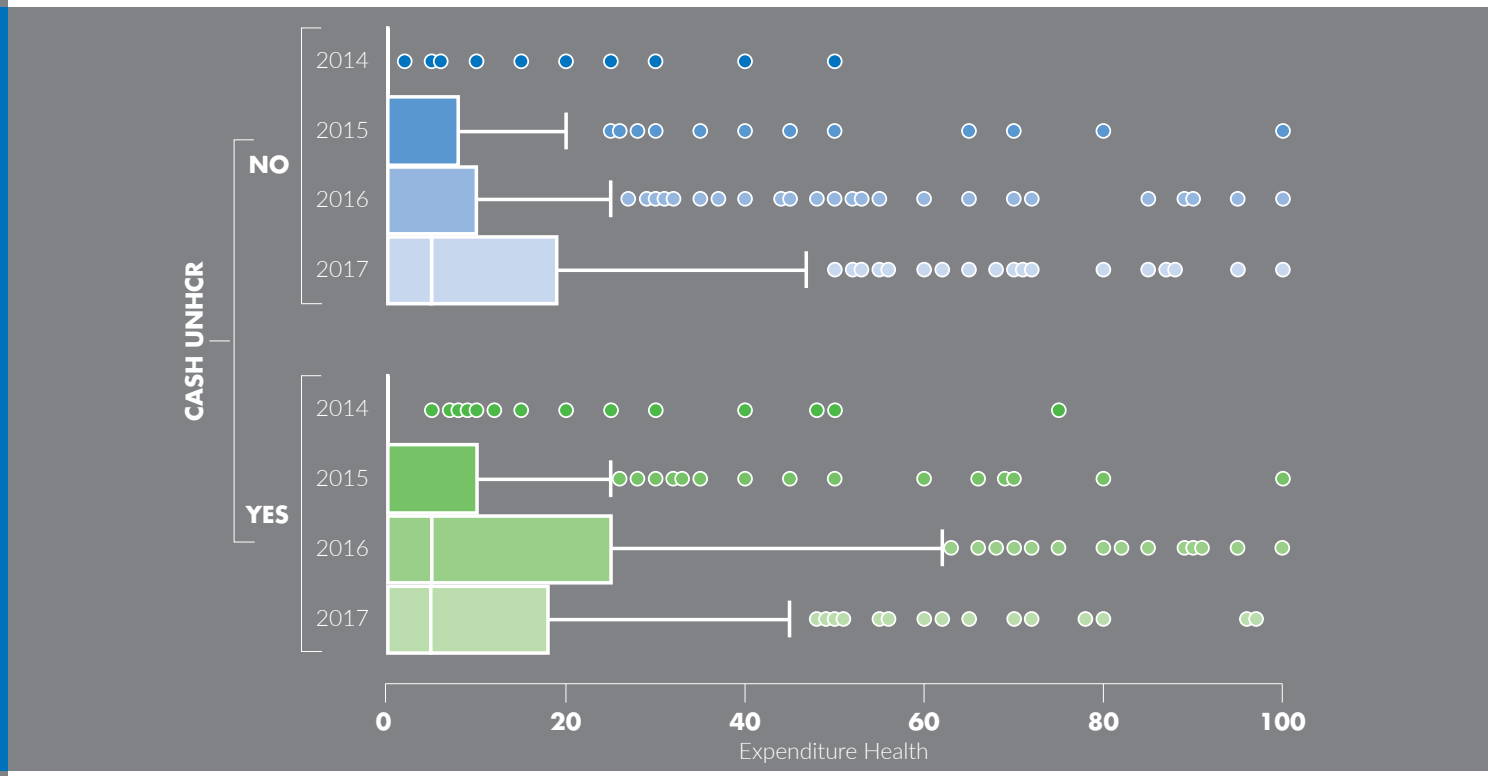

Figure 25: Comparative box plot analysis showing difference in health expenditure per month (shown on horizontal axis, in JOD), for recipients and non-recipients of UNHCR cash, between 2014 and 2017.

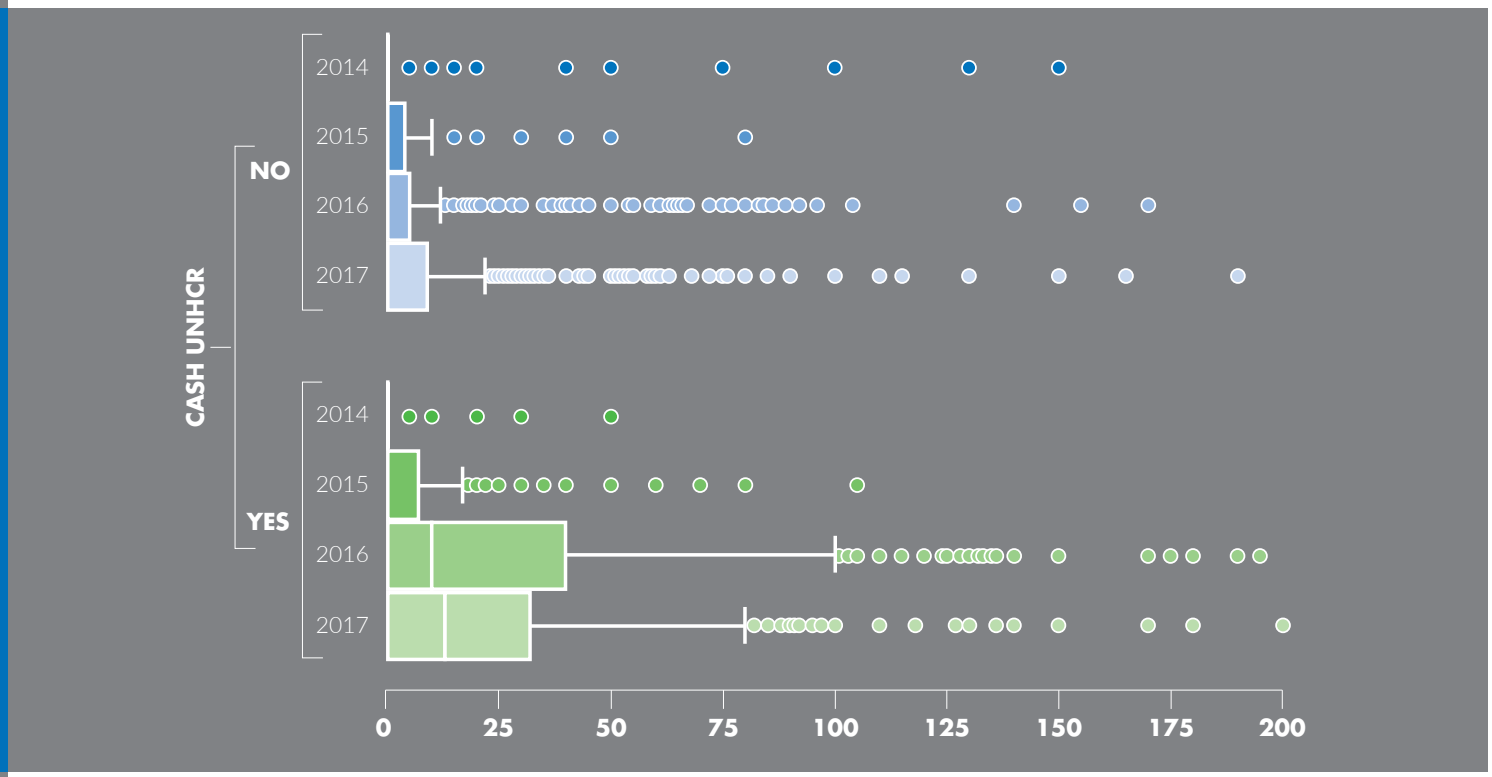

Figure 26: Comparative box plot analysis showing difference in education expenditure per month (shown on horizontal axis, in JOD), for recipients and non-recipients of UNHCR cash, between 2014 and 2017.

To further validate the findings on debt, a yearly comparison of how often each value of debt was reported by respondents showed a decrease over time. Figure 27 shows the density of total debt for each year, and reveals that respondents in 2017 are less likely to report large amounts debt than in previous years while they are more likely to borrow smaller amounts more often. Given the longitudinal nature of the dataset, it is safe to hypothesize that one of the indirect/direct effects of the CBI programme is a lower amount of total debt. In fact, by looking at the figure, respondents in 2017 are less likely to have a total amount of debt above 750 JOD than before.

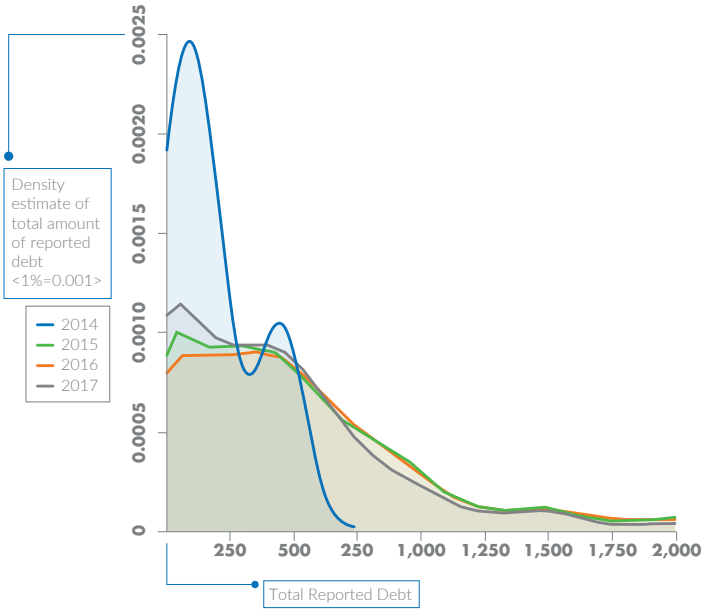

Figure 27: Density analysis of self-reported debt amounts shows total debt of recipients of UNHCR cash decreased over time.

Figure 28 further shows how the number of times an amount of any expenditure is reported (vertical axis) decreases as the amount of that expenditure rises (horizontal axis). Expenditures on water and food tends to be lower in value, while expenditure on rent represents one of the costliest outgoings. Food remains a key expenditure throughout the dataset. Given that this analysis has shown the positive relationship between UNHCR cash and dietary diversity, this reaffirms the importance of UNHCR cash when looking at nutrition and food security.

Chapter 3 of the latest ODI report (2017) also highlights this pattern of spending among CBI recipients, by highlighting that 69 percent of monthly income is spent on accommodation, and that 92 percent of recipients stated that cash helps them pay rent.

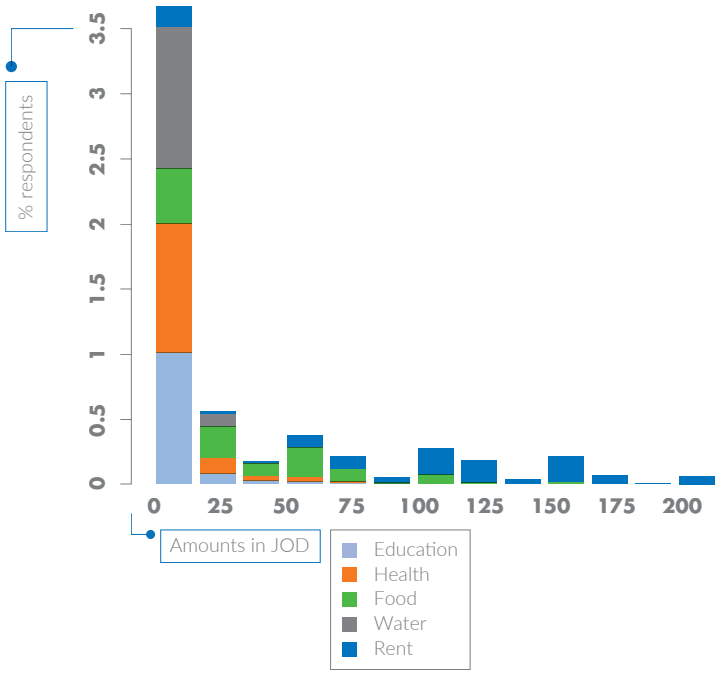

Figure 28: Density analysis shows patterns of expenditure for education, health, food, water and rent

Figure 29 (Annex 2) dives deeper into the analysis of correlation between the different categories of expenditure, in order to uncover specific relationships between variables, and give a greater understanding of the expenditure patterns of respondents. Both the x and y axis are a list of variables from the dataset while the numbers in each box refers to the correlation coefficient. From the figure, the strongest correlation is seen between basic household items and utilities, with expenditure on one rising as the other increases (correlation coefficient = 0.4). This could entail that all other expenses go along the ability of households to secure those items and services, but this assumption remains to be validated.

In fact, even if the interpretation is acceptable to a partial extent, the overall distribution of evidence for each variable seems to be quite independent, with the most significant correlation being 0.4. Furthermore, the level of disaggregation for each category remains insufficiently detailed to establish a link between these expenditure categories (e.g. basic items) and their internal composition (which items are considered basic), which information is not available in the homevisit dataset and therefore cannot be utilised to further explain the correlation table in Figure 29.

4.5.1A EXPENDITURE DATA FROM THE PDM

As for the homevisit and ODI datasets, the five PDM cycles conducted during 2016 and 2017 also showed consistent expenditure trend linked to rent and food as the main household expenses. In comparison, in 2014-2015 more variation in household expenditure was noted. It is likely that the proportional rise in food and health expenditure was due to the 2015 decrease in the absolute value of WFP food vouchers, as well as the decision of the Government of Jordan to stop free health care for refugees in late 2014.

RENT

Rent was the main and most common expense paid by Syrian refugees in 2016 and Q1 2017. In 2016, 88 percent of the households reported paying rent, with an average of 123 JOD per month in 2016 – 2017 (Q1). This is slightly lower than recorded in the PDM dataset in 2015 and ODI report in 2017 (both 130 JOD), possibly due to multiple households moving in together to share the cost, according to the Shelter Sector Working Group. At the same time, data from 2016 shows that 15 percent of respondents reported an increase in their monthly rent payment. This increase was attributed to a general market trend (66 percent), to the landlord believing that UNHCR Jordan pays the rent (23 percent), and to a lesser extent, to respondents being able to afford better accommodation (8 percent). This trend remained similar in 2017 (Q1), with 16 percent reporting an increase in rent, in line with evidence pointing out to a steady increase of accommodation costs since 2011 due to a sharp increase in demand.

FOOD

Food was the second highest and most common expense reported in 2016 – 2017 (Q1). In all five PDM cycles, respondents reported spending money on food, on top of the food vouchers given by WFP. The average expenditure on food was 66 JOD per household (or 15 JOD per person) in 2016, and slightly lower in Q1 2017 at 59 JOD per month, or 12 JOD per person. It was also noted that expenditure on food items during the Ramadan period is higher, a trend that was observed consistently over the years. It is important to note that the PDM does not gather information on dietary diversity.

HEALTH

The decision of the Government of Jordan to stop free health care for Syrian refugees in late 2014 has triggered the 'Cash for Health' scheme: since late 2015, UNHCR Jordan Health Unit has provided funds to refugees to cover health care services. This includes but is not limited to specific grants for pregnant women to assist them in paying for delivery, for that purpose a total of 791,430 JOD was provided to people receiving cash assistance or to people that are on the cash assistance waiting list in 2016. In 2016, 64 percent of the sampled households reported spending an average of 41 JOD per month on health-related expenses.

DEBT REPAYMENT AND OTHER EXPENDITURES

Debt repayment continued to be a substantial expense throughout 2016 – 2017 (Q1) with 10 percent of respondents reporting an average of 39 JOD monthly payment in 2016 (and 33 JOD in 2017 Q1). This gives an indication that cash assistance facilitated recipients to repay existing debt and this trend is verified also descriptively from the home visit and ODI datasets. Other significant monthly expenses recorded during 2016 – 2017 (Q1) included utilities (22 JOD on average for 84 percent of respondents), children's needs (26 JOD on average for 23 percent of respondents) and transportation (14 JOD on average for 70 percent of respondents).

MEETING THE NEEDS OF RECIPIENTS

Despite of the positive effect on expenditures reported by Syrian refugees, both in relation to their physical and mental dimensions, the vast majority do not believe that the cash assistance is sufficient to cover the whole range of household needs. In 2016, only 16 percent of the respondents felt that cash transfers addressed them all and the following Figure 30 highlights the needs that remain unmet. This finding underlines that an upward expenditure trend does not equate to fulfilment of all key needs, even the ones associated to the most basic ones.

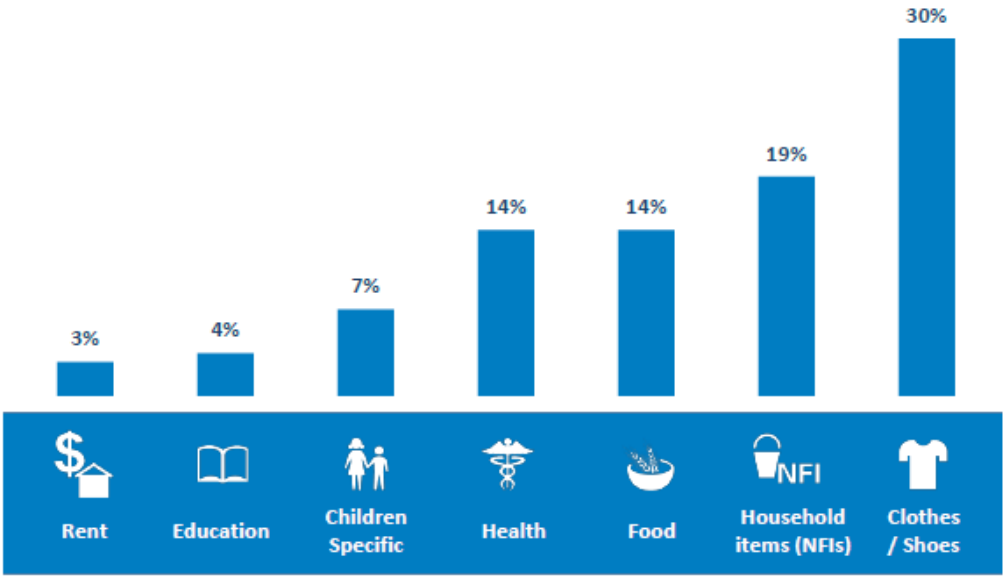

Figure 30: Illustrates the percentage of unmet needs in respondents.
Source: UNHCR Cash Assistance: Improving Refugee Lives and Supporting Local Economies, 2016

5.5 KEY INQUIRY 5

How does the provision of UNHCR cash affect access to key services such as health and education?

SUMMARY OF FINDINGS: KEY INQUIRY 5

- UNHCR CBI is not enough to explain whether respondents' access health services, though health expenditure is associated with access.
- UNHCR CBI leads to a nominal (but not statistically significant) increase on health expenditure.
- UNHCR cash seems to lead to a reduction in the number of children missing school.
- UNHCR CBI leads to a statistically significant increase on education expenditure. Transportation costs are a key driver of education expenditure, along with the number of children missing school.

5.5.1 RELATIONSHIPS LINKED TO ACCESS TO HEALTH SERVICES

This section looks at access to health services in relation to whether respondents are receiving UNHCR cash assistance, coping strategies and health expenditures. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of the factors determining how much access respondents have to health services.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 12)	
RESPONSE VARIABLE Access to Health Services	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash Average incidence of coping strategies (7 days)** Average incidence of coping strategies (30 days) with extra weight on begging and degrading jobs** Vaccination Health expenditure **Controls:** • Location • Gender of head of household • Household size • Disability (proxy for dependency ratio)

This analysis examines whether provision of UNHCR cash, expenditure on health, and the incidence of short- and medium-term coping (last seven and 30 days respectively) strategies affects respondent's access to health services. The provision of UNHCR cash is not a sufficient condition to explain respondents' access to health services. Unsurprisingly, if respondents accessed vaccinations and exhibit a low frequency of negative coping strategies then it is more likely they are using medical facilities (Annex 1: Table 12).

Exploring the correlation between access to health services and other health related variables yields another thought-provoking finding. Figure 31 (Annex 2) shows a strong correlation between total income figures and health expenditures, though the direction of that relationship is not statistically significant ($p>0.05$) according to the model in Table 12 (Annex 1).

From PDM reports, access to health services seems to have improved to some extent, with an increase in 2017 to 22 percent of respondents stating that they were able to access services when needed. Even though this trend is not reflected in a significant way by changes in expenditure patterns from the ODI and home visit data over time, it remains important to mention. For instance, the provision of cash in households with family members affected by disabilities represents nearly a third of those with specific needs and might be an explanation for increased access. The effect of the Cash for Health scheme targeting vulnerable women is also notable, with cash being used to enable women to pay for a delivery at a health facility. Among the factors contributing to the success of the scheme, accurate targeting supported by existing UNHCR Jordan's vulnerability identification process and existing provision of cash largely meeting refugee's basic needs (which could otherwise result in the diversion of cash to meet basic needs).

The PDM data also shows that cash assistance has had a positive effect on the psychological well-being of recipients, with reduced stress levels reported (64 percent during 2016 and 41 percent in the first quarter of 2017); this variation might be explained by incomplete figures from 2017.

The improvement of psychological wellbeing is the most recurrent effect mentioned from respondents in relation to cash assistance, alongside improved meals both in terms of size and quality, less debt, access to health and to education services (Figure 32). Some of these trends are also confirmed by the ODI study and home visit evidence. For example, in the ODI survey over 50 percent of respondents explained the largest contribution cash had made was 'eating better' while 26 percent stated: 'better housing'. It is possible to hypothesise that greater access to health services or at least more resources to use health facilities has a positive influence in the overall psychological wellbeing of recipients. This assumption emerging by considering PDM trends requires further testing.

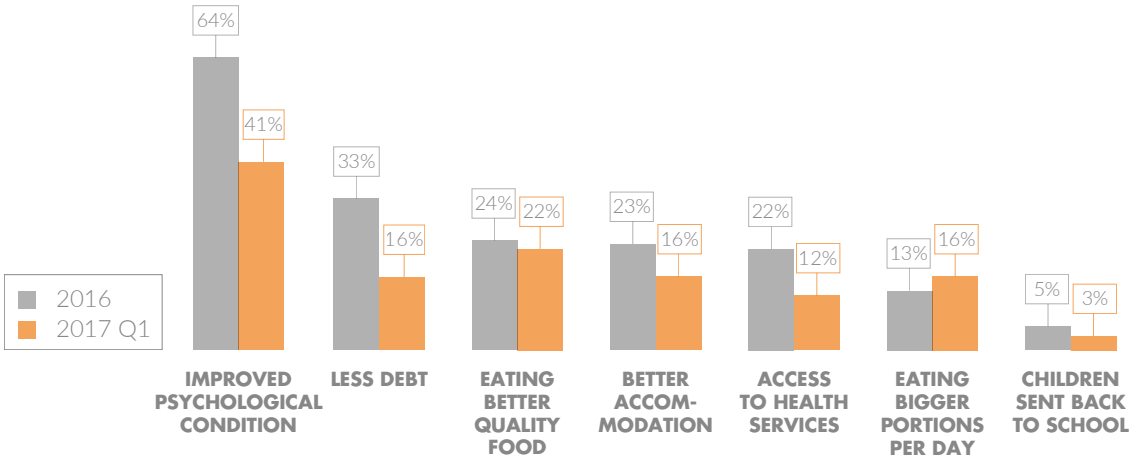

Figure 32: Comparative bar graphs showing percentage of respondents reporting how cash improves various aspects of their lives.

5.5.2 RELATIONSHIPS LINKED TO HEALTH EXPENDITURES

This section looks at access to health expenditures in relation to whether respondents are receiving UNHCR cash assistance, the employment of coping strategies and disability. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of the factors determining how much respondents spend on health services.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 13)	
RESPONSE VARIABLE Health expenditure	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash Total income** Average incidence of coping strategies (7 days)** Average incidence of coping strategies (30 days) with extra weight on begging and degrading jobs Vaccination Disability** **Controls:** • Location • Gender of head of household • Household size

When exploring health expenditures, the presence of disabilities and the employment of short-term (7 day) coping strategies are determining factors in explaining expenses linked to health services. As we might expect, households who have accessed services (e.g. vaccination) are also more likely to incur into higher expenditures. In this context, the difference between recipients and non-recipients is not statistically conclusive (Annex 1: Table 13).

Examination of trends in health expenditure suggest that there has been an increase in health expenditures in between 2016 and 2017 (Figure 33), and that the median value of health expenditure is slightly more for recipients of cash assistance. However, this trend has not been protracted for long enough to render it statistically relevant. Therefore, this report suggests continued monitoring of health expenditure patterns and related variables in order to prove/disprove the hypothesis that the provision of UNHCR cash is a driver of increased health expenditure.

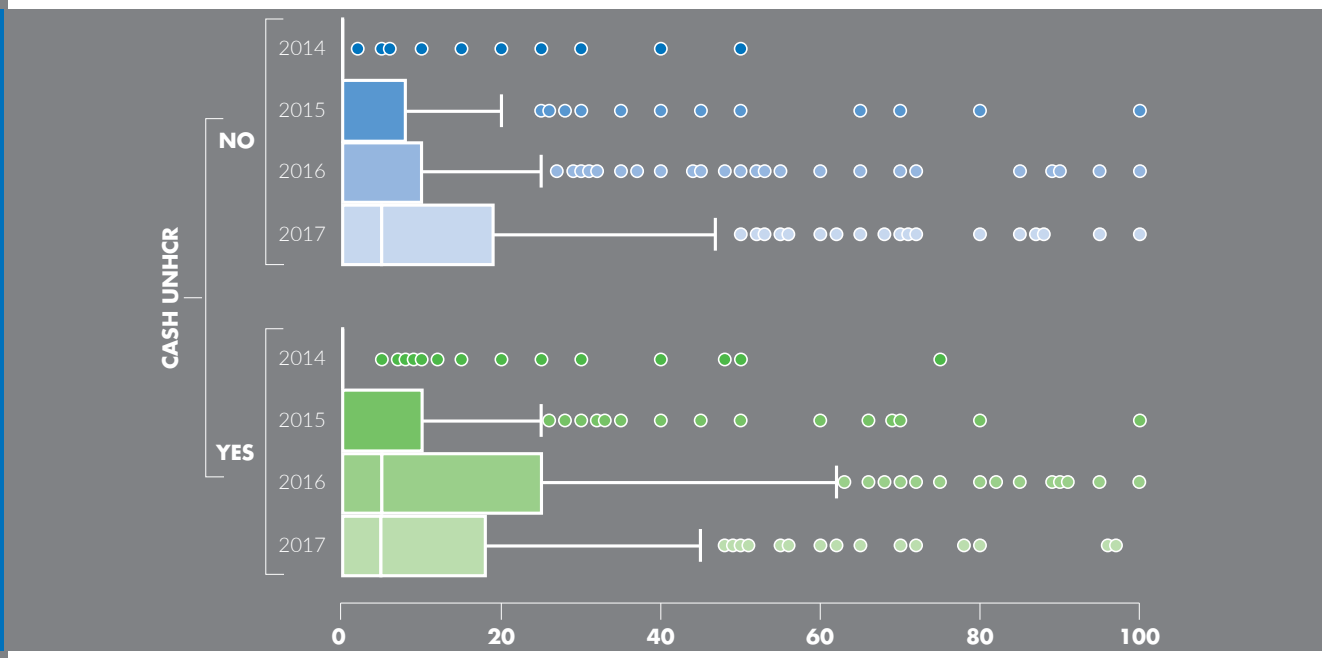

Figure 33: Comparative box plot analysis showing difference in health expenditure per month (shown on horizontal axis, in JOD), for recipients and non-recipients of UNHCR cash, between 2014 and 2017.

5.5.3 RELATIONSHIPS LINKED TO EDUCATION EXPENDITURES

This section looks at education expenditures in relation to whether respondents are receiving UNHCR cash assistance, total income, transportation, and children's attendance to formal education. The following table describes the main inference for this section, which is accompanied by a more in-depth descriptive investigation of the factors determining education expenditures.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 14)	
RESPONSE VARIABLE **Education expenditure**	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash Transportation Costs** Missing School Ratio** Total Income** **Controls:** • Location • Gender of head of household • Household size • Disability

Inferential analysis on education expenditures highlights significant relationships with a number of variables. Transportation costs are a key driver of education expenditure (at 95 percent confidence interval), along with the number of children missing school at 90 percent confidence interval (See Annex 1: Table 14). When consulting with UNCHR education experts, transportation costs were proposed as a major barrier for children's likelihood of attending formal education, which this analysis has confirmed. The disaggregation of expenditure patterns for education by year further establishes that there has been a recent upward trend in the amount spent on education for those receiving UNHCR cash (Figure 34). This may indicate that the UNHCR cash is inducing an increase in education expenditure, as this same pattern is not seen by non-recipients.

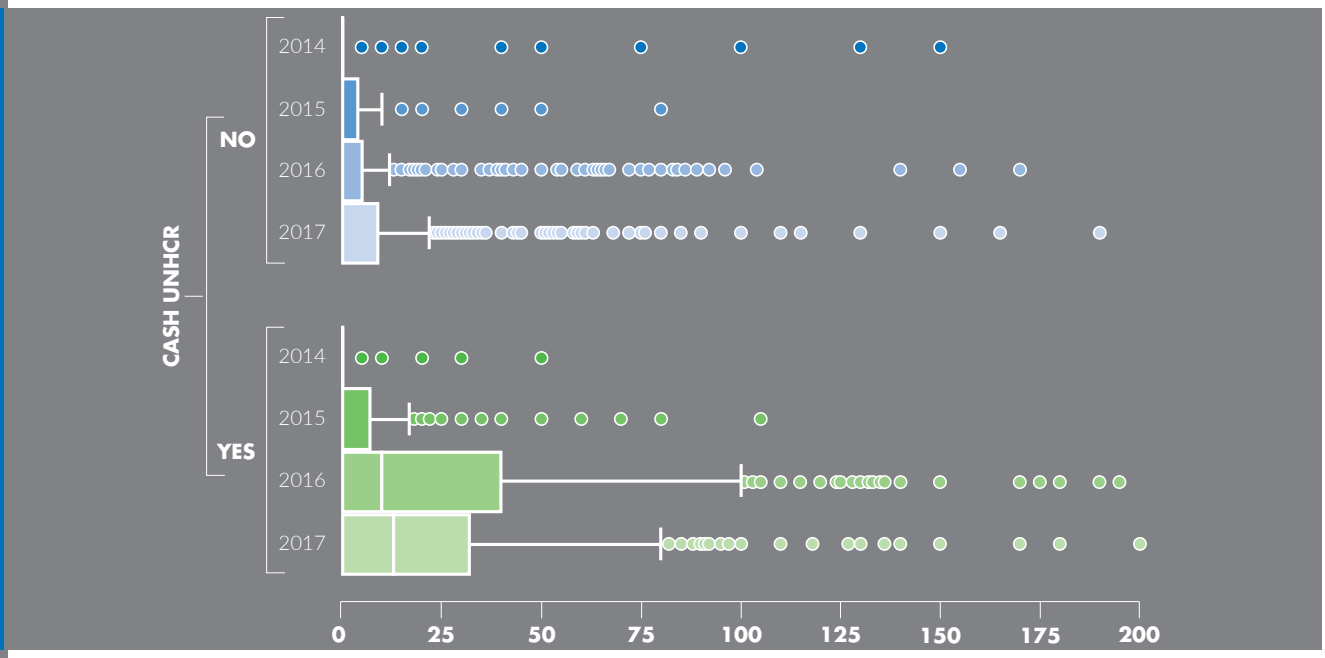

Figure 34: Comparative box plot analysis showing difference in education expenditure per month (shown on horizontal axis, in JOD), for recipients and non-recipients of UNHCR cash, between 2014 and 2017.

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5.5.4 RELATIONSHIPS LINKED TO CHILDREN DROPPING OUT OF FORMAL EDUCATION

This section looks at the relationship between children dropping out of formal education and whether respondents are receiving UNHCR cash assistance, employing short-term coping strategies, total debt and education expenditures. The following table describes the main inference for this section along with a more in-depth descriptive investigation of the factors determining children drop-outs.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 15)	
RESPONSE VARIABLE **Ratio of children skipping school**	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash Total Debt Average incidence of coping strategies (7 days) Child Marriage Education expenditure** **Controls:** • Location • Gender of head of household • Household size • Disability (as a proxy for dependency)

Nine percent of households reported their children having to drop-out of school, but the percentage of children missing school has decreased from 12 percent of children in the household in 2014 to 7.75 percent in 2016. When examining what drove down the ratio of children skipping school (Annex 1: Table 15), expenditure on education has the strongest influence. The higher the amount spend on education, the less likely it is that children will not attend school. It also seems that cash transfers significantly decrease the ratio of children missing school though it remains a weak significance level (90 percent confidence interval).

As seen when examining the drivers for education spending, both correlation analysis indicates that there is a strong relationship between education expenditure and income (Annex 2: Figure 35). This is supported by the results from regression analysis, highlighting the strong direction of the relationship between education expenditures and income. It is important to highlight that multiple dimensions inform spending beyond those analysed here. However, the fact that cash assistance is a driver of income represents that an increase in education expenditure may be an encouraging indirect effect of the CBI programming.

5.6 KEY INQUIRY 6

Are recipients of UNHCR cash with greater food security, dietary diversity, access to water and improved shelter more likely to accumulate savings, and generate more income than expenditures?

SUMMARY OF FINDINGS: KEY INQUIRY 6

- There is no evidence to suggest that the provision of UNHCR cash contributes to an accumulation of savings.
- Respondents with a higher amount of savings have an increased likelihood of depleting their savings as a coping strategy.
- Recipients of UNHCR cash are likely to have a higher total income per month. Dietary diversity is associated with a higher total income, and is itself increased by provision of UNHCR cash.
- Recipients of UNHRC cash are likely to generate more income, and to incur higher expenditures. Between 2014 and 2017, there has been a shift towards a positive differential between income and expenditure across households (i.e. families are left with additional funds after all costs are incurred).

5.6.1 RELATIONSHIPS LINKED TO SAVINGS

This section looks at the amount of self-reported savings in relation to whether respondents are receiving UNHCR cash assistance, nutritional status and living conditions. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of the factors determining savings.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 9)	
RESPONSE VARIABLE **Amount of savings**	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash** Number of meals per day** Diet diversity** Type of shelter** Number days with no water **Controls:** • Location • Disability (proxy for dependency ratio)** • Household size**

The analysis indicates that there is a strong relationship between the amount of savings generated by respondents, and whether they receive UNHCR cash, their nutritional status, and their living conditions (Annex 1: Table 16). The assumption that a savings base positively influences the ability of cash recipients to access a better diet and living conditions is validated from evidence, though it is important to recognise that there is a low-density of savings amount across the dataset. Figure 36 shows the limited amount of data related to savings, with the vertical axis showing that less than 1 percent of respondents reported any savings. The mean value across the dataset is 17 JOD in savings, but the median value is close to zero. Most households who received UNHCR cash are not able to save and only 3 percent (n=81) of total respondents had savings greater than zero. Future iterations of the home visit should attempt to explore this value futher by including non-monetary forms of savings that could expand this figure.

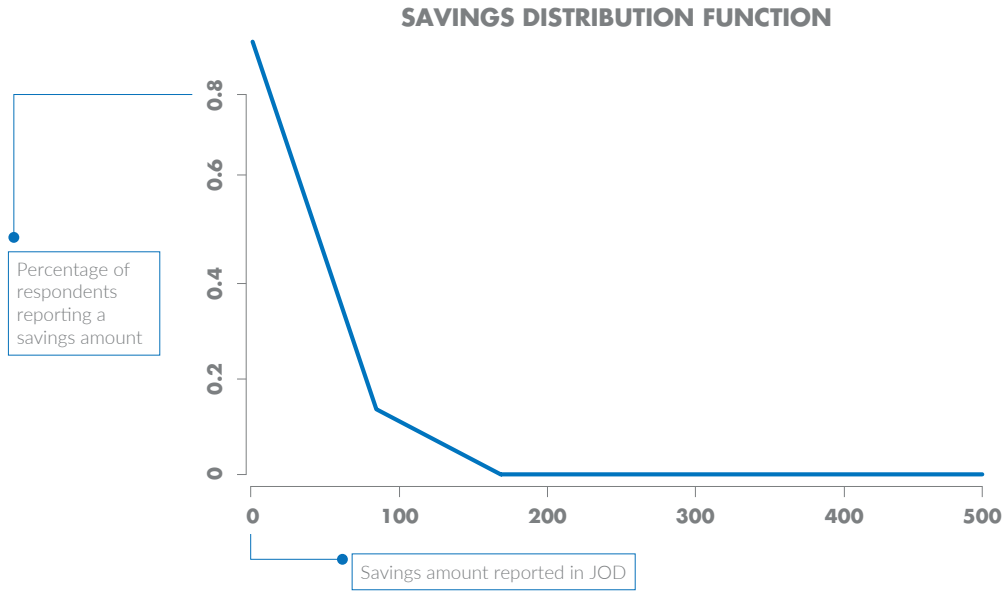

Figure 36: Graph highlighting the low density of savings data in the data set.

5.6.2 RELATIONSHIPS LINKED TO USE OF SAVINGS AS A COPING STRATEGY

This section looks at savings depletion in relation to whether respondents are receiving UNHCR cash assistance, living conditions and nutritional status. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of the factors determining use of savings as a negative coping strategy.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 17)	
RESPONSE VARIABLE **Savings depletion as a negative coping strategy**	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash Diet diversity Savings amount** Type of shelter Number Days with no water **Controls:** • Gender of head of household • Household size • Disability (proxy for dependency ratio) • Location

Though few people manage to save, even fewer (n=63) have used savings as a coping strategy. The frequency of employing this coping strategy is low and not influenced by living conditions or dietary diversity. However, there is a significant relationship between the amount of savings and likelihood of using savings as a coping strategy (Annex 1: Table 17). The possession of monetary savings does not prevent their use to address urgent livelihood needs.

5.6.3 RELATIONSHIPS LINKED TO TOTAL INCOME

This section looks at household income in relation to whether respondents are receiving UNHCR cash assistance, living conditions and nutritional status. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of the factors determining the generation of income and its main sources.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 18)	
RESPONSE VARIABLE **Total income**	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash** Diet diversity** Days with no water** **Controls:** • Gender of head of household** • Household size

Total income of respondents is strongly affected by UNHCR cash, their nutritional status, access to water and gender of the household head (Annex 1: Table 18). All these variables have a statistically significant effect on income figures, indicating how essential UNHCR CBI contribution is to boost recipients' ability to generate monetary resources.

The statistical significance between cash assistance and income figures is further reinforced by looking at the low correlation levels between variables in Figure 37 (Annex 2). The average gradient scale, shown next to the main table, explains that most correlations are between 0.2-0.4, indicating that variables are largely independent from each other with a low risk of multi-collinearity. However, poor correlation between income figures and the chosen explanatory variables also provides the argument that there might be missing dimensions that could strengthen our understanding of income, like access to the job market and productive assets.

To further explore these relationships, this analysis utilised a decision tree algorithm. Decision tree algorithms are a form of supervised learning algorithms which can be used for solving regression and classification problems. The reason for using a decision tree is to create a training model which can be used to predict class/value of target variables by learning decision rules inferred from prior data (training data). The interpretation of a decision tree algorithm is easier than other classification algorithms, due to output of a tree representation (Figure 38). Each internal node of the tree corresponds to an attribute, and each leaf node corresponds to a class label (true node=left; false node=right). A decision tree is a classification strategy as opposed to other single, well-defined classification algorithms.

Three separate decision tree algorithm implementations exist (Gini index, Gain ratio and Information Gain) and there may be several ways to configure different aspects of each. In essence, any algorithm which seeks to classify data by taking a recursive approach to craft a tree-based graph for subsequent instance classification would be considered a decision tree. Given the limited use of decision trees in processing humanitarian evidence, we wish to experiment with this technique by while recognising the limitations of its use and interpretability, since the number of leaves and nodes can attain great dimensions to reach a zero value Gini coefficient. For simplicity, Figure 38 shows only three levels, targeting three key variables (total income, savings amount and diet diversity: 1 to 12). In this case, the classifier would be whether the respondent is (or is not) a cash recipient.

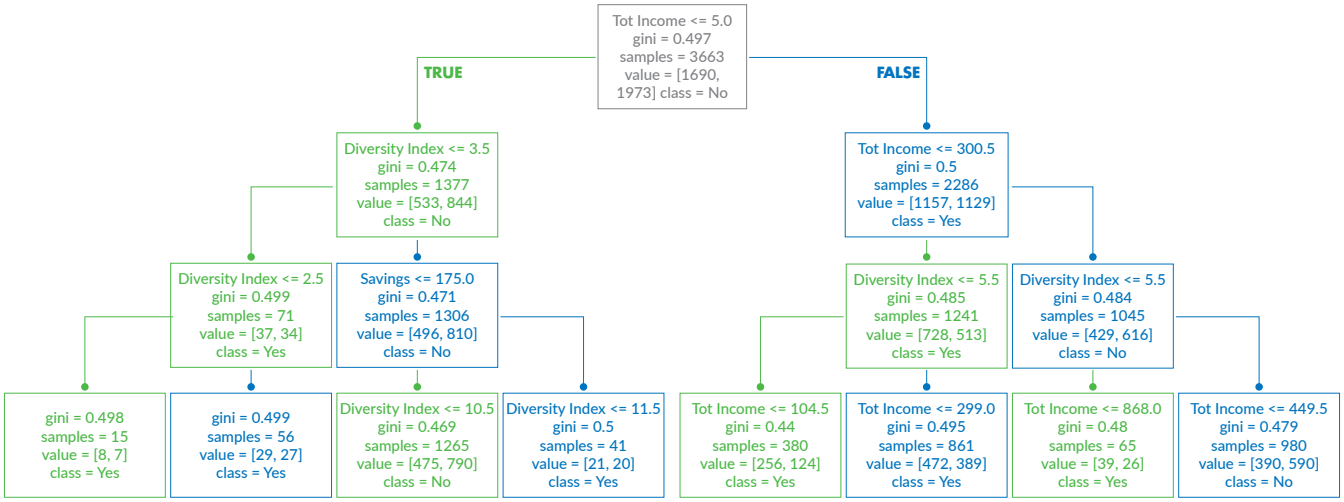

Figure 38: Shows decision tree algorithm for exploring the relationship between the provision of UNHCR cash, total income and dietary diversity.

The result of the analysis should mainly focus on how the decision tree managed to classify values by establishing specific numerical cut-off points along the chain. For example, if total income is below 5 JOD, it is likely the respondent is not a cash recipient. If this node is false, the subsequent cut-off point is 300 JOD to indicate whether the recipient is recipient or not and so-on while if true, their diet diversity score is below 3.5.

The whole logic of the decision tree is to attempt to compute class values with the lowest Gini coefficient by dividing various numerical values across the variables under-choice. For this case, the number of possible scenarios is too great to reach optimal algorithmic distribution, but the logic validates what is stated so far since by observing all the cut-off points, cash recipients are more likely to have higher income, savings and diet diversity. Therefore, it is reasonable to assume that there are positive relationships between income, savings and nutritional status of a respondent.

5.6.3A INCOME FINDINGS FROM PDM

PDM reports offer further detail about income trends and sources between 2016 and 2017 by showing that UNHCR Jordan cash assistance and wages are the main sources of income for the majority of Syrian refugees. Evidence from Q1 of 2016 showed that 25 percent of Syrian refugees rely on income from wages, although most respondents reported 'other/undefined' sources of income, suggesting that the figure may be higher. As such, the income related questions were amended, and data collected during the second to fourth quarters showed that 33 percent rely on income from wages as their main source of income. Data from Q1 of 2017 showed a slight decrease with 31 percent reporting wages to be their main source of income and of these, only 25 percent reported having a work permit. This suggests that many households are still relying on sources of income without accessing a work permit, despite potential legal risks associated with this.

Reliance on UNHCR Jordan as the main or sole source of income was higher in 2016 compared with Q1 of 2017, with 32 percent and 23 percent of respondents citing UNHCR cash assistance is their sole source of income, respectively. At the same time, in Q1 2017 there was an increase in the number of families reporting receiving cash or vouchers from other NGOs/CBOs, from 11 percent in 2016 (Q2-Q4) to 22 percent in Q1 2017. This could explain the decrease in families relying solely on cash assistance. The 2017 ODI report, 'A Promise of Tomorrow' indicates that 50 percent of sample participants reported cash support as their only form of income, which can include both UNHCR and other agencies.

Other sources included remittance from other family members, with a decreasing number of households reporting it as a source of income from 8 percent in 2016 (Q2-Q4) to only 1 percent in Q1 2017. A few families (3 percent) reportedly rely on child labour despite the receipt of cash assistance, though the ODI report assumes substantial underreporting with regards to boys used as labour force. The percentage of families receiving support from the host community has also decreased from 17 percent in 2016 (Q2-Q4) to 4 percent in Q1 2017. Similarly, data from 2016 (Q2-Q4) showed that 34 percent relied on borrowing money, compared with 13 percent in Q1 2017. The evaluation team hypothesises these decreases are correlated to increased cash assistance.

5.6.4 RELATIONSHIPS LINKED TO GAP BETWEEN INCOME AND EXPENDITURE

This section looks at the difference between total income and expenditures in relation to whether respondents are receiving UNHCR cash assistance, nutritional status, living conditions, income source and debt amounts. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of the factors determining the difference between financial inflows and outflows.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 19)	
RESPONSE VARIABLE **Income minus expenditure**	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash** Number of meals per day** Diet diversity Type of shelter** Income from Work** Days with no water Total Debt** **Controls:** • Location • Gender of head of household** • Household size/family size** • Disability (proxy for dependency ratio)**

Understanding whether expenditures are driven by a respondent's living conditions can highlight specific vulnerabilities. Recipients of UNHRC cash are both more likely to generate a higher income and to incur higher expenditures, possibly because the anticipation of receiving cash monthly accelerates their demand for goods and services and propensity to spend (Annex 1: Table 19).

Further analysis of how income is distributed along gender and location also yields useful findings. Although not statistically significant, Figure 40 demonstrates that average household income (the central line in the coloured box) of female-headed households is higher than male-headed ones when receiving cash. For non-recipients, the opposite logic applies. Disaggregating income and expenditures by governorates (Figure 39) shows that there has been an increase in both income and expenditure over time, though there are not significant differences between governorate, except when looking at the 'other group' (respondents that are not from Irbid, Amman, Mafraq or Zarqa, which amounts to less than 1 percent). Therefore, we can conclude there is a positive upward trend for both expenditure and income across regions, which seems to be particularly strong for income figures. It may also be worth examining why those in the 'other' group appear to have shown a decrease in both income and expenditure, in order to understand any vulnerabilities unique to these groups.

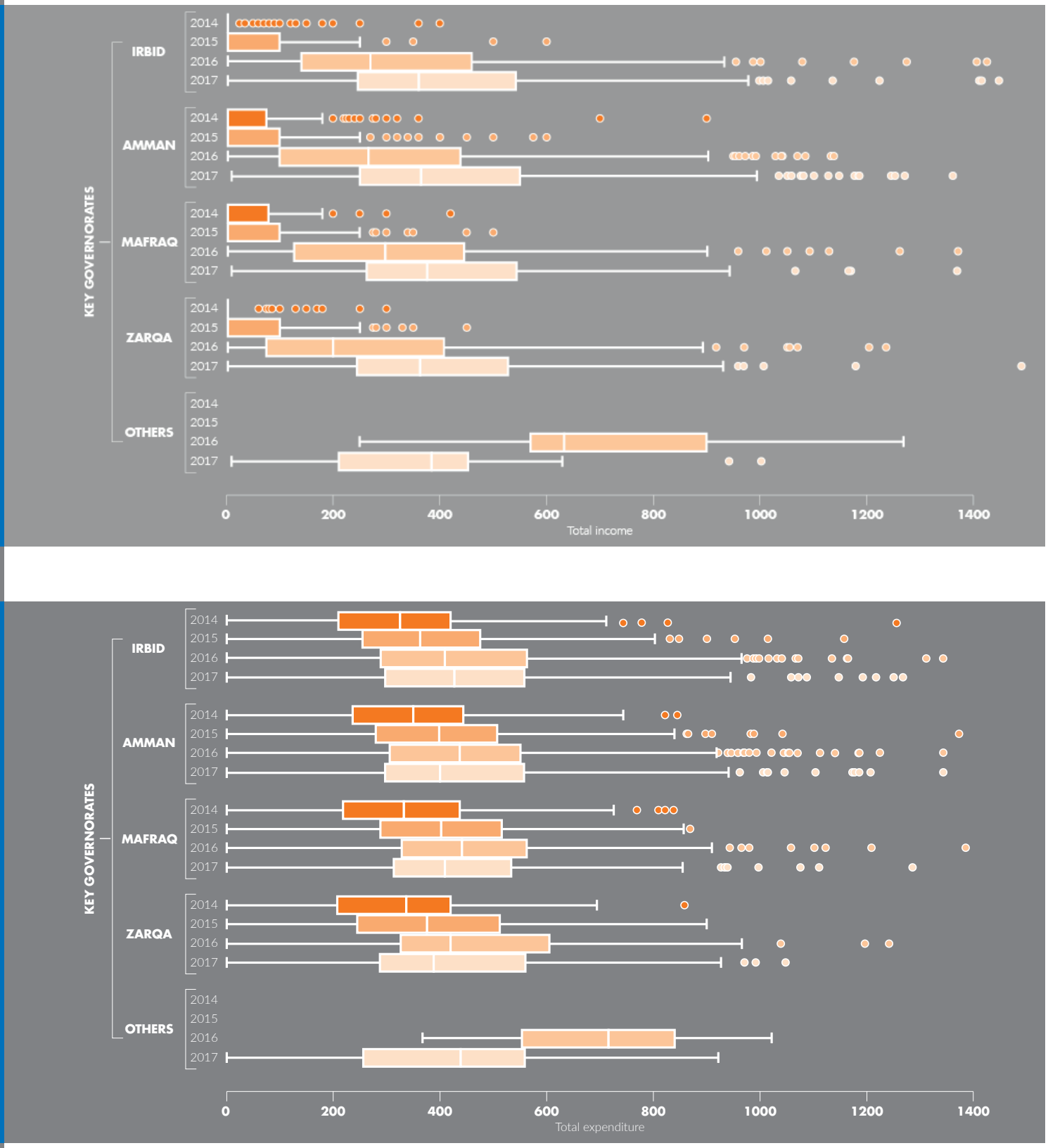

Figure 39: Comparative box plot analysis showing difference in total income (top) and total expenditure (bottom) of respondents in different governorates over time. Boxplots highlight median, interquartile range, outliers.

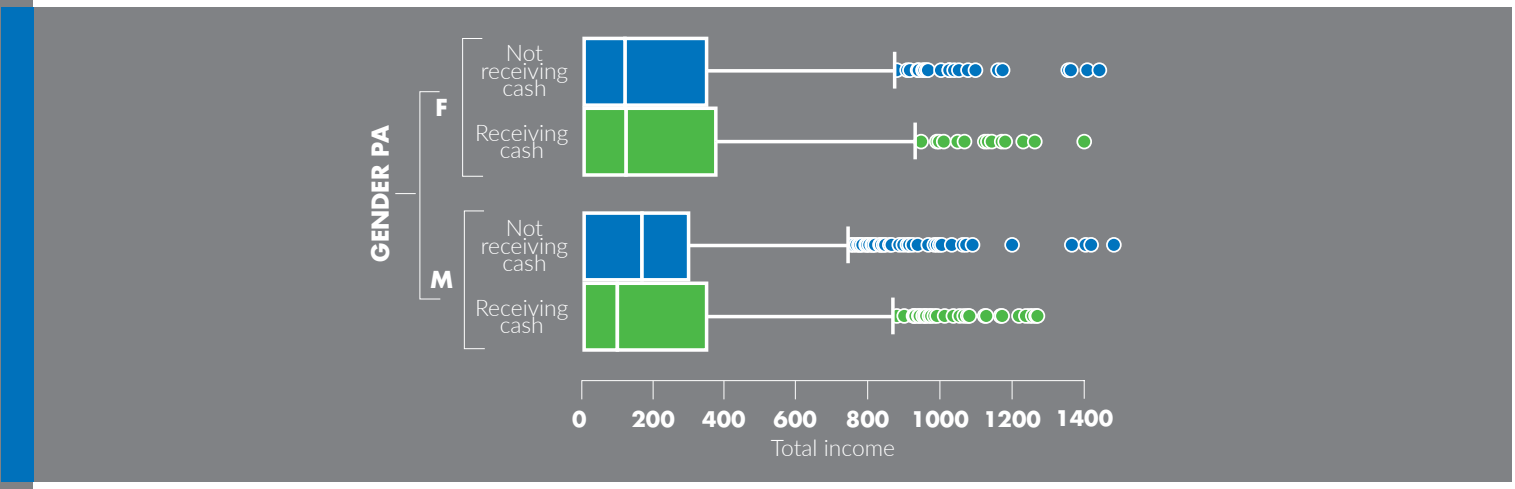

Figure 40: Comparative box plot analysis showing difference in income of non-recipients and recipients of UNHCR cash when comparing female- and male-headed households.

This gradual increase in income has translated to a shift from a negative to a positive balance of income and expenditure differentials across households that were interviewed more than once (Figure 38). Bearing this in mind, it is critical to appreciate there might be some limitation in the analysis of income and expenditure figures since they are self-reported amounts and there might be over-reporting from the ODI study given its depth. Nonetheless, we claim these trends are strongly indicative of significant relationships between the reception of cash and income size.

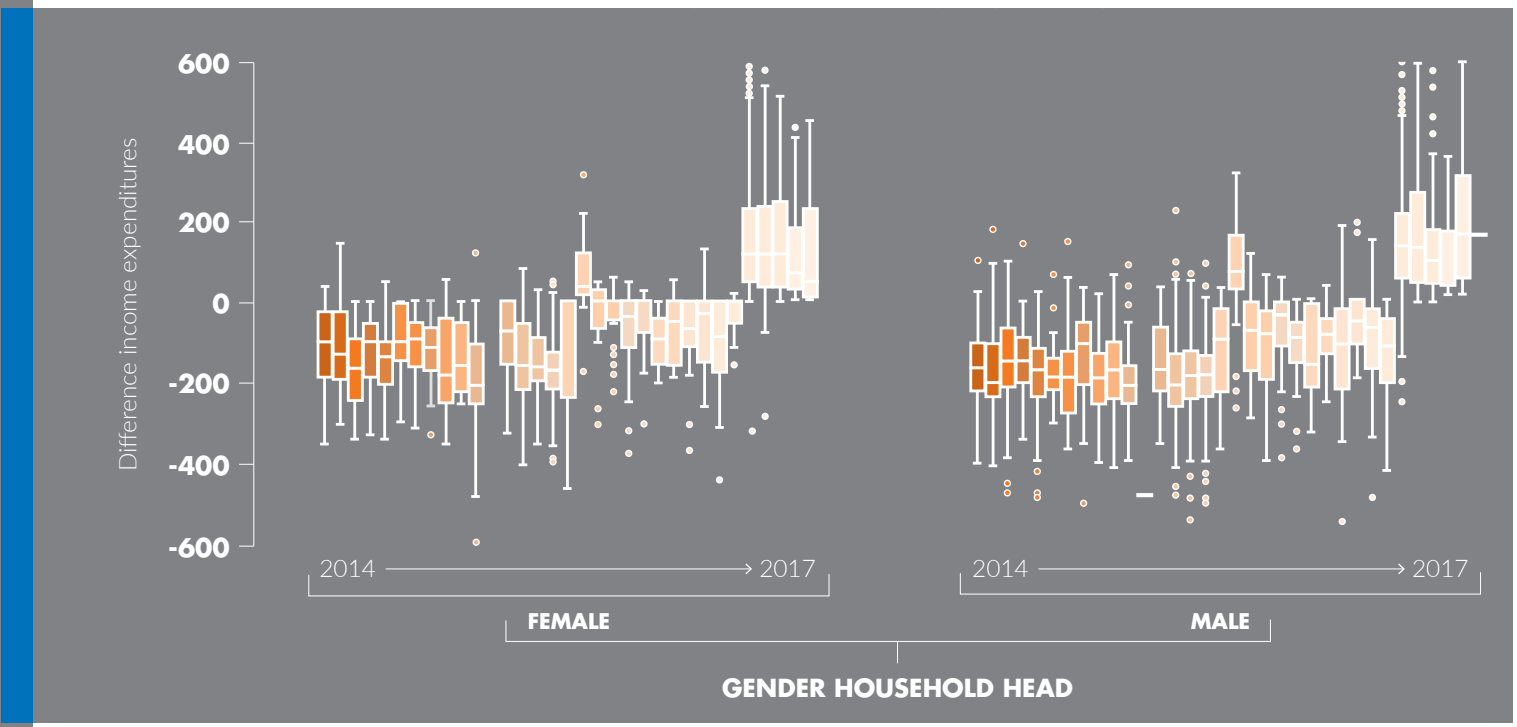

Figure 41: Box-plots of income/expenditure differential for female and male headed households over time (2014-2017)

5.7 KEY INQUIRY 7

Are recipients of UNHCR cash who have a work permit (and do not have legal issues related to access to work) likely to generate more income?

SUMMARY OF FINDINGS: KEY INQUIRY 7

- Recipients of UNHCR cash are less likely to earn income in the formal sector, with access to a work permit proving a vital precursor for this. Income in the formal sector is associated with a reduction in the employment of medium-term coping strategies.
- Respondents generating income from assets are less likely to receive UNHCR cash or have a work permit, but they are more likely to reduce their frequency of long-term negative coping strategies.

5.7.1 RELATIONSHIPS LINKED TO SAVINGS

This section looks at total income from a different perspective by looking at the reported figure in relation to whether respondents are receiving UNHCR cash assistance and their legal status to access a work permit. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of the factors determining the income figure from this perspective.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 20)	
RESPONSE VARIABLE **Total income**	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash** Documentation** Work Permit** **Controls:** • Governorate • Gender of head of household** • Household size** • Disability (proxy for dependency ratio)**

The relationship between total income and legal issues/having a work permit is significantly different from the relationship between income and access to food, water and shelter. In fact, those receiving UNHCR cash are more likely to have a lower income when taking into account whether these households have all the required legal documentation and a work permit in place. Legal compliance has a much stronger influence on increasing refugees' resources from income than UNHCR cash. (Annex 1: Table 20). This pattern is displayed visually in Figure 42, where it can be seen that the median income is increasing more significantly for households who have a work permit, when compared to those who do not.

This pattern is mirrored in the data dispersion table Figure 43 (Annex 2), which emphasises the strong relationship between income from household members generating an income, and total inflows. Similarly, there is enough statistical evidence in descriptive terms to indicate that income from what it is perceived to be a job (both formal and informal) is correlated with a decrease in long-term coping strategies.

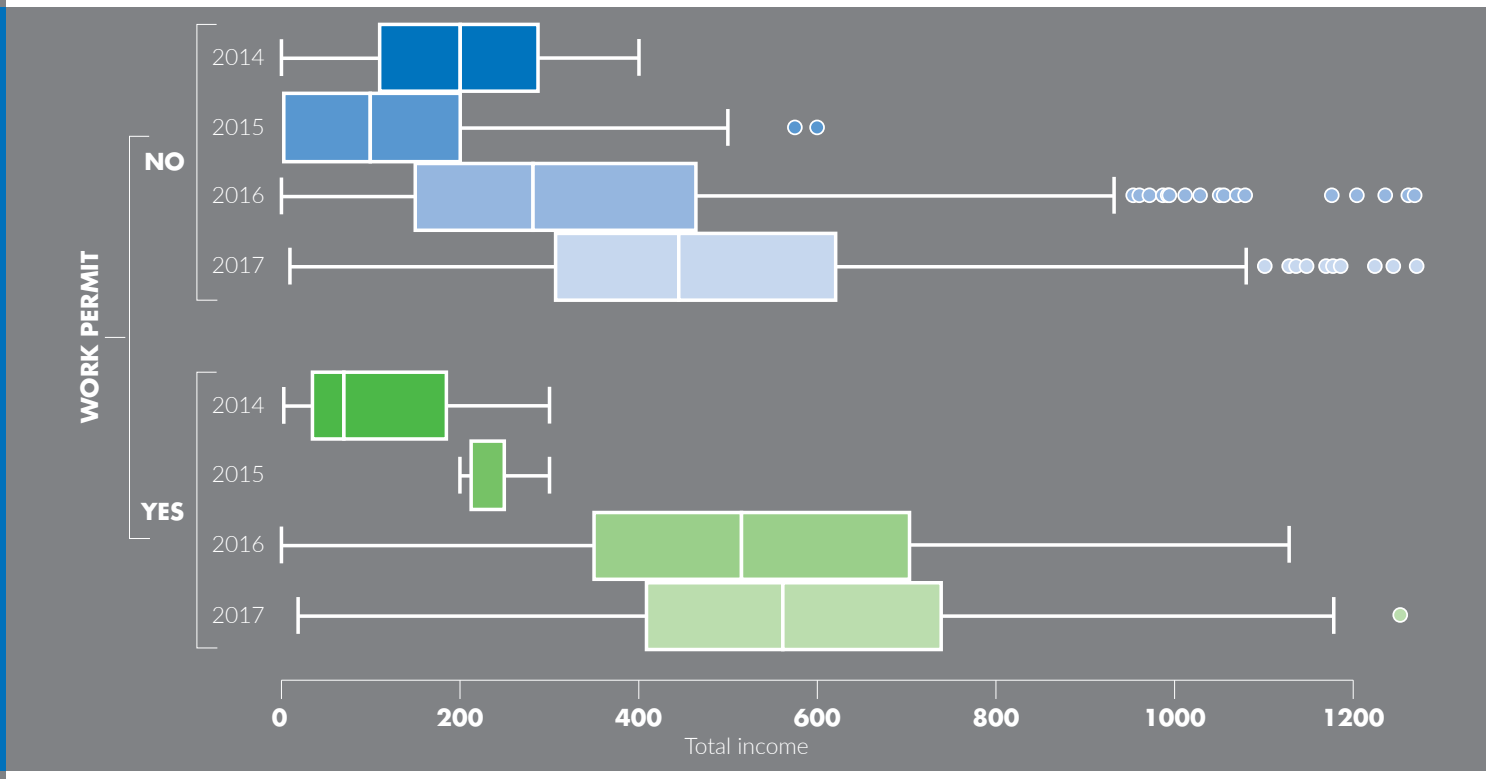

Figure 42: Comparative box plot analysis showing difference in total income and having a work permit.

5.7.2 RELATIONSHIPS LINKED TO WORK PERMITS

This section looks at access to work permits in relation to whether respondents are receiving UNHCR cash assistance, their financial and legal status. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of the factors determining the access to a work permit.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 21)	
RESPONSE VARIABLE **Work permit**	**EXPLANATORY VARIABLE** People receiving/not receiving UNHCR cash Total income** Total savings** Legal issues** Legal documentation available (yes)** Households depleting their savings sources **Controls:** • Gender of head of household • Household size • Disability (proxy for dependency ratio)

The model in Table 21 (Annex 1) shows that possession of a work permit is a key prerequisite for the generation of income and savings. Households accessing the job market[44] are more likely to increase their financial inflows, and to use their savings faster. The recent opening of access to work permits for selected sectors seem vital for refugee communities that are quickly depleting their own savings. In fact, this model shows the strategy of using savings as a coping strategy is by far the strongest factor in driving households to seek access to the job market.

44 The question in the homevisit dataset do not specify if formal or informal, therefore we assume it is both

5.7.3 RELATIONSHIPS LINKED TO INCOME FROM THE JOB MARKET

This section looks at income from the job market in relation to whether respondents are receiving UNHCR cash assistance, long-term coping strategies, access to work permits and legal status. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of the factors determining income from the job market.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 22)	
RESPONSE VARIABLE **Income from jobs**	**EXPLANATORY VARIABLE** People receiving/not receiving cash** Work Permit** Documentation is available** Total savings** Derived- Average frequency of coping strategies at 6 months **Controls:** • Gender of head of household** • Household size** • Disability (proxy for dependency ratio)** • Location

The self-reported amount of income from the job market is strongly influenced by a range of factors (Annex 1: Table 22). Importantly, recipients of UNHCR cash are less likely to access formal employment. This model validates the finding above, and confirms that the possession of a work permit is a key prerequisite for the generation of income from jobs. Additionally, households earning money from the formal sector are also more likely to decrease the frequency of negative short-term (7 day) coping strategies, whereas evidence for the effect of income from work on medium and long-term coping strategies is not conclusive.

5.7.4 RELATIONSHIPS LINKED TO INCOME FROM THE JOB MARKET

This section looks at income from assets in relation to whether respondents are receiving UNHCR cash assistance, long-term coping strategies, savings, access to work permits and legal status. The following table describes the main inference for this section, which is also accompanied by a more in-depth descriptive investigation of the factors determining income from assets.

MODEL FOR REGRESSION ANALYSIS (ANNEX 1: REGRESSION TABLE 23)	
RESPONSE VARIABLE **Income from assets** *Assets not defined but assumption is for "productive assets"*	**EXPLANATORY VARIABLE** People receiving/not receiving cash** Work Permit** Total income** Income from jobs** Average frequency of coping strategies at 6 months** Saving amounts** **Controls:** • Gender of head of household** • Household size** • Disability (proxy for dependency ratio)** • Location

It is important to note that the formalisation of work does not currently accurately describe income generated from the informal sector and assets. Therefore, this analysis aimed identify some explanatory drivers for income from productive assets as a proxy to other sources of informal employment. The model displayed in Table 23 (Annex 1) indicates a strong relationship between income from productive assets, total income and income from employment. Respondents generating income from productive assets are less likely to access UNHCR cash and a work permit, but they are more likely to reduce their frequency of long-term negative coping strategies.

Even when considering the importance of other sources of income, PDM data provides some additional insights into what recipients would do if cash assistance stopped (Figure 44). There has been an increase in the number of people stating they would return to Syria, to 16 percent in 2017 (Q1) compared with 10 percent in 2016. In the first quarter of 2017 a similar increase compared with 2016 values is noticeable for the choices of going to a camp or leaving to a third country. These values represent an increased preference for mobility when compared to 2016.

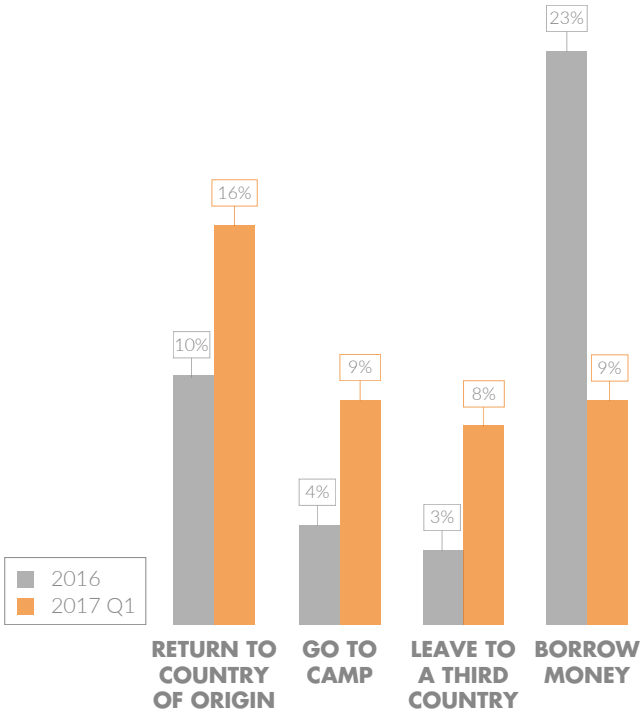

Figure 44: Bar graphs showing percentage of respondents who would take the listed actions if cash assistance was withdrawn.

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5.8 SUMMARY OF EFFECTS AND RESULTS

The results of the descriptive and inferential analysis conducted are outlined in the summary table below, separated by lines of inquiry. Response and explanatory variables are also displayed, though for full list of controls, we direct the reader to the respective sections above. Overall, the hypothesis of cash assistance to address primary needs of recipients seem amply validated whereas the progression towards more complex ones, as proposed in the theory of change, requires further investigation despite some encouraging initial findings.

KEY LINES	RESPONSE VARIABLES	EXPLANATORY VARIABLE	KEY FINDINGS
INQUIRY 1 **How does the provision of UNHCR cash affect the ability of recipients to improve their shelter and living conditions, access to adequate water and sanitation facilities, and ownership of basic items over time?**	Housing type	People receiving/not receiving UNHCR cash	Recipients of UNHCR cash assistance are more likely to be living in permanent accommodation
	Acceptability of housing standards		Recipients of UNHCR cash are more likely to report the standard of their accommodation as acceptable
	Acceptability of housing standards Access to a latrine		Recipients who have access to a latrine, and fewer days without water the previous month are more likely to report their accommodation as acceptable
	Ownership of key household assets		UNHCR cash contributes to the ownership of higher value assets such as fridges, televisions, and washing machines
INQUIRY 2 **How does the provision of UNHCR cash affect recipients' food security (number of meals per day) and nutritional diversity?**	Number of meals per day	People receiving/not receiving UNHCR cash	Recipients of UNHCR cash eat more meals per day on average than those who are not recipients ($p>0.05$)
	Frequency of consumption of food groups in the last seven days Dietary diversity (no. food groups eaten last week) Diet score (average frequency of consumption of all food types)		Recipients of UNHCR cash are also more likely to consume fruit, eggs and meat, and on average eat a greater number of food groups, with a higher frequency of consumption per week.

KEY LINES	RESPONSE VARIABLES	EXPLANATORY VARIABLE	KEY FINDINGS
INQUIRY 3 **How does the provision of UNHCR cash affect the employment of negative coping strategies at 7 days (short-term), 1 month (medium-term), and 6 months (long-term) at the population level?**	Short-term (in the last 7 days) coping strategies to alleviate food shortage	People receiving/not receiving UNHCR cash	Recipients of UNHCR cash employ short-term coping strategies less frequently than non-recipients (though female headed households were still at an increased risk)
	Medium-term (in the last 30 days) coping strategies to alleviate food shortage		Recipients of UNHCR cash were less likely to employ the three most common medium-term coping strategies: buying food on credit, taking an exploitative or degrading job, or withdrawing children from education
	Long-term (in the last six months) coping strategies to alleviate poverty		Recipients of UNHCR cash were less likely to employ the following long-term coping strategies: sell food vouchers, sell assets, borrow money, buy against credit, deplete savings, irregular work, be unable to pay rent and child labour
INQUIRY 4 **How does the provision of UNHCR cash affect the overall expenditure patterns of Syrian refugees? Specifically, do the expenditure patterns of recipients (versus non-recipients) evolve over time to favour a higher proportion of financial resources spent in health, education, savings and repaying debt?**	**Total expenditure** **Total debt** **Education expenditure** **Health expenditures**	People receiving/not receiving UNHCR cash	Recipients of UNHCR cash show an increase in total expenditure, and most importantly and increase in the expenditure on health and education. Historically, reported value of debt has been lower with those households who are receiving UNHCR cash.

KEY LINES	RESPONSE VARIABLES	EXPLANATORY VARIABLE	KEY FINDINGS
INQUIRY 5 **How does the provision of UNHCR cash affect access to key services such as health and education?**	Access to Health Services	People receiving/not receiving UNHCR cash Employment of short- and medium-term coping strategies Vaccination Health expenditure	UNHCR CBI is not enough to explain whether respondents access health services, though health expenditure is associated with access
	Health expenditure	People receiving/not receiving UNHCR cash Total income Employment of short- and medium-term coping strategies Disability Vaccination	UNHCR CBI leads to a nominal (but not statistically significant) increase on health expenditure.
	Percentage of children skipping school	People receiving/not receiving UNHCR cash Total Debt Employment of short-term coping strategies Child Marriage Education expenditure	UNHCR cash seems to lead to a reduction in the number of children missing school
	Education expenditure	People receiving/not receiving UNHCR cash Transportation costs Missing school ratio	UNHCR CBI leads to a statistically significant increase on education expenditure. Transportation costs are a key driver of education expenditure, along with the number of children missing school.

KEY LINES	RESPONSE VARIABLES	EXPLANATORY VARIABLE	KEY FINDINGS
INQUIRY 6 **Are recipients of UNHCR cash with greater food security, dietary diversity, access to water and improved shelter more likely to accumulate savings, and generate more income than expenditures?**	Total savings	People receiving/not receiving UNHCR cash No. days without water No. of meals per day Diet diversity Type of shelter	There is no evidence to suggest that the provision of UNHCR cash contributes to an accumulation of savings.
	Savings depletion as a negative coping strategy	People receiving/not receiving UNHCR cash No. days without water No. of meals per day Diet diversity Type of shelter	Respondents with a higher amount of savings have an increased likelihood of depleting their savings as a coping strategy
	Total Income	People receiving/not receiving UNHCR cash Diet diversity Days with no water	Recipients of UNHCR cash are likely to have a higher total income per month. Dietary diversity is also associated with a higher total income, and is itself increased by provision of UNHCR cash
	Income minus expenditure	People receiving/not receiving UNHCR cash No. days without water No. of meals per day Diet diversity Type of shelter Income from Work Total Debt	Recipients of UNHRC cash are likely to generate more income, and to incur higher expenditures. Between 2014 and 2017, there has been a shift towards a positive differential between income and expenditure across households (i.e. households are left with additional funds after all costs are incurred)

KEY LINES	RESPONSE VARIABLES	EXPLANATORY VARIABLE	KEY FINDINGS
INQUIRY 7 **Are recipients of UNHCR cash who have a work permit (and do not have legal issues) likely to generate more income?**	Total income	People receiving/not receiving UNHCR cash Documentation Work permit	Recipients of UNHCR cash show a higher monthly total income. However, having a work permit is more strongly associated with total income.
	Work Permit	People receiving/not receiving UNHCR cash Total income Total savings Legal issues Documentation Long-term coping strategies	Possession of a work permit is an important for the generation of income and savings
	Income from jobs	People receiving/not receiving cash Work Permit Documentation Total savings Employment of medium- and long-term coping strategies	Recipients of UNHCR cash are less likely to earn income in the formal sector, with access to a work permit proving a vital precursor for this. Income in the formal sector is associated with a reduction in the employment of medium-term coping strategies.
	Income from assets	People receiving/not receiving cash Work Permit Total income Income from jobs Average employment of long-term coping strategies Saving amounts	Respondents generating income from assets are less likely to receive UNHCR cash or have a work permit, but they are more likely to reduce their frequency of long-term negative coping strategies.

6 VALUE FOR MONEY

This section seeks to explore the CBI programme in Jordan with a Value for Money lens. This analysis relies on a large body of research which indicates that, in many contexts, CBI provides better Value for Money (VfM) than in-kind aid. CBI are typically a more cost-efficient modality to deliver assistance than in-kind aid, though context-specific factors determine the overall cost advantages of CBI (CaLP, 2015). Against a background where international humanitarian assistance is increasing but not enough to cover all needs, CBI is a compelling example of how to reach scale through a cutting-edge IT-enabled system.

6.1 ECONOMY

By default, cash maximises economy in terms of the cost of the transfer. A US$100 transfer will always cost US$100 whereas the amount of food that US$100 can buy may shift depending on price movements (ibid). Studies and evaluations that almost exclusively make comparison between CBI and food assistance indicate food aid can cost double or triple more to deliver than cash (ODI, 2015). In-kind assistance typically has higher costs for distribution associated with the storage and delivery of goods and services and can incur larger administrative expenses in the case of vouchers (ADE, 2016).

The major costs of CBI are the transfer itself, staffing, banking fees and expenses associated with the assessment and delivery mechanism (e.g. ATM cards, IRIS scan technology). Thanks to a recent PWC study, programme and management costs have been categorised with increased granularity and consistency.[45] From PWC's analysis, cash to beneficiaries delivered through the IRIS technology accounted for almost 96 percent of the CCF's total cost in Jordan. Even by considering the setup cost for the new technology, the relative cost to deliver cash is similar to the case of Lebanon but significantly lower than in Afghanistan (2 percent less) despite a similar outreach. From the cross-country cost analysis provided by PWC, it is demonstrable that the setup of partner-led encashment centres in Afghanistan represents a greater cost than setting up the IRIS scan technology in Jordan when factoring in for lower banking fees guaranteed by a multi-payment system. In fact, one of the main findings for delivery cost in Jordan is that fees for the FSP represents just 1.3 percent of the total cash amount going to beneficiaries. This compares favourably when compared to CBI in other contexts where fees are typically higher and can be above 5 percent, or if UNHCR acted alone. UNHCR and partner organisations have been able to realise economies of scale and negotiate much lower transaction fees and other savings with the FSP by pooling their funds. The automated payment system further drives costs down and a common FSP and payment facility puts downward pressure on total costs considering the cash operations of all CCF members.

The number of CCF members has grown over time and in 2016 the CCF was used to deliver over 90 percent of the cash assistance given to refugees staying outside camps in Jordan. Additional members would further increase funding through the CCF and provide a stronger basis for leveraging lower transaction costs and currently the platform is open to all organisations operating in the CBI space. As UNHCR considers scaling up its CBI globally,

45 A proposed roadmap has also been proposed to predict future trends in line with the scale of needs.

governance structures provide an important mechanism for UNHCR to have in place the necessary internal arrangements for the accurate and granular allocation, recording and reporting of costs. The CBI programme management office's work in relation to budget, expense and benefit management along with the specific finance and risk management strategies for country roll-outs are particularly relevant here.

6.2 EFFICIENCY

Unconditional CBI opens other possibilities for efficiency gains as they give recipients the flexibility to meet their needs according to their own choices. In the case of in-kind assistance where aid agencies determine people's needs, beneficiaries may sell at a loss what they receive to purchase what they need most while vouchers earmarked for selected shops and goods raise the risk of vendors increasing prices. UNHCR's cash-based assistance, which provides cash flexibly and without restrictions on its subsequent use, is not affected by such efficiency considerations.

The design of CBI is a key driver of their cost efficiency, including scale and the cash transfer size. While the number of beneficiaries for Jordan's CCF is lower than in Lebanon, the average cash amount transferred to beneficiaries was more than a third higher in 2016 (US$225 versus US$133 in the case of Lebanon). The CCF is cost-efficient considering the protracted nature of the refugee situation in Jordan since it can be retained for use in longer-term programmes and thus has a longer time horizon to fully realise cost efficiencies. There is growing evidence that the cost efficiency of CBI rises when they are delivered through digital payment systems. These have potential for major cost savings compared to manual cash distribution modalities which entail variable costs for the storing and organisation of cash, transport and security.[46]

Most digital payment systems for CBI entail either card- or mobile-based systems, yet refugee registration and cash distribution underpinned by biometric technology offer greater efficiencies. Biometric technology has enabled CBI in environments inherently prone to high leakages (CaLP, 2011) and according to the World Bank, biometrics can support the achievement of at least 10 Sustainable Development Goals (SDGs) (World Bank, 2015). UNHCR's use of biometric technology to register refugees and subsequently disburse cash assistance is innovative and provides a strong mechanism for cash to reach intended beneficiaries. By considering the general trends identified by thought leading agencies such as the World Bank and ODI (2015),[47] a standard global system for the biometric identification and registration of refugees tied with digital payments is the suggested approach.

The adoption of biometric procedures by UNHCR in Jordan allows for the allocation of human and financial resources which consider the movement of refugee populations over time. The iris-compatible ATMs are available in every governorate in Jordan, thus enabling the UNHCR country office to monitor refugee movements and factor this into programming in a way that has not been possible before.

46 As an illustration, a study on a cash transfer programme in Niger found that mobile money delivery reduced variable distribution costs by 30 percent (CaLP, 2011).

47 Doing cash differently: How cash transfers can transform humanitarian aid Report of the High-Level Panel on Humanitarian Cash Transfers, ODI, 2015

6.3 EFFECTIVENESS

Given the myriad of possible outcomes brought about by CBI that cover a range of sectors, and the difficulty of assigning monetary values to benefits like flexibility, it is difficult to make definitive statements on the cost-effectiveness of CBI. In economic theory, CBI have a sound cost-effectiveness underpinning. Through UNHCR's unconditional cash-based assistance, beneficiaries can use cash according to their own needs and are able to maximise their marginal utility of cash.

According to the quantitative assessment of UNHCR's CBI, there are indications it contributed to positive impacts for beneficiaries. UNHCR's cash assistance leads to a statistically significant increase on education expenditure. Recipients of UNHCR's cash assistance are also likely to have a higher total income per month along with improved dietary diversity. Within the context of reviewing programme and management costs, a more comprehensive assessment of VfM should better capture cost-effectiveness considerations. While this study made some inferences on cost-effectiveness, the cost of UNHCR's CBI should be compared more robustly against the magnitude of outcomes for beneficiaries. The costs to beneficiaries of UNHCR's cash-based assistance should also be considered within VfM assessments.

The economic impacts for recipient countries of cash-based assistance is worth considering. CBI represent a transfer of resources to beneficiaries that lead to a series of economic transactions and subsequent income multipliers. Estimates largely based on cash transfer programmes in sub-Saharan African indicate that an injection of cash of $1 million would generate additional income of between $1.5 million to $2.5 million for the local economy (ODI, 2015). Cash interventions can also give recipients a chance to repay debts and contribute to building assets which support higher levels of future income. It is therefore possible that if UNHCR achieved sufficient scale in its cash operations in Jordan by expanding the number of beneficiaries from the 140,000-odd in 2016, the resulting economic benefits could outstrip the associated costs of setting up an IT-enabled delivery model.

6.4 EQUITY

Equity considers the degree to which the results of an intervention are equitably distributed. UNHCR's cash-based assistance performs favourably regarding such equity considerations. As all UNHCR registered refugees undergo a vulnerability assessment, all members of the Syrian refugee population not living in camps can benefit from UNHCR's cash support based on their exposure to negative coping strategies. The use of biometric registration procedures and biometric technology at ATMs further ensures cash assistance gets to the intended people as possibilities for fraud and other leakages are substantially minimised. A rollout of biometric identification and registration of refugees globally would therefore give UNHCR's operations a stronger equity foundation.

7 EVALUATION BENCHMARKS: SYNTHESIS AND CONCLUSIONS

In conclusion, the synthesis of existing evidence and statistical analysis allows us to conclude that the CBI programme either fully or partially fulfils all of the key benchmarks considered.

BENCHMARKS	KEY CONCLUSIONS
EFFICIENCY *Fulfilled*	The efficiency of the CBI in Jordan has been demonstrated at various levels of the programme. Unconditional cash is an efficient mode of delivering aid as it allows recipients to use the cash to support their most critical needs. From a technological perspective, the use of biometric/digital platform for delivery of cash has ensured efficiency, not only through this platform directly, but due to its ability to deliver cash at scale and the value of the transfers made. The system also ensures efficiency through the lack of fraud due to biometric identification. Along with the scale of transfers, the coordination mechanisms underpinning the CCF is also a key driver of efficiency due to its multi-stakeholder nature, which has allowed a significant reduction in bank fees in this context. Coordination between organisations through the VAF and BNWG has also further enhanced efficiency, by allowing the generation and sharing of information along with the testing of innovative delivery models, which prevents overlap and allows partners to synchronise their advocacy.
EFFECTIVENESS *Fulfilled; partially inconclusive*	The primary evidence for the effectiveness of the CBI programme can be seen through the quantitative analysis of survey data from home visit, ODI and PDM. This report has shown that CBI is effective in relieving short term vulnerabilities related to shelter, nutrition and water, and that it is likely these partial effects are transferred in the medium term relating to health, expenditure and social protection. More specifically: • In relation to living conditions cash assistance has a direct relationship with the perception of improved shelter and access to reliable sources of water.

EFFECTIVENESS *Fulfilled; partially inconclusive*	• Regarding food security and nutritional status, cash leads to a greater number of meals per day and diet diversity over time. • General expenditure and income patterns are increasing faster among recipients, but cash assistance does not result to be a statistically significant explanation for these changes. • Cash assistance seems to facilitate greater access to educational and health services, especially for education, though not conclusively. • The link between the complex dimensions of livelihood, income generation and socially protected work is less direct and requires further investigation. In light of all these results, the CBI can be considered to fulfil the effectiveness criteria for basic needs. There remains a need to further improve some technical standards and to keep exploring more complex changes by embedding an impact study design in the sample structure and data collection methodology. From a value for money perspective, it has not been possible to confirm the cost-effectiveness of the programme. The wider literature indicates similar delivery model as being cost-effective if considering potential economic multipliers that are not part of this specific analysis.
RELEVANCE *Fulfilled*	The elements of the CBI programme which ensure its relevancy are the basic needs approach and the overarching VAF, both of which are adapted specifically to the context of Syrian refugees living in Jordan. These tools are very comprehensive and when used as targeting, implementation and accountability mechanisms, they help delivering protection and from a 'do no harm' approach. The programme remains relevant from a vulnerability perspective, though livelihood priorities evolve over time and the statement of relevance requires frequent review. The mechanics behind targeting and monitoring multi-sectorial needs is a cornerstone in validating the importance of the CBI in addressing Syrian refugees' needs but for the criteria to remain fulfilled, it is advisable to include an ampler spectrum of livelihood needs.
COVERAGE *Fulfilled; partially inconclusive*	The coverage of the CBI programme in Jordan is increased through the use of the CCF, which provides a platform for large-scale rollout of cash payments among Syrian refugees living in urban settings throughout the country. However, the restriction on distribution of cash in camps settings due to the lack of ATM services presents a limitation to the coverage of this modality. However, the introduction of mobile wallets as part of the JoMoPay scheme may go some way to expand the access of refugee population to cash assistance. Donor engagement provides an opportunity to address a larger portion of critical needs. Though the CBI programme has an impressive number of beneficiaries that surpasses 400,000 people, it is unable to include all eligible groups through current resource. There are elements of donors' advocacy to consider in further fulfilling the coverage criteria if using the present evidence of effectiveness deepened by cost-benefit metrics.

ACCOUNTABILITY *Fulfilled*	The existence of the 'Helpline' mechanism through which Syrian refugees can access information and register complaints helps ensure the programme is accountable to its recipients. Though PDM data indicates that there is a lack of knowledge about a so-called 'complaints' mechanism, the volume of traffic coming through the helpline daily indicates that refugees are aware of who to call, though how a 'complaint' is defined in both the eyes of recipients and the call system may need to be clarified. Furthermore, the Age Gender Diversity Mainstreaming Participatory Assessment (AGDM PA) which identifies and analyses protection risks of vulnerable groups, and the community support committees (CSCs) provide further evidence of accountability and social protection. These qualitative exercises, if adequately representative, can become triggers for review of the alignment between the vulnerability thresholds in the VAF and the definition of needs and priorities of Syrian refugees. Please note, this analysis did not seek to test the effectiveness of these accountability mechanisms, or the extent to which they ensured overall accountability to the affected population.
INNOVATION *Exceeded*	Innovation has been seen at various stages throughout the programme. The use of biometric iris scan technology as a means for ensuring Syrian refugees to access cash provides a strong mechanism for ensuing that cash reaches its intended beneficiaries, and has been essential in minimising fraud and increasing accountability. Furthermore, the collaborative approach to the CCF, which is innovative in not only its design but also its partnership with the private sector, has been key in driving the economy and efficiency dimensions of this programme. The efficiencies in scaling outreach by pooling resources, driving down the interest rate and minimising loss of intended recipients are example of how many linkages the innovation side of CBI has had with all other evaluation benchmarks. Available evidence from PDM surveys further compounds the appreciation of biometric technology by over 90 percent of all recipients, demonstrating contextual readiness for this level of collaboration to drive technological change within this cash programme, and enabling the total fulfilment of this criteria.

8 RECOMMENDATIONS

This evaluation synthesis comes at an important time for UNHCR and the CBI programme in Jordan. As such, this report makes a series of recommendations to UNHCR at the country and global level to help inform the evolution of both the Jordan programme, and contextually similar programmes. The recommendations reflect the key findings and conclusions from this synthesis. Overall, the hypothesis that cash assistance addresses the primary needs of recipients seems to have been amply validated, while its contribution towards supporting more complex needs (as proposed in the theory of change) requires further investigation, despite some encouraging initial findings. The recommendations in this section are aimed at addressing the following points:

A Existing data shows that primary needs are inter-related, and that cash assistance addresses them simultaneously. For instance, cash improves living conditions, as well as access to water and latrines. Additionally, access to water and latrines are associated with an improved perception of shelter acceptability among recipients, illustrating the interdependency between these variables. However, these relationships are measured subjectively, and not confirmed through objective assessment of shelter quality (e.g. infrastructure quality of a building). To further triangulate and balance subjective and objective evidence, future evaluations should embed technical benchmarks alongside self-reported values.

B In this study, some variables showed significant but unexpected relationships, which require further investigation. For example, patterns of total debt changed noticeably after the implementation of cash interventions, in a way that was not predicted. To fully learn from these findings, it is important to understand clearly the definition and determinants of each variable as much as possible. For example, why are CBI recipients accumulating smaller amounts of debt more often, while the total value of debt shows a major downward trend? Additionally, there are social drivers related to community trust and access to informal credit that remain unknown, but can be considered in order to develop a hypothesis exploring the propensity of spending and borrowing.

C Without regular review, the theory of change underpinning any intervention is inherently limited. As mentioned in the analysis against the 'effectiveness' benchmark, the findings strongly point to a statistical representative relationship between primary needs and cash assistance, but more sophisticated or complex links, like the relationship to income generation, are less clear. Therefore, it is advisable to keep exploring these and emerging assumptions based on the evolving needs of recipients and contextual changes. For instance, how does the reduction, or increased mobility of, one vulnerable population translate into a new definition of dignified work and social protection? It is important to consider the emerging employment needs of settled recipients in order to keep the intervention as relevant as possible, and to identify exit strategies.

D The type of evidence collected in CBI programmes must continue to evolve with recipients' needs. For example, living conditions evolve as shelter, nutrition, WASH and livelihood technical requirements improve over time. Long-term programmes should embed dynamic thresholds in defining vulnerability, since indirect effects are also a relevant part of the narrative underpinning the theory of change. By ensuring that thresholds for vulnerability are dynamic and evolving, effectiveness can be better captured through enhanced data collection. This enhanced data collection should be centred on the constant re-definition of priorities based on accountability mechanisms, as well

as reviews of sector-related benchmarks and how they relate to one another. In addition, it is advisable to use data to examine how cost-structures and resource allocation of cash programmes link to effects over time.

E The CBI in Jordan has the potential to inform global approaches and benchmarks in social protection, accountability and cost effectiveness. The wealth of information at both the process- and result-level lends itself to informing the design and adaptation of other cash programmes with similar cost-structures. To do so, a stronger impact-study design to programming, and a focus on contextual forces, would keep key variables and assumptions fully validated. The CBI datasets are already extensive, but the sample design limits conclusive claims on causality, especially because a well-defined control group is not included. A more rigorous approach in tracking cohorts can validate cash effects in relation to primary needs all the way to social protection within a common continuum.

8.1 SECTOR-SPECIFIC CONSIDERATIONS AND KEY RELATIONSHIPS TO BE EXPLORED THROUGH THE VAF

Exploration of the data has shown that there are a number of sector-specific considerations which, if embedded into the VAF, could help to strengthen selected technical areas:

- **Livelihoods:** The inclusion of key new variables (such as the degree of financial inclusion, and whether home-based businesses are registered) could significantly increase the detail of the evidence generated in relation to livelihoods. The VAF assessment should increase its scope to look at economic opportunities and skillsets that are necessary for accessing specific occupations. Along with gathering specific figures, it would be useful to investigate the income expectations of Syrian refugees, in order to establish the cut-off point for financial incentives relating to formal and informal employment.

- **Shelter:** The definition of permanent accommodation is too generic and there is currently a lack of resources needed to identify a more detailed understanding of accommodation quality. Due to this lack of data, there will need to be an additional and objective assessment of shelter quality conducted during the home visits, by training those conducting the survey to assess the building and look at basic technical indications to appraise quality. The gap in defining subjective acceptability vs. humanitarian standards remains a challenge to be addressed.

- **Education:** Distance is a major driver in education expenditures, and the ability to access educational facilities nearby is a fundamental barrier to access, which is driving up the cost of education for households. For this reason, transportation has a strong relationship with education expenditures and it represents an important proxy to determine to what extent distance is a barrier. Therefore, additional detail should be gathered during the home visits in relation to physical distance and associated costs linked to sending children to school. This will in turn provide an important determinant to assess the likelihood of drop-outs.

- **Health:** The ability of households to access health services is not strongly correlated with whether a household is receiving cash. This is because there are multiple contextual and household factors that determine health. Even though some descriptive trends indicate an increased propensity of recipients to spend financial resources on treatment, the health focus in the VAF should remain with variables such as access to water and sanitation facilities. In fact, drivers for a healthy living are likely to yield more relevant results when generating inferences about UNHCR's CBI programme in Jordan.

In addition to sector-specific considerations, it is advisable to explore further some of the key relationships which emerged from the analysis:

- **Total income:** This is a key determinant of the overall living condition of a household and its access to services. Measurements of income can be made more accurate by increasing the level of detail collected with regard to the different sources of income. Additionally, it will be key to understand if (and how) UNHCR cash is invested to generate additional income. From the evidence considered for this study, income is rising over time, but this is not correlated with self-reported amounts of savings. Therefore, it is important to investigate further how increased financial inflows translate to income generating strategies.

- **Debt:** UNHCR cash seems to have a strong relationship with self-reported amounts of debt. This is an important trend indicating that cash transfers act as a significant determinant of the total amount of debt among CBI recipients. Going forward, it will be necessary to understand better what the main sources of debt are, the reasons for its accumulation over time, and its relationship with negative coping strategies.

- **Nutrition:** This represents a key intermediary variable in the theory of change. In particular, diet diversity has a significant association with income. In fact, the range of food types consumed in one household is strongly associated with both savings and total income. Therefore, it will be necessary to explore further the relationships between dietary diversity, income and savings, and the direction of these relationships. It might be that accessing a better diet translates into a greater ability to address secondary needs that are positioned further along the theory of change. Even though nutrition plays an important role here, it is advisable to reduce the number of questions relating to dietary diversity, and maintain only the frequency count per food type, in order to maximise efficient turn-around of relevant information.

In addition to refining the collection of variables related to the above relationships, it is advisable to introduce new variables which are currently not collected during the VAF. These relate to:

- **Livelihood pathways:** The VAF is designed to focus exclusively on the vulnerabilities of a refugee population in an emergency setting. Though this assumption was correct, as refugees have settled in Jordan it becomes increasingly necessary to explore longer-term livelihood pathways. For this reason, one key variable this report recommends introducing is the contribution of home-based businesses to total household income. The work permit is one avenue for formalisation of work and greater household revenue, but a variety of other income streams and market linkages are possible, though under-reported. The dimensions of micro-entrepreneurship and access to formal/informal financial services can be considered as key drivers for income generation and resilient livelihoods, and should be more explicitly included.

- **Productive assets:** In line with a shift from emergency response to early recovery, a model that assesses how cash transfers contribute to the accumulation of productive assets needs to be considered. The current set of evidence provides a generic range of variables linked to household assets but does not explore ownership of or investment in assets that can produce income. Understanding the ability of households to add value in the production cycle of a good or a service requires a fuller and more sophisticated understanding of formal and informal markets where this can happen. As such, it will be worth exploring whether there are signs of households having the ability to invest beyond their primary needs and towards livelihood diversification.

- **Job market:** In the current home visit and PDM tools, the collection of data related to income from work-related sources is limited to one category. It is recommended that future iterations of the VAF deepen the number of probes related to work-related income, and whether it is formal or informal. Because there are sensitivities associated with collection of additional information on income, it may be necessary to define proxy variables that can shed more light on how CBI recipients define 'work', and whether the same notion can be extended to self-managed businesses and productive assets. The expansion of specific questions about the job market is not only relevant in the context of measuring income at the household level but also to appraise what are the perceived entry points, requirements and pre-conditions to trade goods and exchange services, from a refugee's perspective.

8.2 RECOMMENDATIONS FOR UNHCR JORDAN

The following recommendations for UNHCR Jordan can be divided into two types: process-focused and strategic. The distinction between them can further inform both current operations and future design of cash-based interventions in the context of Jordan.

1 ***Process:*** **Streamline Post-Distribution Monitoring by focusing on feedback-related questions to strengthen accountability mechanisms**

The scope of information available from quarterly PDM surveys in Jordan is extensive, and includes both Syrian and non-Syrian refugees. Though PDM surveys are standard practice across most humanitarian interventions, in this context the amount and nature of evidence collected from CBI recipients overlaps with the information generated during the home visits. Though the intention behind both tools is specific, only the PDM tool measures the quality of service (timeliness, distance and customer's treatment), protection-related issues and perception of overall impact. In order to emphasise these aspects of the tool, there is scope to streamline the questions related to livelihoods, income and expenditures with a view to collecting these in the home visit tool. A shorter PDM tool that remains focused on accountability, quality of bank services and social protection would decrease survey fatigue among respondents while complementing the evidence from home visits. The amount of evidence generated by UNHCR Jordan and its partners is extensive, but the ability to process and intersect all this information relies on tools maintaining a specific identity/scope and addressing complementary issues.

2 ***Process:*** **Increase the focus on livelihood options and market linkages in order to explore the link between cash assistance and income generation**

The home visit tool in Jordan is a rare example of comprehensive and multi-sectorial monitoring, linked to both targeting and vulnerability measurement. Considering its critical role, it remains important to recognise the evolving needs and behaviours of refugees, who are increasingly settling down in urban centers across Jordan. Despite the role cash transfers play in addressing primary needs, there is a lack of focus on how recipients are directing, accessing (formal credit) or generating financial resources towards more sustainable livelihood options. A lack of market opportunities and financial exclusion should be considered as key vulnerabilities in a context of early recovery, and as such it is recommended that UNHCR integrate questions exploring this. The underlying hypothesis (that has not yet been fully validated due to insufficient information) is whether cash transfers – along with other forms of assistance – have a role in enabling households to link to markets and undertake income generating opportunities.

3 ***Strategic:*** **Design large cash-based intervention embedding and costing for a cost-benefit analysis to prove value for money more conclusively**

The recent study from PWC highlighted a series of cost categories that are pertinent to the delivery of CBIs, and offered the stepping stone towards a more in-depth effectiveness study. The PWC assessment contributes to further investigating how a harmonised set of cost structures adopted by all implementing partners links to a set of validated assumptions underpinning benefit-related metrics. The hypothesis that cash transfers generate a multiplier effect in the Jordanian economy, compensating inflationary pressures, opens the space to explore how this might translate to the household level of CBI recipients. The next step will be to define indicators that can measure how multi-sectorial improvements caused by cash transfers can be converted into monetary values (e.g. the gain in income when health indicators improve and enable more constant access to employment opportunities). Once a decision is taken to outline possible returns at the household level, it should be straightforward to assess these values against selected cost categories characterising CBI.


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8.3 RECOMMENDATIONS FOR UNHCR AT ORGANISATION LEVEL

As in the previous section, the following recommendations for UNHCR at the organisation-level can be divided into two types: process-focused and strategic. These can be used to: inform adaptation of ongoing CBI programmes; feed into global level design of CBI programmes; and strengthen the evidence base on cash assistance interventions of this scale.

4 ***Process:*** **Replicate similar home-visit data collection across large-scale cash assistance programmes**

A comprehensive and relevant multi-sectorial monitoring mechanism is advisable for all large cash transfer programmes managed by UNCHR, since the range of uses for unconditional cash is very broad. It is important to recognise any intervention as having a continuum of needs and priorities which evolve over time, and therefore require constant monitoring and adaptation or programming. To maximise an evidence-driven CBI, we suggest UNHCR replicate a similar monitoring mechanism across comparable programmes, while investing resources in gathering information on how a humanitarian response shifts to early recovery from a recipient's perspective.

5 ***Process:*** **Balance attribution of perception of change and sector-level technical assessments**

In the context of CBI in Jordan, the home visits require subjective responses and self-reported figures from respondents. To some degree this is unavoidable, as it is not feasible cost-wise to embed a comprehensive technical assessment for all

sectors as part of vulnerability monitoring. Nevertheless, it is recommended that elements of rapid objective technical appraisal are balanced with perception-based evidence, in order to validate thresholds and benchmarks. For example, shelter and WASH-related results should require data collectors to be trained in using both observation-based and quantifiable values to describe the condition of accommodation and the adequacy of hygienic services at the household level. In addition, specific questions to reflect technical assessments should triangulate whether agreed standards are perceived to be sufficient or not by recipients.

6 ***Process:*** **Explore qualitative triangulation outside of traditional survey tools**

Large datasets provide compelling evidence at the population level that can be used to generalise findings. At the same time, some degree of qualitative triangulation might be necessary to identify key behavioural patterns linked to eligibility and exposure to shock. It is advisable to select relevant cohorts among the whole population that exhibit more complex needs (or critical vulnerabilities) and to track them longitudinally through self-reflective qualitative process, such as financial diaries. Along with the breadth of information generated from large population surveys, a greater depth of information can be collected using intensive qualitative methods, which can in turn inform programmatic decisions relating to cash assistance. A mixed methods approach requires the same degree of rigour and sophistication to refine the project's adaptation to the needs of marginalised groups while considering larger trends and the scale of population-level needs. In some cases, a longitudinal qualitative approach can be adopted to further understand social barriers related to structural issues like women's access to employment opportunities, which represent fundamental challenges that require programmatic considerations in longer-term cash assistance programmes.

7 ***Strategic:*** **Understand vulnerability from an employment and productivity perspective**

For chronic crisis leading to the settlement of cash recipients, an evolving perspective on vulnerability is critical. In fact, though primary needs are at the core of any humanitarian response, there are secondary ones that emerge once vulnerable groups receive cash assistance and other forms of in-kind support. In contexts where a crisis turns into a long-term demographic shift, the overall definition of vulnerability ought to be reviewed and expanded. Hence, it is advisable to include elements defining vulnerability that reflect a livelihoods approach in terms of both access to the formal job market, and formalisation of home-based/small businesses. The diversification of livelihood options is a powerful proxy to measure how far a household is advancing towards self-sufficiency, though the full achievement of an exit strategy from vulnerability requires an integrated and possibly multi-agency approach when designing and delivering cash programmes.

8 ***Strategic:*** **Set-up impact studies that allow for rigorous testing and stronger causal claims in large-scale shock settings**

A synthesis approach to evaluative information can generate compelling inferences about the whole population receiving cash assistance. However, the structure of the sample embeds inherent limitations, since control groups are rarely adequately weighted against recipients or layered to reflect the composition of the whole population. Furthermore, longitudinal iterations do not follow a systematic approach in terms of sampling. With the objective of increasing the rigour of evaluative processes, large-scale cash programmes offer a prime opportunity to conduct impact studies, based on appropriate cohort matching and relevant statistical design before the delivery of cash assistance. In addition to the advantages of testing causal claims at the impact level from inception, impact studies also offer the opportunity to generate evidence for inferring the degree of societal returns either in monetary or quantifiable terms. It is important to appreciate the lack of rigorous evidence available in the literature linking results of cash assistance with evidence of broader macro-economic and social returns at scale, which donors are increasingly requesting in order to justify the adoption of multi-purpose cash as the main modality to deliver aid.

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ANNEX 1: REGRESSION TABLES

Given the varied nature of the response variables chosen for this analysis, three types of regression modelling are used, namely: Poisson regression where the response variable is comprised of count data with limited range; binomial regression for binary response variables; and Gaussian models with numerical response variables.

Dep. Variable:	PermanentShelter	No. Observations:	2783
Model:	GEE	No. clusters:	1882
Method:	Generalized Estimating Equations	Min. cluster size:	1
		Max. cluster size:	4
Family:	Binomial	Mean cluster size:	1.5
Dependence structure:	Independence	Num. iterations:	9
Date:	Thu, 23 Nov 2017	Scale:	1.000

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	0.8842	0.596	1.484	0.138	-0.283	2.052
CashFromUNHCR_Yes	0.7226	0.280	2.577	0.010	0.173	1.272
TotIncome	0.0025	0.002	1.672	0.095	-0.000	0.006
WFPFoodVouchers_yes	0.1026	0.351	0.292	0.770	-0.586	0.791
UNICEFCashYes	0.2093	0.320	0.655	0.513	-0.417	0.836

Skew:	-3.6807	Kurtosis:	15.0275
Centered skew:	-0.6159	Centered kurtosis:	56.7627

Table 1: Binomial logistic regression exploring shelter type against provision of UNHCR cash, UNICEF cash, WFP vouchers, total income, gender of head of household and disability within the household.

Dep. Variable:	BuildingAcceptable	No. Observations:	3120
Model:	GEE	No. clusters:	2219
Method:	Generalized Estimating Equations	Min. cluster size:	1
		Max. cluster size:	4
Family:	Binomial	Mean cluster size:	1.4
Dependence structure:	Independence	Num. iterations:	6
Date:	Thu, 23 Nov 2017	Scale:	1.000

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	0.1844	0.368	0.501	0.617	-0.538	0.907
CashFromUNHCR_Yes	0.3186	0.104	3.063	0.002	0.115	0.522
TotIncome	0.0026	0.000	5.608	0.000	0.002	0.004
WFPFoodVouchers_yes	-0.1744	0.152	-1.148	0.251	-0.472	0.123
UNICEFCashYes	0.0863	0.117	0.736	0.461	-0.143	0.316
GenderCode	0.1022	0.096	1.064	0.287	-0.086	0.290
HouseHoldSize	-0.0385	0.022	-1.746	0.081	-0.082	0.005

Skew:	-0.9379	Kurtosis:	-0.8223
Centered skew:	-0.1424	Centered kurtosis:	3.5893

Table 2: Multivariate logistic regression exploring the acceptability of shelter standard against the provision of UNHCR cash, UNICEF cash, WFP vouchers, total income, total expenditure on rent, gender of head of household, household size and disability within the household and governorate.

Dep. Variable:	LatrineYes			**No. Observations:**		5234
Model:	GEE			**No. clusters:**		2601
Method:	Generalized Estimating Equations			**Min. cluster size:**		1
				Max. cluster size:		5
Family:	Binomial			**Mean cluster size:**		2.0
Dependence structure:	Independence			**Num. iterations:**		7
Date:	Thu, 23 Nov 2017			**Scale:**		1.000
	coef	**std err**	**z**	**P>|z|**	**[0.025**	**0.975]**
Intercept	-0.3647	0.349	-1.044	0.296	-1.049	0.320
CashFromUNHCR_Yes	-0.1048	0.074	-1.421	0.155	-0.249	0.040
BuildingAcceptable	0.2390	0.076	3.131	0.002	0.089	0.389
Days_NoWater	-0.0204	0.015	-1.381	0.167	-0.049	0.009
TotIncome	0.0008	0.000	4.059	0.000	0.000	0.001
GenderCode	-0.3088	0.076	-4.036	0.000	-0.459	-0.159
HouseHoldSize	0.1747	0.016	11.041	0.000	0.144	0.206

Skew:	-0.9755	**Kurtosis:**	-0.5876
Centered skew:	-0.1763	**Centered kurtosis:**	0.9956

Table 3: Binomial logistic regression exploring access to a private latrine against provision of UNHCR cash, total income, gender of head of household, household size, building acceptability and number of days without water in the past month.

Dep. Variable:	DaysNoWater			**No. Observations:**		4516
Model:	GEE			**No. clusters:**		1883
Method:	Generalized Estimating Equations			**Min. cluster size:**		2
				Max. cluster size:		5
Family:	Poisson			**Mean cluster size:**		2.4
Dependence structure:	Independence			**Num. iterations:**		31
Date:	Thu, 14 Dec 2017			**Scale:**		1.000
	coef	**std err**	**z**	**P>|z|**	**[0.025**	**0.975]**
Intercept	0.2328	0.209	1.112	0.266	-0.178	0.643
CashFromUNHCR_Yes	-0.0678	0.099	-0.687	0.492	-0.261	0.126
LatrineYes	0.0563	0.125	0.450	0.652	-0.189	0.301
BuildingAcceptable	-0.3275	0.100	-3.288	0.001	-0.523	-0.132
Days_NoWater	0.1701	0.007	23.779	0.000	0.156	0.184
TotIncome	-0.0007	0.000	-2.053	0.040	-0.001	-3.18e-05
Governorate_Amman	-0.4063	0.198	-2.052	0.040	-0.794	-0.018
Governorate_Irbid	-0.8524	0.196	-4.341	0.000	-1.237	-0.468
Governorate_Mafraq	-0.7559	0.196	-3.853	0.000	-1.140	-0.371

Skew:	-19.9829	**Kurtosis:**	718.3839
Centered skew:	-1.8857	**Centered kurtosis:**	311.9747

Table 4: Poisson logistic regression exploring days without water against provision of UNHCR cash, total income, gender of head of household, household size, building acceptability and number of days without water in the past month.

Dep. Variable:	SumAssets			**No. Observations:**		2783
Model:	GEE			**No. clusters:**		1882
Method:	Generalized Estimating Equations			**Min. cluster size:**		1
				Max. cluster size:		4
Family:	Poisson			**Mean cluster size:**		1.5
Dependence structure:	Independence			**Num. iterations:**		12
Date:	Thu, 23 Nov 2017			**Scale:**		1.000
	coef	**std err**	**z**	**P>|z|**	**[0.025**	**0.975]**
Intercept	1.9460	0.024	81.508	0.000	1.899	1.993
CashFromUNHCR_Yes	0.0293	0.013	2.232	0.026	0.004	0.055
TotIncome	0.0007	6e-05	11.924	0.000	0.001	0.001
ExpenditureBasicItems	0.0024	0.001	2.550	0.011	0.001	0.004
WFPFoodVouchers_yes	-0.0360	0.019	-1.882	0.060	-0.073	0.001
UNICEFCashYes	0.1353	0.012	11.181	0.000	0.112	0.159
GenderCode	0.0128	0.011	1.116	0.264	-0.010	0.035
HouseHoldSize	-0.0240	0.003	-8.284	0.000	-0.030	-0.018

Skew:	0.3151	**Kurtosis:**	0.8146
Centered skew:	-0.0401	**Centered kurtosis:**	3.2589

Table 5: Multivariate logistic regression exploring total number of assets against provision of UNHCR cash, UNICEF cash, WFP vouchers, total income, total expenditure on basic household items, gender of head of household, household size.

Dep. Variable:	HowManyMeals			**No. Observations:**		4516
Model:	GEE			**No. clusters:**		1883
Method:	Generalized Estimating Equations			**Min. cluster size:**		2
				Max. cluster size:		5
Family:	Poisson			**Mean cluster size:**		2.4
Dependence structure:	Independence			**Num. iterations:**		7
Date:	Thu, 14 Dec 2017			**Scale:**		1.000
	coef	**std err**	**z**	**P>|z|**	**[0.025**	**0.975]**
Intercept	0.8937	0.037	23.952	0.000	0.821	0.967
CashFromUNHCR_Yes	0.0197	0.008	2.609	0.009	0.005	0.035
HouseHoldSize	-0.0049	0.001	-5.391	0.000	-0.007	-0.003
GenderCode	-0.0352	0.008	-4.689	0.000	-0.050	-0.020
DisabilitiesYes	0.0163	0.008	2.141	0.032	0.001	0.031

Skew:	0.1049	**Kurtosis:**	0.2217
Centered skew:	0.0122	**Centered kurtosis:**	0.1505

Table 6: Multivariate Poisson regression exploring dietary diversity against provision of UNHCR cash, UNICEF cash, WFP vouchers, total income, gender of head of household and disability within the household.

Dep. Variable:	DietDiversity	No. Observations:	4516
Model:	GEE	No. clusters:	1883
Method:	Generalized Estimating Equations	Min. cluster size:	2
		Max. cluster size:	5
Family:	Poisson	Mean cluster size:	2.4
Dependence structure:	Independence	Num. iterations:	12
Date:	Thu, 23 Nov 2017	Scale:	1.000

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	98.4396	6.335	15.539	0.000	86.024	110.856
CashFromUNHCR_Yes	0.0667	0.009	7.471	0.000	0.049	0.084
YearVisit	-0.0478	0.003	-15.216	0.000	-0.054	-0.042

Skew:	-0.4301	Kurtosis:	-0.9634
Centered skew:	-0.2623	Centered kurtosis:	-0.7755

Table 7: Multivariate Poisson regression exploring dietary diversity against provision of UNHCR cash, UNICEF cash, WFP vouchers, total income, gender of head of household and disability within the household.

Dep. Variable:	DietScore	No. Observations:	2783
Model:	GEE	No. clusters:	1882
Method:	Generalized Estimating Equations	Min. cluster size:	1
		Max. cluster size:	4
Family:	Poisson	Mean cluster size:	1.5
Dependence structure:	Independence	Num. iterations:	8
Date:	Thu, 23 Nov 2017	Scale:	1.000

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	1.0405	0.026	39.546	0.000	0.989	1.092
CashFromUNHCR_Yes	0.1481	0.012	12.412	0.000	0.125	0.171
TotIncome	-0.0001	6.49e-05	-1.689	0.091	-0.000	1.76e-05
WFPFoodVouchers_yes	0.1725	0.024	7.049	0.000	0.125	0.220
UNICEFCashYes	-0.2937	0.014	-21.648	0.000	-0.320	-0.267
GenderCode	-0.0302	0.010	-2.896	0.004	-0.051	-0.010
DisabilitiesYes	-0.0347	0.010	-3.489	0.000	-0.054	-0.015

Skew:	-0.0924	Kurtosis:	-0.3772
Centered skew:	-0.0421	Centered kurtosis:	1.4950

Table 8: Multivariate Poisson regression exploring dietary diversity against provision of UNHCR cash, UNICEF cash, WFP vouchers, total income, gender of head of household and disability within the household.

Dep. Variable:	AverageCoping	**No. Observations:**	2783
Model:	GEE	**No. clusters:**	1882
Method:	Generalized Estimating Equations	**Min. cluster size:**	1
		Max. cluster size:	4
Family:	Poisson	**Mean cluster size:**	1.5
Dependence structure:	Independence	**Num. iterations:**	7
Date:	Fri, 24 Nov 2017	**Scale:**	1.000

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	1.1621	0.118	9.831	0.000	0.930	1.394
CashFromUNHCR_Yes	-0.1446	0.025	-5.768	0.000	-0.194	-0.095
TotIncome	-0.0003	0.000	-2.715	0.007	-0.001	-9.54e-05
WFPFoodVouchers_yes	-0.1181	0.033	-3.585	0.000	-0.183	-0.054
UNICEFCashYes	0.2027	0.027	7.390	0.000	0.149	0.256

Skew:	0.5152	**Kurtosis:**	-0.1538
Centered skew:	0.0844	**Centered kurtosis:**	1.9138

Table 9: Multivariate Poisson regression exploring the average incidence of short term coping strategies against the provision of UNHCR cash, UNICEF cash, WFP vouchers, total income, gender of head of household, household size and governorate.

Dep. Variable:	Coping at 30 days	**No. Observations:**	3120
Model:	GEE	**No. clusters:**	2219
Method:	Generalized Estimating Equations	**Min. cluster size:**	1
		Max. cluster size:	4
Family:	Poisson	**Mean cluster size:**	1.4
Dependence structure:	Independence	**Num. iterations:**	7
Date:	Fri, 15 Dec 2017	**Scale:**	1.000

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	0.3061	0.137	2.234	0.025	0.038	0.575
CashFromUNHCR_Yes	-0.0640	0.036	-1.787	0.074	-0.134	0.006
TotIncome	-0.0014	0.000	-6.946	0.000	-0.002	-0.001
UNICEFCash	-0.2128	0.044	-4.802	0.000	-0.300	-0.126
HouseHoldSize	0.0583	0.008	7.323	0.000	0.043	0.074
GenderCode	-0.1464	0.036	-4.093	0.000	-0.217	-0.076
Disabilities	0.1607	0.032	4.958	0.000	0.097	0.224
Governorate_Irbid	0.2478	0.125	1.981	0.048	0.003	0.493
Governorate_Mafraq	0.4296	0.127	3.382	0.001	0.181	0.679
Governorate_Zarqa	0.5964	0.127	4.694	0.000	0.347	0.845

Skew:	0.7472	**Kurtosis:**	0.4280
Centered skew:	0.1665	**Centered kurtosis:**	4.0384

Table 10: Multivariate Poisson regression exploring the average incidence of medium-term coping strategies against the provision of UNHCR cash, UNICEF cash, WFP vouchers, total income, gender of head of household, household size and governorate.

Dep. Variable:	SixMonthsCoping			**No. Observations:**		3120
Model:	GEE			**No. clusters:**		2219
Method:	Generalized Estimating Equations			**Min. cluster size:**		1
				Max. cluster size:		4
Family:	Poisson			**Mean cluster size:**		1.4
Dependence structure:	Independence			**Num. iterations:**		7
Date:	Fri, 15 Dec 2017			**Scale:**		1.000
	coef	**std err**	**z**	**P>|z|**	**[0.025**	**0.975]**
Intercept	-1.6468	0.056	-29.362	0.000	-1.757	-1.537
CashFromUNHCR_Yes	-0.0188	0.018	-1.033	0.302	-0.055	0.017
TotIncome	-0.0009	9.07e-05	-10.411	0.000	-0.001	-0.001
WFPFoodVouchers	-0.0299	0.026	-1.135	0.257	-0.082	0.022
HouseHoldSize	0.0459	0.004	11.937	0.000	0.038	0.053
DisabilitiesYes	0.0370	0.015	2.507	0.012	0.008	0.066
Skew:	0.3123	**Kurtosis:**		-0.0103		
Centered skew:	-0.0025	**Centered kurtosis:**		2.9740		

Table 11: Multivariate Poisson regression exploring the average incidence of long term coping strategies at six months against the provision of UNHCR cash, UNICEF cash, WFP vouchers, total income, gender of head of household, household size and governorate.

Dep. Variable:	AccessHealthServicesYes			**No. Observations:**		1338
Model:	GEE			**No. clusters:**		1098
Method:	Generalized Estimating Equations			**Min. cluster size:**		1
				Max. cluster size:		4
Family:	Binomial			**Mean cluster size:**		1.2
Dependence structure:	Independence			**Num. iterations:**		9
Date:	Tue, 21 Nov 2017			**Scale:**		1.000
	coef	**std err**	**z**	**P>|z|**	**[0.025**	**0.975]**
Intercept	3.0004	1.206	2.488	0.013	0.636	5.364
CashFromUNHCR_Yes	0.3487	0.344	1.013	0.311	-0.326	1.023
LongTermCoping	-0.2176	0.068	-3.221	0.001	-0.350	-0.085
ExpenditureHealth	0.0085	0.013	0.637	0.524	-0.018	0.035
VaccinationYes	0.7102	0.386	1.839	0.066	-0.047	1.467
AverageCoping	-0.2043	0.101	-2.030	0.042	-0.401	-0.007
Skew:	-5.4430	**Kurtosis:**		28.7002		
Centered skew:	-0.8679	**Centered kurtosis:**		78.0508		

Table 12: Multivariate binomial regression exploring whether or not a household has accessed health services against the provision of UNHCR cash, employment of short and medium term coping strategies, expenditure on health, and vaccination of children.

Dep. Variable:	ExpenditureHealth	**No. Observations:**	1338
Model:	GEE	**No. clusters:**	1098
Method:	Generalized Estimating Equations	**Min. cluster size:**	1
		Max. cluster size:	4
Family:	Poisson	**Mean cluster size:**	1.2
Dependence structure:	Independence	**Num. iterations:**	22
Date:	Tue, 21 Nov 2017	**Scale:**	1.000

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	0.2933	0.683	0.429	0.668	-1.046	1.632
CashFromUNHCR_Yes	0.1863	0.163	1.142	0.253	-0.133	0.506
TotIncome	0.0031	0.001	3.912	0.000	0.002	0.005
LongTermCoping	0.0348	0.045	0.780	0.435	-0.053	0.122
VaccinationYes	0.1513	0.142	1.062	0.288	-0.128	0.431
AverageCoping	0.2238	0.050	4.495	0.000	0.126	0.321
AccessHealthServicesYes	0.3118	0.350	0.890	0.373	-0.375	0.998
DisabilitiesYes	1.1197	0.165	6.779	0.000	0.796	1.443

Skew:	8.0844	**Kurtosis:**	110.5699
Centered skew:	-0.0023	**Centered kurtosis:**	172.6055

Table 13: Multivariate Poisson regression exploring health expenditure against the provision of UNHCR cash, total income, employment of short and medium term coping strategies, vaccination of children and accessing health services.

Dep. Variable:	ExpenditureEducation	**No. Observations:**	471
Model:	GEE	**No. clusters:**	371
Method:	Generalized Estimating Equations	**Min. cluster size:**	1
		Max. cluster size:	4
Family:	Poisson	**Mean cluster size:**	1.3
Dependence structure:	Independence	**Num. iterations:**	15
Date:	Tue, 05 Dec 2017	**Scale:**	1.000

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	-0.5368	0.759	-0.707	0.480	-2.025	0.952
CashFromUNHCR_Yes	-0.1696	0.242	-0.702	0.482	-0.643	0.304
ExpenditureTransportation	0.0208	0.007	3.024	0.002	0.007	0.034
MissingSchoolRatio	-0.2570	0.134	-1.912	0.056	-0.520	0.006
HouseHoldSize	0.0817	0.042	1.944	0.052	-0.001	0.164
Governorate_Amman	1.7526	0.440	3.986	0.000	0.891	2.614
Governorate_Irbid	1.1311	0.629	1.800	0.072	-0.101	2.363
Governorate_Mafraq	1.6772	0.615	2.727	0.006	0.472	2.882
Governorate_Zarqa	1.5626	0.609	2.566	0.010	0.369	2.756

Skew:	7.4407	**Kurtosis:**	82.0311
Centered skew:	0.5260	**Centered kurtosis:**	17.0061

Table 14: Multivariate Poisson regression exploring education expenditure against the provision of UNHCR cash, missing school ratio and transportation costs.

Dep. Variable:	MissingSchoolRatio	**No. Observations:**	391
Model:	GEE	**No. clusters:**	310
Method:	Generalized Estimating Equations	**Min. cluster size:**	1
		Max. cluster size:	4
Family:	Poisson	**Mean cluster size:**	1.3
Dependence structure:	Independence	**Num. iterations:**	6
Date:	Fri, 17 Nov 2017	**Scale:**	1.000

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	-0.0584	0.253	-0.231	0.817	-0.553	0.437
CashFromUNHCR_Yes	-0.1069	0.064	-1.682	0.093	-0.232	0.018
AverageCoping	-0.0282	0.021	-1.361	0.174	-0.069	0.012
DropOutsYes	0.0556	0.063	0.883	0.377	-0.068	0.179
ExpenditureEducation	-0.0150	0.007	-2.156	0.031	-0.029	-0.001
TotalDebt	-5.319e-05	4.33e-05	-1.227	0.220	-0.000	3.17e-05
ChildMarriage	-0.6770	0.435	-1.556	0.120	-1.530	0.176

Skew:	0.8228	**Kurtosis:**	1.2931
Centered skew:	0.0349	**Centered kurtosis:**	14.9192

Table 15: Multivariate Poisson regression exploring percentage of children missing school against the provision of UNHCR cash, total debt, employment of short and medium-term coping strategies, and child marriage.

Dep. Variable:	SavingHowMuch	**No. Observations:**	4515
Model:	GEE	**No. clusters:**	1883
Method:	Generalized Estimating Equations	**Min. cluster size:**	1
		Max. cluster size:	5
Family:	Poisson	**Mean cluster size:**	2.4
Dependence structure:	Independence	**Num. iterations:**	60
Date:	Tue, 21 Nov 2017	**Scale:**	1.000

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	-2.6768	1.426	-1.877	0.061	-5.473	0.119
CashFromUNHCR_Yes	-0.7731	0.270	-2.858	0.004	-1.303	-0.243
HowManyMeals	1.1468	0.288	3.983	0.000	0.582	1.711
DietDiversity	0.2202	0.098	2.251	0.024	0.028	0.412
Days_NoWater	-0.1293	0.067	-1.921	0.055	-0.261	0.003
PermanentShelter	1.7020	0.617	2.757	0.006	0.492	2.912

Skew:	24.7447	**Kurtosis:**	870.2983
Centered skew:	9.2235	**Centered kurtosis:**	495.1804

Table 16: Multivariate Poisson regression exploring the total amount of savings against the provision of UNHCR cash, number of meals the previous day, dietary diversity, days without water, and type of shelter.

Dep. Variable:	SavingsDepletion	**No. Observations:**	4515
Model:	GEE	**No. clusters:**	1883
Method:	Generalized Estimating Equations	**Min. cluster size:**	1
		Max. cluster size:	5
Family:	Binomial	**Mean cluster size:**	2.4
Dependence structure:	Independence	**Num. iterations:**	9
Date:	Tue, 21 Nov 2017	**Scale:**	1.000

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	-2.8535	0.998	-2.859	0.004	-4.810	-0.897
SavingHowMuch	0.0028	0.001	2.967	0.003	0.001	0.005
DietDiversity	-0.0186	0.052	-0.359	0.720	-0.120	0.083
PermanentShelter	-0.5266	0.617	-0.854	0.393	-1.735	0.682
Days_NoWater	-0.0313	0.063	-0.494	0.621	-0.155	0.093

Skew:	7.9584	**Kurtosis:**	74.0178
Centered skew:	2.1482	**Centered kurtosis:**	37.9520

Table 17: Binomial logistic regression exploring depletion of savings (binary) against the amount of savings, number of meals the previous day, dietary diversity, days without water, and type of shelter.

Dep. Variable:	TotIncome	**No. Observations:**	4516
Model:	GEE	**No. clusters:**	1883
Method:	Generalized Estimating Equations	**Min. cluster size:**	2
		Max. cluster size:	5
Family:	Poisson	**Mean cluster size:**	2.4
Dependence structure:	Independence	**Num. iterations:**	60
Date:	Fri, 17 Nov 2017	**Scale:**	1.000

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	28.0203	2.167	12.929	0.000	23.772	32.268
CashFromUNHCR_Yes	16.8664	0.139	121.623	0.000	16.595	17.138
DietDiversity	13.9247	0.172	80.896	0.000	13.587	14.262
Days_NoWater	-2.8956	0.243	-11.898	0.000	-3.373	-2.419
GenderCode	4.7375	0.189	25.042	0.000	4.367	5.108

Skew:	-9.3437	**Kurtosis:**	nan
Centered skew:	-2.2968	**Centered kurtosis:**	nan

Table 18: Multivariate Poisson regression exploring total income against the provision of UNHCR cash, number of meals the previous day, dietary diversity, days without water, gender of head of household (0: male; 1: female) and household size.

Dep. Variable:	DiffIncomeExp	**No. Observations:**	2783
Model:	GEE	**No. clusters:**	1882
Method:	Generalized Estimating Equations	**Min. cluster size:**	1
		Max. cluster size:	4
Family:	Gaussian	**Mean cluster size:**	1.5
Dependence structure:	Independence	**Num. iterations:**	2
Date:	Tue, 21 Nov 2017	**Scale:**	6063.244

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	-15.3171	18.092	-0.847	0.397	-50.777	20.143
CashFromUNHCR_Yes	-39.6679	3.323	-11.939	0.000	-46.180	-33.156
HowManyMeals	8.5081	2.946	2.888	0.004	2.734	14.282
DietDiversity	0.1586	0.527	0.301	0.763	-0.875	1.192
Days_NoWater	-1.7102	1.062	-1.611	0.107	-3.791	0.371
PermanentShelter	-63.4873	6.885	-9.221	0.000	-76.981	-49.993
IncomeWork	0.5205	0.021	25.096	0.000	0.480	0.561
TotalDebt	-0.0316	0.005	-6.422	0.000	-0.041	-0.022

Skew:	-0.2972	**Kurtosis:**	1.4716
Centered skew:	0.0529	**Centered kurtosis:**	6.9891

Table 19: Multivariate regression exploring income/expenditure differential against the provision of UNHCR cash, number of meals the previous day, dietary diversity, days without water, gender of head of household and household size.

Dep. Variable:	TotIncome	**No. Observations:**	565
Model:	GEE	**No. clusters:**	537
Method:	Generalized Estimating Equations	**Min. cluster size:**	1
		Max. cluster size:	3
Family:	Gaussian	**Mean cluster size:**	1.1
Dependence structure:	Independence	**Num. iterations:**	2
Date:	Fri, 17 Nov 2017	**Scale:**	9422.219

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	-102.5905	78.917	-1.300	0.194	-257.266	52.084
CashFromUNHCR_Yes	-75.4644	9.121	-8.274	0.000	-93.341	-57.588
WorkPermitYes	46.5313	13.586	3.425	0.001	19.903	73.160
DocumentationYes	176.2479	32.196	5.474	0.000	113.144	239.351

Skew:	0.5413	**Kurtosis:**	1.5684
Centered skew:	-0.0287	**Centered kurtosis:**	32.3344

Table 20: Multivariate regression exploring total income against the provision of UNHCR cash, and whether or not households have a work permit and legal documentation.

Dep. Variable:	WorkPermitYes	No. Observations:	565
Model:	GEE	No. clusters:	537
Method:	Generalized Estimating Equations	Min. cluster size:	1
		Max. cluster size:	3
Family:	Binomial	Mean cluster size:	1.1
Dependence structure:	Independence	Num. iterations:	23
Date:	Wed, 22 Nov 2017	Scale:	1.000

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	-0.0811	1.384	-0.059	0.953	-2.793	2.631
CashFromUNHCR_Yes	0.0998	0.431	0.232	0.817	-0.745	0.945
TotIncome	0.0050	0.001	3.427	0.001	0.002	0.008
SavingsDepletion	312.6200	21.616	14.462	0.000	270.253	354.987
DocumentationYes	-2.8505	1.237	-2.305	0.021	-5.274	-0.426
SavingHowMuch	-0.1676	0.011	-15.512	0.000	-0.189	-0.146
LegalIssuesYes	1.2009	1.087	1.105	0.269	-0.929	3.331

Skew:	3.5802	Kurtosis:	11.8528
Centered skew:	0.0000	Centered kurtosis:	261.2211

Table 21: Multivariate binomial regression analysis exploring possession of a work permit against the provision of cash from UNHCR, total income, total amount of savings, depletion of savings, possession of legal documentation and experiencing legal issues.

Dep. Variable:	IncomeWork	No. Observations:	565
Model:	GEE	No. clusters:	537
Method:	Generalized Estimating Equations	Min. cluster size:	1
		Max. cluster size:	3
Family:	Gaussian	Mean cluster size:	1.1
Dependence structure:	Independence	Num. iterations:	2
Date:	Wed, 22 Nov 2017	Scale:	8682.965

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	-55.4659	77.217	-0.718	0.473	-206.808	95.877
CashFromUNHCR_Yes	-72.5395	8.798	-8.245	0.000	-89.783	-55.296
WorkPermitYes	46.6797	14.494	3.221	0.001	18.272	75.088
DocumentationYes	168.8079	32.365	5.216	0.000	105.373	232.243
SavingHowMuch	0.0768	0.005	14.119	0.000	0.066	0.088
AverageCoping	-13.1737	3.184	-4.137	0.000	-19.415	-6.932
LongTermCoping	-0.6395	2.327	-0.275	0.783	-5.200	3.921

Skew:	0.4781	Kurtosis:	0.9446
Centered skew:	0.0018	Centered kurtosis:	26.8104

Table 22: Multivariate regression analysis exploring the amount of income generated from work against the provision of cash from UNHCR, total amount of savings, possession of a work permit and legal documentation and the employment of short and medium-term coping strategies.

Dep. Variable:	IncomeAssets	**No. Observations:**	1437
Model:	GEE	**No. clusters:**	1105
Method:	Generalized Estimating Equations	**Min. cluster size:**	1
		Max. cluster size:	3
Family:	Gaussian	**Mean cluster size:**	1.3
Dependence structure:	Independence	**Num. iterations:**	2
Date:	Wed, 22 Nov 2017	**Scale:**	8955.142

	coef	std err	z	P>|z|	[0.025	0.975]
Intercept	55.6442	16.880	3.296	0.001	22.559	88.729
CashFromUNHCR_Yes	-22.3845	6.820	-3.282	0.001	-35.752	-9.017
WorkPermitYes	-17.4446	8.752	-1.993	0.046	-34.598	-0.292
TotIncome	0.6703	0.062	10.780	0.000	0.548	0.792
LongTermCoping	-13.9943	2.327	-6.015	0.000	-18.554	-9.434
IncomeWork	-0.7342	0.071	-10.388	0.000	-0.873	-0.596
SavingHowMuch	0.0273	0.009	3.007	0.003	0.009	0.045

Skew:	0.5835	**Kurtosis:**	18.8104
Centered skew:	0.2219	**Centered kurtosis:**	27.1794

Table 23: Multivariate regression analysis exploring the amount of income generated from assets against the provision of cash from UNHCR, total income, total amount of savings, possession of a work permit and legal documentation and the employment of short and medium term coping strategies

ANNEX 2: ADDITIONAL GRAPHS

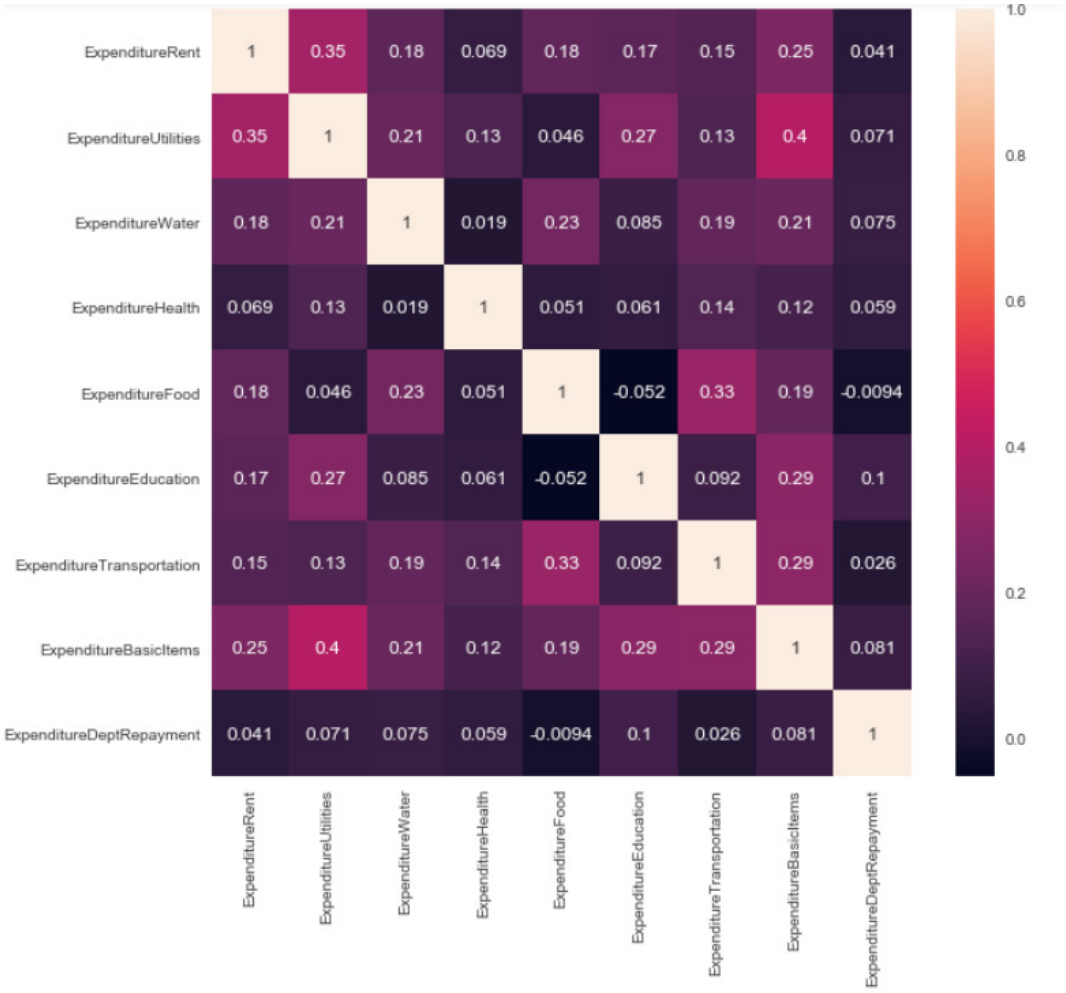

Figure 29: Correlation matrix shows relationships between the various categories of expenditure.

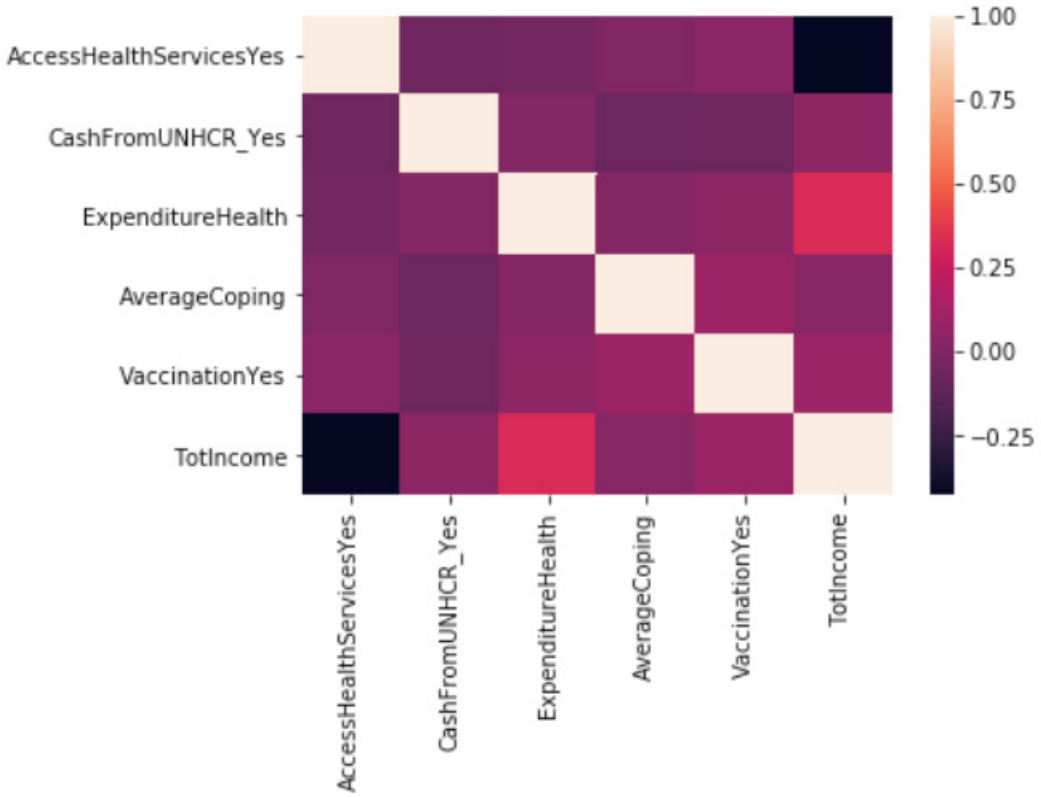

Figure 31: Correlation matrix shows relationships between access to health services, the provision of UNHCR cash, total income, employment of short and medium-term coping strategies, expenditure on health, and vaccination of children.

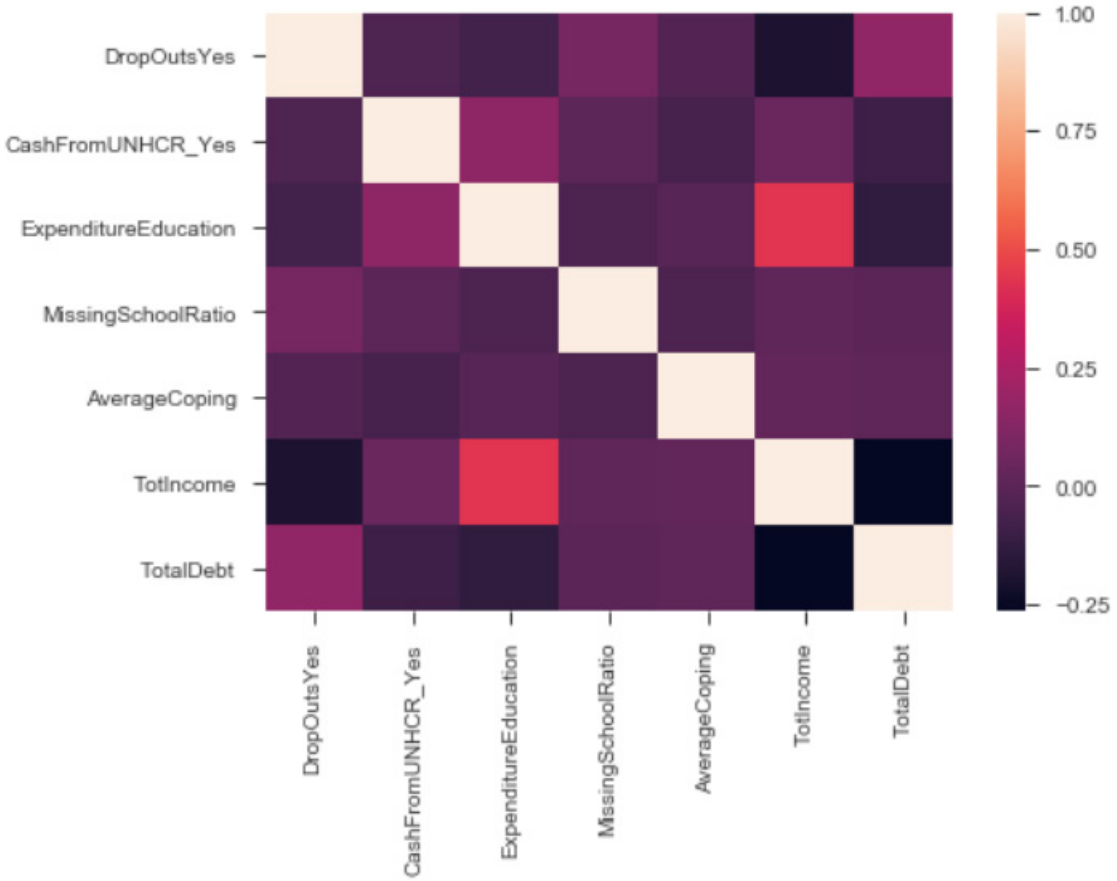

Figure 35: Correlation matrix shows relationships between children dropping out of education, the provision of UNHCR cash, total income, total debt, and employment of short and medium-term coping strategies.

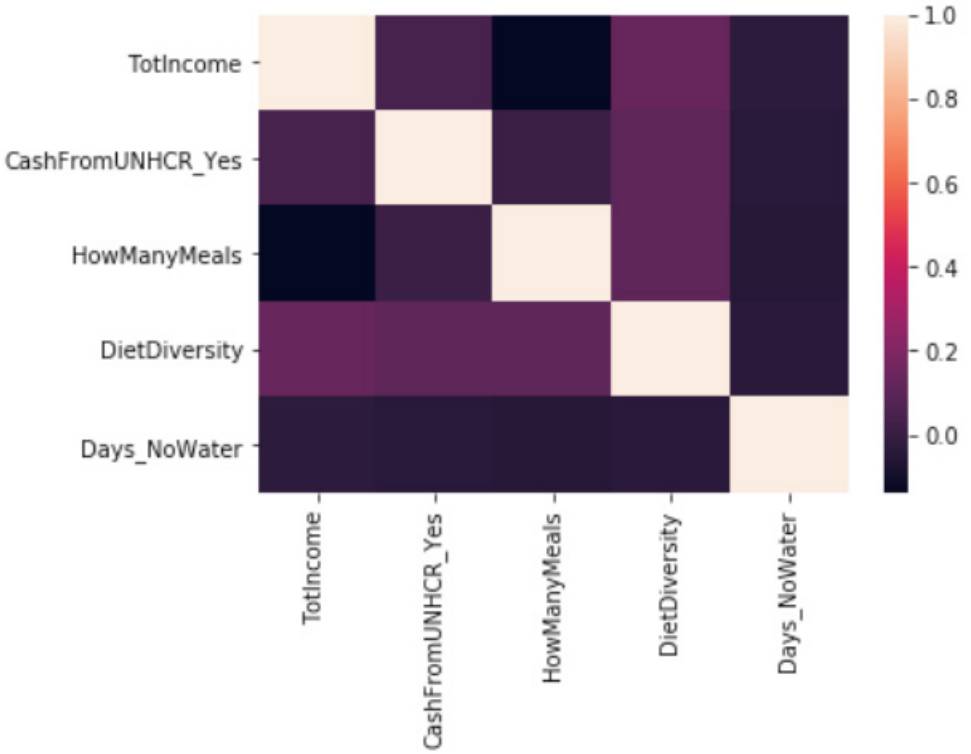

Figure 37: Correlation matrix shows relationships between total income, the provision of UNHCR cash, number of meals the previous day, dietary diversity and days without water in the past month.

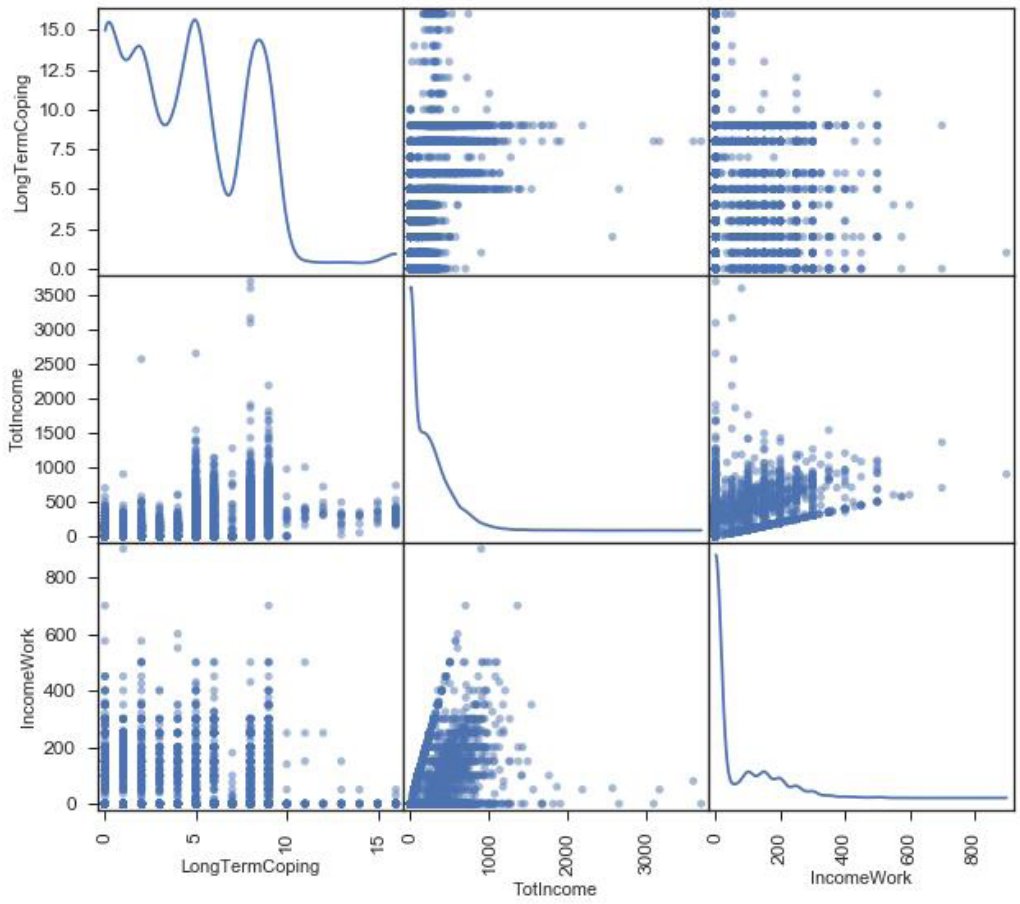

Figure 43: Analysis of data distribution between 30-day copings strategies, total income and income from work. Both x and y axis represent reported amounts of the various combination of variables used for coping strategies, income and income from work

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ACTION AGAINST HUNGER

UNHCR
The UN Refugee Agency

SUMMARY OF UNHCR JORDAN'S CASH-BASED INTERVENTION AND ITS EFFECT ON PATTERNS OF DEBT

BETWEEN 2015 AND 2017, THE TOTAL AMOUNT OF DEBT HELD BY SYRIAN REFUGEE FAMILIES DECREASED

Reported amounts of debt are lower in households receiving UNHCR cash than those that are not

A third of households reported that cash improved their lives by leaving them with less debt*

2015

2017

Recipients of UNHCR cash were less likely to report large amounts of debt in 2017 than in previous years, instead borrowing smaller amounts more often

* *Post Distribution Monitoring Report, UNHCR, Winter 2016*

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Unless otherwise stated, statistics have been sourced from http://www.unhcr.org/5a5e16607.pdf

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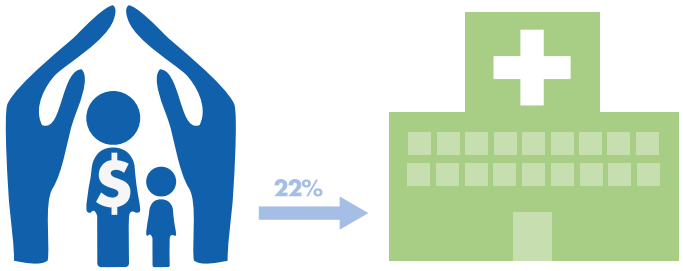
SUMMARY OF UNHCR JORDAN'S CASH-BASED INTERVENTION AND ITS EFFECT ON PATTERNS OF HEALTH AND EDUCATION EXPENDITURE

HEALTH

UNHCR cash leads to a slight increase in health expenditure

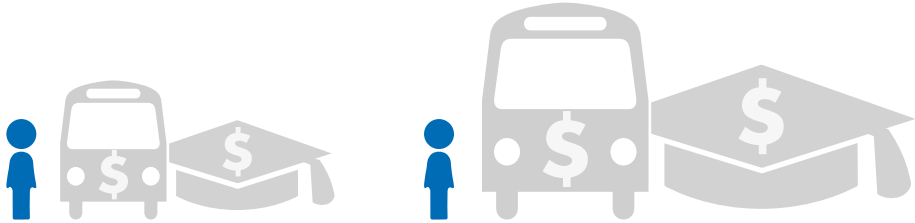


22% said UNHCR cash allowed them to access health services*

Two thirds of respondents said UNHCR cash improved their psychological wellbeing

EDUCATION

UNHCR cash leads to a significant increase in education expenditure



Transportation costs are a key driver of education expenditure

UNHCR cash may make it less likely for families to withdraw children from school

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Unless otherwise stated, statistics have been sourced from http://www.unhcr.org/5a5e16607.pdf

* *Post Distribution Monitoring Report, UNHCR, Winter 2016*

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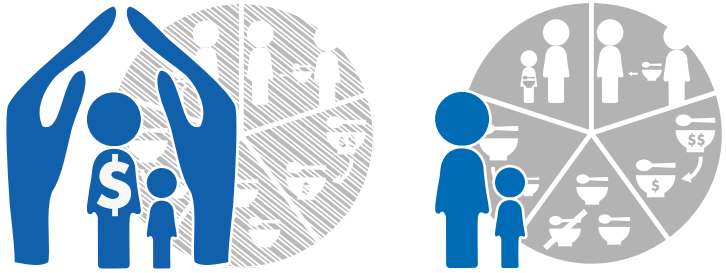
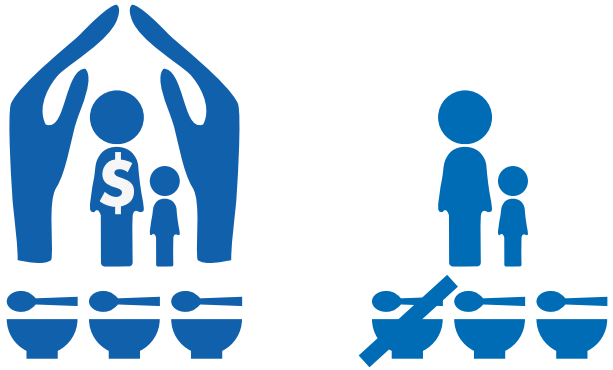
SUMMARY OF UNHCR JORDAN'S CASH-BASED INTERVENTION AND ITS EFFECT ON

THE USE OF SHORT-TERM COPING STRATEGIES

SHORT-TERM COPING STRATEGIES TO ALLEVIATE FOOD SHORTAGE



Families receiving UNHCR cash are less likely to use coping strategies than families that are not.



Families receiving cash are less likely to have reduced their number of meals.

Female headed households are more likely to employ coping strategies, whether or not they receive cash.

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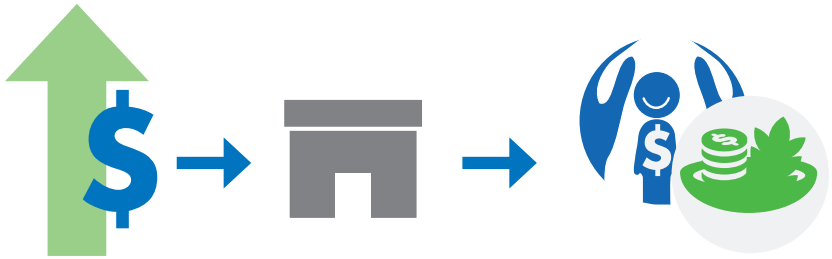
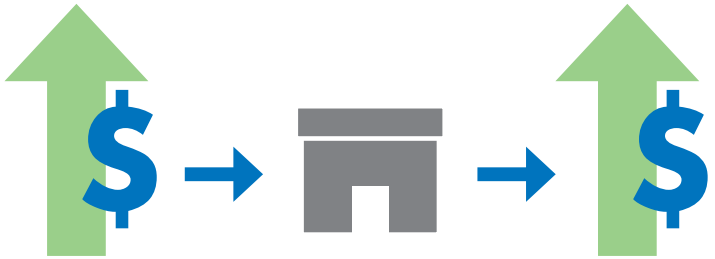
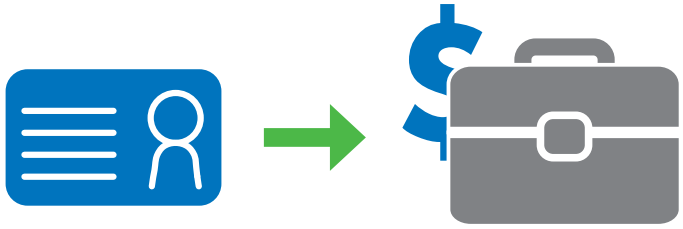
SUMMARY OF UNHCR JORDAN'S CASH-BASED INTERVENTION AND ITS EFFECT ON INCOME PATTERNS



Increased total income has been shown to have a positive relationship with aspects of cash recipients' wellbeing, such as nutritional status.



UNHCR cash contributes to an increase in total income per month as well as total expenditure.



A work permit is a vital prerequisite for the generation of income from the formal sector, and has a stronger influence on income from the formal sector than the provision of cash.

Those receiving UNHCR cash are less likely to earn income in the formal sector.

This is likely due to their increased vulnerability.

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