

# SETTING GRADUATION FRAMEWORK FOR MULTIPURPOSE CASH ASSISTANCE

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# Executive Summary

The overall objective of this report is to refine the applied graduation framework for cash-based interventions by understanding the dynamics of moving in and out of poverty among refugees, and identifying the determinants of chronic and transitory poverty, with the view of informing decision-makers on the most suitable interventions for these two groups (such as regular and time-bound cash grants, micro-credit, employment opportunities, etc.). Special attention is given to persons with specific needs such as single parents, persons with disability, and GBV survivors in accordance with UNHCR Policy on Age, Gender, and Diversity.

The analysis of the data in this report consists of two parts:

- A retrospective analysis of data already gathered through the socioeconomic assessments of Syrian Refugees between 2015 and 2017
- An updated analysis comprising all nationalities based on panel data collected in 2018 and 2022 (by re-interviewing those sampled through the EVAR 2018 baseline survey).

The methodology for estimating welfare aggregate and poverty lines in the report is that adopted by CAPMAS (the official statistical agency in Egypt). The welfare variable is the actual consumption which includes out-of-pocket consumption, home-produced, and in-kind transfers.

Using the various cross-sections of household data collected on Syrian refugees between 2015 and 2017, it was found that almost two-fifths of Syrian refugees (39 percent) in 2015 were poor, while this percentage declined to 31 percent in 2016 and declined more to reach 21 percent in 2017. Syrian refugees in metropolitan areas were more likely to be poor than those in other regions. Furthermore - following a panel of 13,210 Syrian households - it was found that the overall poverty rate among households stood at 14.6%. This represents a significant decline from 29 percent in 2016 and 39 percent in 2015 and overall indicates that the income situation of the Syrian refugees in Egypt significantly improved between 2015 and 2017.

Regarding food poverty rates, it was found that extreme poverty among Syrian refugees reached 10 percent in 2015 and declined significantly to 6 percent in 2016 and 2017. The highest percentage of extreme poverty among Syrian refugees in 2015 was in Upper Egypt (12 percent), while this percentage reached 10 percent and 8 percent in the metropolitan and Lower Egypt respectively. The largest decline in extreme poverty rates in 2016 and 2017 was found in Upper Egypt. Panel data further indicates a significant improvement regarding the prevalence of food poverty among Syrian refugees whereby only 9 percent could not satisfy their basic food needs in 2015 and this percentage declined markedly to 4 percent and 1.6 percent in 2016 and 2017 respectively.

Several factors associated with poverty mobility among Syrian refugees were identified including but not limited to household and family composition, geographical mobility between regions, education, employment, access to residency permits, duration of stay in Egypt, the existence of specific needs among household members, and **access to cash transfer**.

The report shows that Syrian refugees who received cash transfers in 2017 were more likely to move out of poverty and less likely to fall into poverty or remain poor. In other words, the analysis shows that 92 percent of refugees who moved out of poverty in 2017 (i.e., were previously poor) received WFP's assistance. Similarly, 67 percent of those moved out of poverty received UNHCR's Multipurpose Cash Assistance. It is worth mentioning that most of the Syrian refugees (86 percent) were covered by cash and voucher assistance in 2017 where such assistance increased significantly between 2015 and 2017 (72 percent in 2015 and 80 percent in 2016).

The situation is reversed when looking at the updated analysis comprising all refugee nationalities between 2018 and 2022. The report shows that 17 percent of Syrian refugees were poor in 2018, while this percentage increased

significantly to reach 41% in 2022. On the other extreme, 71% of non-Syrian refugees were already poor in 2018 and this percentage remained unchanged in 2022.

In terms of food poverty, it was found that 5 percent of Syrian refugees were living below the food poverty line in 2018. Additionally, half of the Syrian refugees were nearly poor in 2018, and they were vulnerable to any price increase or economic shocks. Again, the situation completely changed in 2022, as the prevalence of extreme poverty among Syrian refugees increased by more than double to reach 12 percent. Although the poverty status of non-Syrian refugees is worse than Syrian refugees, the prevalence of extreme poverty decreased by 4 percent from 2018 to 2022.

Several factors are correlated with the poverty of status of Syrian and non-Syrian refugees, including geographical mobility. Notably, Syrian, and non-Syrian refugees in the metropolitan region had the worst poverty situation compared to other regions. The report shows that 17 percent of refugees in metropolitan areas are chronically poor as they stayed in poverty between 2018 and 2022, while this percentage decreased to 7 percent and 8 percent among those in Lower and Upper Egypt respectively. The situation is much worst among non-Syrian refugees, where 57% of non-Syrian refugees in metropolitan and Upper Egypt are chronically poor.

Unlike the situation in 2017, the percentage of Syrian refugees receiving UNHCR cash assistance declined significantly from 2018 to 2022, while access to non-Syrian refugees increased significantly during the same period. Two-thirds of the Syrian refugees remained beneficiaries of WFP assistance in both years; 2018 and 2022. Additionally, non-Syrian refugees started to receive WFP assistance after 2018 and this was further increased to 46 percent in 2022 without affecting the percentage of Syrian refugees receiving this assistance compared to 2017.





# Chapter 1

## Introduction

*Sudanese community leaders at an event organized by UNHCR to honor them for helping their communities. ©UNHCR/Pedro Costa Gomes*



## Introduction

The purpose of this report is to provide an understanding of the dynamics at play in the determination of poverty, and the influencing factors of moving in and out of poverty among refugees and asylum-seekers, with the view to informing decision-makers on the most suitable interventions for these two groups (such as regular and time-bound cash grants, micro-credits, employment opportunities, etc....).

Specifically for Syrians, the study looked at historical data collected by UNHCR under the auspices of the Egypt Vulnerability Assessment for Syrian Refugees (EVAR) between 2014 and 2017. Despite the wealth of vulnerability data that has been collected over the years, this information was not always systematically analyzed, and its use as evidence to inform the decision-making process was not regularly well-documented. Accordingly, this report presents a major step in building an institutional memory, and further making efficient use of the collected data.

In addition, in order to have an updated analysis comprising all nationalities, the study collected additional data by re-interviewing the same cases that were assessed through the latest multisectoral assessment (Egypt Vulnerability Assessment for Refugees – EVAR 2018).

## Objectives of the Study

The overall objective of this assignment is to refine the applied graduation framework for cash-based interventions through expert validation. Specific objectives are as follows:

- Understanding the **dynamics of moving in and out of poverty among refugees**<sup>1</sup>, and identifying the determinants of **chronic and transitory poverty**, with the view of informing decision-makers on the most suitable interventions for these two groups (such as regular and time-bound cash grants, micro-credit, provide employment opportunities, etc.).
- **Deriving the probability of being transient and chronic poor** for refugees specially persons with specific needs such as single parents, persons with disability, GBV survivors etc. The above analysis will also justify the need for different thresholds as elaborated later in this report.
- **Defining Exit Thresholds**, another decision that need to be applied in the refugee context is the possibility of defining an “exit threshold” potentially higher than the “entry threshold”. Using a database for cases assessed by UNHCR to receive **Multipurpose Cash Assistance (MPCA)**, the study will explore both the desirability and feasibility of these exit thresholds, particularly vis-à-vis other options (such as gradual benefits reductions). UNHCR pays special attention to at-risk groups such as people with disabilities, people with diverse sexual orientations and gender identities, as well as under-represented groups such as adolescents, youth, and older people<sup>2</sup>. Accordingly, adjusted thresholds need to be defined to eliminate errors of utilizing absolute poverty lines (such as the national poverty line or the minimum expenditure basket) by gathering empirical evidence on additional costs incurred by persons of concern with specific needs and/or applying existing modalities utilized by the national social protection programs.

## Data Source<sup>3</sup>

As of September 2014, UNHCR started to conduct the first phase of the Socio-Economic Assessment (SEA) of the Syrian Refugees in Egypt with focus on Greater Cairo area. In November 2014, UNHCR expanded the assessment to the Egypt's North Coast including Alexandria, Matrouh and Damietta. The goal of such assessment was to collect data on 100% of the Syrian refugee population in Egypt. The data collection was administered through a standardized questionnaire designed for household visits. The data was collected by Save the Children International in the Greater Cairo area, and Caritas Egypt in the North Coast area. The data collection took place until December 2015 with a

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<sup>1</sup> The term ‘refugees’ is used throughout this document, covering both refugees and asylum-seekers in Egypt, for ease of reading.

<sup>2</sup> See UNHCR policy on Age, Gender, and Diversity: [UNHCR, Policy on age, gender and diversity, 2018 0.pdf](#)

<sup>3</sup> There are 5 data sources with two-panel surveys (2015, 2016, 2017) and (2018 and 2022), the first set of panel surveys covered Syrians only while the second one (2018 – 2022) was extended to all nationalities.

total of 23,503 households comprising approximately 80% of the total Syrian refugee population registered with UNHCR in Egypt.

The same exercise was repeated in years 2016 and 2017 respectively, with the purpose of monitoring the needs, challenges, vulnerabilities, and protection concerns, among Syrian refugees in Egypt. Data was collected from a total of 23,345 and a total of 26,585 Syrian households in years 2016 and 2017 respectively.

The three surveys contribute to a longitudinal data set that facilitates the identification of significant trends in vulnerability-related data such as detailed socioeconomic and food security data and provides evidence and evaluative frameworks for targeting programs. The questionnaire deployed for the 2014 and 2015 Socio Economic Assessment (SEA), was developed by UNHCR in consultation with WFP, UNICEF, and Save the Children, as well as with UNHCR Egypt’s partner, CARITAS Egypt. Together, these stakeholders developed a standardized questionnaire based on similar assessments performed by UNHCR in Lebanon and Jordan<sup>4</sup>.

As much as possible, the sampled households in 2015 survey were re-interviewed in 2016 and further interviewed in 2017. 13,210 households were interviewed in all years. It is possible, therefore, to trace changes occurred for households’ characteristics during the 2015-2017 period and to assess the impact of these changes on the households’ living standards. However, no efforts were made to follow households’ members and hence changes at the individual level cannot be traced.

In order to make use of the data, it was necessary to perform some processing and editing on the original data for each round of the survey to have consistent data sets with identical variables and categories ready to use to get comparable indicators. Some differences were noted in the questionnaires used in the three rounds of the survey; some questions and/or categories were different, and some questions were not included in all rounds. In addition, various duplications per one survey round were found. Accordingly in all subsequent analysis, households who were successfully monitored across the three rounds were the only ones considered.

**Table 1.1: Number of Syrian households in the successive years**

	<i>Population</i>	<i>All Sample (Households)</i>	<i>Panel sample (Households)</i>
2015	43,323	23,503	13,210
2016	39,056	23,345	13,210
2017	42,380	26,585	13,210

In addition, due to the scarcity of panel data collected on refugees from other nationalities, households surveyed in the EVAR 2018 were re-interviewed in 2022 to the extent possible. A similar questionnaire was applied to assess factors that determine the chronic and transient poverty among refugees of all nationalities.

**Construction of Poverty Lines in Successive Years**

Refugees in Egypt do not live in camps and thus they have similar basic needs as Egyptians and are exposed to similar challenges and risks including prices’ levels. The official regional poverty lines (food and total) provided by CAPMAS, for 2017/18 are used to identify the extreme poor and the poor. Poverty lines for 2016 and 2015 are derived using the corresponding CPI published by CAPMAS. Poverty lines for successive years have the same real value and thus, consistent poverty comparisons are performed. Table 1.2 and 1.3 demonstrate the poverty lines used in our analysis by regions, for 2015, 2016 and 2017.

➤ *Methodology for deriving poverty lines*

The methodology for estimating welfare aggregate and poverty lines in this report is that adopted by CAPMAS (the official statistical agency in Egypt). Welfare variable is the actual consumption which includes out of pocket consumption, home produced and in-kind transfers. The official poverty lines methodology followed the World Bank

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<sup>4</sup> Vulnerability Assessment of Syrian Refugees in Egypt 2017 Report: [EVAR2017-2019-Online.pdf \(unhcr.org\)](https://www.unhcr.org/refugees/files/2017/07/EVAR2017-2019-Online.pdf)

approach outlined in the next paragraph. The methodology uses the “cost of basic needs” approach, where households are considered poor if they cannot afford to consume minimum acceptable basic needs (Haughton & Khandker, 2009). The cost of minimum basic needs is the poverty line. It considers the variation in prices between regions. Near poor are defined as those households whose consumption exceeds the poverty line but is below 1.3 times the poverty line.

World Bank methodology for deriving the poverty line is based on a normative food bundle set for the HIECS 2017/18, which assures that nutritional requirements are met for a diet that is consistent with Egyptian tastes of the poorest two quintiles, in 2017/18. This bundle is valued at regional-specific prices. The cost of this food bundle is the food poverty line. The food component of the poverty line is augmented with an allowance for non-food goods, consistent with the non-food spending of those households whose total spending is no more than the food poverty line. We followed parametric estimation for non-food poverty line where Angle’s regression was estimated for each region. Regional food share is regressed on total consumption. Parameters for Angel’s regressions were applied to households in all survey taking into account differences in household size, age and gender composition of households.

**Total poverty line = food poverty line + non-food poverty line.**

Therefore, each household is classified in one of the following four categories:

1. **Extremely poor:** if household consumption is below the food poverty line,
2. **Poor:** if household consumption is below the total poverty line. Thus, this category includes the extremely poor and households whose consumption is above the food poverty line but below the total poverty line.
3. **Near poor:** if household consumption is above the total poverty line and below 1.3 times total poverty line,
4. **Non-poor:** if household consumption is above 1.3 times total poverty line.

**Table 1.2: Poverty lines for different regions and years, LE (per capita per month)**

Regions	2018	2017	2016	2015
Metropolitan	773.34	678.00	518.84	453.29
Lower Egypt	719.63	630.92	482.81	421.81
Upper Egypt	735.36	644.71	493.36	431.03
Frontier	726.40	636.86	487.35	425.78
Total	735.59	644.91	493.51	431.16
CPI	1.00	0.877	0.671	0.586

**Table 1.3: Food poverty line for different regions and years, LE (Per capita per month)**

Regions	2018	2017	2016	2015
Metropolitan	505.44	446.83	320.68	273.21
Lower Egypt	486.45	430.03	308.63	262.94
Upper Egypt	487.76	431.19	309.47	263.65
Frontier	505.13	446.55	320.49	273.04
Total	490.80	433.88	311.39	265.30
food CPI	1.000	0.884	0.634	0.541

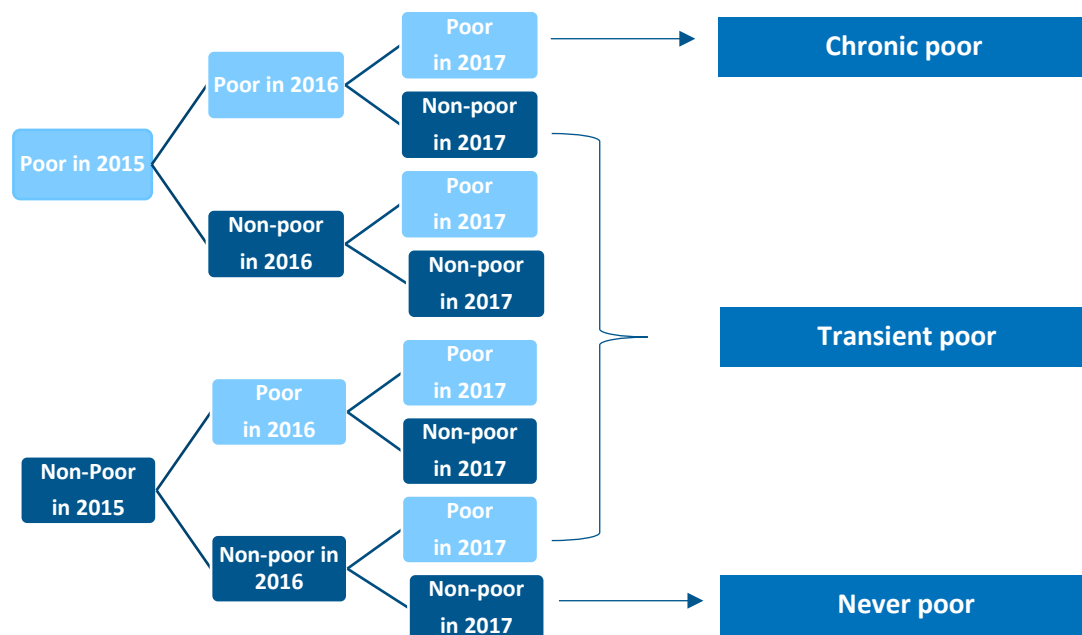
## Methodology for Measuring Poverty Dynamics

Using the poverty line, transition matrices are constructed to identify the dynamics of poverty among refugees, i.e., moving in and out of poverty and to explore chronic and transitory poverty. Every household in each date (survey) is classified as poor or non-poor depending on its welfare aggregate in its relation to the poverty line. The joint distribution of the poor across the three waves is examined to determine whether a household remained poor in all years (chronic poor) or moved in and out poverty categories in successive years (transient poor) or stayed non-poor in all years. Looking at the two periods together, households are classified into eight poverty dynamics categories that arise in a three-wave panel (see Figure 1.1 below) to recognize the ordered nature of poverty transitions. Individuals are classified into the following categories:

- Poor in all years (PPP),
- Poor in 2015 and 2016 but exit poverty in 2017 (PPN),
- Poor in 2015, exit in 2016 and returned to poverty in 2017 (PNP)
- Poor in 2015, exit in 2016 and stayed non-Poor in 2017 (PNN).
- Non-Poor in 2015 but poor in 2016 and 2017 (NPP),
- Non-Poor in both 2015 and 2016 but fell in poverty in 2017 (NNP).
- Non-Poor in 2015, fell into poverty in 2016 and moved out of poverty in 2017 (NPN),
- Non-Poor in all years (NNN).

Syrian Panel data is used to identify the main determinants of chronic and transitory poverty. Analysis includes descriptive statistics of the data used to provide detailed diagnostic checks and an explanation on how UNHCR can reproduce/utilize the model for future cases, while optimizing the needs for data collection and associated costs.

Figure 1.2: Illustration of poverty dynamics




The probability of being transient and chronic poor-using logistic regression technique- are estimated that can help in setting graduation thresholds and to propose interventions for graduates. Special thresholds may be suggested for people with protection risks such as single parents, persons with disability, SGBV survivors will be estimated.

Households also can be classified into 4 categories according to their poverty status in first, end and in between surveys. Thus, categories are always poor (PPP), poor in 2017 but was not poor in any other year (PNP or NNP or NPP), non-poor in 2017 but was poor in any other year (PPN or NPN or PNN) and always non-poor (NNN). Logistic regression is used to identify household's demographic socio-economic characteristics, housing characteristics and transfers received by UNHCR, WFP and other donors, that contribute to each of the four categories.



Logistic regression results will be used in setting graduation thresholds and to propose interventions for graduates. Special thresholds are suggested for persons with protection risks such as single parents, persons with disability, SGBV survivors are estimated.

The same approach was followed for all nationalities sample to identify the dynamics of poverty, the main determinants of chronic and transitory poverty, and the probabilities of being transient and chronic poor.



## Chapter 2

# Poverty Dynamics among Syrian Refugees

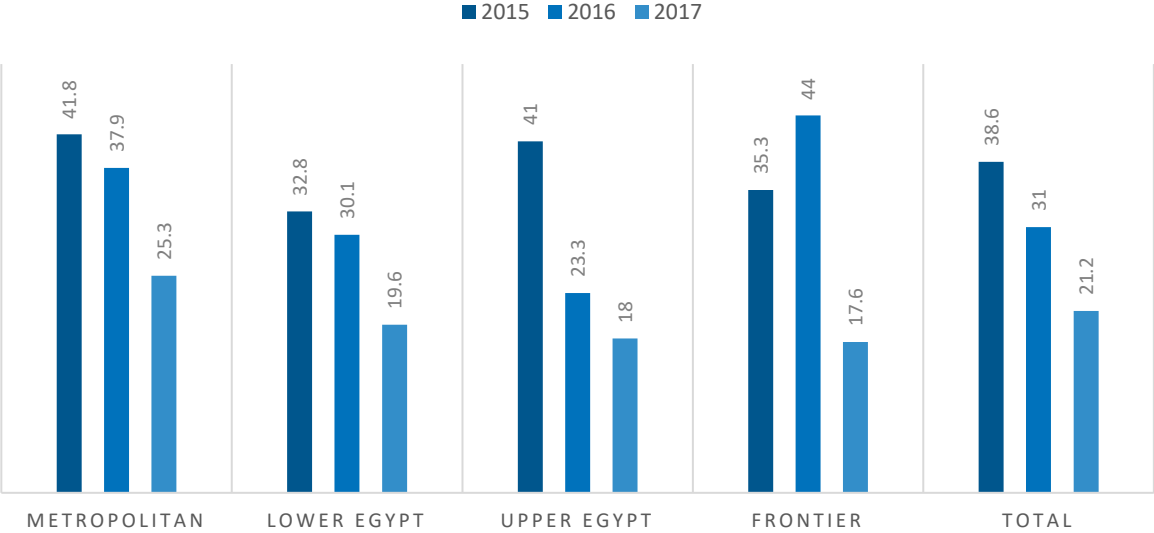
*Samar El Maghrabi, from Syria, applying to a UNHCR cash-based intervention to cover her basic needs. © UNHCR/Pedro Costa Gomes*

# Poverty Measures among Syrian Refugees

➤ Cross section analysis

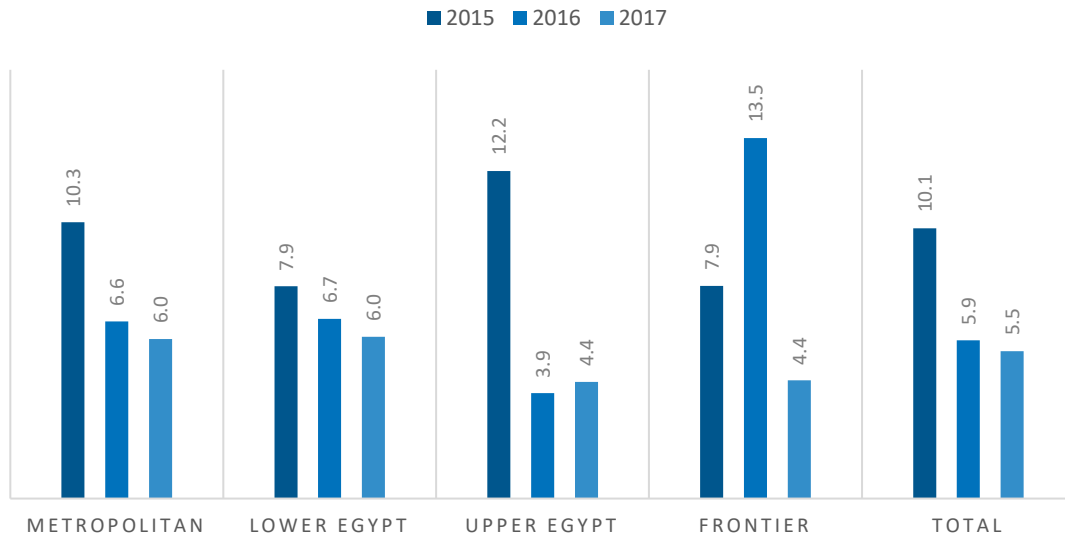
This part focuses on poverty status of Syrian refugees in different survey rounds conducted in 2015, 2016 and 2017. Data presented in Figure 2.1 shows that almost two fifth of Syrian refugees (39%) in 2015 are poor, while this percentage declined to 31% among refugees in 2016 and declined more to reach 21% among refugees in 2017. Syrian refugees in metropolitan areas are more likely to be poor than those in other regions. Overall, 25% of Syrian refugees in metropolitan areas are considered poor in 2017, compared to 20% among those in Lower Egypt and 18% in Upper Egypt.

Figure 2.1: Poverty rates in different survey rounds, cross sectional data



Regarding food poverty rates (percentage of Syrian refugees whose per capita expenditure are less than food poverty line, i.e., they cannot satisfy their basic food needs), Figure 2.2 shows the percentages of extreme poor refugees in different survey rounds. Overall, the figure shows that extreme poor refugees were almost halved from 2015 to 2016. The percentage of extreme poor Syrian refugees reached 10% in 2015, while declined significantly to 6% in 2016 and 2017. As expected, the highest percentage of extreme poor in 2015 is in Upper Egypt (12%), while this percentage reached 10% and 8% in metropolitan and Lower Egypt respectively. The largest decline in extreme poverty rate in 2016 and 2017 was found in Upper Egypt as shown in the figure.

Figure 2.2: Food poverty rates in different survey rounds, cross sectional data



### ➤ Panel analysis

The advantage of a panel of households is that it provides an opportunity to study the movements into and out of poverty, which is not possible with repeated cross sections. This allows one to identify the factors associated with poverty dynamics among refugees, and so to inform policies aimed at providing cash assistance and reducing poverty.

Regarding household mobility dynamics between successive years, a sub-sample of 13,210 Syrian households interviewed in 2015 was selected to be revisited in 2016 and 2017 to allow for a more complete analysis of movements into and out of poverty overtime.

Since the analysis in this part is based on a sub-sample of the cross-section survey, the point estimates here differ slightly from those presented in the previous part. However, the sub sample size is large enough to infer the trend analysis. Data presented in Table 2.1 shows the trends in poverty measures for only the panel sample in different years. The results are consistent with those reported for the full samples and show a reduction in the headcount poverty rate between 2015, 2016 and 2017.

The results show that in 2017, the overall poverty rate among households who were followed since 2015 stood at 14.6%; this represented a significant decline from 29% in 2016 and 39% in 2015. The change in poverty rate between 2015 and 2017 was statistically significant, which means that the income situation of Syrian refugees was improved significantly during 2015 and 2017.

The panel data also indicates that the poor in 2017 were relatively better off compared to 2016 and 2015. The drop in the poverty gap rate was significantly lower in 2017 than in previous years – and the fall in the squared poverty gap measure was significant – indicating that living standards of the poor and the poorest of the poor improved, even though they are still poor.



**Table 2.1: Poverty measures among Syrian Refugees in 2015, 2016 and 2017 (panel households)**

	Estimate	Standard Error	95% Confidence Interval	
<i>Head Count Poverty Rates</i>				
2015	39.0	0.52	37.96	39.99
2016	28.9	0.48	28	29.88
2017	14.6	0.38	13.82	15.32
<i>Poverty Gap</i>				
2015	10.5	0.2	10.12	10.92
2016	5.6	0.13	5.35	5.86
2017	2.3	0.08	2.1	2.42
<i>Squared poverty gap ("Poverty Severity")</i>				
2015	4.6	0.13	4.34	4.85
2016	1.9	0.07	1.72	1.99
2017	0.7	0.04	0.58	0.72

Data presented in Figure 2.3 shows the trends in headcount poverty rate among Syrian refugees interviewed in the three successive years by regions. The figure shows that poverty rate has fallen significantly between 2015, 2016 and 2017 in Upper Egypt, where it declined from 39% to 21% and finally to 11% in the three years respectively. On the other hand, poverty rates declined by almost 4 percentage points between 2015 and 2016 in other regions and declined by more than 15 percentage points in 2017.

**Figure 2.3: Trends in poverty rates for panel households in 2015, 2016 & 2017 by regions**

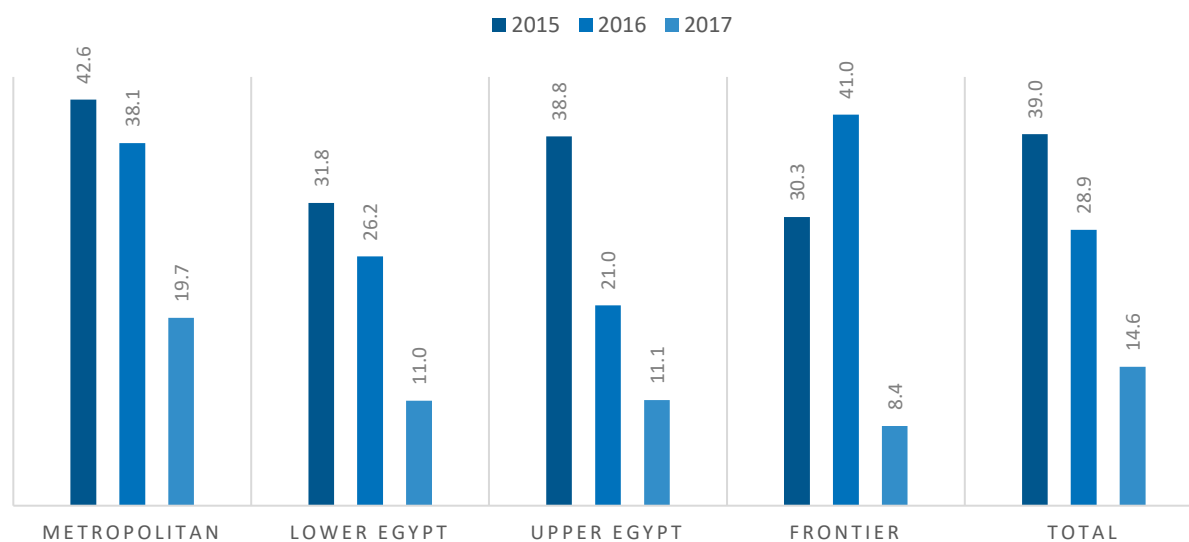
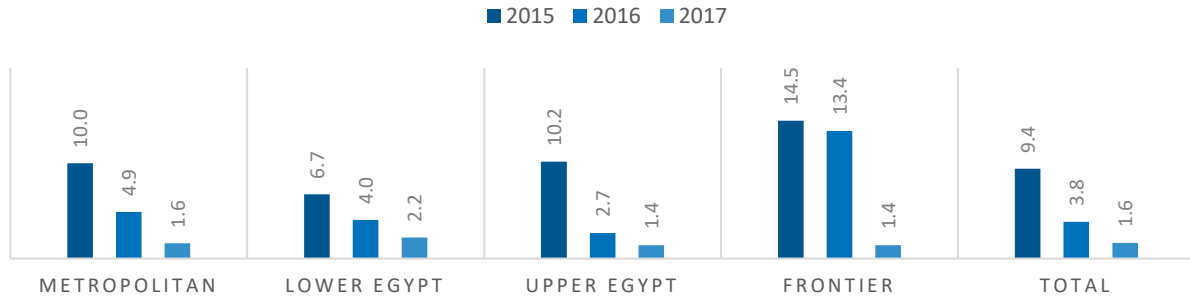


Figure 2.4 shows the prevalence of extreme poverty (percentage of refugees who could not satisfy their basic food needs) among Syrian refugees interviewed in the three waves. Overall, the data shows that the situation of refugees improved significantly from 2015 to 2016 and 2017, where 9% of refugees in 2015 could not satisfy their basic food needs and this percentage declined markedly to 4% in 2016 and declined more to only 1.6% in 2017. Similar trend was observed in all regions as shown in the figure.

Figure 2.4: Trends in food poverty rates for panel households in 2015, 2016 & 2017 by regions



## Short Term Dynamics of Poverty

This part deals with short term poverty dynamics between every two surveys among Syrian refugees interviewed in the three successive years. Short term poverty dynamics examines movements into and out of poverty between the two survey years, thus there are four categories: poor in both years (stayed in poverty), moved into poverty (non-poor in first survey and poor in the end survey), moved out of poverty (poor in first survey and non-poor in the end survey), and always non-poor (non-poor in both surveys).

### ➤ Poverty dynamics between 2015 and 2016

Overall, poverty rate declined by almost 10 percentage points between 2015 and 2016, in addition, there are large movements into and out of poverty occurred between the two surveys. Overall, data presented in Table 2.2 show that 16% of refugees stayed in poverty between 2015 and 2016, and one out of eight persons (13%) fell into poverty. On the other hand, slightly less than one quarter (23%) moved out of poverty; and the remaining half (48%) were non-poor in neither period. In sum, more than one third (36%) of Syrian refugees were transient poor (either moved in or out of poverty) and almost half were never poor.

Looking at the distribution of refugees in 2015, the table shows that almost 60% of poor refugees moved out of poverty in 2016, while 21.5% of the non-poor fell into poverty. UNHCR multipurpose cash assistance (that started in 2016) as well as WFP cash assistance (that started since the outset of the Syrian crisis) had marked positive impact on poor people to move out of poverty<sup>5</sup>.

Table 2.2: Poverty transition matrix 2015-2016 among Syrian refugees

	2015			2016			
	Non-Poor	Poor	Total	Non-Poor	Poor	Total	
	% of Population			% of group in 2015			
2015	Non-Poor	47.9	13.1	61.0	78.5	21.5	100.0
	Poor	23.1	15.8	39.0	59.4	40.6	100.0
	Total	71.1	28.9	100.0	71.1	28.9	100.0
	% of group in 2016						
2015	Non-Poor	67.4	45.3	61.0			
	Poor	32.6	54.7	39.0			
	Total	100.0	100.0	100.0			

<sup>5</sup> Details on the impact of cash assistance on poverty are shown in chapter 3.

➤ *Poverty dynamics between 2016 and 2017*

Looking at the poverty transition matrix between 2016 and 2017, data presented in Table 2.3 shows that the mobility between 2016- 2017 was less than the period 2015-2016. Overall, almost 28% of people was transient poor between 2016 and 2017, where 21% moved out of poverty, while 7% fell into poverty. During the same period, 64% remained non-poor and only 7.6% remained poor. Additionally, the table shows that the majority of poor refugees in 2016 (74%) moved out of poverty in 2017, while only 10% of the non-poor fell into poverty in 2017.

*Table 2.3: Poverty transition matrix 2016-2017 among Syrian refugees*

	2017			2017			
	Non-Poor	Poor	Total	Non-Poor	Poor	Total	
	% of Population			% of group in 2016			
2016	<b>Non-Poor</b>	64.1	7.0	<b>71.1</b>	90.2	9.8	<b>100</b>
	<b>Poor</b>	21.3	7.6	<b>28.9</b>	73.7	26.3	<b>100</b>
	<b>Total</b>	<b>85.4</b>	<b>14.6</b>	<b>100</b>	<b>85.4</b>	<b>14.6</b>	<b>100</b>
	% of group in 2017						
2016	<b>Non-Poor</b>	75.0	47.8	<b>71.1</b>			
	<b>Poor</b>	25.0	52.2	<b>28.9</b>			
	<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>			

➤ *Poverty dynamics between 2015 and 2017*

Looking at the whole period between 2015 and 2017, data presented in Table 2.4 shows the significant improvement in poverty status of Syrian refugees during this period. Poverty rate – which measures the proportion of people whose expenditure falls below the national poverty line – fell from 39% to 14.6%; declined by almost 24 percentage points during 2015-2017.

The table shows that 38% of Syrian refugees were transient poor between 2015 and 2017, where 31% were able to move out of poverty in 2017, while 7% fell into poverty during the same period. On the other extreme, more than half (54%) of Syrian refugees were non-poor in both years. Concerning the distribution of poor in 2015, the data shows that 81% of those poor moved out of poverty in 2017, while 12% of the non-poor in 2015 fell into poverty in 2017.

*Table 2.4: Poverty transition matrix 2015-2017 among Syrian refugees*

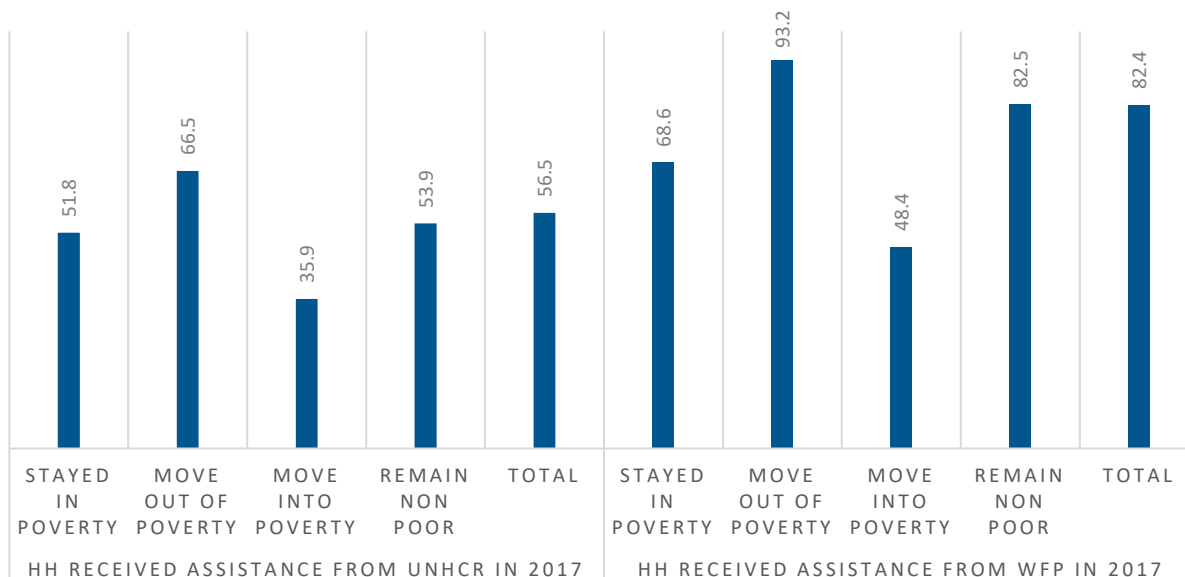
		2015			2017		
		Non-Poor	Poor	Total	Non-Poor	Poor	Total
		% of Population			% of group in 2015		
2015	<b>Non-Poor</b>	54.0	7.0	<b>61.0</b>	88.5	11.5	<b>100</b>
	<b>Poor</b>	31.4	7.5	<b>39.0</b>	80.7	19.4	<b>100</b>
	<b>Total</b>	<b>85.4</b>	<b>14.6</b>	<b>100</b>	<b>85.4</b>	<b>14.6</b>	<b>100</b>
		% of group in 2017					
2017	<b>Non-Poor</b>	63.2	48.3	<b>61.0</b>			
	<b>Poor</b>	36.8	51.7	<b>39.0</b>			
	<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>			

Figure 2.5 interprets the great improvement in poverty status of Syrian refugees between 2015 and 2017. The figure shows the percentage of people who were interviewed in 2015 and 2017 and received income/cash from UNHCR or WFP assistance in 2017 according to poverty mobility between 2015 and 2017. Overall, almost 57% of refugees received UNHCR cash assistance (whether MPCA or education assistance) and 82% received cash assistance from WFP in 2017, however, 53% of refugees received both assistances and 14% do not receive any of them.

The impact of UNHCR cash assistance on poverty mobility is obvious as shown in the figure, where 67% of those who moved out of poverty in 2017 received UNHCR cash assistance in 2017, compared to only 36% of those who fell into poverty. The impact of WFP cash assistance is more obvious, the data shows that 93% of refugees who moved out of poverty in 2017 received WFP assistance in 2017, while this percentage is halved to reach only 48% among those who fell into poverty. On the other hand, 82% of refugees who remain non-poor during the two surveys 2015 and 2017 received WFP cash assistance, while this percentage declined to 69% among those who stayed in poverty in the two surveys.

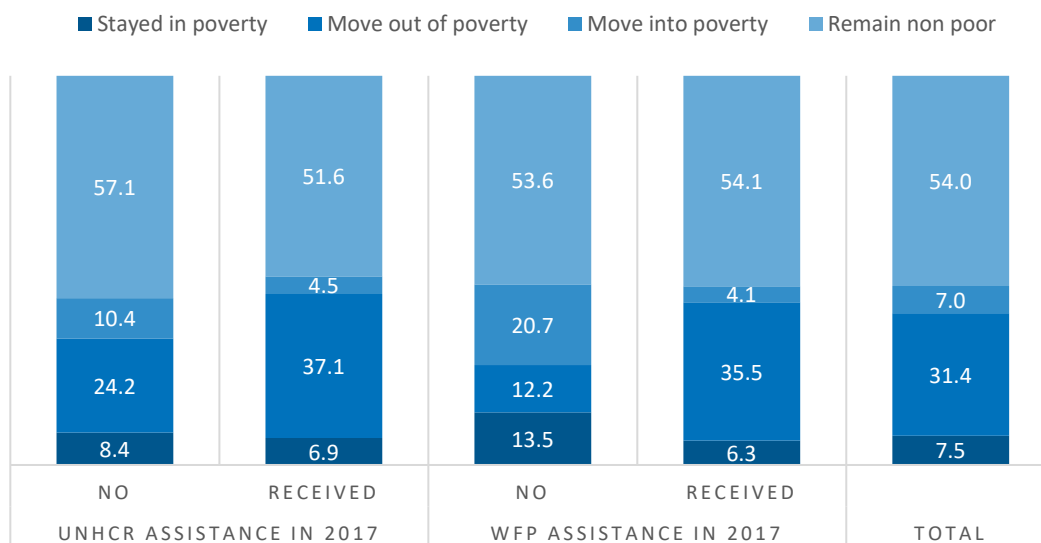


**Figure 2.5: Percentage of UNHCR or WFP assistance beneficiaries in 2017 according to poverty mobility between 2015 - 2017**



Regarding the distribution of Syrian refugees according to receiving cash assistance, Figure 2.6 confirms the great impact of cash assistance on moving out of poverty. The figure shows that 37% of those received UNHCR cash assistance moved out of poverty in 2017 compared to only 24% among those who did not receive the assistance. Similar result is observed regarding WFP cash assistance, where these figures reached 36% and 12% respectively.

**Figure 2.6: Percentage of UNHCR or WFP assistance beneficiaries in 2017 according to poverty mobility between 2015 - 2017**



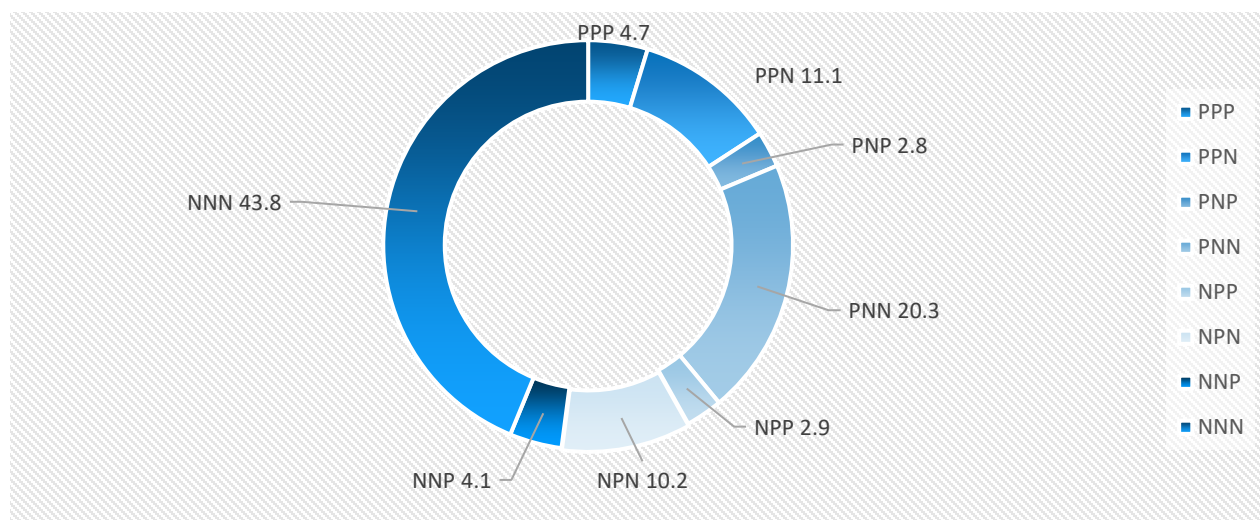
## Medium Term Dynamics of Poverty (Three Waves) among Syrian Refugees

This section examines poverty dynamics using the spells approach for the three panel surveys 2015, 2016 and 2017. Every household in each survey is classified as poor or non-poor depending on its expenditure and its relation to the national poverty line. Syrian refugees who interviewed in the three surveys may be classified into eight categories that arise in a three-wave panel as follows:

- PPP: Poor in all years (Chronic Poor)
- PPN: Poor in 2015 and 2016 but exit poverty in 2017
- PNP: Poor in 2015, exit in 2016 and returned to poverty in 2017
- PNN: Poor in 2015, exit in 2016 and stayed non-poor in 2017
- NPP: Non-poor in 2015 but poor in 2016 and 2017
- NNP: Non-poor in both 2015 and 2016 but fell into poverty in 2017
- NPN: Non-poor in 2015, fell into poverty in 2016, and moved out of poverty in 2017
- NNN: Non-poor in all years (Never Poor).

Figure 2.7 shows the distribution of refugees on the eight spells. Overall, the figure shows that 44% of Syrian refugees who were interviewed in the three surveys were never poor; i.e., did not experience poverty at any of the three surveys. On the other extreme, only 5% were chronic poor; i.e., poor in the three waves. Experiencing one spell of poverty over the three waves is almost double experiencing two spells of poverty as shown in the figure. Syrian refugees who experienced two spells of poverty over the three waves reached 17%, and about one of three persons (35%) fell into poverty in one spell out of three.

**Figure 2.7: Distribution of Syrian refugees by poverty spells (three waves)**

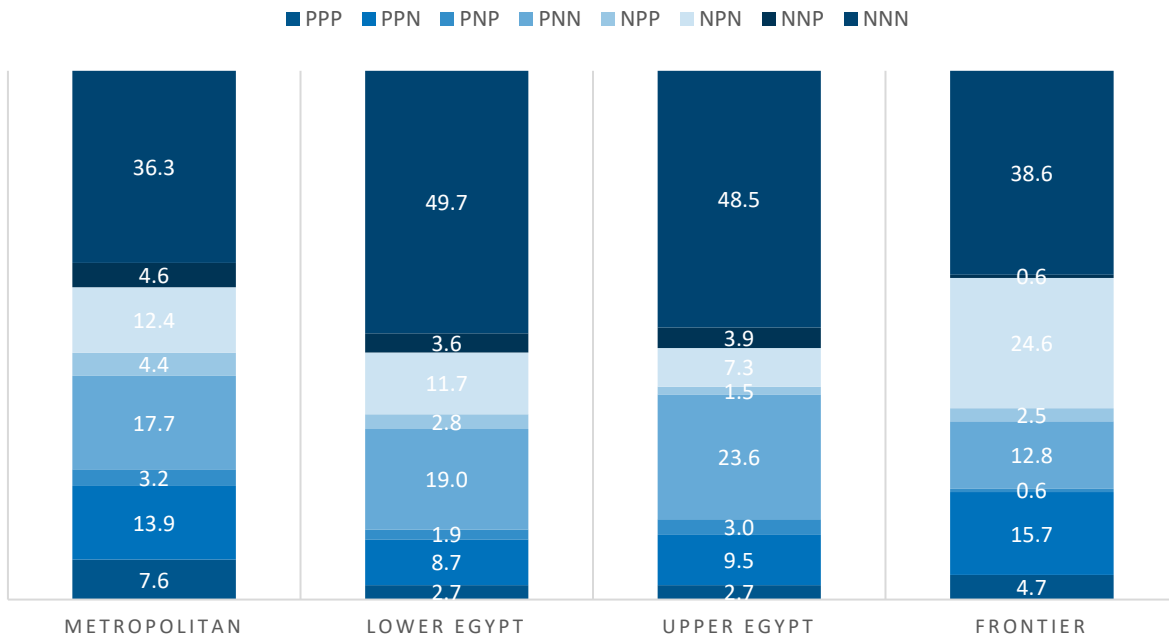


**Syrian refugees in metropolitan region had the worst poverty situation compared to other regions.** Disaggregating poverty spells by regions reveals large disparities between different regions as shown in Figure 2.8. Syrian refugees in metropolitan region had the worst poverty situation where only 36% of refugees in metropolitan areas did not experience poverty at any of the three surveys (never poor), while this percentage increased to almost 50% among those in Lower and Upper Egypt. On the other hand, the percentage of refugees in metropolitan areas in the “chronic poor” category reached 7.6%, which is almost three times the corresponding figure in other regions (2.7%).

The largest part of refugees after the “never poor” category are those who moved out of poverty in 2016 and remain non-poor in 2017. Figure 2.8 shows that 24% of refugees in Upper Egypt moved out of poverty in 2016 and remained non-poor, and this percentage reached 19% and 18% among those in Lower Egypt and metropolitan areas respectively. **This could be interpreted by the multipurpose cash transfer of UNHCR that started in 2016 and affects**

markedly poverty situation of Syrian refugees, in addition to the WFP cash transfer that started since the outset of the Syrian crisis<sup>6</sup>.

Figure 2.8: Distribution of Syrian refugees by poverty spells (three waves) by regions



The eight spells of poverty could be aggregated into four categories; namely, always poor, transient poor (poor in 2017 but was not poor in any of the previous years), previously poor (non-poor in 2017 but poor in any of the previous years) and never poor.

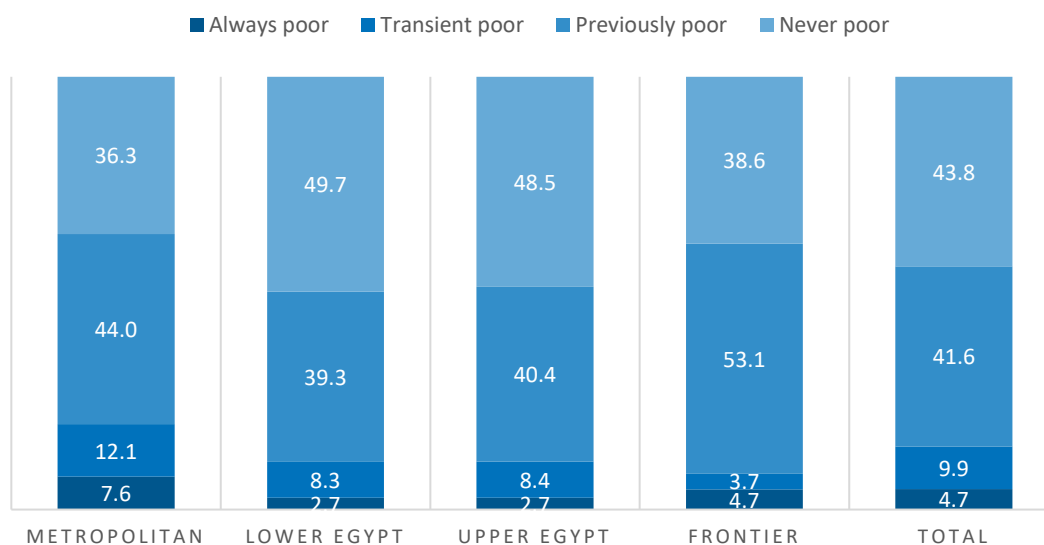
- PPP: Always poor
- PPN, PNN and NPN: Previously poor
- PNP, NPP and NNP: Transient poor
- NNN: Never poor

Figure 2.9 shows the distribution of Syrian refugees according to the previous four categories of poverty spells. The percentage of never poor people reached only 36% among refugees in metropolitan areas, while this percentage increased to almost 49% among those in other regions. However, metropolitan areas exhibited larger mobility than other regions, where 44% were previously poor (winners), while 12% were transient poor (losers). Looking at the other regions, the data shows that almost 40% were previously poor (winners), while 8% fell into poverty (losers).

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<sup>6</sup> Impact of cash transfers on poverty will be presented in detail in chapter 3

Figure 2.9: Distribution of Syrian refugees by regions according to 4 categories poverty spells (three waves)

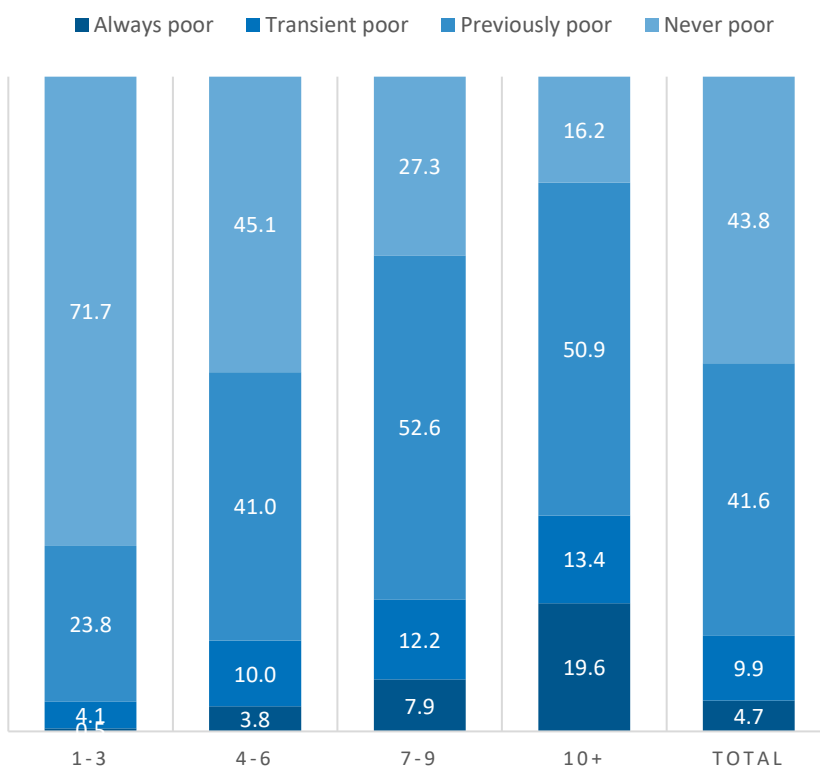


### Correlates of Poverty Mobility (Three Waves)

Identifying the factors associated with poverty mobility among Syrian refugees, is one of the important steps to inform policy makers and related organizations aimed at providing cash assistance, social protection and reducing poverty.

#### ➤ Household size and age composition

Figure 2.101: Distribution of Syrian refugees by 4 categories poverty spells (three waves) by household size in 2017



One of the important factors affecting poverty mobility is the household size of Syrian refugees. Figure 2.10 reveals that as the number of household members increases, so too does the likelihood that the household is always poor. The figure shows that the “always poor” families are overrepresented among large households (7 or more members). On the other hand, 72% of small families (1-3 members) are never poor.

Table 2.5 set out some of the key correlates of poverty mobility. Change in household size and in age composition of household members between 2015 and 2017 have great impact on poverty mobility as shown in the Table. Households that increased in size during the period 2015-2017 were more likely to stay in poverty or move into poverty. The impact also obvious in the other direction, so that households that became smaller were more likely to move out of poverty.

Mobility is highly correlated with number of children less than 18 years and number of elderly people 60 years or more in household as well. Households who experienced increase in number of children and elderly people between 2015 and 2017 are more likely to fall into poverty as presented by the percentage of transient poor refugees. On the other hand, decline in number of children and elderly people have great impact to move households out of poverty.

➤ *Mobility between regions*

Region is one of the important factors affecting poverty mobility. Although the percentage of refugees moved out metropolitan areas is very small (1.8%), they are more likely to move out of poverty (47%) compared to those moved into metropolitan or those stayed in the same area. This result confirms the previous results that show that Syrian refugees in metropolitan region had the worst poverty situation compared to other regions.

**Table 2.5: Poverty dynamics (three waves) by change in household size and age composition**

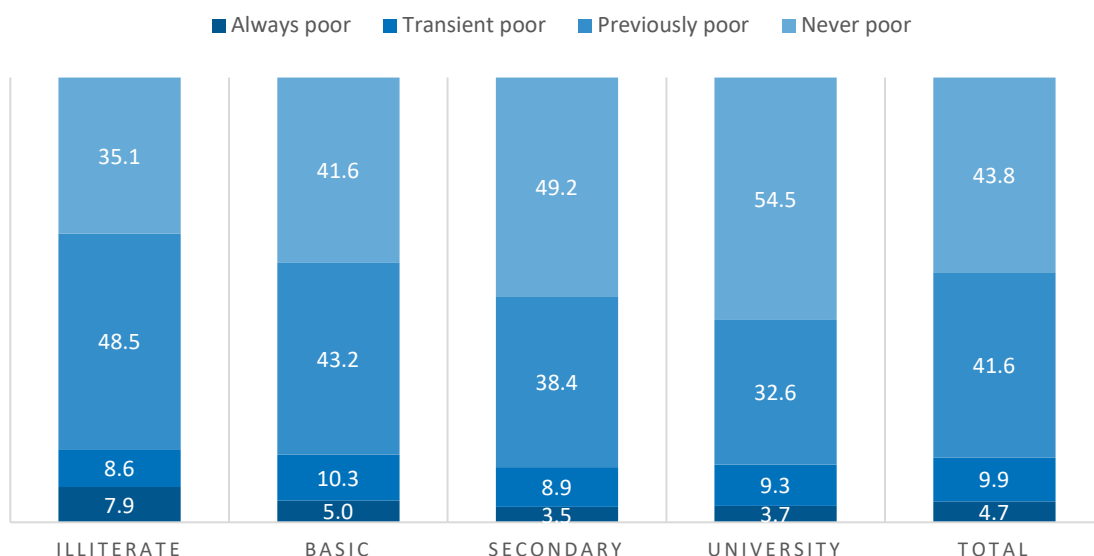
	Always poor	Transient poor (Poor in 2017)	Previously poor (non-poor in 2017)	Never poor	Total	Always poor	Transient poor	Previously poor	Never poor	Total
	Row Percent					Column Percent				
Total	4.7	9.9	41.6	43.8	100	100	100	100	100	100
<i>Change in Household size</i>										
Increased	5.4	15.2	35.5	43.9	100	37.5	50.0	27.7	32.5	32.4
Unchanged	4.6	7.6	43.0	44.8	100	50.6	39.3	53.0	52.4	51.3
Decreased	3.4	6.5	49.5	40.6	100	11.9	10.7	19.4	15.1	16.3
<i>Change in number of children &lt;18 years</i>										
Increased	5.3	15.9	35.6	43.3	100	26.7	37.9	20.2	23.3	23.6
Unchanged	4.5	8.8	40.7	46.0	100	51.4	48.5	53.2	57.1	54.4
Decreased	4.7	6.1	50.4	38.8	100	21.9	13.6	26.7	19.6	22.0
<i>Change in number of elder 60+ years</i>										
Increased	4.6	14.5	37.3	43.6	100	10.2	15.2	9.3	10.3	10.4
Unchanged	4.8	9.5	41.8	43.9	100	87.6	83.1	86.9	86.7	86.4
Decreased	3.3	5.3	50.3	41.2	100	2.2	1.7	3.9	3.0	3.2
<i>Change in number of work age group (18-59 years)</i>										
Increased	5.6	11.7	42.4	40.3	100	29.3	29.2	25.1	22.7	24.6
Unchanged	4.6	9.4	40.6	45.5	100	60.4	58.8	60.4	64.4	62.0
Decreased	3.6	8.8	45.2	42.4	100	10.3	12.0	14.5	13.0	13.4
<i>Move between Regions</i>										
Moved into Metropolitan	0.5	15.6	39.0	45.0	100	0.2	2.6	1.5	1.7	1.6
Unchanged	4.8	9.8	41.7	43.7	100	98.5	95.2	95.8	95.5	95.7
Moved out Metropolitan	3.3	7.6	46.8	42.4	100	1.3	1.4	2.0	1.8	1.8
Moved between other regions	0.4	10.5	33.7	55.4	100	0.1	0.9	0.7	1.1	0.9

➤ **Characteristics of household head**

**Education of heads**

Education of head has a great impact on poverty status and consequently on poverty dynamics. Never poor households are more represented among those with heads have university or more education (55%), while it represents only 35% among those with illiterate heads as shown in Figure 2.11.

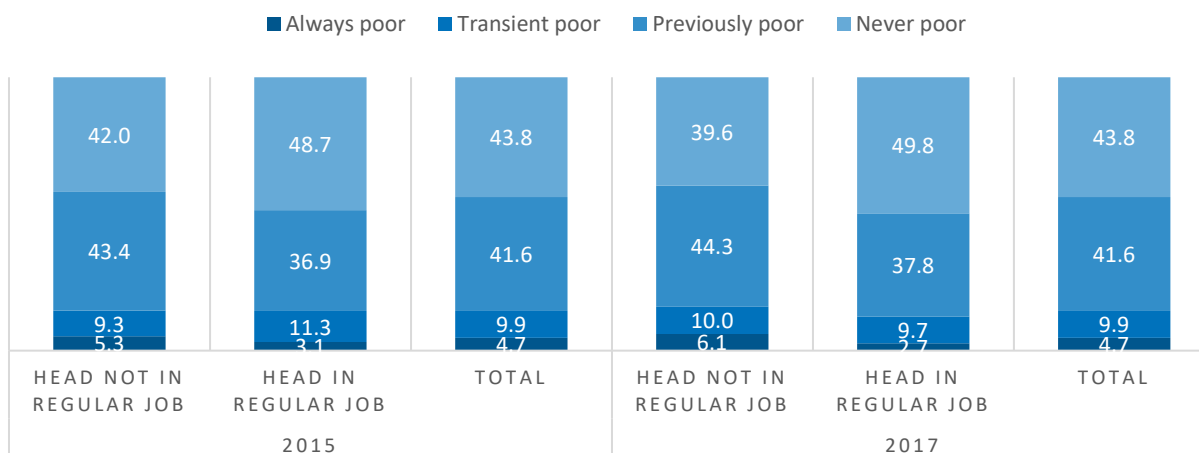
**Figure 2.11: Distribution of Syrian refugees by 4 categories poverty spells (three waves) by education of head in 2017**



**Employment and occupation of heads**

**Poverty increases in households whose head is either temporarily employed or out of labour force.** Stability of work particularly among household heads has great impact on poverty dynamics as shown in Figure 2.12. The figure shows that the percentage of refugees who are never poor increased by almost 10 percentage points among those with heads have regular/stable jobs in 2017 compared with those have heads with no stable jobs. Similar result is observed for stability of work among heads in 2015.

**Figure 2.12: Distribution of Syrian refugees by 4 categories poverty spells (three waves) by stability of work of heads in 2015 and 2017**





**Households with heads remained in regular jobs or in salaried professional jobs between 2015 and 2017 are more likely to be “never poor” households.** Mobility is highly correlated with changes in household characteristics, especially the employment status of head of household. Change in the stability of jobs of heads affect poverty mobility. Table 2.6 shows that 52% of refugees with heads remained in regular jobs are in “never poor” category compared to 42% among those with heads changed their regular jobs. Heads remained unemployed in both 2015 and 2017 are more likely to be always poor, where 41% of those always poor are with heads unemployed in both years, compared to only 26% among those in “never poor” category. More than half of refugees (58%) whose heads remained in salaried professional jobs in both 2015 and 2017 are never poor compared to only 43% among those with heads changed their occupation or with no occupation.

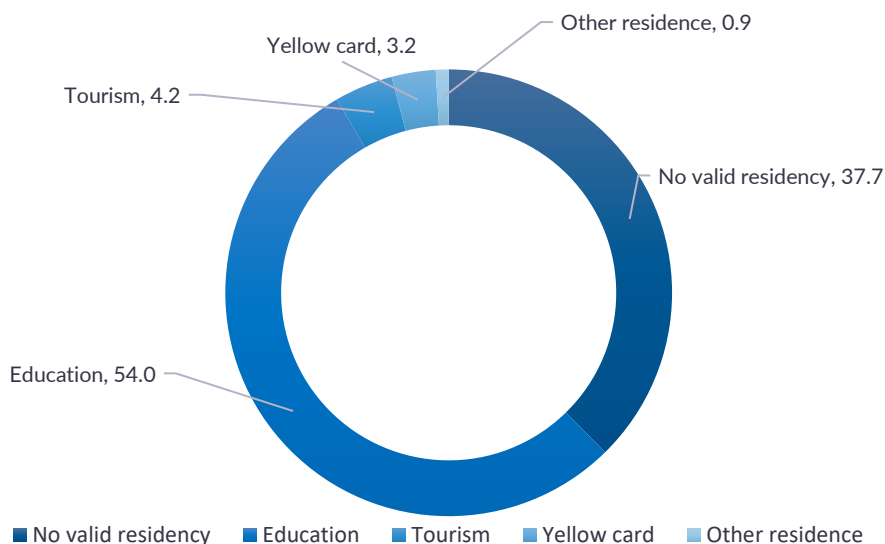
**Table 2.6: Poverty dynamics (three waves) by change in occupation of household head**

	Always poor	Transient poor	Previously poor	Never poor	Total	Always poor	Transient poor	Previously poor	Never poor	Total
	<b>Row Percent</b>					<b>Column Percent</b>				
<i>Total</i>	<b>4.7</b>	<b>9.9</b>	<b>41.6</b>	<b>43.8</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
	<i>Change in regular employment for heads</i>									
<i>Change regular jobs/other</i>	5.4	9.6	43.2	41.9	<b>100</b>	91.7	77.8	83.4	77.0	<b>80.4</b>
<i>Head remains in regular jobs</i>	2.0	11.2	35.3	51.5	<b>100</b>	8.3	22.2	16.6	23.0	<b>19.6</b>
	<i>Change in temporary employment for heads</i>									
<i>Change temporary jobs/other</i>	4.6	9.9	41.1	44.3	<b>100</b>	91.1	92.9	91.3	93.5	<b>92.4</b>
<i>Head remain in temporary jobs</i>	5.5	9.2	47.9	37.4	<b>100</b>	9.0	7.1	8.8	6.5	<b>7.6</b>
	<i>Change in Unemployment status of heads</i>									
<i>Head work in any year</i>	3.9	10.1	40.7	45.3	<b>100</b>	59.1	73.4	69.8	74.0	<b>71.5</b>
<i>Head remains unemployed in both years</i>	6.7	9.2	44.1	40.0	<b>100</b>	40.9	26.6	30.3	26.1	<b>28.6</b>
	<i>Change in Manual labour</i>									
<i>Change Manual labour/no occupation</i>	5.1	9.7	42.1	43.1	<b>100</b>	81.7	74.6	76.5	74.4	<b>75.6</b>
<i>Head remain in Manual labour</i>	3.5	10.3	40.2	46.0	<b>100</b>	18.3	25.4	23.5	25.6	<b>24.4</b>
	<i>Change in Salaried Professional jobs</i>									
<i>Change Salaried professional/no occupation</i>	4.8	10.0	42.0	43.3	<b>100</b>	98.1	97.6	97.4	95.6	<b>96.7</b>
<i>Head remain in Salaried professional jobs</i>	2.7	7.1	32.5	57.7	<b>100</b>	1.9	2.4	2.6	4.4	<b>3.3</b>

## Residence permits of household heads

Egyptian residence permits facilitate the lives of Syrian refugees by permitting access to basic and social services, such as health care and education, in addition the access to formal work. Figure 2.13 shows that 62.3% of the refugees were with heads holding a valid residence permit in 2017, which is an increase from 59.7% the year before. However, still, there was 38% of Syrian refugees with heads have no valid residency permit in 2017. Accordingly, UNHCR should support refugees to obtain birth certificates, advocating for facilitating access to residence permits<sup>7</sup>, continuing to provide targeted support for refugees, and disseminating information about the importance of permits.

**Figure 2.13: Distribution of refugees by the type of residency of heads, 2017**



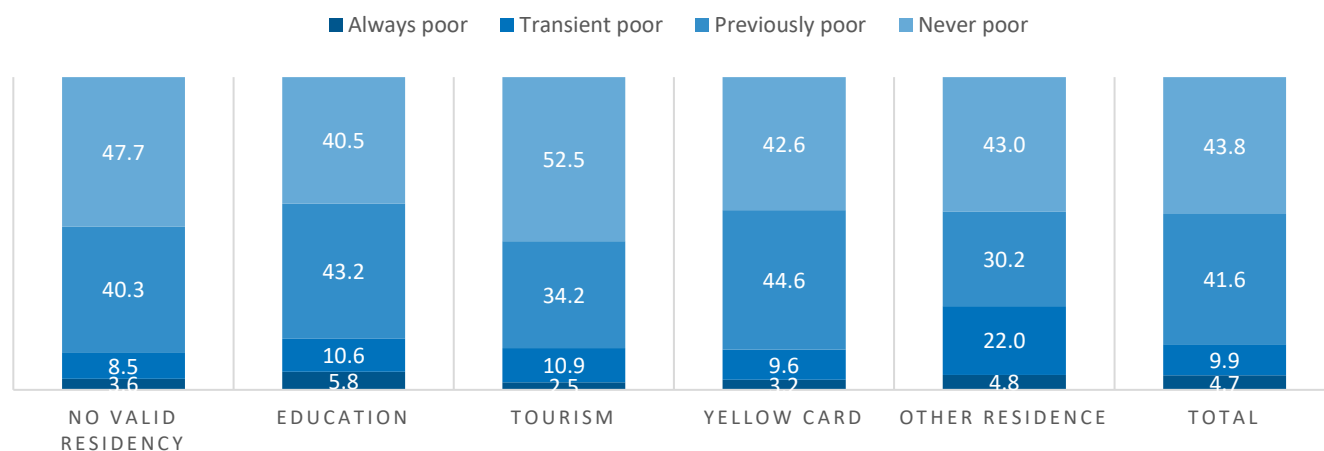
Syrian refugees registered with UNHCR receive an asylum-seeker card, also known as a “yellow card” which is valid for 18 months. This card is important proof of registration with UNHCR and can facilitate access to a residence permit<sup>8</sup>. Most of Syrian refugees (54%) acquired a residence permit in order to access educational facilities, as Syrian children require both a valid residence permit as well as an asylum-seeker card in order to enroll in public schools. Other reasons for acquiring a residence permit include tourism industry (4.2%). On the other side, 3.2% of refugees are with heads hold only yellow card.

Poverty mobility is highly correlated with type of residency permit. Figure 2.14 shows that more than half (53%) of refugees with heads have tourism residency permit are never poor during the period 2015-2017. This percentage declined to 41% among those with heads hold education residency permit. On the other hand, “always poor” category is overrepresented among refugees with heads hold education residency permit (6%).

<sup>7</sup> Vulnerability Assessment of Syrian Refugees in Egypt 2016 Report: [https://www.unhcr.org/eg/wp-content/uploads/sites/36/2019/06/Vulnerability\\_AssessmentofSyrianRefugeesinEgypt\\_2016.pdf](https://www.unhcr.org/eg/wp-content/uploads/sites/36/2019/06/Vulnerability_AssessmentofSyrianRefugeesinEgypt_2016.pdf)

<sup>8</sup> Vulnerability Assessment of Syrian Refugees in Egypt 2016: [https://www.unhcr.org/eg/wp-content/uploads/sites/36/2019/06/Vulnerability\\_AssessmentofSyrianRefugeesinEgypt\\_2016.pdf](https://www.unhcr.org/eg/wp-content/uploads/sites/36/2019/06/Vulnerability_AssessmentofSyrianRefugeesinEgypt_2016.pdf)

Figure 2.14: Distribution of refugees by type of residency of heads in 2017 and poverty dynamics



➤ **Characteristics of household members**

**Education of household members**

Education is a powerful driver of development and one of the strongest instruments for reducing poverty and improving health, gender equality, peace, and stability. Additionally, education determines the command of individuals over income earning opportunities through access to various types of employment. On the other side, poverty perpetuates the lack of education, leading to a vicious cycle of poverty and low education. Table 2.7 presents the percentage of refugees 18 years and more according to education status in 2015 and 2017 and according to dynamics of poverty. The table shows the significant correlation between education and poverty dynamics, where the percentage of illiterate refugees 18 years and more among always poor households is more than that among never poor households by more than 50% in both 2015 and 2017. On the other hand, the highest percentage of adults (18 years and more) with university education and above is found among never poor households and more than the percentage among always poor households by 50%.

School enrolment can be thought of as the interaction of two factors: supply and demand. In other words, low school attendance is in part due to opportunity cost of schooling (demand for schooling) and in part on the availability and quality of school facilities (supply of schooling). Table 2.7 shows that the percentage of children 6-17 years enrolled in schools in 2015 and 2017 is almost identical among all poverty dynamics groups.

Table 2.7: Percent of refugees 18 years and more according to education status in both 2015 and 2017 and poverty dynamics

	Always poor	Transient poor	Previously poor	Never poor	Total
2015					
% of illiterate adults	7.7	5.4	6.4	4.9	5.6
% Of adults having Basic Education	29.5	29.3	30.8	27.0	28.8
% of adults having Secondary education	53.3	53.8	52.8	53.4	53.2
% of adults having University education	9.5	11.5	10.0	14.7	12.4
% of children 6-17 years enrolled in school	83.3	87.3	82.0	85.7	84.0
2017					
% of illiterate adults	8.1	6.0	6.3	5.0	5.7
% of adults having Basic education	66.9	64.7	66.2	60.1	63.1
% of adults having Secondary education	18.4	21.4	20.5	24.6	22.5
% of adults having University education	6.6	8.0	7.0	10.3	8.7
% of children 6-17 years enrolled in school	87.2	90.9	89.6	89.9	89.7

## Employment of household members

Change in employment status of household members has an impact on poverty mobility. The percentage of transient poor (poor in 2017 but was not poor in any of the previous years) reached 8.5% - compared with 10% for total panel sample- when number of members in permanent jobs increased during the period 2015 - 2017. On the other hand, the percentage of transient poor increased to 11.8% when the number of permanent employed members decreased during the same period as shown in Table 2.8.

**Table 2.8: Poverty dynamics by change in employment status of household members during the period 2015-2017**

	Always poor	Transient poor	Previously poor	Never poor	Total	Always poor	Transient poor	Previously poor	Never poor	Total
<b>Total</b>	<b>4.7</b>	<b>9.9</b>	<b>41.6</b>	<b>43.8</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<i>Change in number of Permanent Employed members</i>										
Increased	3.4	8.5	42.2	46.0	100	21.9	25.6	30.3	31.4	29.9
Unchanged	2.2	10.5	35.6	51.7	100	10.4	23.3	18.7	25.8	21.8
Decreased	5.7	11.8	41.3	41.2	100	11.7	11.5	9.6	9.1	9.7
No permanent employed in both years	6.8	10.1	44.8	38.3	100	56.0	39.6	41.4	33.7	38.5
<i>Change in number of Self-Employed members</i>										
Increased	3.1	9.6	42.7	44.6	100	2.8	4.1	4.3	4.3	4.2
Unchanged	0.0	20.7	15.3	64.0	100	0.0	0.3	0.1	0.2	0.2
Decreased	4.8	7.0	45.3	42.9	100	1.2	0.9	1.3	1.2	1.2
No self-employed in both years	4.8	9.9	41.6	43.7	100	96.0	94.7	94.3	94.3	94.4

### ➤ Duration of stay in Egypt and poverty dynamics

**Staying more in Egypt increases the welfare of Syrian refugees.** There are several factors affecting the poverty mobility of Syrian refugees, duration of stay in Egypt is one of these factors that has a great impact on poverty mobility. Three waves' panel data shows that staying more in Egypt increases the welfare of Syrian refugees and increase the likelihood of being never poor. Table 2.9 presents poverty dynamics according to the duration of stay in Egypt, where duration in Egypt is calculated according to the largest duration in each household. The table shows that recent arrival to Egypt (less than one year before 2015 survey) increases the likelihood to be always poor, while stay in Egypt for a long time increases the likelihood to be never poor. The table shows that 34% of those recently came to Egypt (less than one year) are never poor, while this percentage increased to 43% among those who stay 4 years and more.

**Table 2.9: Distribution of refugees by poverty dynamics and duration of stay in Egypt before 2015 survey**

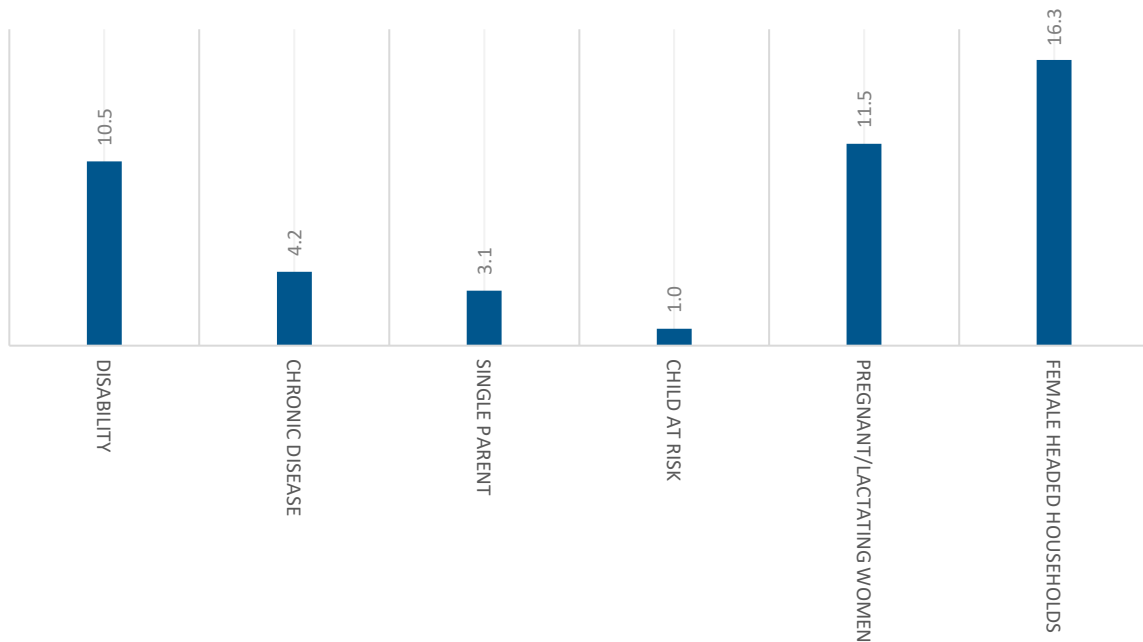
	Always poor	Transient poor	Previously poor	Never poor	Total	Always poor	Transient poor	Previously poor	Never poor	Total
	Row Percent					Column Percent				
<b>Total</b>	<b>4.7</b>	<b>9.9</b>	<b>41.6</b>	<b>43.8</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<i>less than one year</i>	6.2	9.5	50.8	33.6	100	3.6	2.7	3.4	2.1	2.8
<i>One to less than 2</i>	3.9	8.6	41.2	46.2	100	33.6	35.1	39.8	42.5	40.2
<i>Two to less than 3</i>	5.0	10.6	41.6	42.9	100	51.9	52.2	48.8	47.8	48.9
<i>Three to less than 4</i>	7.1	11.4	41.8	39.7	100	8.8	6.7	5.8	5.3	5.8
<i>4 years and more</i>	4.2	13.9	38.8	43.1	100	2.1	3.3	2.2	2.3	2.4

➤ **Specific-needs and poverty dynamics**

Poverty status is highly prevalent among single parent, especially females, households with physical disability and indebtedness members, and with those have pregnant or lactating women (high risk women).

Figure 2.15 presents the percentage of households in 2017 who reported specific needs. The figure shows that 16% of Syrian refugee households in 2017 are headed by female heads, 10.5% of households have one or more members suffer from different kind of disabilities, and 4.2% of households have members suffer from chronic diseases. Additionally, 11.5% of households have pregnant or lactating women.

**Figure 2.15: Percentage of households in 2017 with specific needs**



Regarding the impact of specific needs on poverty dynamics, Table 2.10 presents the most risk factors associated with poverty mobility. Households with physical disability members are more likely to be always poor and less likely to be never poor as shown in the table. Additionally, the percentage of never poor households declined from 50% to 41% when the household has a single parent and to 45% when it is female headed household.

Table 2.10: Poverty dynamics by specific needs in 2017

	Always poor	Transient poor	Previously poor	Never poor	Total	Always poor	Transient poor	Previously poor	Never poor	Total
<i>Disability</i>										
No one Available	3.4	8.9	37.8	50.0	100	86.7	91.3	89.1	89.8	89.5
Available	4.5	7.2	39.7	48.6	100	13.3	8.7	11.0	10.2	10.5
<i>Chronic</i>										
No one Available	3.6	8.8	37.8	49.8	100	96.5	96.8	95.5	95.8	95.8
Available	3.0	6.5	40.4	50.1	100	3.6	3.2	4.5	4.2	4.2
<i>Single Parent</i>										
No one Available	3.5	8.6	37.8	50.1	100	96.2	95.8	96.4	97.4	96.9
Available	4.3	11.6	43.1	41.0	100	3.8	4.2	3.6	2.6	3.1
<i>Female Headed</i>										
No one Available	3.3	8.6	37.3	50.8	100	78.7	82.8	82.4	85.3	83.7
Available	4.6	9.2	41.2	45.0	100	21.3	17.2	17.7	14.7	16.3
<i>Pregnant/lactating women</i>										
No one Available	3.5	8.5	38.6	49.3	100	88.2	86.7	90.1	87.7	88.5
Available	3.6	10.1	32.8	53.5	100	11.8	13.3	9.9	12.3	11.5

➤ *Housing conditions and poverty dynamics*

The panel data show a high correlation between housing characteristics and dynamics of poverty. Table 2.11 shows that people who experienced increasing in durable goods they owned were more likely to move out of poverty. The table shows that 43% of people whose durable goods were increased between the period 2015 and 2017 were previously poor (non-poor in 2017 but previously poor in any of previous years), compared to 38% among those who decreased their durable goods.

Absence of basic sanitation facilities can contribute to the spread of many diseases that can cause widespread illness and death<sup>9</sup>. Panel data shows that most of Syrian refugees (83%) have private bathrooms in both years 2015 and 2017, while 5% have shared bathrooms with other people. Data presented in Table 2.11 shows the correlation between the availability of private bathroom and poverty mobility. Almost 45% of people with private bathrooms in both years are never poor, while this percentage declined by 10 percentage points among those with shared toilet. Changing the availability of private bathroom was correlated by poverty mobility, where people who have a private bathroom instead of a shared one are more likely to be previously poor.

**The above analysis indicates that improving household head characteristics, particularly employment and occupation status, availability of valid residency, improving housing conditions as well as controlling household size can be key factors of lifting poor households out of poverty.**

<sup>9</sup> <https://www.cdc.gov/healthywater/global/sanitation/toilets.html>

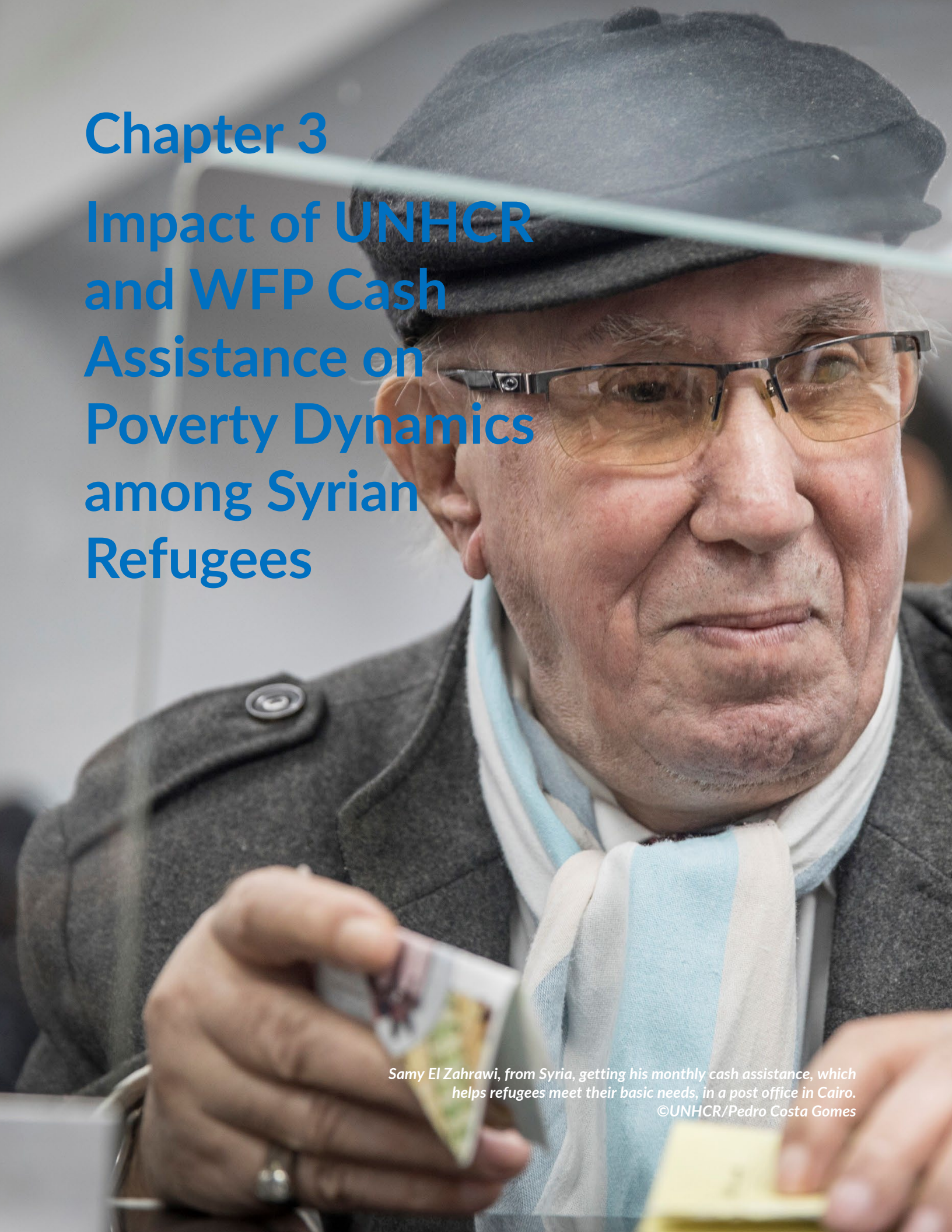


**Table 2.11: Poverty dynamics and change in housing characteristics**

	Always poor	Transient poor	Previously poor	Never poor	Total	Always poor	Transient poor	Previously poor	Never poor	Total
<b>Total</b>	<b>4.7</b>	<b>9.9</b>	<b>41.6</b>	<b>43.8</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<i>Change in number of durable goods owned by household</i>										
Increased	4.3	8.9	42.9	43.9	100	41.3	41.1	46.8	45.6	45.5
Unchanged	5.9	9.5	43.7	41.0	100	33.7	25.8	28.3	25.2	26.9
Decreased	4.3	11.8	37.5	46.4	100	24.9	33.1	24.9	29.3	27.6
<i>Change in availability of exclusive bathroom for HH</i>										
Exclusive in both years	4.5	9.4	41.4	44.7	100	79.8	79.7	82.8	85.2	83.4
Shared in both years	7.5	11.4	46.0	35.1	100	8.4	6.0	5.8	4.2	5.2
Exclusive to shared	3.6	15.6	38.5	42.4	100	4.7	9.8	5.7	6.0	6.2
Shared to exclusive	6.5	8.7	45.7	39.1	100	7.2	4.6	5.7	4.7	5.2
<i>Change in Occupancy</i>										
From Unfurnished to furnished	3.8	10.1	42.7	43.4	100	7.8	9.8	9.8	9.4	9.5
From Furnished to Unfurnished	3.8	10.0	38.3	48.0	100	8.5	10.6	9.6	11.5	10.5
Occupancy Unchanged	4.9	9.1	41.6	44.5	100	76.8	68.2	74.0	75.3	74.2
Other	5.6	19.3	47.0	28.2	100	6.9	11.4	6.6	3.8	5.9

# Chapter 3

## Impact of UNHCR and WFP Cash Assistance on Poverty Dynamics among Syrian Refugees



*Samy El Zahrawi, from Syria, getting his monthly cash assistance, which helps refugees meet their basic needs, in a post office in Cairo.*

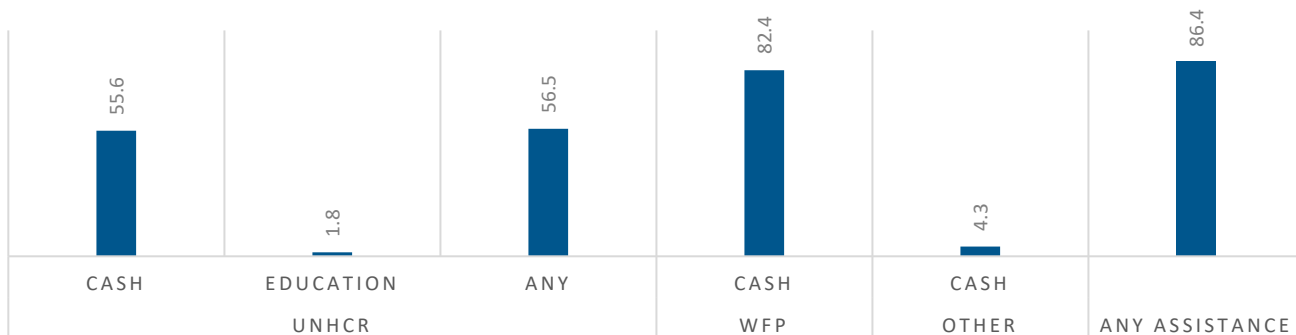
©UNHCR/Pedro Costa Gomes

## Introduction

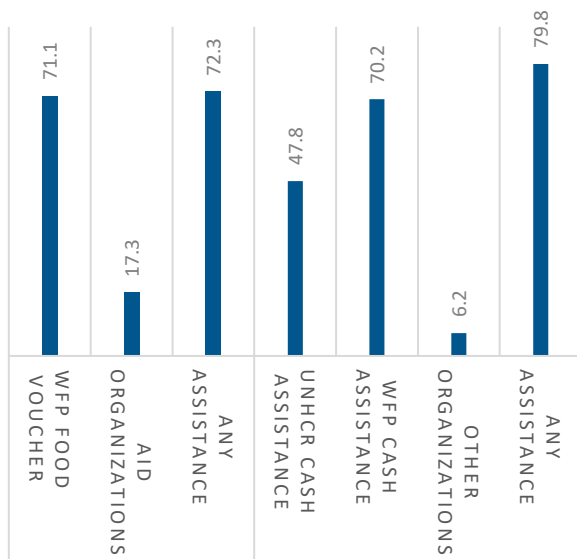
According to the specific-needs, employment, housing, and poverty status of Syrian refugees in Egypt, many organizations provide financial and in-kind assistance for refugee families. Most refugees live in environments where they have access to markets and services in the same way that local communities do. Providing refugees with cash enables them to fulfill their needs in a dignified manner and contributes to the local economy. UNHCR uses cash-based interventions to provide protection, assistance, and services to the most vulnerable. Cash and vouchers help the displaced meet a variety of needs, including access to food, water, healthcare, shelter, that allow them to build and support livelihoods, and to facilitate voluntary repatriation<sup>10</sup>.

UNHCR provides multipurpose cash assistance as well as education assistance for Syrian refugees, however, the education assistance is so far very limited. Additionally, WFP provides food vouchers and cash assistance for vulnerable refugees. Figure 3.1 presents the percentage of Syrian refugees who received cash transfer from different organizations at the time of 2017 survey. Overall, 86% of Syrian refugees received cash assistance at the time of 2017 survey. Disaggregating by aid organizations, the figure shows that 56% of Syrian refugees received UNHCR cash assistance at the time of the survey and only 2% received education assistance. On the other hand, WFP has the greatest share of cash assistance provided to Syrian refugees, where more than 8 for every 10 refugees received WFP cash assistance. UNICEF, Caritas and other aid organizations as CRS, medical assistance (Mahmoud hospital) and NGOs provided very limited cash assistance which did not exceed 5% as shown in the figure.

**Figure 3.1: Percentage of Syrian beneficiaries of cash assistance, 2017**



**Figure 3.2: Percentage of Syrian beneficiaries of cash transfers in 2015 and 2016**



**Cash assistance to vulnerable Syrian refugees increased significantly from 2015 to 2017.** The percentage of Syrian refugees received cash assistance in 2015 from all aid organizations reached 72%, while this percentage increased to 80% in 2016 and to 86% in 2017. Concerning cash transfer for Syrian refugees in 2015, data presented in Figure 3.2 shows that almost 71% of refugees received WFP food vouchers in 2015, and 17% received income/ cash assistance from other aid organizations. On the other hand, there exist 28% of Syrian refugees did not receive any of them.

**Syrian refugees started to receive UNHCR cash assistance from 2016** as Figure 3.2 shows. Slightly less than half of refugees (48%) received UNHCR cash assistance and 70% received WFP cash assistance in 2016. Additionally, 39% of Syrian refugees received both cash assistances (WFP and UNHCR) in 2016, while 21% did not receive any of them.

<sup>10</sup> <https://www.unhcr.org/eg/what-we-do/main-activities/cash-assistance>



## Impact of Cash Assistance on Poverty Dynamics

At the early phases of displacement, cash-based interventions were helping the majority of registered refugee families, which in turn improves the welfare of those refugees. Data presented in Figure 3.3 and Table 3.1 shows the significant impact of cash transfers on poverty dynamics of Syrian refugees in Egypt.

**Refugees received cash transfer in 2017 are more likely to move out of poverty and less likely to fall into poverty or remain poor.** Regarding cash transfers provided to refugees in 2017, Figure 3.3 shows the great impact of UNHCR cash assistance that started in 2016 on poverty mobility during the period 2015-2017.

The figure shows that 67% of refugees who moved out of poverty in 2017 (previously poor) received UNHCR cash transfers, compared to only 36% among transient poor refugees. Regarding the distribution of UNHCR beneficiaries, Table 3.1 shows that almost 50% of UNHCR beneficiaries moved out of poverty in 2017, compared to only 32% among those who did not receive assistance. On the other hand, only 6% of UNHCR beneficiaries fell into poverty in 2017 compared to 15% among those who did not receive the cash transfer.

**Figure 3.3: Distribution of refugees according to poverty dynamics (3 waves) and receiving UNHCR cash assistance in 2017**

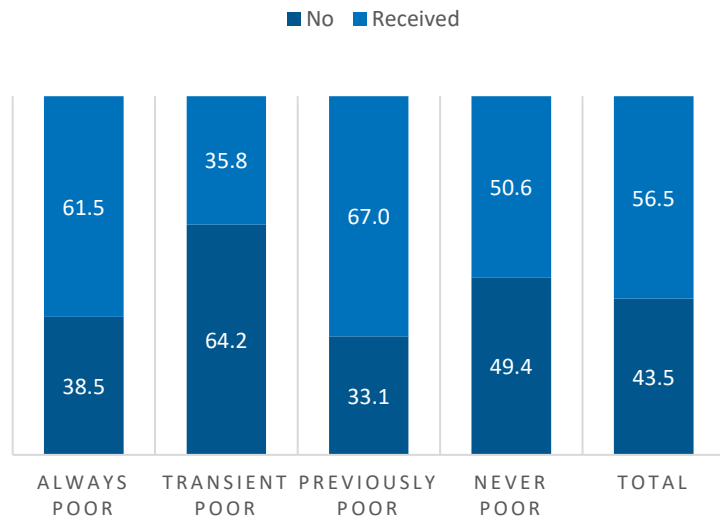


Table 3.1 presents the great impact of WFP transfers on poverty dynamics. The data shows that 92% of previously poor refugees received WFP cash transfers, while this percentage declined to only 51% among transient poor refugees. Looking at the distribution of WFP beneficiaries, the table shows that almost 47% of WFP beneficiaries in 2017 were non-poor in 2017 while they were previously poor, compared to only 18% among those who did not receive WFP cash transfers. On the other extreme, only 6% of refugees who received WFP cash transfers fell into poverty in 2017 compared to 28% among those who did not receive cash transfers.

**Increasing the value of cash assistance increases the impact on vulnerable refugees to move out of poverty.** Table 3.1 shows the impact of receiving both UNHCR and WFP cash assistance on poverty mobility during 2015-2017. Although slightly more than half (53%) of Syrian refugees received both cash transfers, the impact was obvious in moving those refugees out of poverty. Almost half of the beneficiaries (who received both UNHCR and WFP assistance) were previously poor, i.e., non-poor in 2017 while poor in any previous year, compared to only 31% among non-beneficiaries. Additionally, only 5% of UNHCR and WFP beneficiaries fell into poverty, compared with 15% of non-beneficiaries.

**Table 3.1: Impact of cash transfers on poverty dynamics (three waves)**

	Always poor	Transient poor	Previously poor	Never poor	Total	Always poor	Transient poor	Previously poor	Never poor	Total
	<b>Row Percent</b>					<b>Column Percent</b>				
<i>Total</i>	<b>4.7</b>	<b>9.9</b>	<b>41.6</b>	<b>43.8</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
	<i>Received UNHCR cash assistance in 2017</i>									
<i>Not received</i>	4.2	14.6	31.6	49.7	<b>100</b>	38.5	64.2	33.1	49.4	<b>43.5</b>
<i>Received</i>	5.1	6.3	49.4	39.2	<b>100</b>	61.5	35.8	67.0	50.6	<b>56.5</b>
	<i>Received WFP cash assistance in 2017</i>									
<i>Not received</i>	6.7	27.5	18.2	47.7	<b>100</b>	25.0	48.9	7.7	19.2	<b>17.6</b>
<i>Received</i>	4.3	6.1	46.7	43.0	<b>100</b>	75.0	51.1	92.3	80.9	<b>82.4</b>
	<i>Received both UNHCR and WFP cash assistance in 2017</i>									
<i>Not received</i>	4.1	15.1	31.2	49.6	<b>100</b>	41.4	72.2	35.3	53.4	<b>47.1</b>
<i>Received</i>	5.2	5.2	51.0	38.6	<b>100</b>	58.6	27.9	64.7	46.6	<b>52.9</b>

➤ **Discontinuation of cash assistance**

**Discontinue receiving cash assistance increases the likelihood to fell into poverty.** Table 3.2 shows the impact of changing access to WFP cash assistance between 2015 and 2017 on poverty dynamics. Overall, the table shows that 14% of refugees received WFP cash assistance beginning only from the 2017 survey year, 1.5% stopped receiving cash assistance in 2017, 69% received the assistance during the whole period (2015-2017), while 16% did not receive the assistance at all.

Regarding the impact of change on the accessibility to WFP assistance, the table shows that 44% of refugees who received cash assistance beginning from the year 2017 were previously poor (winners), while 6% were transient poor (losers). On the other hand, only 22% of those who stopped receiving the cash transfer in 2017 were previously poor, while the percentage of transient poor increased to 31%. Although the percentage of refugees who stopped receiving the assistance is very limited, the impact of the assistance is obvious.

**Table 3.2: Impact of discontinuation of cash transfers on poverty dynamics (three waves)**

	Always poor	Transient poor	Previously poor	Never poor	Total	Always poor	Transient poor	Previously poor	Never poor	Total
	<b>Row Percent</b>					<b>Column Percent</b>				
<b>Total</b>	<b>4.7</b>	<b>9.9</b>	<b>41.6</b>	<b>43.8</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
	<i>Change in WFP assistance between 2015-2017</i>									
WFP assistance begins in 2017	3.6	5.6	43.5	47.3	100	10.7	7.8	14.5	15.0	13.9
WFP assistance stopped in 2017	9.3	30.9	22.4	37.5	100	3.0	4.7	0.8	1.3	1.5
Received assistance in both years	4.4	6.2	47.3	42.1	100	64.3	43.3	77.9	65.9	68.6
No assistance in both years	6.4	27.1	17.8	48.7	100	22.0	44.2	6.9	17.9	16.1

➤ **Duration of cash assistance**

**Increasing the duration of assistance increases the likelihood of moving out of poverty.** Regarding the impact of the duration of MPCA (UNHCR multipurpose cash assistance) in 2017 on poverty dynamics, Table 3.3 shows that almost 55% of MPCA beneficiaries who received assistance for more than one year before 2017 were previously poor, while this percentage declined to 48% among those recently received this transfer and declined more to reach only 33% among those who did not receive the assistance.

Concerning the duration of WFP assistance, the data shows that 61% of beneficiaries for 13-24 months were previously poor, while this percentage declined to 49% among beneficiaries of 12 months or less. As expected, when the duration of WFP assistance is more than 2 years (started before 2015), the percentage never-poor refugees increased to reach 44% among beneficiaries for 3 years or more.



**Table 3.3: Impact of duration of cash transfers on poverty dynamics (three waves)**

	Always poor	Transient poor	Previously poor	Never poor	Total	Always poor	Transient poor	Previously poor	Never poor	Total
	Row Percent					Column Percent				
<b>Total</b>	<b>4.7</b>	<b>9.9</b>	<b>41.6</b>	<b>43.8</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
	<i>Duration of MPC assistance in 2017</i>									
Not received in 2017	4.2	14.0	32.6	49.2	100	42.4	68.0	37.3	53.7	47.8
12 Months or less	6.4	7.5	47.6	38.6	100	47.7	26.7	40.3	31.1	35.3
13-24 Months	2.7	3.1	54.9	39.3	100	9.9	5.4	22.3	15.2	17.0
	<i>Duration of WFP assistance in 2017</i>									
Not received in 2017	5.4	18.6	27.2	48.9	100	30.8	51.0	17.7	30.2	27.0
12 Months or less	3.3	4.4	49.3	43.0	100	1.8	1.2	3.0	2.5	2.6
13-24 Months	4.3	4.1	61.3	30.3	100	3.7	1.7	5.9	2.8	4.0
25-36 Months	6.9	10.9	43.0	39.2	100	29.6	22.2	20.7	17.9	20.0
37-48 Months	3.5	5.1	47.4	44.0	100	34.2	24.1	52.7	46.6	46.4

### Impact of Cash Assistance on the Poverty Status of Refugees in 2017

**A significant impact of cash assistance on poverty status, where a marked percentage of refugees moved from being poor to non-poor after receiving the assistance.** To assess the impact of cash transfers on the poverty status of refugees, the distribution of refugees according to poverty status was calculated before and after receiving the cash transfer in 2017. The results presented in Table 3.4 show the great impact of cash transfer programs on the poverty status of vulnerable Syrian refugees.

**Almost two-thirds of poor refugees before receiving UNHCR cash assistance moved out of poverty after receiving it.** Regarding UNHCR cash assistance (MPCA), overall, the table shows that about 26% of Syrian refugees moved from being poor to non-poor after receiving only UNHCR cash assistance. In other words, the percentage of non-poor increased significantly from 59% to 85.4% after receiving the UNHCR cash assistance in 2017. Concerning the distribution of the poor before receiving MPC assistance, the table shows that 64.4% of poor refugees moved out of poverty after receiving UNHCR cash assistance. Regarding the cash and education UNHCR assistance, the table shows the limited impact of UNHCR education assistance since the percentage of beneficiaries of education assistance does not exceed 2%.

Data presented in the table shows the great impact of WFP assistance on the poverty status of Syrian refugees, where about 51% of refugees moved out of poverty after receiving cash assistance. In other words, the percentage of non-poor increased significantly from 34.5% to 85.4% after receiving WFP cash assistance in 2017. Additionally, the table shows that more than three-quarters (77.7%) of poor refugees before receiving WFP cash assistance moved out of poverty after receiving WFP assistance.

As expected, increasing the values of cash assistance to vulnerable refugees increases the impact on their poverty status. Regarding both UNHCR and WFP cash assistance, overall, the table shows that 63% of refugees move out of poverty after receiving both types of assistance. Additionally, the percentage of poor declined from 77.3% to only 14.6% as a result of cash assistance.

Table 3.4: Distribution of Syrian refugees according to Poverty Status before and after receiving cash transfer in 2017

		Poverty without UNHCR Assistance (MPCA)								
		% of population			% after receiving assistance (Row %)			% before receiving assistance (column %)		
		Non-Poor	Poor	Total	Non-Poor	Poor	Total	Non-Poor	Poor	Total
<i>Poverty after cash assistance</i>	<i>Non-Poor</i>	59.1	26.4	85.4	69.1	30.9	100	100.0	64.4	85.4
	<i>Poor</i>		14.6	14.6		100.0	100		35.6	14.6
	<i>Total</i>	59.1	41.0	100.0	59.1	41.0	100	100.0	100.0	100.0
		Poverty without UNHCR Assistance (cash & education)								
		% of population			% after receiving assistance (Row %)			% before receiving assistance (column %)		
		Non-Poor	Poor	Total	Non-Poor	Poor	Total	Non-Poor	Poor	Total
<i>Poverty after assistance</i>	<i>Non-Poor</i>	58.4	27.1	85.4	68.3	31.7	100	100.0	65.0	85.4
	<i>Poor</i>		14.6	14.6		100.0	100		35.0	14.6
	<i>Total</i>	58.4	41.6	100.0	58.4	41.6	100	100.0	100.0	100.0
		Poverty without WFP Cash Assistance								
		% of population			% after receiving assistance (Row %)			% before receiving assistance (column %)		
		Non-Poor	Poor	Total	Non-Poor	Poor	Total	Non-Poor	Poor	Total
<i>Poverty after cash assistance</i>	<i>Non-Poor</i>	34.5	50.9	85.4	40.4	59.6	100	100.0	77.7	85.4
	<i>Poor</i>		14.6	14.6		100.0	100		22.3	14.6
	<i>Total</i>	34.5	65.5	100.0	34.5	65.5	100	100.0	100.0	100.0
		Poverty without WFP & UNHCR Assistance (Cash & education)								
		% of population			% after receiving assistance (Row %)			% before receiving assistance (column %)		
		Non-Poor	Poor	Total	Non-Poor	Poor	Total	Non-Poor	Poor	Total
<i>Poverty after assistance</i>	<i>Non-Poor</i>	22.7	62.7	85.4	26.6	73.4	100	100.0	81.1	85.4
	<i>Poor</i>		14.6	14.6		100.0	100		18.9	14.6
	<i>Total</i>	22.7	77.3	100.0	22.7	77.3	100	100.0	100.0	100.0

# Chapter 4: Determinants of Chronic and Transitory Poverty among Syrian Refugees

A close-up photograph of a young girl with dark, curly hair, smiling and looking upwards. She is wearing a blue top with a white lace collar. The background is blurred, showing other people in a registration center.

*A young girl from Syria seen at the registration center of  
UNHCR in Cairo. ©UNHCR/Pedro Costa Gomes*

## Introduction

Dynamic poverty profiles are a useful way of summarizing information on the levels of poverty and the characteristics of the chronic and transient poor in a society. They also provide us with important clues on the underlying determinants of poverty dynamics. Empirical poverty assessments in recent years have seen several attempts to go beyond poverty profile tabulations to engage in a multivariate analysis of living standards and poverty. One of the benefits of such analyses is the ability to assess the impact of a change that a particular factor would have on the probability of an individual being chronic or transient poor, where all other factors constant. Policymakers try to design interventions that protect populations from slipping into poverty and help the poor to go out of poverty. However, such interventions are based on a 'snapshot' assessment of vulnerability. Multivariate analysis is used here to evaluate poverty dynamics pointing to the best policy interventions for poverty reduction over time.

## Methodology

Multinomial logistic regression is used to model poverty mobility status between 2015 and 2017 for Syrian refugees, in which the log odds of the outcomes are modeled as a linear combination of the predictor variables. The ratio of the probability of choosing one outcome category over the probability of choosing the baseline category is often referred to as relative risk (and it is also sometimes referred to as odds). Relative risk can be obtained by exponentiating the linear equations, yielding regression coefficients that are relative risk ratios for a unit change in the predictor variable.

We believe that the household characteristics in 2015 played important role in poverty mobility in the next 2 years, so we included several households' characteristics in 2015 and 2017. We also believe that changes in households' characteristics are important factors in poverty mobility and hence we included the most relevant changes. Housing conditions and place of residence are always considered as important factors affecting households' living standards. Besides, social assistances are also important as short-term interventions for poverty reduction.

The dependent variable has four levels of households' poverty mobility:

1. Always poor; poor 2015 and 2017,
2. Non-Poor in 2017 but was poor in 2015,
3. Poor in 2017 but was non-poor in 2015,
4. Always Non-Poor.

The predictor variables are grouped into 8 groups:

- ✓ Place of residence in 2017 and changes in place of residence between 2015 and 2017.
- ✓ Change in demographic characteristics; household size, number of children, number of elderlies, number of persons in working age.
- ✓ Demographic characteristics: Number of elderlies, school age children, child labor in 2015, single parent 2015, high risk women households headed by children in 2015 and 2017, female headed households (FHH) in 2015 and 2017, single parent households, high risk women (lactating or pregnant women)
- ✓ Receiving assistance for various years: UNHCR assistance, WFP food voucher/ assistance, aid organization, UNICEF assistance, Caritas assistance, additionally, duration of receiving MPC assistance and WFP assistance.
- ✓ Housing characteristics in 2015; house type, ownership of house and change in housing occupancy type.
- ✓ Employment status in all years and changes in it, especially for household heads: Number of regular employed persons in 2015, wage working status of head in 2015, Number of regular employed persons in 2017, Number of temporary employed persons in 2017, unemployment status of head 2017 and manual labor status of head 2017, change in salaried working status, in regular employment, in temporary employment of head.
- ✓ Health and education status: disability\_2017, number of household adult members with basic education, with secondary education and university education in 2015, number of children enrolled in school in 2015, need health support in 2015 and need food support in 2015.
- ✓ Other variables: number of durable goods in 2017 and having valid residency in 2015



### Main Logistic Results

Multinomial regression approach predicts which of the three categories (always poor, moved out of poverty and moved into poverty) that a household is likely to belong to, compared to a baseline (never poor) category given certain household’s characteristics. The ultimate goal of this exercise is to be able to predict the probability of an outcome occurring in the future compared to other potential outcomes, applying information on households’ characteristics in the relevant date.

The overall model is statistically significant (chi-square = 6063.16,  $p \leq 0.001$ ), which means the model for poverty dynamics classifications fits the data statistically significant. We also tested the percentages of correct classifications. The actual poverty dynamics categories are compared with the predicted probabilities of classifications and the model shows 60.42% of overall correct classifications. As we are more concerned about the ability of the model to correctly classify households according to their poverty mobility categories, we looked at the percentage of those who were correctly classified by the model. Table 4.1 showed that 47% of those who were classified by the model as “stayed in poverty” categories are in this category. The corresponding figures are 57% for “moved out of poverty” Category, 41% in “moved into poverty” category and 63% for “remained non-poor” category.

**Table 4.1: Predicted and actual classifications of poverty dynamics categories**

		Predicted				
		Stayed in poverty	Moved out of poverty	Moved into poverty	Remained Non-Poor	Total
Actual	Stayed in poverty	46.84	8.49	13.32	5.8	7.54
	Moved out of poverty	18.46	56.67	7.09	24.26	31.43
	Moved into poverty	12.66	2.6	41.33	7.29	7.03
	Remained Non-Poor	22.05	32.24	38.25	62.65	53.99
	Total	100	100	100	100	100

**Marginal analysis** is useful to help understand the relationship between transfers received, household characteristics and other explanatory variables on the probability of staying in poverty or moving out or in categories. We calculated the predicted probability of the four poverty dynamics categories for a given explanatory predictors. The values (margin probabilities) in Table 4.2 are the average predicted probabilities for certain predictors holding all other variables in the model at their means. The predicted probability of staying always poor (the second column) or moving out of poverty (fifth column) or move into poverty (8<sup>th</sup> column) are presented in Table 4.2. Probabilities of staying always in poverty decrease when household received WFP food voucher in 2015, WFP assistance in 2017, UNHCR assistance in 2017, live in furnished rental apartment, household size decrease, the number of children or number of elderly decreases.

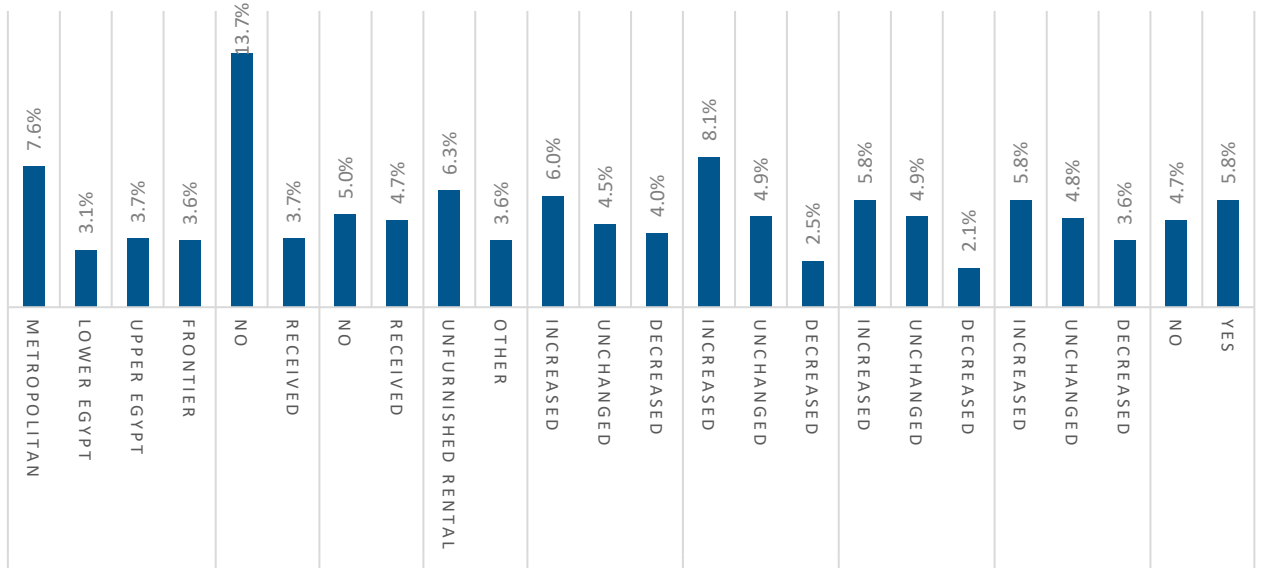
Moving into poverty follow the same direction for probabilities of staying always in poverty, while the opposite direction is observed for the probabilities of moving out of poverty.

**Table 4.2: Marginal probabilities of poverty mobility categories for explanatory variables**

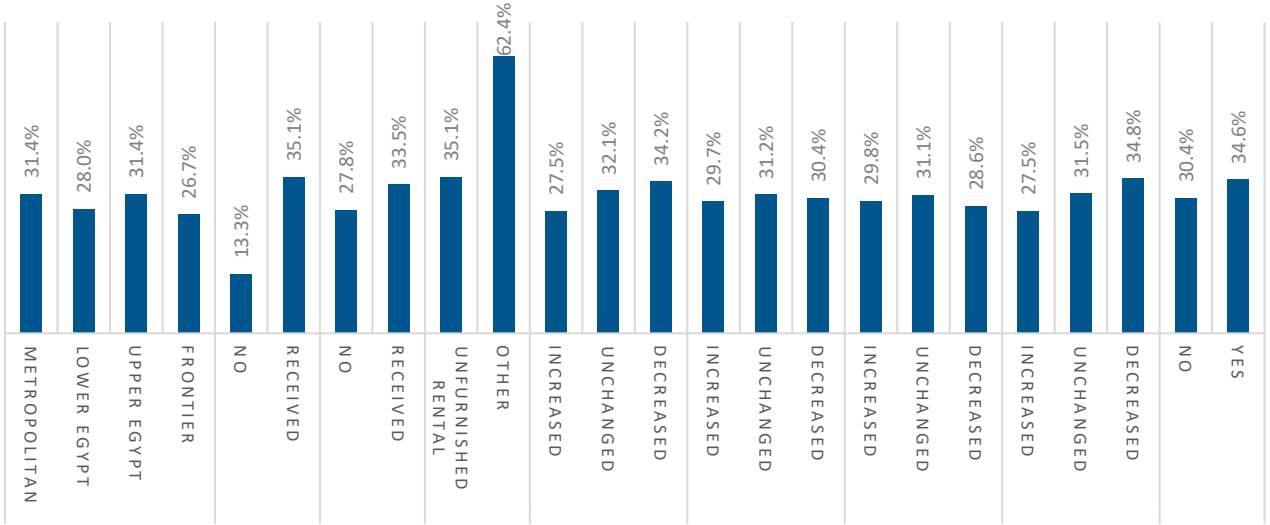
	Stayed in poverty			Move out of poverty-poor 2015-Non-Poor 2017			Move into poverty Non-Poor in 2015 and fell in poverty in 2017		
	Margin	Std. Err.	P>z	Margin	Std. Err.	P>z	Margin	Std. Err.	P>z
<i>region_2017</i>									
Metropolitan	7.6%	0.5%	0.0	31.4%	0.9%	0.0	5.9%	0.4%	0.0
Lower Egypt	3.1%	0.3%	0.0	28.0%	1.0%	0.0	3.5%	0.3%	0.0
Upper Egypt	3.7%	0.4%	0.0	31.4%	1.0%	0.0	2.9%	0.3%	0.0
Frontier	3.6%	2.0%	0.1	26.7%	4.8%	0.0	1.7%	1.0%	0.1
<i>WFP_assistance_2017</i>									
No	13.7%	1.5%	0.0	13.3%	1.1%	0.0	20.2%	2.0%	0.0
Received	3.7%	0.3%	0.0	35.1%	0.7%	0.0	2.7%	0.2%	0.0
<i>UNHCR_assistance_2017</i>									
No	5.0%	0.6%	0.0	27.8%	1.3%	0.0	4.9%	0.6%	0.0
Received	4.7%	0.5%	0.0	33.5%	1.2%	0.0	3.5%	0.4%	0.0
<i>house_ownership</i>									
Unfurnished rental	6.3%	0.5%	0.0	35.1%	0.9%	0.0	4.1%	0.3%	0.0
Furnished rental	3.0%	0.3%	0.0	22.0%	1.0%	0.0	4.4%	0.5%	0.0
Other	3.6%	1.2%	0.0	62.4%	3.7%	0.0	1.0%	0.4%	0.0
<i>change_hhsize</i>									
Increased	6.0%	0.8%	0.0	27.5%	1.7%	0.0	5.5%	0.8%	0.0
Unchanged	4.5%	0.4%	0.0	32.1%	0.9%	0.0	3.9%	0.3%	0.0
Decreased	4.0%	0.8%	0.0	34.2%	2.6%	0.0	2.6%	0.6%	0.0
<i>changes_child</i>									
increased	8.1%	1.3%	0.0	29.7%	2.0%	0.0	8.0%	1.1%	0.0
unchanged	4.9%	0.3%	0.0	31.2%	0.8%	0.0	4.1%	0.3%	0.0
decreased	2.5%	0.4%	0.0	30.4%	1.8%	0.0	1.8%	0.3%	0.0
<i>changes_elderly</i>									
increased	5.8%	1.0%	0.0	29.8%	2.2%	0.0	6.9%	1.0%	0.0
unchanged	4.9%	0.3%	0.0	31.1%	0.6%	0.0	3.9%	0.2%	0.0
decreased	2.1%	0.7%	0.0	28.6%	3.2%	0.0	2.1%	0.7%	0.0
<i>changes_workage</i>									
increased	5.8%	0.8%	0.0	27.5%	1.7%	0.0	6.6%	0.8%	0.0
unchanged	4.8%	0.3%	0.0	31.5%	0.8%	0.0	3.4%	0.3%	0.0
decreased	3.6%	0.7%	0.0	34.8%	2.4%	0.0	3.7%	0.8%	0.0
<i>hh_salaried_prof_2015</i>									
no	4.7%	0.3%	0.0	30.4%	0.6%	0.0	4.0%	0.3%	0.0
yes	5.8%	0.7%	0.0	34.6%	1.7%	0.0	4.4%	0.6%	0.0



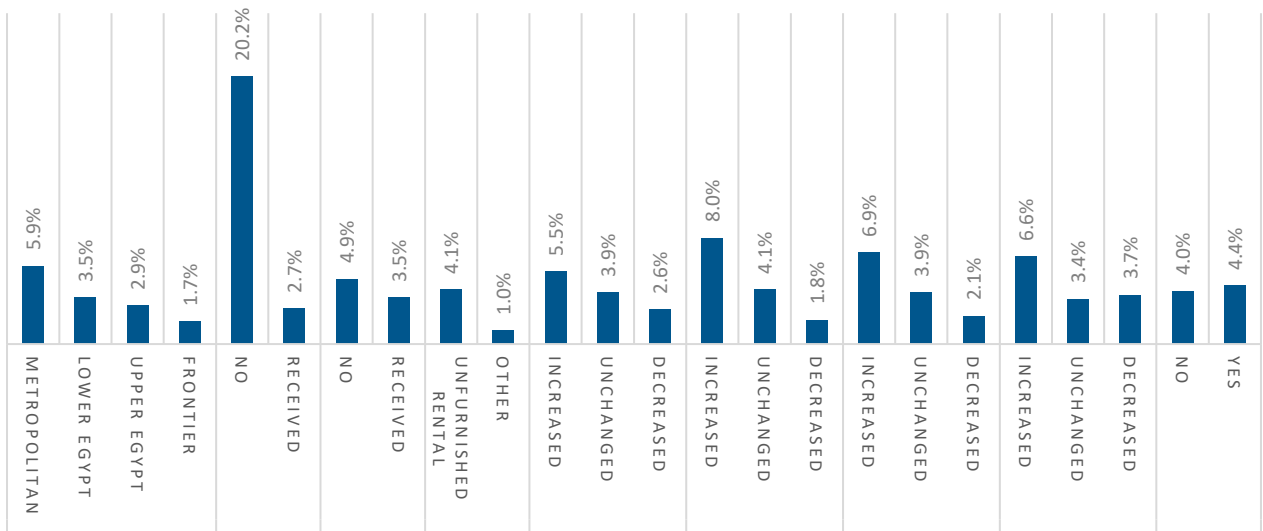
**Figure 4.1: Marginal probabilities of being always poor**



**Figure 4.1: Marginal probabilities of moving out of poverty**



**Figure 4.2: Marginal probabilities of slipping into poverty**



Comparing the marginal probabilities of moving out of poverty versus slipping into poverty we noted that, as revealed by figures 4.1 and 4.2, indicate that probabilities of moving out of poverty increases as duration of MPC assistance increases, as households receive UNHCR assistance or assistance from combined other sources. Demographic and educational characteristics have strong impact on poverty mobility status. As households' sizes decrease, the probability of moving out of poverty increases, so as the number of children and the number of elderly indicating that poverty declines as dependency ratio decreases. The number of household members with secondary education also affect the poverty mobility status, where the probability of escaping poverty increases as the number of household members with secondary education increases. One of the important consequences of poverty mobility is the number of enrolled children, where the number of enrolled children increases among households who moved out of poverty.

**Figure 4.3: Probability of moving in or moving out of poverty by beneficiaries from cash transfers**

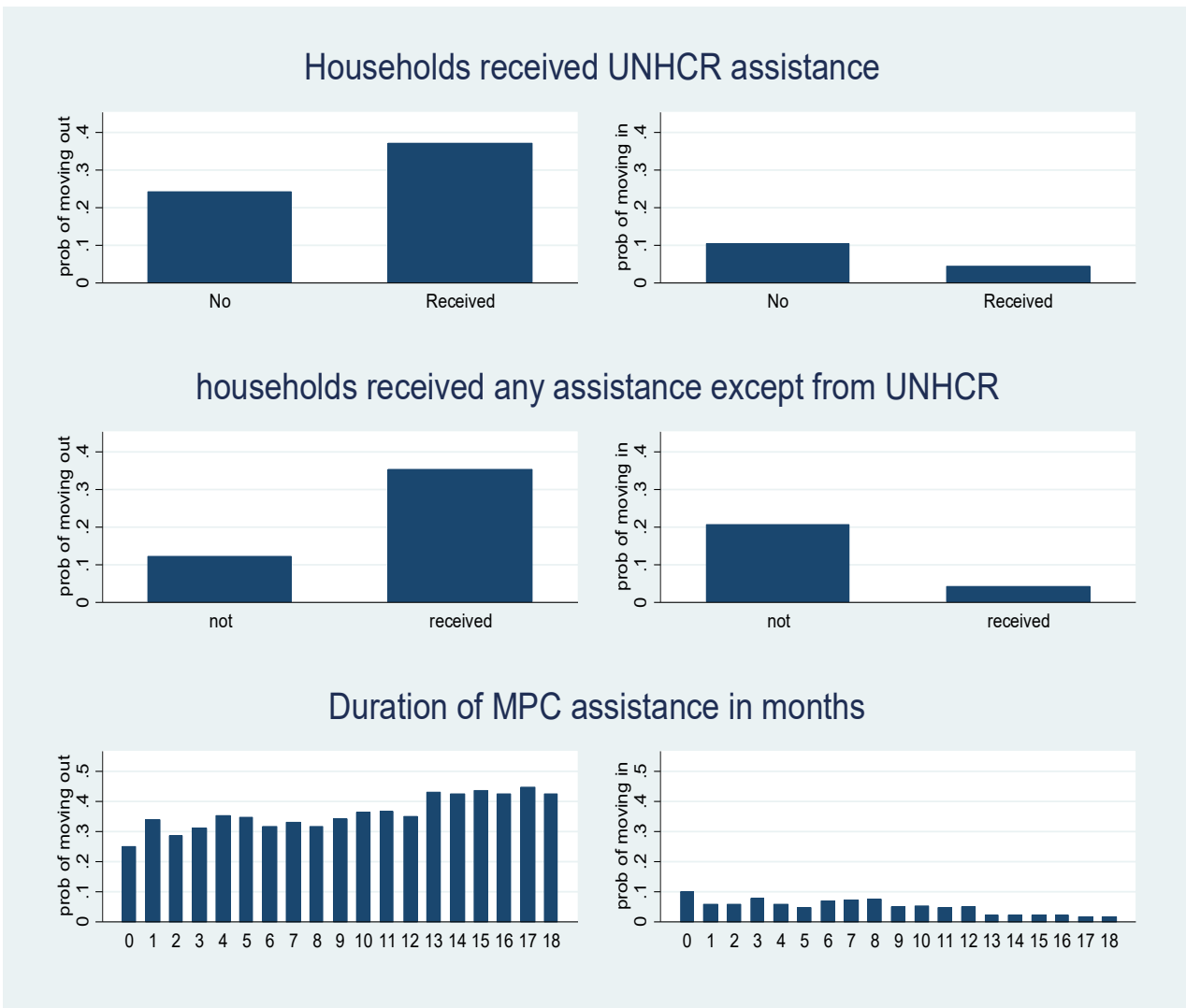


Figure 4.4: Probability of moving in or moving out of poverty by changing in demographic characteristics

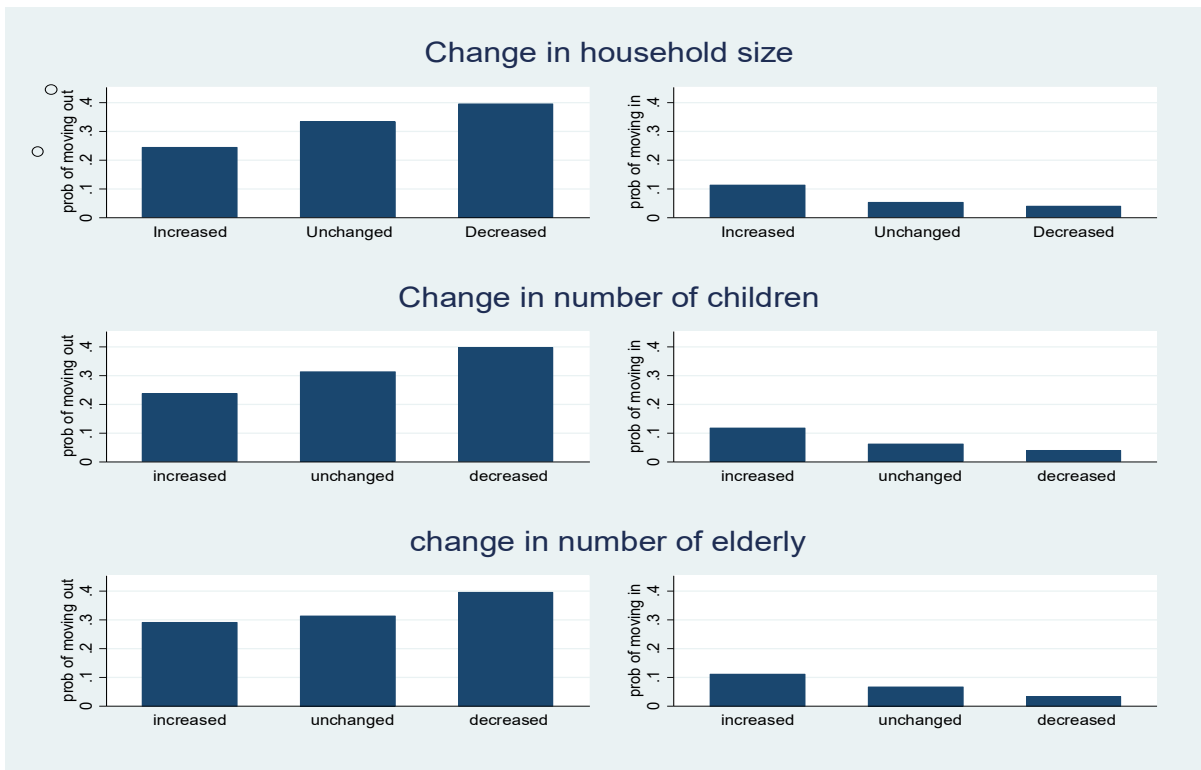
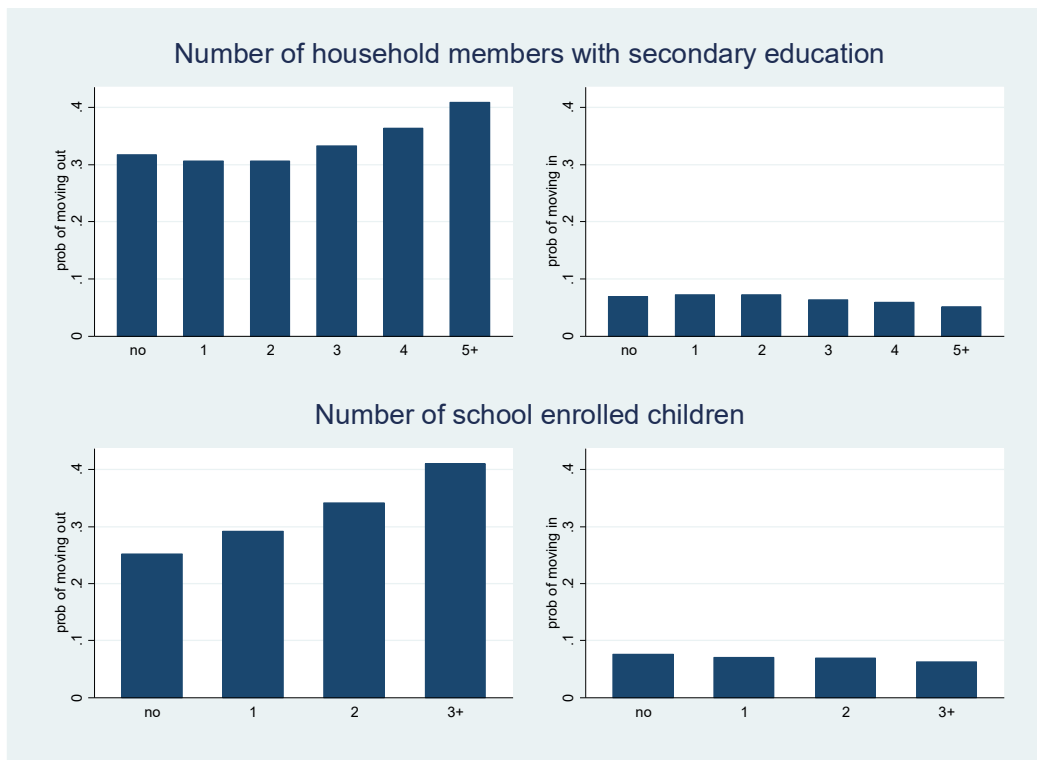


Figure 4.5: Probability of moving in or moving out of poverty by children school enrollment



## Main Determinants of Chronic and Transitory Poverty

### Probability of always poor

#### ➤ Assistance

UNHCR assistance in 2017 has a significant impact with relative risk ratio of 0.99, thus receiving UNHCR assistance in 2017 has equal probability of being always non-poor compared to being always poor.

The relatively long odds of being in always poor category vs. in never poor category decreases by 0.24 receiving WFP assistance in 2017. In other words, the expected risk of staying in the always poor category is one fourth for households who receive WFP assistance.

Increase in the duration of receiving MPC assistance increases the probability of being in always poor category vs. in never poor category. Compared to not receiving assistants before 2017, receiving assistants for 12 to 23 months increases the risk of being always poor. The relative risk ratio reaches 2.1, indicating that the probability of being never poor is half that of being always poor for those who receive assistance for 12 to 23 months. This unexpected result may be explained by the fact that assistance targeted the very poor and the amount of assistance is not enough to increase their consumption above the poverty line.

#### ➤ Demographic and socio-economic characteristics

The relationship between household size and poverty is also confirmed for poverty mobility. The probability of being always poor to being never poor decreases as household size decrease. The relative risk ratio is 0.23 (exp -0.35) for being always poor vs. always non-poor. Thus, the probability of being never poor versus being always poor is 1.45 times for households who experienced decrease in the number of their members.

The relative risk ratio for a one-unit increase in number of secondary education holders is .7 (exp -0.35) for being in always poor vs. always non-poor. In other words, increase the secondary certificate holders by one member decreases the probability of being always poor relative to always non-Poor by 42%. The corresponding figures for university degree holders and children enrolled are 0.55 and 0.84.

The change in the number of children between 2015 and 2017 have a large impact on poverty mobility. Households experienced decline in the number of children has lower probability of being always poor relative to always non-Poor by 4 times. Moreover, increasing the number of children at the school age increase the relative risk for being in always poor vs. always non-poor by 2.1 times.

The relative risk of always poor vs. always non-poor increases as the number of regular employed members decreases. In other words, increasing the number of those regularly employed in 2015 decreases the probability of being always non-poor relative to always poor by 1.4 times. The corresponding figure is 2 times for regular employment in 2017. The impact of the number of temporary employments followed a similar direction, with smaller magnitude.

#### ➤ Place of residence, housing characteristics and durables

Living in Metropolitan region increases the risk for being always poor category vs. in never poor category compared to other regions. Namely, the risk for being always poor category vs. in never poor category in Metropolitan region is 2.6, while the corresponding figures for Lower and Upper Egypt are 0.9 and 1.1, respectively.

The relative risk ratio residing in furnished apartment compared to unfurnished apartment is 0.36 for being always poor category vs. in never poor category. In other words, the expected risk of staying in the always poor category is lower for subjects who resided in furnished rented apartments. The impact of other types of rental arrangements has similar relative risk ration compared to households who live in unfurnished apartments (0.93 times).

Moreover, compared to households who changed their occupancy from unfurnished to furnished rents, the relative risk ratio of being in always poor category is 2.9 times for households who changed their occupancy from furnished to unfurnished rents, 2 times for those who do not change their occupancy type and 4 times for households who reside in other arrangement types.

For both 2015 and 2017, the relative risk ratio for a one-unit increase in durable goods is .85 and 0.89, respectively, for being in always poor vs. always non-poor.

**Table 4.3: Multinomial regression results: always poor category**

	Coef.	std error	z	P>z	Relative risk ratio
<i>region_2017</i>					
Lower Egypt	-1.07	0.12	-9.09	0.00	0.34
Upper Egypt	-0.85	0.12	-7.34	0.00	0.43
Frontier	-0.96	0.58	-1.66	0.10	0.38
<i>WFP_food_voucher_2015</i>					
Received	-0.29	0.12	-2.43	0.02	0.75
<i>WFP_assistance_2015</i>					
Received	1.24	0.37	3.37	0.00	3.45
<i>WFP_assistance_2017</i>					
Received	-1.42	0.16	-9.04	0.00	0.24
<i>Aid_organization_2015</i>					
Received	-0.23	0.14	-1.64	0.10	0.79
<i>UNHCR_assistance_2017</i>					
Received	0.00	0.19	0.00	1.00	1.00
<i>UNICEF_assistance_2017</i>					
Received	-14.61	0.78	-18.79	0.00	0.00
<i>duration_MPC_assist_2017_agg</i>					
12 Months or less	0.76	0.32	2.40	0.02	2.13
13-24 Months	0.44	0.46	0.95	0.34	1.55
<i>house_type</i>					
Apartment	-0.01	0.24	-0.03	0.98	0.99
Other	-1.15	0.69	-1.67	0.10	0.32
<i>house_ownership</i>					
Furnished rental	-1.01	0.15	-6.74	0.00	0.36
Other	-0.08	0.35	-0.21	0.83	0.93
<i>change_hhsize</i>					
Unchanged	-0.26	0.19	-1.36	0.18	0.77
Decreased	-0.37	0.33	-1.13	0.26	0.69
<i>change_region</i>					
Unchanged	1.04	0.40	2.59	0.01	2.82
Moved out Metropolitan	0.71	0.58	1.24	0.22	2.04
Moved between other regions	0.51	0.77	0.67	0.50	1.67
<i>changes_child</i>					
unchanged	-0.59	0.19	-3.17	0.00	0.55
decreased	-1.36	0.29	-4.62	0.00	0.26
<i>changes_elderly</i>					

<i>unchanged</i>	-0.23	0.19	-1.19	0.23	0.79
<i>decreased</i>	-1.17	0.42	-2.79	0.01	0.31
<i>changes_workage</i>					
<i>unchanged</i>	-0.20	0.17	-1.23	0.22	0.81
<i>decreased</i>	-0.45	0.32	-1.42	0.16	0.64
<i>changes_salariedprof_hh</i>					
<i>Head remain in Salaried professional</i>	-0.81	0.34	-2.37	0.02	0.44
<i>basic_2015</i>	-0.22	0.11	-1.93	0.05	0.80
<i>sec_2015</i>	-0.35	0.11	-3.24	0.00	0.70
<i>university_2015</i>	-0.58	0.13	-4.60	0.00	0.56
<i>enrol_2015</i>	-0.17	0.08	-2.18	0.03	0.85
<i>age_enrol_2015</i>	0.72	0.08	9.52	0.00	2.06
<i>adult_2015</i>	0.73	0.11	6.76	0.00	2.08
<i>change_occupancy</i>					
<i>From Furnished to unfurnished</i>	1.07	0.31	3.50	0.00	2.93
<i>Occupancy Unchanged</i>	0.69	0.18	3.75	0.00	1.99
<i>Other</i>	1.42	0.31	4.64	0.00	4.15
<i>durable_2015</i>	-0.17	0.03	-6.12	0.00	0.85
<i>durable_2017</i>	-0.12	0.04	-3.21	0.00	0.89
<i>reg_employed</i>	-0.36	0.11	-3.46	0.00	0.69
<i>temp_employed</i>	-0.16	0.09	-1.73	0.08	0.85
<i>duration_WFP_assistance_2017</i>	-0.02	0.01	-2.45	0.01	0.98
<i>duration_MPC_assistance_2017</i>	-0.09	0.03	-3.20	0.00	0.91
<i>1.hh_salaried_prof_2015</i>	0.30	0.15	2.05	0.04	1.36
<i>reg_empl_2017</i>	-0.71	0.11	-6.77	0.00	0.49
<i>temp_empl_2017</i>	-0.20	0.10	-2.02	0.04	0.82
<i>valid_residency_2017</i>	0.13	0.02	5.33	0.00	1.14
<i>support_food</i>	0.64	0.11	5.73	0.00	1.89
<i>support_health</i>	-0.32	0.25	-1.27	0.20	0.73
<i>single_parent_2015</i>	-15.11	0.44	-34.63	0.00	0.00
<i>child_head_2015</i>	-14.22	0.43	-33.43	0.00	0.00
<i>single_parent_2017</i>					
<i>One child</i>	0.68	0.25	2.66	0.01	1.97
<i>Two children</i>	-17.75	1.06	-16.73	0.00	0.00
<i>child_head_2017</i>	-14.62	1.90	-7.70	0.00	0.00
<i>Constant term</i>	-1.75	0.51	-3.40	0.00	0.17

## Probability of moving out of poverty

### ➤ Assistance

UNHCR assistance in 2017 has a significant impact with relative risk ratio of 1.29, thus receiving UNHCR assistance in 2017 increases probability of moving out of poverty compared to being always non-poor. In other words, the expected risk of moving out of poverty category is 1.29 times for households who are received UNHCR assistance.

The relative log odds of being in moving out of poverty category vs. never poor category increases by 2.4 for those who received WFP assistance in 2017.



Increase in the duration of receiving MPC assistance increases the probability of moving out of poverty category vs. in never poor category. Compared to not receiving assistants before 2017, receiving assistants from 13 to 23 months increases the risk of moving out of poverty. The relative risk ratio reaches 1.02, indicating that the probability of being never poor is almost similar to the probability of moving out of poverty for those who receive assistance for 12 to 23 months.

➤ *Demographic and socio-economic characteristics*

The relationship between household size and poverty is also confirmed for poverty mobility. The probability of moving out of poverty to being never poor increases as household size decrease. The relative risk ratio is .128 (exp 0.25) for moving out of poverty vs. always non-poor.

Contrary to the always poor category, change in the number of children between 2015 and 2017 have insignificant impact on moving out of poverty.

The relative risk of moving out of poverty vs. always non-poor increases household head is wage worker. In other words, the probability of moving out of poverty vs. always non-poor for household head who is wage worker is 1.26. The corresponding figure is 2 times for regular employment in 2017. The relative risk of moving out of poverty vs. always non-poor increases as the number of temporary employments in 2017 increases with a value of 1.12.

➤ *Place of residence, housing characteristics and durables*

Living in Metropolitan region increases the probability of moving out of poverty category vs. in never poor category compared to other regions. Precisely, this probability in Metropolitan region is 1.5, while the corresponding figures for Lower and Upper Egypt are 1.09 and 1.29, respectively.

Compared to households who changed their occupancy from unfurnished to furnished rents, the relative probability of moving out of poverty category is 1.34 times for households who changed their occupancy from furnished to unfurnished rents, 1.16 times for those who do not change their occupancy type. Compared to “always non-Poor” category, the number of durable goods in 2017 have insignificant impact on the probability of moving out of poverty.

**Table 4.4: Multinomial logistic regression results: moving out of poverty**

	Coef.	std error	z	P>z	Relative risk ratio
<i>region_2017</i>					
Lower Egypt	-0.28	0.06	-4.38	0.00	0.75
Upper Egypt	-0.12	0.06	-1.83	0.07	0.89
Frontier	-0.37	0.26	-1.46	0.14	0.69
<i>WFP_food_voucher_2015</i>					
Received	-0.57	0.07	-7.87	0.00	0.57
<i>WFP_assistance_2015</i>					
Received	0.96	0.23	4.15	0.00	2.62
<i>WFP_assistance_2017</i>					
Received	0.86	0.10	8.30	0.00	2.37
<i>Aid_organization_2015</i>					
Received	-0.39	0.07	-5.38	0.00	0.68
<i>UNHCR_assistance_2017</i>					
Received	0.26	0.11	2.35	0.02	1.29
<i>UNICEF_assistance_2017</i>					
Received	0.25	0.56	0.44	0.66	1.28
<i>house_type</i>					
Apartment	0.31	0.12	2.69	0.01	1.36
Other	0.11	0.26	0.41	0.68	1.11
<i>house_ownership</i>					
Furnished rental	-0.73	0.09	-8.30	0.00	0.48
Other	1.08	0.17	6.34	0.00	2.93
<i>duration_MPC_assist_2017_agg</i>					

12 Months or less	-0.16	0.20	-0.82	0.41	0.85
13-24 Months	0.02	0.28	0.07	0.94	1.02
change_hhsize					
Unchanged	0.18	0.11	1.61	0.11	1.20
Decreased	0.25	0.19	1.32	0.19	1.28
change_region					
Unchanged	0.12	0.20	0.62	0.53	1.13
Moved out Metropolitan	0.38	0.27	1.41	0.16	1.47
Moved between other regions	0.02	0.33	0.07	0.94	1.02
changes_child					
unchanged	-0.05	0.11	-0.42	0.68	0.95
decreased	-0.16	0.16	-0.97	0.33	0.85
changes_elderly					
unchanged	0.00	0.11	-0.02	0.98	1.00
decreased	-0.20	0.21	-0.97	0.33	0.82
changes_workage					
unchanged	0.13	0.10	1.31	0.19	1.14
decreased	0.27	0.17	1.60	0.11	1.31
changes_salariedprof_hh					
Head remain in Salaried professional	-0.44	0.18	-2.49	0.01	0.64
basic_2015	-0.07	0.07	-1.07	0.28	0.93
sec_2015	-0.14	0.06	-2.20	0.03	0.87
university_2015	-0.37	0.07	-4.99	0.00	0.69
enrol_2015	-0.18	0.05	-3.92	0.00	0.83
age_enrol_2015	0.51	0.05	10.67	0.00	1.66
adult_2015	0.35	0.07	5.23	0.00	1.41
change_occupancy					
From Furnished to unfurnished	0.30	0.16	1.88	0.06	1.34
Occupancy Unchanged	0.15	0.10	1.56	0.12	1.16
Other	-0.19	0.17	-1.17	0.24	0.82
durable_2015	-0.15	0.02	-9.60	0.00	0.86
durable_2017	-0.03	0.02	-1.44	0.15	0.97
reg_employed	-0.26	0.06	-4.53	0.00	0.77
temp_employed	-0.11	0.05	-2.25	0.02	0.89
duration_WFP_assistance_2017	-0.02	0.01	-2.73	0.01	0.98
duration_MPC_assistance_2017	0.01	0.02	0.42	0.67	1.01
1.hh_salaried_prof_2015	0.23	0.09	2.62	0.01	1.26
reg_empl_2017	-0.03	0.06	-0.57	0.57	0.97
temp_empl_2017	0.12	0.06	1.97	0.05	1.12
valid_residency_2017	0.06	0.01	4.33	0.00	1.06
support_food	0.36	0.07	5.00	0.00	1.43
support_health	-0.43	0.11	-4.04	0.00	0.65
1.single_parent_2015	-0.49	0.44	-1.10	0.27	0.61
1.child_head_2015	-0.44	1.03	-0.43	0.67	0.64
single_parent_2017					
One child	-0.08	0.15	-0.50	0.62	0.93
Two children	-17.95	1.02	-17.60	0.00	0.00
child_head_2017	2.71	1.50	1.81	0.07	15.07
Constant term	-2.13	0.29	-7.44	0.00	0.12

## Probability of slipping into poverty

### ➤ Assistance

UNHCR assistance in 2017 has an insignificant impact with relative risk ratio of 0.78, thus receiving UNHCR assistance in 2017 decreased the probability of slipping into poverty compared to being always non-poor.

The relative log odds of slipping into poverty category vs. in never poor category decreases by 0.12 for households receiving WFP assistance in 2017. In other words, the expected risk of staying in the slipping into poverty category is one tenth for households who are received WFP assistance.

Increase in the duration of receiving MPC assistance increase the probability of slipping into poverty category vs. in never poor category. Compared to not receiving assistants before 2017, receiving assistant for 12 to 23 months decreases the risk of slipping into poverty. The relative risk ratio reaches 0.74 indicating that the probability of being never poor is 1.3 times that of slipping into poverty for those who receive assistance for 12 to 23 months.

### ➤ Demographic and socio-economic characteristics

The relationship between household size and poverty is also confirmed for poverty mobility. The probability of being always poor to being never poor decreases as household size decrease. The relative risk ratio is .048 (exp -0.74) for slipping into poverty vs. always non-poor. Thus, the probability of being never poor versus slipping into poverty is 2 times for households who experienced decrease in the number of their members.

The relative risk ratio for a one-unit increase in number of university education holders is .75 (exp -0.29) for slipping into poverty vs. always non-poor. In other words, increase the university graduates by one member decreases the probability of slipping into poverty relative to always non-Poor by 33%.

Change in the number of children between 2015 and 2017 have a large impact on poverty mobility. Households experienced decline in the number of children has lower probability of slipping into poverty relative to always Non-Poor by 0.19. Moreover, increase the number of children at the school age increase the relative risk for slipping into poverty vs. always non-poor by 1.16 times.

The relative risk of slipping into poverty vs. always non-poor increases as the number of regular employed members decreases. In other words, increase the number one regular employment in 2017 decreases the probability of being always non-poor relative to slipping into poverty by 2 times. The impact of the number of temporary employments followed similar direction, with smaller magnitude.

### ➤ Place of residence, housing characteristics and durables

Living in Metropolitan region increases the risk for slipping into poverty category vs. in never poor category compared to other regions. Namely, the risk for slipping into poverty category vs. in never poor category in Metropolitan region is 4, while the corresponding figures for Lower and Upper Egypt are 2 and 1.9, respectively.

The relative risk ratio residing in furnished apartment compared to unfurnished apartment is 0.82 for slipping into poverty category vs. in never poor category. In other words, the expected risk of slipping into poverty is lower for subjects who reside in furnished rented apartment. The impact of other types of rental arrangements has similar relative risk ratio compared to households who live in unfurnished apartments.

Moreover, compared to households who changed their occupancy from unfurnished to furnished rents, the relative risk ratio of slipping into poverty is 1.4 times for households who changed their occupancy from furnished to unfurnished rents, 1.2 times for those who do not change their occupancy type and 5 times for households who reside in other arrangement types.

For both 2015 and 2017, the relative risk ratio for a one-unit increase in durable goods is 1.01 and 0.87, respectively, for slipping into poverty vs. always non-poor.

**Table 4.5: Multinomial logistic regression results: slipping into poverty**

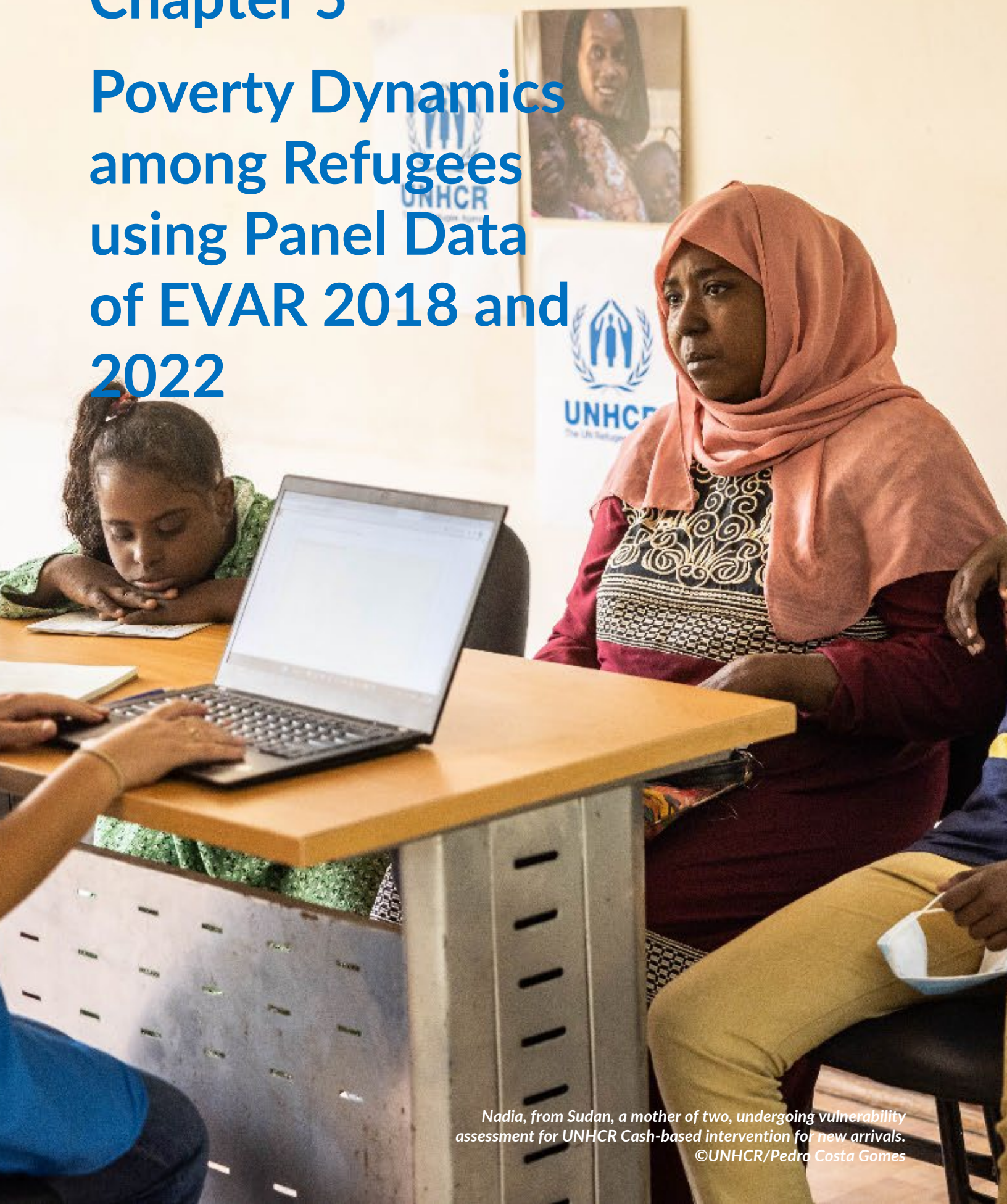
	Coef.	std error	z	P>z	Relative risk ratio
<i>region_2017</i>					
Lower Egypt	-0.70	0.11	-6.35	0.00	0.50
Upper Egypt	-0.82	0.12	-7.10	0.00	0.44
Frontier	-1.44	0.57	-2.51	0.01	0.24
<i>WFP_food_voucher_2015</i>					
Received	0.38	0.12	3.04	0.00	1.46
<i>WFP_assistance_2015</i>					
Received	1.62	0.48	3.39	0.00	5.04
<i>WFP_assistance_2017</i>					
Received	-2.10	0.16	-13.28	0.00	0.12
<i>Aid_organization_2015</i>					
Received	-0.15	0.14	-1.10	0.27	0.86
<i>UNHCR_assistance_2017</i>					
Received	-0.25	0.20	-1.22	0.22	0.78
<i>UNICEF_assistance_2017</i>					
Received	0.22	1.13	0.20	0.84	1.25
<i>house_type</i>					
Apartment	-0.71	0.26	-2.77	0.01	0.49
Other	-0.77	0.54	-1.43	0.15	0.46
<i>house_ownership</i>					
Furnished rental	-0.20	0.15	-1.28	0.20	0.82
Other	-0.97	0.37	-2.58	0.01	0.38
<i>duration_MPC_assist_2017_agg</i>					
12 Months or less	0.37	0.41	0.92	0.36	1.45
13-24 Months	-0.30	0.59	-0.51	0.61	0.74
<i>change_hhsize</i>					
Unchanged	-0.33	0.18	-1.80	0.07	0.72
Decreased	-0.74	0.34	-2.17	0.03	0.48
<i>change_region</i>					
Unchanged	-0.08	0.30	-0.28	0.78	0.92
Moved out Metropolitan	0.09	0.44	0.20	0.84	1.09
Moved between other regions	0.23	0.62	0.37	0.71	1.26
<i>changes_child</i>					
unchanged	-0.76	0.17	-4.52	0.00	0.47
decreased	-1.66	0.27	-6.06	0.00	0.19
<i>changes_elderly</i>					
unchanged	-0.61	0.16	-3.71	0.00	0.55
decreased	-1.34	0.40	-3.37	0.00	0.26
<i>changes_workage</i>					
unchanged	-0.67	0.15	-4.62	0.00	0.51
decreased	-0.53	0.30	-1.77	0.08	0.59
<i>changes_salariedprof_hh</i>					
Head remain in Salaried professional	-0.70	0.32	-2.18	0.03	0.50
<i>basic_2015</i>					
basic_2015	0.04	0.14	0.32	0.75	1.04
<i>sec_2015</i>					
sec_2015	-0.07	0.13	-0.56	0.57	0.93
<i>university_2015</i>					
university_2015	-0.29	0.14	-2.00	0.05	0.75
<i>enrol_2015</i>					
enrol_2015	0.16	0.11	1.48	0.14	1.17
<i>age_enrol_2015</i>					
age_enrol_2015	0.15	0.11	1.39	0.17	1.16
<i>adult_2015</i>					
adult_2015	0.27	0.13	2.05	0.04	1.31
<i>change_occupancy</i>					
From Furnished to unfurnished	0.34	0.29	1.18	0.24	1.40
Occupancy Unchanged	0.16	0.19	0.85	0.39	1.18
Other	1.65	0.26	6.24	0.00	5.18
<i>durable_2015</i>					
durable_2015	0.01	0.03	0.23	0.82	1.01
<i>durable_2017</i>					
durable_2017	-0.15	0.04	-3.87	0.00	0.87
<i>reg_employed</i>					
reg_employed	-0.01	0.09	-0.09	0.93	0.99
<i>temp_employed</i>					
temp_employed	-0.12	0.09	-1.29	0.20	0.89

<i>duration_WFP_assistance_2017</i>	-0.04	0.01	-3.50	0.00	0.96
<i>duration_MPC_assistance_2017</i>	-0.04	0.04	-1.08	0.28	0.96
<i>1.hh_salaried_prof_2015</i>	0.19	0.15	1.31	0.19	1.21
<i>reg_empl_2017</i>	-0.66	0.09	-7.44	0.00	0.52
<i>temp_empl_2017</i>	-0.38	0.10	-3.69	0.00	0.68
<i>valid_residency_2017</i>	0.06	0.02	2.73	0.01	1.07
<i>support_food</i>	0.21	0.12	1.74	0.08	1.24
<i>support_health</i>	-0.20	0.20	-1.01	0.31	0.82
<i>1.single_parent_2015</i>	-0.49	1.06	-0.46	0.64	0.61
<i>1.child_head_2015</i>	0.96	0.75	1.28	0.20	2.60
<i>single_parent_2017</i>					
<i>One child</i>	0.47	0.33	1.43	0.15	1.59
<i>Two children</i>	-16.01	1.07	-14.94	0.00	0.00
<i>child_head_2017</i>	-14.63	1.84	-7.94	0.00	0.00
<i>Constant term</i>	1.30	0.43	3.01	0.00	3.68



# Chapter 5

## Poverty Dynamics among Refugees using Panel Data of EVAR 2018 and 2022



*Nadia, from Sudan, a mother of two, undergoing vulnerability assessment for UNHCR Cash-based intervention for new arrivals.*

*©UNHCR/Pedro Costa Gomes*



## Introduction

### ➤ Data source

Given the COVID-19 pandemic-induced challenges with conducting a comprehensive and updated vulnerability assessment, UNHCR through Caritas collected data from a sample of 851 households (3,099 individuals) using a hybrid approach of home visits and phone surveys in March 2022.

With the aim to have an updated analysis comprising all nationalities, the data was collected by re-interviewing the same cases that were assessed through the latest multisectoral assessment (Egypt Vulnerability Assessment for Refugees – EVAR 2018).

To analyze the panel data 2018–2022 and assess poverty mobility during this period, expenditure of household has to be calculated in both years. However, it was found that 14 households have zero expenditure in 2018, in addition to 4 households in 2022. Additionally, there are 3 households in 2022 and one household in 2018 have no heads. Accordingly, the total number of panel households analyzed in this chapter is 829 households.

### ➤ Projection of poverty rates in 2022 using national poverty lines (2017/18)

As mentioned previously, refugees in Egypt have similar basic needs as Egyptians and are exposed to similar challenges and risks including prices' levels. The official regional poverty lines provided by CAPMAS, for 2017/18 are used to identify the extreme poor and the poor refugees in 2018. Poverty line for 2022 is derived using the corresponding CPI published by CAPMAS. Additionally, poverty line estimated for 2022 has the same real value and thus, consistent poverty comparisons are performed. Table 5.1 presents the poverty lines used in this part of the analysis by regions, for 2018 and 2022.

**Table 5.1: National food and lower poverty lines (in urban areas) in 2017/18 and estimated lines in March 2022, EGP (per capita per month)**

Region	Food PL in 2017/18	Lower PL in 2017/18	Upper PL in 2017/18	Food PL in 2022	Lower PL in 2022	Upper PL in 2022
Urban Governorates	505.4	773.3	1160	675.9	1043.2	1564.8
Urban Lower Egypt	472.3	711.4	1067.1	631.7	959.7	1439.5
Urban Upper Egypt and Frontier	479.3	727.3	1091	641.0	981.1	1471.7
CPI (Urban)	<b>1</b>	<b>1</b>		<b>1.337</b>	<b>1.349</b>	

### ➤ Weights of the panel sample

The sample is stratified by three group's classification, to reflect the different realities faced by refugees and asylum seekers in Egypt namely:

- 1) Syrians;
- 2) Other Arabic speakers<sup>11</sup>;
- 3) African non-Arabic speakers.

Table 5.2 shows the size of both the registered population - as of March 2018 - and the sample.

<sup>11</sup> Other Arabic speakers are those from Iraq, Sudan and Yemen, while African non-Arabic speakers were mainly from Eritrea, South Sudan, Ethiopia, and Somalia.

**Table 5.2: Population and sample distribution by Strata and the corresponding weights, 2018**

Stratum	Population $N_h$	Sample size $n_h$	Sampling weight
Syrian	43,041 Cases	406 Households	$= (43041/98740) / (406/829) = 0.8901$
Other Arabic Speakers	22,631 Cases	231 Households	$= (22631/98740) / (231/829) = 0.8225$
African refugees Non-Arabic Speakers	33,068 Cases	192 Households	$= (33068/98740) / (192/829) = 1.4460$
<b>Total</b>	<b>98,740 Cases</b>	<b>829 Households</b>	

Sampling weights were applied so that the distribution of Cases within each stratum reflects the actual population distribution. The following formula was used to calculate sampling weights:

$$\text{Sampling weight} = (\text{population in strata } h / \text{total population}) / (\text{sample in strata } h / \text{total sample size}).$$

However, in this chapter, the panel sample for 2018 and 2022 is classified into only two strata; Syrian and non-Syrian refugees, where non-Syrian Arabic and non-Arabic speakers are combined together.

### Poverty Measures among refugees, Panel 2018-2022

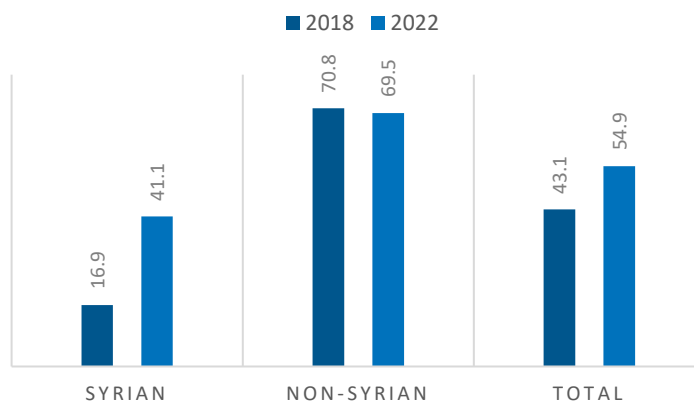
This section presents the poverty status of Syrian and non-Syrian refugees participated in different panel survey rounds conducted in 2018 and 2022. Poverty analysis of refugees and the comparison between Syrian and non-Syrian refugees is of particular value for designing and targeting poverty alleviation strategies. Income poverty is highly correlated with malnutrition and higher incidence of child mortality and morbidity, and it is associated with lower education levels, poor housing conditions and on coping strategies adopted to face economic hardships.

Figure 5.1 shows that 17% of Syrian refugees were poor in 2018, while this percentage increased significantly by 24 percentage points to reach 41% in 2022. On the other extreme, 71% of non-Syrian refugees were poor in 2018 and this percentage almost unchanged in 2022.

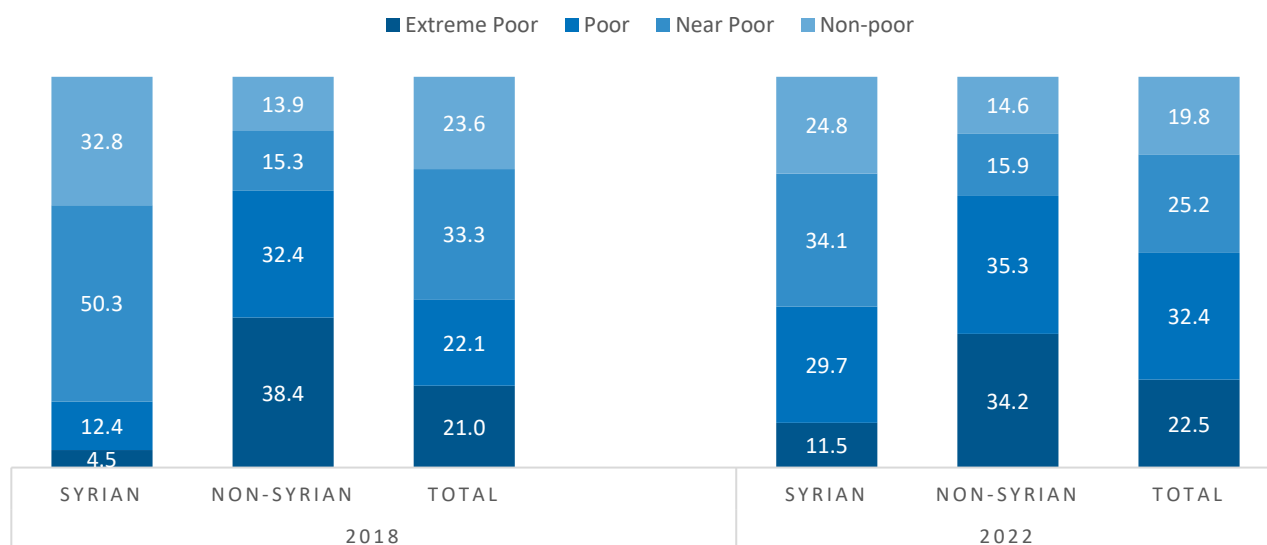
Data presented in Figure 5.2 shows that 5% of Syrian refugees were living below the food poverty line in 2018, i.e., they cannot meet their basic food needs and therefore considered as extremely poor. Additionally, half of Syrian refugees were nearly poor in 2018, where they were vulnerable to any price increase or economic shocks. The situation is completely

changed in 2022, where the prevalence of extreme poverty among Syrian refugees increased by more than double to reach 12%; i.e., cannot obtain their basic foods, additionally, the prevalence of poverty also increased in 2022. Although poverty status of non-Syrian refugees is worse than Syrian refugees, the prevalence of extreme poverty decreased by 4 percentage points from 2018 to 2022.

**Figure 5.1: Poverty rates in 2018-2022 by nationality**



**Figure 5.2: Distribution of refugees by poverty status 2018-2022 and nationality**



Concerning the prevalence of poverty among regions, Table 5.3 shows that poverty rates increased among Syrian refugees almost equally in all regions, while poverty rate decreased slightly among non-Syrian refugees from 2018 to 2022 only in Upper Egypt and Frontier.

**Table 5.3: Poverty rates in 2018 and 2022 by nationality and regions**

	2018	2022	Difference in percentage points
<b>Syrian Refugees</b>			
Total	16.9	41.1	24.2
Metropolitan	22.8	48.6	25.8
Lower Egypt	16.1	40.1	24
Upper Egypt & Frontier	12.5	35.7	23.2
<b>Non-Syrian Refugees</b>			
Total	70.8	69.5	-1.3
Metropolitan	71.3	71.7	0.4
Lower Egypt	35.5	35.5	0
Upper Egypt & Frontier	71.7	67.1	-4.6
<b>Total</b>	<b>43.1</b>	<b>54.9</b>	<b>11.8</b>

## Dynamics of Poverty between 2018-2022 (Transition Matrices)

One of the advantages of a panel data is that it provides an opportunity to study the movements into and out of poverty. This permits one to identify the main factors associated with poverty dynamics among Syrian and non-Syrian refugees, and so to inform policies aimed at providing cash assistance and reducing poverty.

Refugees may be classified into four categories that arise in a two-wave panel as follows:

1. Stayed in poverty (poor in both 2018 and 2022),
2. Moved out of poverty (poor in 2018 but was not poor in 2022),
3. Moved into poverty (non-poor in 2018 but poor in 2022) and
4. Remained non-poor (non-poor in both 2018 and 2022).

Overall, Table 5.4 shows poverty dynamics among Syrian refugees, where poverty rate increased by 24 percentage points between 2018 and 2022. Additionally, there are large movements into and out of poverty occurred between the two surveys. The table shows that only 10% of Syrian refugees stayed in poverty between 2018 and 2022, while 31% of refugees fell into poverty (they are non-poor in 2018 but poor in 2022). On the other hand, only 7% moved out of poverty; and the remaining half (52%) were never poor in both surveys. Looking at the distribution of Syrian refugees in 2018, the data shows that almost 60% of poor refugees stayed in poverty in 2022, and 37% of the non-poor fell into poverty.

**Table 5.4: Poverty transition Matrix 2018-2022 among Syrian refugees**

		2018			2022		
		Non-Poor	Poor	Total	Non-Poor	Poor	Total
		% of Population			% of group in 2018		
2018	Non-Poor	52.1	31.1	83.1	62.6	37.4	100
	Poor	6.8	10.1	16.9	40.3	59.7	100
	<b>Total</b>	<b>58.9</b>	<b>41.1</b>	<b>100</b>	<b>58.9</b>	<b>41.1</b>	<b>100</b>
		% of group in 2022					
2018	Non-Poor	88.5	75.5	83.1			
	Poor	11.6	24.5	16.9			
	<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>			

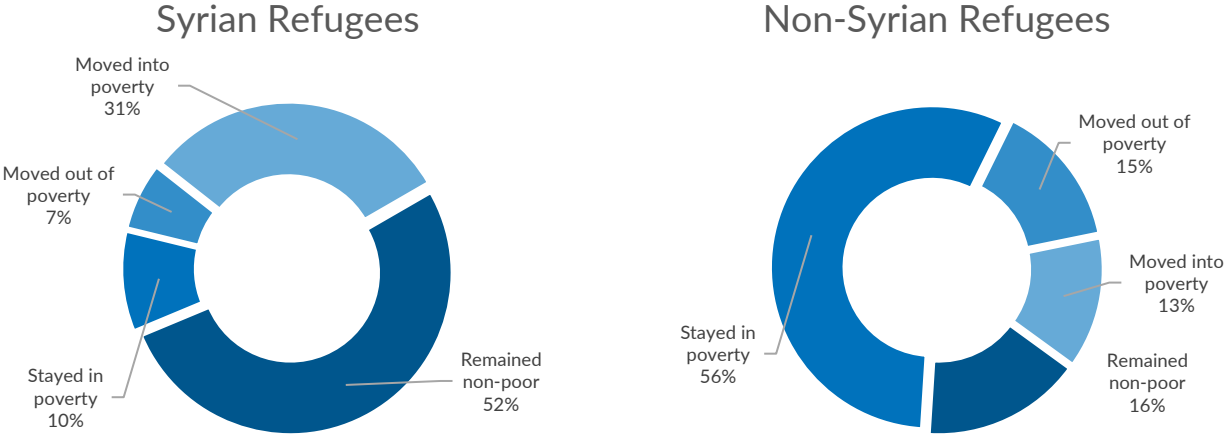
Data presented in Table 5.5 shows that poverty rate did not change among non-Syrian refugees between the two surveys. However, large movements into and out of poverty occurred between 2018 and 2022. Overall, the table shows that 56% of non-Syrian refugees stayed in poverty between the two surveys, while 13% fell into poverty and other 15% moved out of poverty. This explained the reason of permanence of poverty rates for non-Syrian refugees between the two surveys. Only, 16% were never poor in both surveys as shown in the table. Looking at the distribution of non-Syrian refugees in 2018, the data shows that 80% of poor refugees stayed in poverty in 2022, in addition to 45% of the non-poor fell into poverty.

**Table 5.5: Poverty transition Matrix 2018-2022 among non-Syrian refugees**

		2018			2022		
		Non-Poor	Poor	Total	Non-Poor	Poor	Total
		% of Population			% of group in 2018		
2018	Non-Poor	16.0	13.2	29.2	54.7	45.3	100
	Poor	14.5	56.3	70.8	20.5	79.5	100
	<b>Total</b>	<b>30.5</b>	<b>69.5</b>	<b>100</b>	<b>30.5</b>	<b>69.5</b>	<b>100</b>
		% of group in 2022					
2018	Non-Poor	52.4	19.0	29			
	Poor	47.6	81.0	71			
	<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>			

Figure 5.3 shows the distribution of refugees on the four spells. The figure shows the large difference between Syrian and non-Syrian. More than half (52%) of Syrian refugees were never poor, i.e., did not experience poverty at the two surveys, while this percentage declined to only 16% among non-Syrian refugees. On the other extreme, only 10% of Syrian refugees were chronic poor, i.e., poor in the two waves, while this percentage increased significantly to reach 56% among non-Syrian refugees. Although, the percentage of the chronic poor among Syrian refugees is small, the percentage of those moved into poverty reached 31% as shown in the figure.

Figure 5.3: Distribution of refugees by poverty spells (2018-2022)



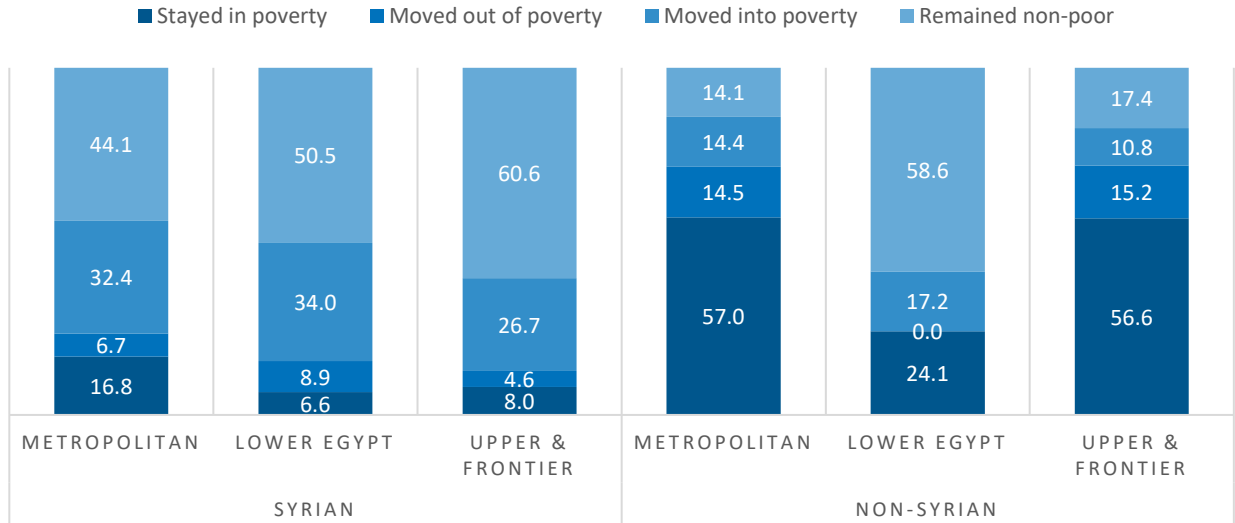
**Syrian and non-Syrian refugees in metropolitan region had the worst poverty situation compared to other regions.** Disaggregating poverty spells by regions shows that Syrian refugees in metropolitan region had the worst poverty situation where 17% of refugees in metropolitan areas are chronic poor (stayed in poverty between 2018 and 2022), while this percentage decreased to 7% and 8% among those in Lower and Upper Egypt respectively. The situation is much worse among non-Syrian refugees, where 57% of non-Syrian refugees in metropolitan and Upper Egypt are chronic poor, however, only 14% in metropolitan region are never poor, while this percentage increased to 17.4% among those in Upper Egypt.

Almost one third of Syrian refugees in metropolitan and Lower Egypt moved into poverty in 2022, and this percentage reached 27% among those in Upper Egypt. **This could be interpreted by the discontinuation of multipurpose cash transfer of UNHCR that stopped in 2022 and before for some Syrian refugees and affects markedly poverty situation of those refugees<sup>12</sup>.**

Although large percentage of non-Syrian refugees are chronic poor (stayed in poverty in the two surveys), the percentages of refugees moved into poverty are lower than that among Syrian refugees. **This could be interpreted by the cash transfers of UNHCR and WFP as well that started in 2019 or increased in 2022.** Non-Syrian refugees in Lower Egypt have the best economic situation, where 59% are never poor as shown in Figure 5.4.

<sup>12</sup> Impact of UNHCR and WFP cash transfers on poverty will be presented in detail in section 5.5

**Figure 5.4: Distribution of refugees according to poverty mobility 2018-2022 by regions**

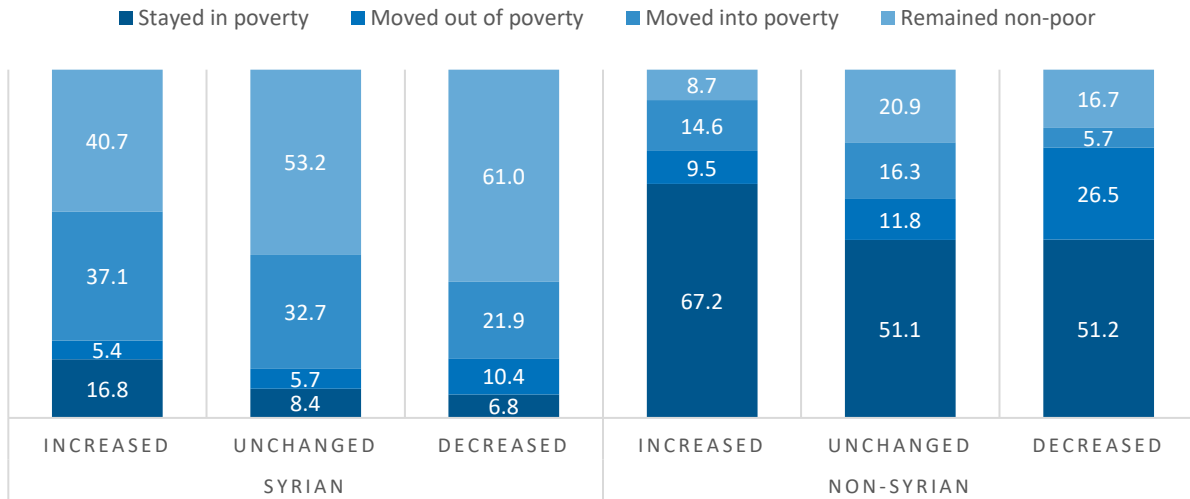


### Correlates of Poverty Mobility

➤ *Household size and age composition*

Change in household size is one of the important factors affecting the dynamics of poverty. As expected, increasing household size between 2018 and 2022 increases the percentage of refugees falling into poverty. Almost 37% of Syrian refugees whose household size increased between 2018 and 2022 fall into poverty, while this percentage declined to 22% among those who experienced decrease in household size. These figures reached 14.6% and 5.7% among non-Syrian refugees.

**Figure 5.5: Distribution of refugees by change in household size 2018-2022 and poverty dynamics**



Similar result is observed regarding the changes in the number of children 0-17 years, however the impact among non-Syrian refugees is much obvious as shown in Table 5.7.



**Table 5.6: Poverty dynamics (2018-2022) by change in household size and age composition among Syrian refugees**

	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total
<b>Total</b>	10.1	6.8	31.1	52.1	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
	<b>Row Percent</b>					<b>Column Percent</b>				
	<i>Change in number of children &lt;18 years</i>									
Increased	12.0	5.7	39.3	43.0	<b>100</b>	25.3	17.9	27.0	17.6	21.3
Unchanged	10.8	4.4	24.4	60.4	<b>100</b>	45.8	27.7	33.6	49.5	42.7
Decreased	8.1	10.3	34.1	47.6	<b>100</b>	28.9	54.5	39.5	32.9	36.0
	<i>Change in number of elder 60+ years</i>									
Increased	11.0	9.8	20.7	58.5	<b>100</b>	5.4	7.1	3.3	5.6	5.0
Unchanged	10.2	6.3	32.1	51.4	<b>100</b>	90.4	83.0	92.4	88.2	89.4
Decreased	7.5	11.8	23.7	57.0	<b>100</b>	4.2	9.8	4.3	6.2	5.6

**Table 5.7: Poverty dynamics (2018-2022) by change in household size and age composition among non-Syrian refugees**

	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total
<b>Total</b>	56.3	14.5	13.2	16.0	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
	<b>Row Percent</b>					<b>Column Percent</b>				
	<i>Change in number of children &lt;18 years</i>									
Increased	67.9	11.0	13.3	7.8	<b>100</b>	31.3	19.7	26.1	12.7	25.9
Unchanged	44.5	14.0	17.0	24.5	<b>100</b>	34.6	42.3	56.2	67.2	43.8
Decreased	63.4	18.2	7.8	10.6	<b>100</b>	34.1	38.0	17.8	20.2	30.3
	<i>Change in number of elder 60+ years</i>									
Increased	39.0	0.0	38.9	22.1	<b>100</b>	2.0	0.0	8.5	4.0	2.9
Unchanged	57.7	13.9	13.0	15.5	<b>100</b>	95.8	89.7	91.5	90.4	93.5
Decreased	34.5	41.0	0.0	24.5	<b>100</b>	2.2	10.3	0.0	5.6	3.6

➤ **Mobility between regions**

Moving between regions is almost negligible among Syrian refugees, while 6.5% of non-Syrian refugees moved between regions during the period 2018-2022. Falling into poverty is less representative among those who moved out metropolitan region.

**Table 5.8: Poverty dynamics (2018-2022) by mobility between regions among Syrian refugees**

	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total
<b>Total</b>	<b>Row Percent</b>					<b>Column Percent</b>				
	10.1	6.8	31.1	52.1	100	100	100	100	100	100
	<i>Move between Regions</i>									
Moved into Metropolitan	0.0	0.0	33.3	66.7	100	0.0	0.0	0.8	0.9	0.7
Unchanged	10.4	7.0	30.8	51.8	100	100.0	100.0	96.1	96.3	96.8
Moved out Metropolitan	0.0	0.0	29.6	70.4	100	0.0	0.0	1.6	2.2	1.6
Moved between other regions	0.0	0.0	61.5	38.5	100	0.0	0.0	1.6	0.6	0.8

**Table 5.9: Poverty dynamics (2018-2022) by mobility between regions among non-Syrian refugees**

	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total
<b>Total</b>	<b>Row Percent</b>					<b>Column Percent</b>				
	56.3	14.5	13.2	16.0	100	100	100	100	100	100
	<i>Move between Regions</i>									
Moved into Metropolitan	58.0	25.0	14.8	2.3	100	2.7	4.5	2.9	0.4	2.6
Unchanged	55.7	14.5	13.4	16.5	100	92.6	93.3	94.4	96.4	93.5
Moved out Metropolitan	67.9	9.4	10.7	12.1	100	4.0	2.2	2.7	2.5	3.3
Moved between other regions	77.8	0.0	0.0	22.2	100	0.7	0.0	0.0	0.7	0.5

➤ **Characteristics of household head**

**Education of heads**

Education of heads has a great impact on poverty dynamics regardless the nationality. Never poor Syrian households are more represented among those with heads who have secondary or university education, while less represented among those with illiterate heads. More than two-thirds of non-Syrian households with illiterate heads are in the chronic poor category, while those with heads who have a university education are more represented among never-poor households as shown in Table 5.10.

**Table 5.10: Distribution of refugees by education of heads in 2022 and poverty dynamics**

	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total
	Row Percent					Column Percent				
	<i>Syrian Refugees</i>									
None	20.9	10.0	28.2	40.9	100	13.9	9.8	6.1	5.2	6.7
Basic	8.2	6.9	34.3	50.6	100	59.6	74.1	80.9	71.1	73.2
Secondary	9.1	4.0	22.6	64.3	100	10.8	7.1	8.8	14.9	12.1
University	19.6	7.5	16.5	56.4	100	15.7	8.9	4.3	8.7	8.1
Total	10.1	6.8	31.1	52.1	100	100	100	100	100	100
	<i>Non-Syrian Refugees</i>									
None	68.3	11.3	13.6	6.9	100	21.3	13.6	18.0	7.5	17.5
Basic	59.6	15.8	11.0	13.6	100	43.0	44.2	33.7	34.4	40.6
Secondary	62.2	13.5	10.5	13.8	100	27.6	23.3	19.8	21.6	25.0
University	27.0	16.2	22.3	34.5	100	8.1	18.9	28.5	36.5	16.9
Total	56.3	14.5	13.2	16.0	100	100	100	100	100	100

**Employment status of heads**

**Households with heads remained in regular jobs between 2018 and 2022 are more likely to be “never poor” households. On the other hand, households with heads remained in temporary jobs are more likely to be chronic poor.** Stability of work among household heads has great impact on poverty dynamics. The percentage of Syrian refugees who are never poor increased by almost 10 percentage points among those with heads have regular/stable jobs between 2018 and 2022 compared with those have heads their stability of jobs have changed between the two surveys. The contrary is observed regarding the change in the temporary jobs or who remained unemployed, where the percentage of Syrian refugees who are chronic poor are more represented among those with heads have remained in temporary jobs or remained unemployed between the two surveys.

Similar results are observed for non-Syrian refugees as shown in Table 5.12. However, non-Syrian households whose heads remained unemployed during the two surveys are more likely to fell into poverty in 2022.

**Table 5.11: Distribution of Syrian refugees by change in employment status of heads between 2018 & 2022 and by poverty mobility**

	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total
<b>Total</b>	<b>10.1</b>	<b>6.8</b>	<b>31.1</b>	<b>52.1</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
	<b>Row Percent</b>					<b>Column Percent</b>				
	<i>Change in regular jobs for heads</i>									
Change regular jobs/other	11.0	6.1	32.4	50.7	100	91.6	75.0	87.7	81.9	84.2
Head remain in regular jobs	5.4	10.8	24.2	59.6	100	8.4	25.0	12.3	18.1	15.8
	<i>Change in temporary jobs for heads</i>									
Change temporary jobs/other	9.5	6.9	31.0	52.7	100	81.9	87.5	86.5	87.8	86.8
Head remain in temporary jobs	13.8	6.4	31.7	48.2	100	18.1	12.5	13.5	12.2	13.2
	<i>Change in unemployment status of heads</i>									
Head work in any year	9.6	6.9	31.0	52.5	100	94.0	100.0	98.4	99.3	98.5
Head remains unemployed in both years	41.7	0.0	33.3	25.0	100	6.0	0.0	1.6	0.7	1.5

**Table 5.12: Distribution of Non-Syrian refugees by change in employment status of heads between 2018 & 2022 and by poverty mobility**

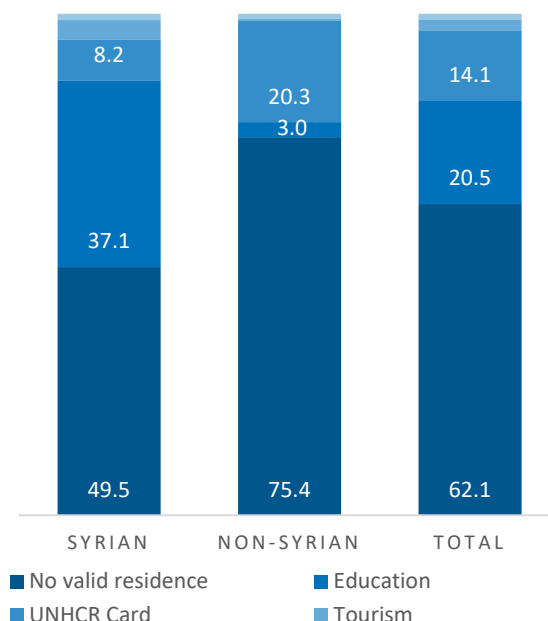
	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total
<b>Total</b>	<b>56.3</b>	<b>14.5</b>	<b>13.2</b>	<b>16.0</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
	<b>Row Percent</b>					<b>Column Percent</b>				
	<i>Change in regular jobs for heads</i>									
Change regular jobs/other	56.3	14.4	13.5	15.8	100	96.1	95.6	97.8	95.1	96.1
Head remain in regular jobs	56.0	16.3	7.6	20.1	100	3.9	4.4	2.2	4.9	3.9
	<i>Change in temporary jobs for heads</i>									
Change temporary jobs/other	52.7	14.6	16.0	16.7	100	69.8	74.9	90.2	77.7	74.5
Head remain in temporary jobs	66.7	14.3	5.1	14.0	100	30.2	25.1	9.8	22.3	25.5
	<i>Change in Unemployment status of heads</i>									
Head work in any year	57.2	14.8	12.9	15.2	100	99.0	99.3	94.7	92.8	97.5
Head remains unemployed in both years	22.8	4.1	27.5	45.5	100	1.0	0.7	5.3	7.3	2.5

➤ **Residence permits of household heads**

**Syrian heads who hold UNHCR cards or have tourism residences are wealthier than other heads, while non-Syrian heads who have education residences are wealthier than their counterparts.** Residence permits facilitate the lives of Syrian and non-Syrian refugees by permitting access to formal works as well as basic services, such as health care and education. Only half of the Syrian household heads in 2022 have valid residences and this percentage declined to only 25% among non-Syrian heads. The majority of Syrian heads who have valid residency hold education residences, while the majority of non-Syrian heads who have valid residency hold the UNHCR card as shown in Figure 5.6.

Table 5.13 shows that Syrian heads who have UNHCR or tourism residences are more represented among never-poor households, while those who have education residences are more represented among chronically poor households. The situation is reversed among non-Syrian heads, where most of the households whose heads have education residence are never poor.

**Figure 5.6: Distribution of refugees by Type of residency of heads in 2022**



**Table 5.13: Distribution of refugees by type of residency of heads in 2022 and poverty dynamics**

	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total
	<b>Row Percent</b>					<b>Column Percent</b>				
	<i>Syrian Refugees</i>									
No valid residency	7.8	7.6	32.1	52.5	100	38.6	55.4	51.2	49.9	49.5
Education	14.2	5.1	35.7	45.0	100	52.4	27.7	42.6	32.1	37.1
UNHCR Card	5.2	4.4	18.5	71.9	100	4.2	5.4	4.9	11.3	8.2
Tourism	12.3	0.0	9.2	78.5	100	4.8	0.0	1.2	5.9	3.9
Other residency	0.0	61.9	4.8	33.3	100	0.0	11.6	0.2	0.8	1.3
Total	10.1	6.8	31.1	52.1	100	100	100	100	100	100
	<i>Non-Syrian Refugees</i>									
No valid residency	57.9	13.3	14.4	14.4	100	77.5	69.2	81.8	68.1	75.4
Education	0.0	0.0	15.7	84.3	100	0.0	0.0	3.6	16.0	3.0
UNHCR Card	60.3	22.0	7.8	10.0	100	21.7	30.8	11.9	12.7	20.3
Tourism	16.7	0.0	83.3	0.0	100	0.1	0.0	2.2	0.0	0.4
Other residency	38.1	0.0	6.4	55.6	100	0.6	0.0	0.5	3.3	0.9
Total	56.3	14.5	13.2	16.0	100	100	100	100	100	100

➤ *Characteristics of household members*

**Education of household members**

**Percentage of illiterate adults declined between the two surveys for Syrian and non-Syrian refugees, and the enrollment rate for children 6-17 years increased only among Syrian children between 2018 and 2022.** Overall, Table 5.14 shows that the percentage of illiterate refugees 18 years and more declined between 2018 and 2022 particularly among non-Syrian refugees, where the prevalence decreased by 4 percentage points. Additionally, the enrollment rate among children 6-17 years increased among Syrian children between 2018 and 2022, while the rate decreased slightly among non-Syrian children.

The relation between education and poverty dynamics shows that the percentage of illiterate adults (18 years and more) among those stayed in poverty is more than that among never poor households in both 2018 and 2022, for Syrian and non-Syrian refugees. On the other hand, the highest percentage of adults with university education and above is found among never poor households for non-Syrian refugees, while this is not occurred among Syrian adults.

**Table 5.14: Percentage of adult refugees by education status in both 2018 and 2022 and poverty dynamics**

	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total
<b>Syrian Refugees</b>										
	<b>2018</b>					<b>2022</b>				
% of illiterate adults	8.0	3.5	8.7	3.3	<b>5.2</b>	6.7	3.6	8.6	6.2	<b>6.8</b>
% of adults having Basic education	64.0	63.2	68.7	69.2	<b>68.3</b>	61.8	76.8	70.4	64.7	<b>66.8</b>
% of adults having Secondary education	14.7	15.8	17.5	19.9	<b>18.6</b>	22.5	10.7	16.1	18.7	<b>17.8</b>
% of adults having University education	13.3	17.5	5.2	7.6	<b>8.0</b>	9.0	8.9	4.9	10.4	<b>8.6</b>
% of children 6-17 years enrolled in school	78.9	77.1	94.0	90.2	<b>89.4</b>	85.9	93.7	94.8	91.0	<b>92.0</b>
<b>Non-Syrian Refugees</b>										
	<b>2018</b>					<b>2022</b>				
% of illiterate adults	19.9	10.9	15.9	8.1	<b>15.0</b>	13.3	5.8	14.8	6.6	<b>11.1</b>
% of adults having Basic education	46.4	51.0	43.8	40.2	<b>45.2</b>	49.2	53.1	41.9	44.7	<b>47.3</b>
% of adults having Secondary education	24.6	24.0	20.7	30.6	<b>25.2</b>	28.0	28.5	24.0	24.9	<b>26.6</b>
% of adults having University education	9.1	14.2	19.6	21.1	<b>14.5</b>	9.5	12.6	19.3	23.8	<b>14.9</b>
% of children 6-17 years enrolled in school	83.6	81.5	90.4	73.6	<b>83.1</b>	81.9	91.6	73.9	72.5	<b>81.5</b>



## Employment Status of household members

**Change in employment status of household members has significant impact on poverty dynamics. Increasing number of members of permanent jobs helps in moving the household out of poverty.** The percentage of Syrian refugees who moved out of poverty between 2018 and 2022 reached 8.6% when number of permanent employed members increased, compared to only 2.7% when number of members in permanent jobs decreased during the two surveys. On the other hand, the percentage of Syrian refugees who fell into poverty reached 32% among those with number of temporary jobs increased during the two surveys, while declined to 24% when the number of temporary employed members decreased. Concerning non-Syrian refugees, the data shows that 20% of refugees with number of members in permanent jobs increased during 2018-2022 moved out of poverty, compared to only 4% among those with whose number of permanent jobs decreased during the same period.

**Table 5.15: Distribution of refugees by change in employment status of household members during the period 2018-2022**

	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total
<b>Syrian Refugees</b>										
<b>Total</b>	10.1	6.8	31.1	52.1	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Change in number of Permanent Employed members</b>										
<i>Increased</i>	3.1	8.6	9.3	79.0	<b>100.0</b>	3.0	12.5	2.9	14.9	<b>9.8</b>
<i>Unchanged</i>	5.0	10.0	31.1	53.9	<b>100.0</b>	8.4	25.0	17.0	17.6	<b>17.0</b>
<i>Decreased</i>	8.0	2.7	33.6	55.7	<b>100.0</b>	24.7	12.5	33.8	33.5	<b>31.3</b>
<i>No permanent employed in both years</i>	15.3	8.1	34.3	42.3	<b>100.0</b>	63.9	50.0	46.3	34.0	<b>41.9</b>
<b>Change in number of Temporary Employed members</b>										
<i>Increased</i>	10.5	5.6	32.1	51.8	<b>100.0</b>	32.5	25.9	32.2	31.0	<b>31.2</b>
<i>Unchanged</i>	15.9	5.8	37.9	40.4	<b>100.0</b>	26.5	14.3	20.5	13.1	<b>16.8</b>
<i>Decreased</i>	4.6	13.3	24.2	57.9	<b>100.0</b>	6.6	28.6	11.3	16.2	<b>14.6</b>
<i>No temporary employed in both years</i>	9.2	5.7	29.8	55.3	<b>100.0</b>	34.3	31.3	35.9	39.7	<b>37.4</b>
<b>Non-Syrian Refugees</b>										
<b>Total</b>	56.3	14.5	13.2	16.0	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Change in number of Permanent Employed members</b>										
<i>Increased</i>	52.6	19.8	11.2	16.4	<b>100.0</b>	10.0	14.6	9.0	11.0	<b>10.7</b>
<i>Unchanged</i>	48.7	27.5	4.9	18.9	<b>100.0</b>	5.3	11.5	2.2	7.2	<b>6.1</b>
<i>Decreased</i>	63.5	4.0	14.0	18.6	<b>100.0</b>	19.0	4.6	17.7	19.6	<b>16.8</b>
<i>No permanent employed in both years</i>	55.7	15.1	14.2	15.0	<b>100.0</b>	65.8	69.3	71.0	62.3	<b>66.4</b>
<b>Change in number of Temporary Employed members</b>										
<i>Increased</i>	65.6	11.2	10.9	12.3	<b>100.0</b>	40.5	26.9	28.6	26.6	<b>34.7</b>
<i>Unchanged</i>	64.5	17.2	5.1	13.2	<b>100.0</b>	32.3	33.3	10.9	23.2	<b>28.1</b>
<i>Decreased</i>	43.7	20.0	21.9	14.4	<b>100.0</b>	12.9	22.9	27.5	14.9	<b>16.6</b>
<i>No temporary employed in both years</i>	39.4	11.9	21.2	27.4	<b>100.0</b>	14.4	16.9	33.0	35.3	<b>20.6</b>

➤ *Duration of stay at Egypt and poverty dynamics*

**Staying more in Egypt increases the welfare of refugees, particularly Syrian refugees, while it does not affect non-Syrian refugees.** Table 5.16 presents the results of poverty dynamics according to the duration of stay in Egypt before 2018 survey. The data shows that only 32% of Syrian refugees who stay in Egypt less than 2 years before 2018 are never poor, while this percentage increased significantly to 56% among those who stay 5 years and more before 2018. However, this is not the situation among non-Syrian refugees, where the percentage of never poor refugees increased slightly with increasing the duration of stay in Egypt and at the same time the percentage of stay in poverty also increased with largest duration of stay.

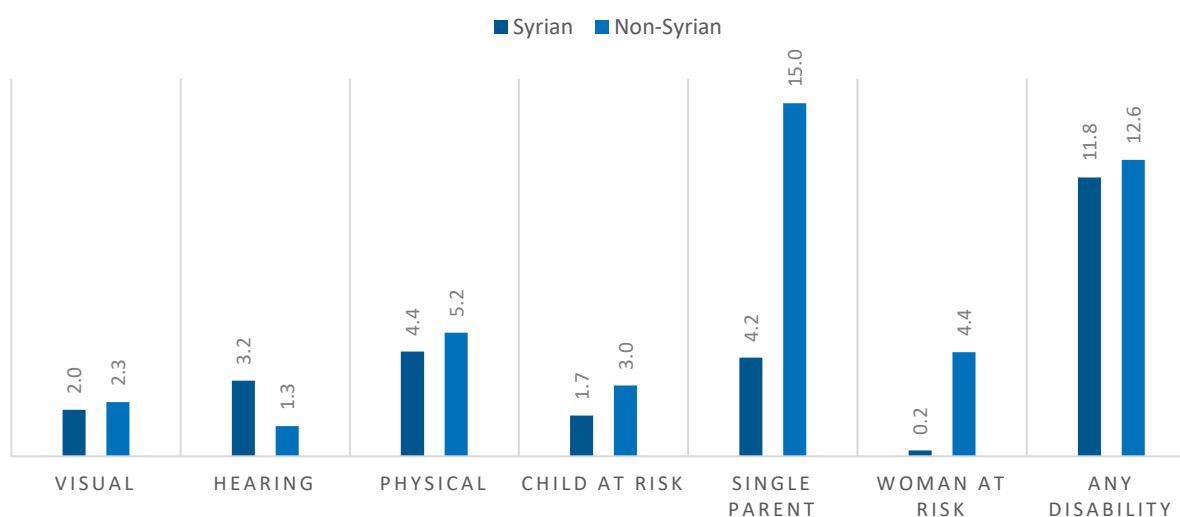
**Table 5.16: Distribution of refugees by poverty dynamics and duration of stay in Egypt before 2018 survey**

	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total
<i>Syrian Refugees</i>										
Total	10.1	6.8	31.1	52.1	100	100	100	100	100	100
	Row Percent					Column Percent				
less than 2 years	20.9	20.5	27.0	31.6	100.0	27.1	39.3	11.3	7.9	13.1
2 to less than 4	15.9	5.7	31.8	46.6	100.0	8.4	4.5	5.5	4.8	5.3
4 to less than 5	9.2	2.6	33.3	55.0	100.0	27.7	11.6	32.6	32.2	30.5
5 years and more	7.2	5.9	30.7	56.1	100.0	36.8	44.6	50.6	55.1	51.2
<i>Non-Syrian Refugees</i>										
Total	56.3	14.5	13.2	16.0	100	100	100	100	100	100
	Row Percent					Column Percent				
less than 2 years	55.8	13.7	14.5	16.0	100.0	39.4	37.5	43.6	39.7	39.8
2 to less than 4	49.9	15.5	17.2	17.4	100.0	25.5	30.8	37.3	31.3	28.7
4 to less than 5	64.8	22.4	3.2	9.6	100.0	14.9	20.0	3.1	7.8	13.0
5 years and more	61.1	9.2	11.4	18.3	100.0	20.1	11.8	15.9	21.2	18.5

➤ *Specific needs and poverty dynamics*

**Poverty dynamics is markedly correlated with the presence of specific needs and disabilities.** Figure 5.7 shows that almost 13% of non-Syrian households have at least one member with any kind of disability (visual, hearing, physical, mental, educational needs and speech impairment) and this percentage reached 12% among Syrian households. Almost one in every 7 non-Syrian households are headed by single parents (15%), while this percentage declined to only 4% among Syrian households. Additionally, 4.4% of non-Syrian households have women at risk, while this percentage declined to 0.2% among Syrian households.

Figure 5.7: Percentage of households in 2022 with specific needs by nationality



Regarding the impact of the presence of any kind of disability on poverty dynamics, Table 5.17 shows that households with at least one disabled member are more likely to be always poor and less likely to be never poor among Syrian and non-Syrian households. Additionally, households headed by single parents are more likely to be always poor.

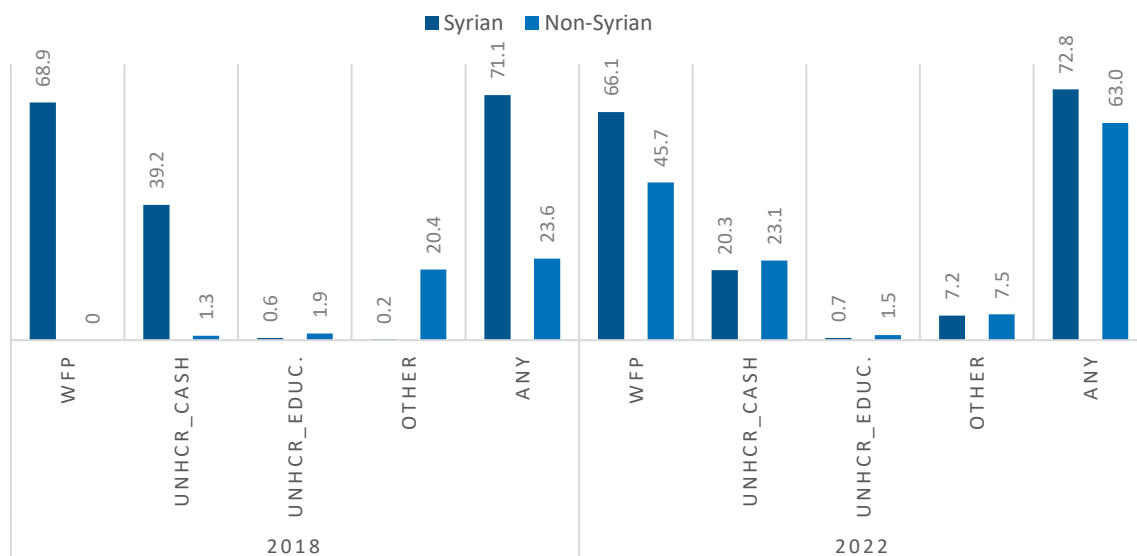
Table 5.17: Distribution of households by poverty dynamics and specific needs in 2022

	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total
<b>Syrian Households</b>										
<b>Total</b>	<b>9.6</b>	<b>6.7</b>	<b>25.9</b>	<b>57.9</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Any Disability</b>										
No	8.9	6.4	25.4	59.2	100.0	82.1	85.2	86.7	90.2	88.2
Yes	14.6	8.3	29.2	47.9	100.0	18.0	14.8	13.3	9.8	11.8
<b>Single Parent</b>										
No	8.2	6.7	25.7	59.4	100.0	82.1	96.3	95.2	98.3	95.8
Yes	41.2	5.9	29.4	23.5	100.0	18.0	3.7	4.8	1.7	4.2
<b>Non-Syrian Households</b>										
<b>Total</b>	<b>38.4</b>	<b>14.5</b>	<b>19.7</b>	<b>27.5</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Any Disability</b>										
No	36.3	14.8	19.5	29.4	100.0	82.6	89.7	86.8	93.4	87.4
Yes	53.0	11.9	20.7	14.4	100.0	17.4	10.4	13.2	6.6	12.6
<b>Single Parent</b>										
No	34.9	13.7	20.3	31.1	100.0	77.5	80.5	87.9	96.0	85.0
Yes	57.8	18.9	15.9	7.4	100.0	22.5	19.5	12.1	4.0	15.0

## Impact of UNHCR and WFP assistance on poverty dynamics among all Refugees

**Percentage of Syrian beneficiaries from UNHCR cash assistance declined significantly from 2018 to 2022, while non-Syrian beneficiaries increased significantly during the same period.** Most refugees in Egypt live in environments where they have access to basic services and markets in the same way as Egyptian do. Accordingly, supporting refugees with cash enables them to fulfil their basic needs. UNHCR uses cash-based interventions for Syrian and non-Syrian refugees to provide assistance and public services to the most vulnerable to allow them to build and support livelihoods. Additionally, WFP provides cash and vouchers to help refugees to meet a variety of needs, including access to food, water, shelter .... etc. Data presented in Figure 5.8 shows that the percentage of Syrian beneficiaries from UNHCR cash assistance decreased from 39% in 2018 to 20.3% in 2022, while there are no changes in the percentage of beneficiaries from education or WFP assistance. Almost two thirds of Syrian refugees received WFP assistance in both years: 2018 and 2022. On the other extreme, the percentage of non-Syrian beneficiaries from UNHCR cash assistance increased significantly from 1.3% in 2018 to 23% in 2022, while no change in the percentage of beneficiaries from UNHCR education assistance (almost 2%). Additionally, non-Syrian refugees started to receive WFP assistance after 2018 and the percentage of beneficiaries reached 46% in 2022 without affecting the percentage of Syrian refugees receiving this assistance as reported above.

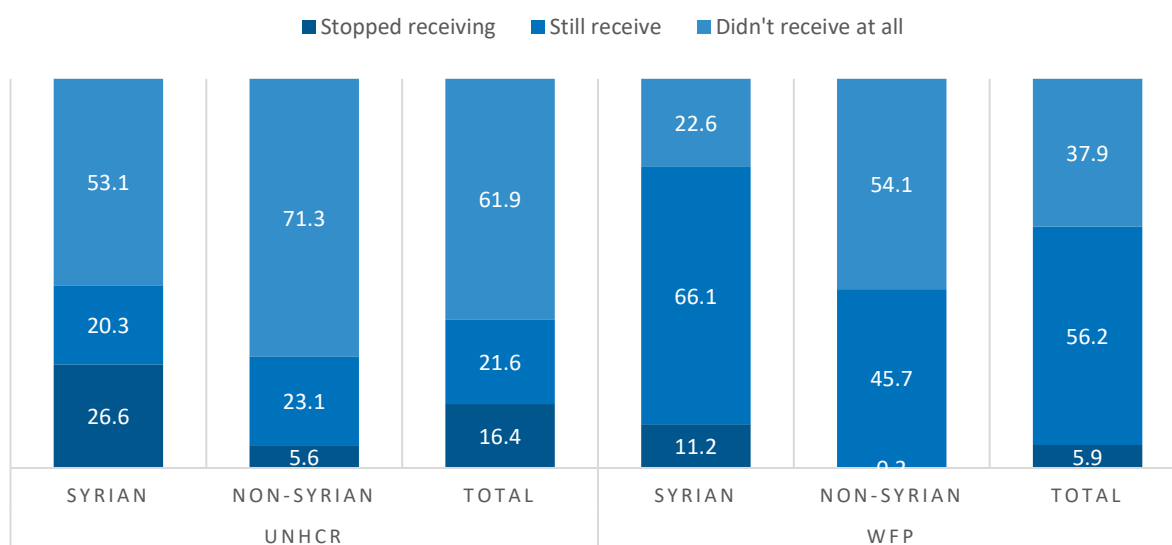
**Figure 5.8: Percentage of assistance beneficiaries in 2018 and 2022**



### ➤ Discontinuation of cash assistance in 2022

**Discontinuation of cash assistance provided to refugees has significant impact on poverty mobility, as it increases the likelihood of refugees to fall into poverty.** Overall, data presented in Figure 5.9 shows that 27% of Syrian refugees have stopped receiving UNHCR cash assistance in 2022, in addition, more than half (53%) did not ever receive MPCA, which affects their poverty mobility. Concerning non-Syrian refugees, the data shows that 71% of refugees did not ever receive UNHCR MPCA, and 6% stopped receiving UNHCR cash assistance in 2022.

Figure 5.9: Distribution of refugees by discontinuation of assistance at 2022



Regarding WFP cash/voucher assistance, the data shows that 11% of Syrian refugees have stopped receiving this assistance in 2022, in addition, less than quarter (23%) did not ever receive it. More than half (54%) of non-Syrian refugees did not ever receive WFP assistance as shown in the figure.

Table 5.18 shows that discontinuation of UNHCR cash assistance to Syrian refugees has great impact on their poverty mobility, while this is not obvious on non-Syrian refugees. Almost 39% of Syrian refugees who were cut off from UNHCR assistance in 2022 fell into poverty, compared to 33% among those who still receive MPCA in 2022. Additionally, only 3% of Syrian refugees who were cut off from MPCA moved out of poverty, while this percentage increased to 9% among those who still benefit of the assistance.

Regarding WFP cash/voucher assistance, the data shows that 23% of Syrian refugees who did not ever receive WFP assistance stayed in poverty between 2018 and 2022, while this percentage decreased to 7% among those who remained benefit of WFP assistance (Table 5.18).

Table 5.18: Distribution of refugees according to poverty mobility and discontinuation of UNHCR assistance in 2022

	Row %				Total	Column %				Total
	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor		Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	
<b>Syrian Refugees</b>										
Stopped receiving	9.3	2.7	39.0	49.0	100.0	24.7	10.7	33.4	25.1	26.6
Still receive	3.9	9.0	32.9	54.2	100.0	7.8	26.8	21.5	21.1	20.3
Didn't receive at all	12.8	8.0	26.4	52.8	100.0	67.5	62.5	45.1	53.9	53.1
<b>Total</b>	<b>10.1</b>	<b>6.8</b>	<b>31.1</b>	<b>52.1</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Non-Syrian Refugees</b>										
Stopped receiving	54.1	27.4	16.7	1.9	100.0	5.4	10.6	7.1	0.7	5.6
Still receive	67.4	13.4	12.1	7.1	100.0	27.7	21.4	21.0	10.2	23.1
Didn't receive at all	52.8	13.8	13.4	20.0	100.0	66.9	68.0	71.9	89.1	71.3
<b>Total</b>	<b>56.3</b>	<b>14.5</b>	<b>13.2</b>	<b>16.0</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

**Table 5.19: Distribution of refugees according to poverty mobility and discontinuation of WFP assistance in 2022**

	Row %				Total	Column %				Total
	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor		Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	
<b>Syrian Refugees</b>										
Stopped receiving	2.7	3.8	28.7	64.9	100.0	3.0	6.3	10.4	14.0	11.2
Still receive	6.8	3.6	35.1	54.6	100.0	44.6	34.8	74.6	69.4	66.1
Didn't receive at all	23.3	17.7	20.6	38.3	100.0	52.4	58.9	15.0	16.7	22.6
<b>Total</b>	<b>10.1</b>	<b>6.8</b>	<b>31.1</b>	<b>52.1</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Non-Syrian Refugees</b>										
Stopped receiving	100.0	0.0	0.0	0.0	100.0	0.4	0.0	0.0	0.0	0.2
Still receive	67.7	15.3	9.7	7.2	100.0	55.0	48.3	33.5	20.7	45.7
Didn't receive at all	46.4	13.9	16.3	23.4	100.0	44.6	51.7	66.5	79.3	54.1
<b>Total</b>	<b>56.3</b>	<b>14.5</b>	<b>13.2</b>	<b>16.0</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

➤ **Duration of cash assistance**

**Increasing the duration of receiving the assistances increases the likelihood of being non-poor, particularly among Syrian refugees.** Regarding the impact of duration of MPCA on poverty dynamics, Table 5.20 shows that 61% of Syrian refugees who receives MPCA for more than 5 years are remained non-poor compared to 52% at the national level. On the other extreme, only 5.6% of those who received MPCA for more than 5 years stayed in poverty compared to 10% at the national level. Similar results are observed regarding the WFP assistance.

**Table 5.20: Impact of duration of MPCA on poverty dynamics**

	Row Percent				Total	Column Percent				Total
	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor		Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	
<b>Syrian Refugees</b>										
Less than 2 years	100.0	0.0	0.0	0.0	100	7.8	0.0	0.0	0.0	0.8
24-35 months	14.0	0.0	28.0	58.0	100	4.2	0.0	2.7	3.4	3.0
36-60 months	5.8	7.9	45.2	41.0	100	13.3	26.8	33.4	18.1	22.9
More than 5 years	5.6	4.2	29.5	60.8	100	9.6	10.7	16.6	20.4	17.5
Never received	11.8	7.6	26.3	54.3	100	65.1	62.5	47.3	58.2	55.8
<b>Total</b>	<b>10.1</b>	<b>6.8</b>	<b>31.1</b>	<b>52.1</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Non-Syrian refugees</b>										
Less than 2 years	49.3	16.7	21.2	12.9	100	4.8	6.3	8.7	4.4	5.4
24-35 months	69.3	20.3	7.3	3.1	100	13.0	14.8	5.8	2.1	10.6
36-60 months	77.8	3.6	7.5	11.2	100	12.1	2.2	4.9	6.1	8.8
More than 5 years	62.6	18.9	15.6	2.9	100	9.0	10.6	9.6	1.5	8.1
Never received	51.2	14.3	14.0	20.5	100	61.1	66.3	71.0	86.0	67.1
<b>Total</b>	<b>56.3</b>	<b>14.5</b>	<b>13.2</b>	<b>16.0</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>



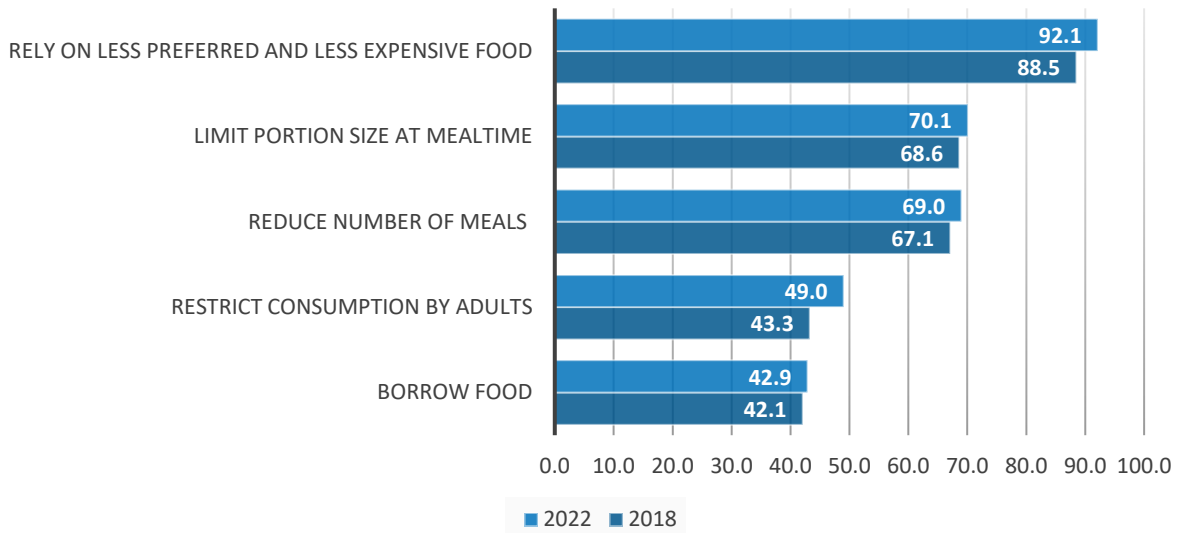
**Table 5.21: Impact of duration of WFP cash/voucher on poverty dynamics**

	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total	Stayed in Poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total
	Row Percent					Column Percent				
<i>Syrian Refugees</i>										
Less than 4 years	16.8	9.7	27.4	46.0	100	11.5	9.8	6.1	6.1	6.9
48-108 months	5.1	7.0	34.2	53.7	100	9.6	19.6	20.9	19.6	19.0
More than 9 years	5.2	1.1	35.7	58.1	100	25.9	8.0	58.0	56.3	50.5
Never received	22.6	18.0	19.7	39.7	100	53.0	62.5	15.0	18.1	23.7
<b>Total</b>	<b>10.1</b>	<b>6.8</b>	<b>31.1</b>	<b>52.1</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<i>Non-Syrian refugees<sup>13</sup></i>										
Less than 4 years	65.2	15.5	6.0	13.3	100	19.0	17.5	7.4	13.7	16.4
48-59 months	69.3	16.1	11.2	3.4	100	34.3	30.8	23.6	5.9	27.8
Never received	47.1	13.5	16.4	23.1	100	46.7	51.7	69.0	80.5	55.8
<b>Total</b>	<b>56.3</b>	<b>14.5</b>	<b>13.2</b>	<b>16.0</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

➤ **Coping strategies for lack of food during the 7 days prior to survey**

Households' food access remains a concern primarily among refugees, food insecurity has been shown to affect many dimensions of well-being as a form of deprivation. Refugees were asked to mention the main strategies adopted to cope with lack of food or money to buy food. There are several coping strategies that refugees use to manage household food shortage during the 7 days prior to survey.

**Figure 5.10: Percentage of households adopted coping strategies for lack of food during the 7 days prior to survey 2018-2022**



<sup>13</sup> Non-Syrian refugees started receiving WFP assistance in May 2019

**Consumption of cheaper food or less preferred food and reduce portion size at meals are the predominant coping strategies of households to cope with a lack of food or money to buy it.** Almost nine in every 10 households (89%) in 2018 rely on less expensive or less preferred food to cope with lack of food, while this percentage increased to 92% in 2022. Around 70% of households in both years reduced their meal size or reduce number of daily meals to cope with inadequate food.

Poverty mobility has a significant impact on coping strategies adopted by households to cope with lack of food. As expected, the percentage of households who employed any strategy to cope with food insufficiency among those who remained non-poor is significantly less than those who stayed in poverty during 2018-2022. Additionally, the results show that households who moved out of poverty between 2018 and 2022 employed most coping strategies to cope with food insufficiency more than those who moved into poverty (see Table 5.22).

**Table 5.22: Percentage of households employed different coping strategies in the 7 days prior to survey to cope with lack of food**

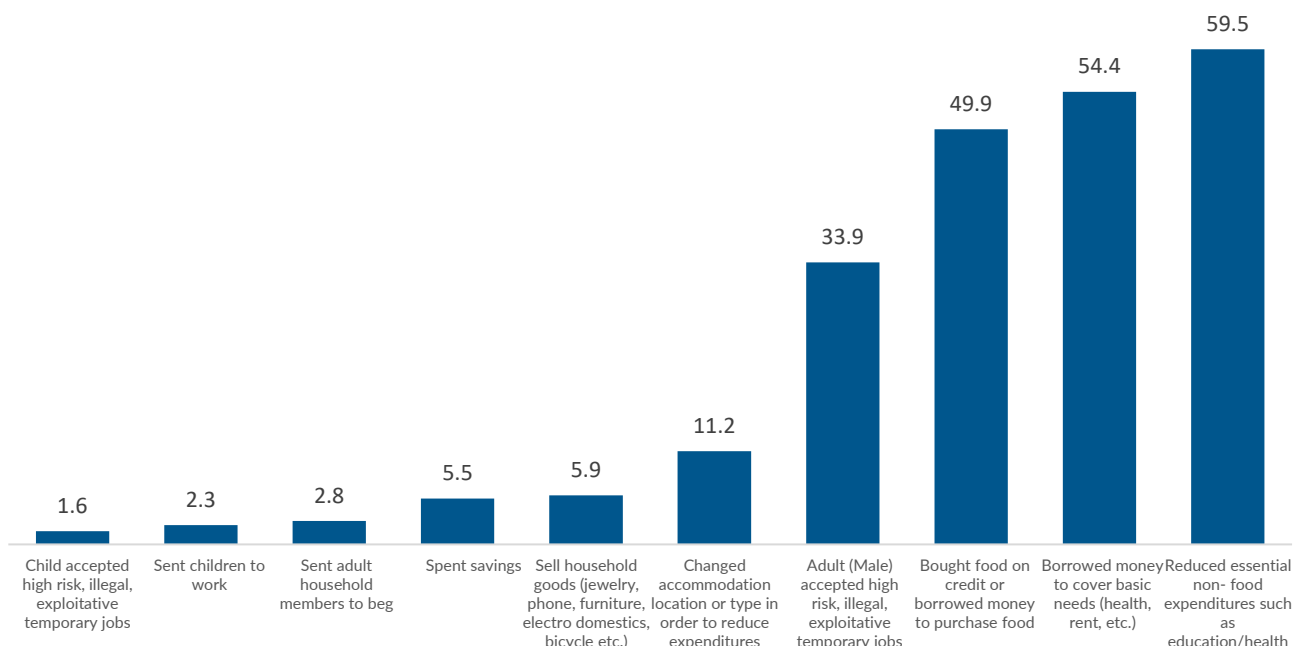
	Stayed in poverty	Moved out of poverty	Moved into poverty	Remained non-poor	Total
<i>Rely on less preferred and less expensive food</i>					
2018	96.2	93.7	87.5	82.7	88.5
2022	96.8	91.5	93.5	88.6	92.1
<i>Limit portion size at mealtime</i>					
2018	80.9	77.2	65.1	60.5	68.6
2022	80.2	75.1	71.3	61.7	70.1
<i>Reduce number of meals</i>					
2018	83.3	77.3	61.8	57.0	67.1
2022	78.8	77.7	67.0	61.5	69.0
<i>Restrict consumption by adults</i>					
2018	69.1	47.8	41.8	26.5	43.3
2022	75.8	52.3	55.2	27.7	49.0
<i>Borrow food</i>					
2018	56.3	56.9	34.8	33.0	42.1
2022	42.2	50.3	49.2	37.9	42.9

➤ **Coping strategies to meet basic needs during the 30 days prior to survey**

Households were asked to mention the strategies applied during the 30 days prior to survey to meet their insufficient basic needs. Some of these strategies are considered as short-term strategy, while others are considered as long-term strategy. Additionally, some strategies may have long term impact on households' living standards and households' human capital.

Overall, results show that 60% of refugee households in 2022<sup>14</sup> reduced essential non-food expenditures such as education or health to spend on other basic needs. Borrowed money to cover basic needs is the second common strategy, where 54% of households relied on borrowing money to meet their basic needs. Bought food on credit or borrowed money to purchase food was mentioned by half of refugee households. Accepting high risk, illegal, exploitative temporary jobs is one of the main strategies mentioned by 34% of households.

**Figure 5.11: Percentage of households applied strategies in the past 30 days to meet basic needs, 2022**



➤ **Impact of cash assistance on poverty status of refugees in 2022**

**Cash transfer has significant impact on poverty status of Syrian and non-Syrian refugees, where marked percentage of refugees moved from being poor to non-poor after receiving the assistance.** To examine the impact of cash transfers on poverty status of refugees, the distribution of refugees according to poverty status was calculated before and after receiving the cash transfer in 2022.

**Regarding Syrian refugees, 13% of poor refugees before receiving UNHCR cash assistance moved out of poverty after receiving MPCA, while education assistance has no impact on their poverty status.** Overall, the data shows that 6.3% of Syrian refugees moved from being poor to non-poor after receiving only the UNHCR cash assistance. In other words, the percentage of non-poor increased from 52.6% to 58.9% after receiving the UNHCR cash assistance in 2022. Concerning the distribution of poor before receiving MPCA, the table shows that 13.2% of poor refugees

<sup>14</sup> There is no comparable data in 2018.

moved out of poverty after receiving the UNHCR cash assistance. UNHCR education assistance has no impact on poverty status of Syrian refugees since less than one percent (0.7%) of Syrian refugees are the beneficiaries.

Since two thirds of Syrian refugees in 2022 are receiving WFP assistance, the impact of WFP transfers on poverty status is higher than other transfers. The data shows that one third (31%) of poor Syrian refugees before receiving WFP transfers moved out of poverty after receiving WFP assistance. Accordingly, the percentage of non-poor Syrian refugees increased from 40.7% to 58.9% after receiving WFP cash assistance in 2022.

Similar results are observed regarding the impact of cash assistance on poverty status of non-Syrian refugees as shown in Table 5.23. The percentage of poor non-Syrian refugees declined from 72.9% to 69.5% after receiving UNHCR cash transfers. Additionally, 6% of non-Syrian refugees are moved out of poverty after receiving WFP cash transfers in 2022.

**Table 5.23: Distribution of Syrian refugees according to poverty Status before and after receiving cash assistance in 2022**

		<b>Poverty without UNHCR Cash Assistance</b>								
		<b>% of population</b>			<b>% after receiving assistance (Row %)</b>			<b>% before receiving assistance (column %)</b>		
<b>Poverty after cash assistance</b>		<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>
<b>Non-Poor</b>		52.6	6.3	58.9	89.4	10.6	100.0	100.0	13.2	58.9
<b>Poor</b>		0.0	41.1	41.1	0.0	100.0	100.0	0.0	86.8	41.1
<b>Total</b>		52.6	47.4	100.0	52.6	47.4	100.0	100.0	100.0	100.0
		<b>Poverty without WFP Vouchers</b>								
		<b>% of population</b>			<b>% after receiving assistance (Row %)</b>			<b>% before receiving assistance (column %)</b>		
<b>Poverty after WFP assistance</b>		<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>
<b>Non-Poor</b>		40.7	18.2	58.9	69.1	30.9	100.0	100.0	30.7	58.9
<b>Poor</b>		0.0	41.1	41.1	0.0	100.0	100.0	0.0	69.3	41.1
<b>Total</b>		40.7	59.3	100.0	40.7	59.3	100.0	100.0	100.0	100.0
		<b>Poverty without other Assistance (UNICEF, Caritas &amp; NGOs)</b>								
		<b>% of population</b>			<b>% after receiving assistance (Row %)</b>			<b>% before receiving assistance (column %)</b>		
<b>Poverty after assistance</b>		<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>
<b>Non-Poor</b>		58.2	0.7	58.9	98.9	1.1	100.0	100.0	1.6	58.9
<b>Poor</b>		0.0	41.1	41.1	0.0	100.0	100.0	0.0	98.4	41.1
<b>Total</b>		58.2	41.8	100.0	58.2	41.8	100.0	100.0	100.0	100.0

**Table 5.24: Distribution of Non-Syrian refugees according to Poverty Status before and after receiving cash assistance in 2022**

<b>Poverty without UNHCR Cash Assistance</b>									
	<b>% of population</b>			<b>% after receiving assistance (Row %)</b>			<b>% before receiving assistance (column %)</b>		
	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>
<b>Poverty after cash assistance</b>									
Non-Poor	27.2	3.3	30.5	89.1	10.9	100.0	100.0	4.6	30.5
Poor	0.0	69.5	69.5	0.0	100.0	100.0	0.0	95.4	69.5
<b>Total</b>	<b>27.2</b>	<b>72.9</b>	<b>100.0</b>	<b>27.2</b>	<b>72.9</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Poverty without UNHCR Education Assistance</b>									
	<b>% of population</b>			<b>% after receiving assistance (Row %)</b>			<b>% before receiving assistance (column %)</b>		
	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>
<b>Poverty after assistance</b>									
Non-Poor	29.6	0.9*	30.5	96.9	3.1	100.0	100.0	1.3	30.5
Poor	0.0	69.5	69.5	0.0	100.0	100.0	0.0	98.7	69.5
<b>Total</b>	<b>29.6</b>	<b>70.5</b>	<b>100.0</b>	<b>29.6</b>	<b>70.5</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Poverty without WFP Vouchers</b>									
	<b>% of population</b>			<b>% after receiving assistance (Row %)</b>			<b>% before receiving assistance (column %)</b>		
	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>
<b>Poverty after WFP assistance</b>									
Non-Poor	24.3	6.2	30.5	79.8	20.2	100.0	100.0	8.1	30.5
Poor	0.0	69.5	69.5	0.0	100.0	100.0	0.0	91.9	69.5
<b>Total</b>	<b>24.3</b>	<b>75.7</b>	<b>100.0</b>	<b>24.3</b>	<b>75.7</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Poverty without other Assistance (UNICEF, Caritas &amp; NGOs)</b>									
	<b>% of population</b>			<b>% after receiving assistance (Row %)</b>			<b>% before receiving assistance (column %)</b>		
	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>	<b>Non-Poor</b>	<b>Poor</b>	<b>Total</b>
<b>Poverty after assistance</b>									
Non-Poor	29.5	1.0	30.5	96.7	3.3	100.0	100.0	1.4	30.5
Poor	0.0	69.5	69.5	0.0	100.0	100.0	0.0	98.6	69.5
<b>Total</b>	<b>29.5</b>	<b>70.5</b>	<b>100.0</b>	<b>29.5</b>	<b>70.5</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\*: Only one household in the panel sample received UNHCR education assistance

## Main Determinants of Chronic and Transitory Poverty among all Refugees

This section attempts to assess the impact of a change of a particular factor on the probability of an individual being chronic (stayed in poverty between 2018 and 2022), or fell into poverty, or moved out of poverty were all other factors constant. Multinomial logistic regression is used to model poverty mobility status between 2018 and 2022, in which the log odds of the outcomes are modeled as a linear combination of the predictor variables. The odds is the ratio of the probability of choosing one outcome category over the probability of choosing the baseline category (it is also referred to as relative risk).

The dependent variable has four levels of households' poverty mobility.

1. Always poor; poor in 2018 and in 2022,
2. Moved out of poverty: non-Poor in 2022 but was poor in 2018,
3. Fell into poverty: Poor in 2022 but was non-poor in 2018,
4. Always Non-Poor; non-poor in 2018 and in 2022

The predictor variables are grouped into 8 groups:

- ✓ **Place of residence** in 2022.
- ✓ **Change in demographic characteristics**; household size, number of children 0-17 years, number of elderlies, number of persons in working age.
- ✓ **Demographic characteristics in both 2018 and 2022**: child labor, single parent, high risk women, female headed households.
- ✓ **Receiving assistance in both 2018 and 2022**: UNHCR cash assistance, UNHCR education assistance, WFP cash/voucher, Caritas assistance, other organizations, additionally, discontinuation of receiving MPC assistance and WFP assistance.
- ✓ **Housing characteristics in 2018**; house type, ownership of house and change in housing occupancy type.
- ✓ **Employment status** in both years and changes in it, especially for household heads: Number of regular employed persons in 2018 and 2022, Number of temporary employed persons in 2018 and 2022, unemployment status of head 2022, change in regular employment and change in temporary employment of head between 2018 and 2022 and income contribution of heads.
- ✓ **Health and education status**: disability in both 2018 and 2022, Percentage of household adult members with basic education, with secondary education and university education in 2018 and 2022, percentage of heads with basic education, with secondary education and university education, percentage of children enrolled in school in 2018 and 2022,
- ✓ Other variables: number of durable goods in 2018 and 2022 and having valid residency in 2018.

➤ *Significance of the regression model*

Multinomial regression approach predicts which of the three categories (always poor, moved out of poverty and moved into poverty) that a household is likely to belong to, compared to a baseline (never poor) category given certain household's characteristics. The main goal of this regression is to be able to predict the group that a household in the future will belong to, depending on information on households' characteristics in the relevant date.

**The predicted model is significant with overall percent of correct classification 69.2%.** The overall model is statistically significant ( $p \leq 0.0001$ ), which means that the predicted model is significantly fits the data. The actual poverty mobility categories (the 4 categories) are compared with the predicted classifications from the model and the model shows 69.2% of overall correct classifications. Since we always concern by the agreement of the predicted classification with the actual classification, Table 5.25 presents the distribution of the predicted classification according to the actual classification. It shows that 74% of those who were classified by the model as "stayed in poverty" categories are actually in this category. The corresponding figures are 66% for "moved out of poverty" category, 60% in "moved into poverty" category and 69% for "remained non-poor" category.

**Table 5.25: Percentage of correct classifications**

	Predicted categories				Total	
	Stayed in poverty	Moved out of poverty	Moved into poverty	Remained non-poor		
Actual categories	Stayed in poverty	74.2	10.4	12.0	6.6	32.5
Moved out of poverty	9.3	65.7	4.5	4.4	10.6	
Moved into poverty	11.7	1.6	60.3	20.1	22.4	
Remained non-poor	4.8	22.2	23.3	68.9	34.5	
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	

➤ **Marginal analysis**

Marginal probability helps understand the relationship between household characteristics on the probability of staying in poverty or moving out or slipping into poverty. Marginal probability is the average of the predicted probabilities (estimated probabilities from the model) for certain variable holding all other variables in the model at their means.

Table 5.26 shows that probabilities of staying always in poverty increases for non-Syrian households. Demographic characteristics have strong impact on poverty mobility status. Increasing number of children significantly increases the probability of staying in poverty and moving into poverty, indicating that poverty increases as dependency ratio increases.

Additionally, existing of single parent in the base year (2018) increases the probability of household to stay in poverty. Number of members employed in regular jobs in the household has great impact on poverty mobility, where if no members in the household work in regular jobs in both years increases the probability of staying in poverty or fell into poverty.

Mobility status is significantly affected by change in receiving cash assistance during the period 2018 and 2022. Increasing UNHCR and WFP cash assistance increases the probability of moving out of poverty and decreasing this assistance increases the probability of slipping into poverty as shown in the table and Figures 5.13 and 5.14.

**Table 5.26: Marginal probabilities of poverty mobility categories for explanatory variables**

	Stayed in Poverty			Moved out of Poverty			Slipping into Poverty		
	Margin	Std. Err.	P>z	Margin	Std. Err.	P>z	Margin	Std. Err.	P>z
<i>Nationality</i>									
Syrian	<b>26.0%</b>	5.6%	0.00	<b>3.0%</b>	1.0%	0.00	<b>36.9%</b>	5.2%	0.00
Non-Syrian	<b>32.5%</b>	5.8%	0.00	<b>4.0%</b>	1.4%	0.00	<b>32.7%</b>	5.6%	0.00
<i>Region_2022</i>									
Metropolitan	<b>34.1%</b>	5.2%	0.00	<b>3.9%</b>	1.3%	0.00	<b>33.9%</b>	4.4%	0.00
Lower Egypt	<b>13.6%</b>	5.4%	0.01	<b>4.5%</b>	1.7%	0.01	<b>41.5%</b>	6.7%	0.00
Upper & Frontier	<b>34.1%</b>	4.8%	0.00	<b>2.4%</b>	0.9%	0.01	<b>30.8%</b>	4.6%	0.00
				<i>changes_child</i>					
Increased	<b>37.9%</b>	11.5%	0.00	<b>0.6%</b>	0.4%	0.14	<b>40.2%</b>	10.9%	0.00
Unchanged	<b>23.2%</b>	4.7%	0.00	<b>2.1%</b>	0.9%	0.02	<b>27.3%</b>	4.5%	0.00
Decreased	<b>25.6%</b>	7.9%	0.00	<b>18.6%</b>	6.7%	0.01	<b>34.4%</b>	8.6%	0.00
				<i>changes_elderly</i>					
Increased	<b>19.3%</b>	15.6%	0.22	<b>0.3%</b>	0.4%	0.39	<b>44.9%</b>	16.6%	0.01
Unchanged	<b>29.3%</b>	3.6%	0.00	<b>3.7%</b>	1.0%	0.00	<b>35.2%</b>	3.5%	0.00
Decreased	<b>31.0%</b>	15.3%	0.04	<b>6.1%</b>	5.2%	0.24	<b>20.9%</b>	11.0%	0.06
				<i>changes_workage</i>					
Increased	<b>23.1%</b>	8.9%	0.01	<b>0.7%</b>	0.5%	0.14	<b>45.1%</b>	9.5%	0.00
Unchanged	<b>30.2%</b>	4.5%	0.00	<b>5.1%</b>	1.6%	0.00	<b>32.4%</b>	4.8%	0.00
Decreased	<b>32.4%</b>	13.3%	0.02	<b>12.2%</b>	6.9%	0.08	<b>24.5%</b>	10.0%	0.02
				<i>change_hhsize</i>					
Increased	<b>28.6%</b>	9.6%	0.00	<b>8.8%</b>	4.7%	0.06	<b>39.1%</b>	10.8%	0.00
Unchanged	<b>23.4%</b>	4.7%	0.00	<b>2.6%</b>	0.8%	0.00	<b>42.5%</b>	5.0%	0.00
Decreased	<b>38.0%</b>	15.4%	0.01	<b>1.7%</b>	1.4%	0.20	<b>17.7%</b>	6.9%	0.01



	<i>single_parent_2018</i>								
No	<b>28.6%</b>	3.7%	0.00	<b>3.4%</b>	1.1%	0.00	<b>35.7%</b>	3.8%	0.00
Yes	<b>35.8%</b>	22.8%	0.12	<b>4.6%</b>	5.6%	0.41	<b>24.5%</b>	14.9%	0.10
	<i>child_risk_2018</i>								
No	<b>27.8%</b>	3.4%	0.00	<b>3.7%</b>	1.0%	0.00	<b>37.9%</b>	3.5%	0.00
Yes	<b>8.8%</b>	10.5%	0.40	<b>0.0%</b>	0.0%	0.55	<b>0.0%</b>	0.0%	0.43
	<i>disability_2018</i>								
No	<b>30.7%</b>	4.5%	0.00	<b>3.4%</b>	1.1%	0.00	<b>32.4%</b>	4.0%	0.00
Yes	<b>15.3%</b>	10.2%	0.13	<b>3.4%</b>	2.6%	0.19	<b>59.5%</b>	15.3%	0.00
	<i>single_parent_2022</i>								
No risk	<b>27.0%</b>	3.6%	0.00	<b>3.1%</b>	0.9%	0.00	<b>34.1%</b>	3.7%	0.00
Risk exists	<b>47.0%</b>	15.7%	0.00	<b>7.7%</b>	10.5%	0.46	<b>34.4%</b>	13.7%	0.01
	<i>child_risk_2022</i>								
No risk	<b>29.6%</b>	3.7%	0.00	<b>3.6%</b>	1.0%	0.00	<b>34.1%</b>	3.5%	0.00
Risk exists	<b>16.2%</b>	8.4%	0.05	<b>1.1%</b>	1.3%	0.38	<b>57.2%</b>	15.8%	0.00
	<i>disability_2022</i>								
No risk	<b>25.0%</b>	3.6%	0.00	<b>3.6%</b>	1.0%	0.00	<b>38.8%</b>	3.9%	0.00
Risk exists	<b>56.3%</b>	18.4%	0.00	<b>2.3%</b>	1.8%	0.20	<b>15.3%</b>	9.3%	0.10
	<i>Difference_UNHCR_cash</i>								
No change/ decrease	<b>19.4%</b>	8.4%	0.02	<b>2.5%</b>	1.5%	0.10	<b>46.5%</b>	8.2%	0.00
Assistance increase	<b>41.7%</b>	21.3%	0.05	<b>15.5%</b>	12.4%	0.21	<b>20.3%</b>	10.6%	0.06
Never take	<b>27.9%</b>	6.2%	0.00	<b>2.4%</b>	1.0%	0.02	<b>35.4%</b>	5.2%	0.00
	<i>Difference_WFP_voucher</i>								
No change/ decrease	<b>7.6%</b>	3.4%	0.03	<b>1.0%</b>	0.7%	0.13	<b>44.9%</b>	7.7%	0.00
Assistance increase	<b>33.7%</b>	10.7%	0.00	<b>14.2%</b>	6.8%	0.04	<b>27.6%</b>	7.5%	0.00
Never take	<b>55.5%</b>	13.6%	0.00	<b>2.3%</b>	1.3%	0.09	<b>22.4%</b>	8.2%	0.01
	<i>Change No. of regular employment</i>								
Increased	<b>25.4%</b>	10.9%	0.02	<b>0.1%</b>	0.0%	0.08	<b>8.4%</b>	4.1%	0.04
Decreased	<b>1.2%</b>	1.5%	0.42	<b>93.2%</b>	7.5%	0.00	<b>4.2%</b>	4.8%	0.39
No regular employed in both years	<b>37.2%</b>	9.0%	0.00	<b>0.0%</b>	0.0%	0.05	<b>30.1%</b>	6.3%	0.00
	<i>Change No. of temporary employment</i>								
Increased	<b>40.0%</b>	9.8%	0.00	<b>3.9%</b>	1.8%	0.03	<b>26.4%</b>	7.6%	0.00
Decreased	<b>7.3%</b>	5.9%	0.22	<b>12.1%</b>	7.8%	0.12	<b>41.8%</b>	17.1%	0.01
No temporary employed in both years	<b>35.3%</b>	10.1%	0.00	<b>0.8%</b>	0.5%	0.10	<b>33.3%</b>	8.6%	0.00

Figure 5.12: Marginal probabilities of being always poor between 2018-2022

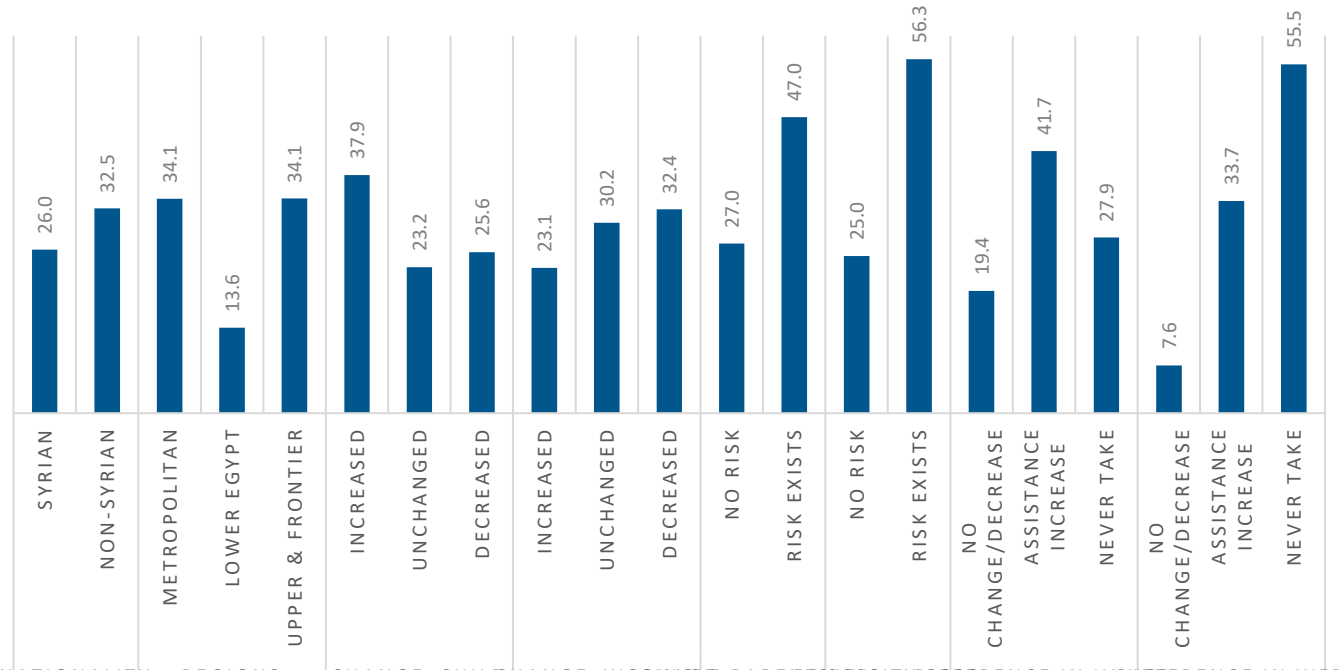


Figure 5.13: Marginal probabilities of moving out of poverty between 2018-2022

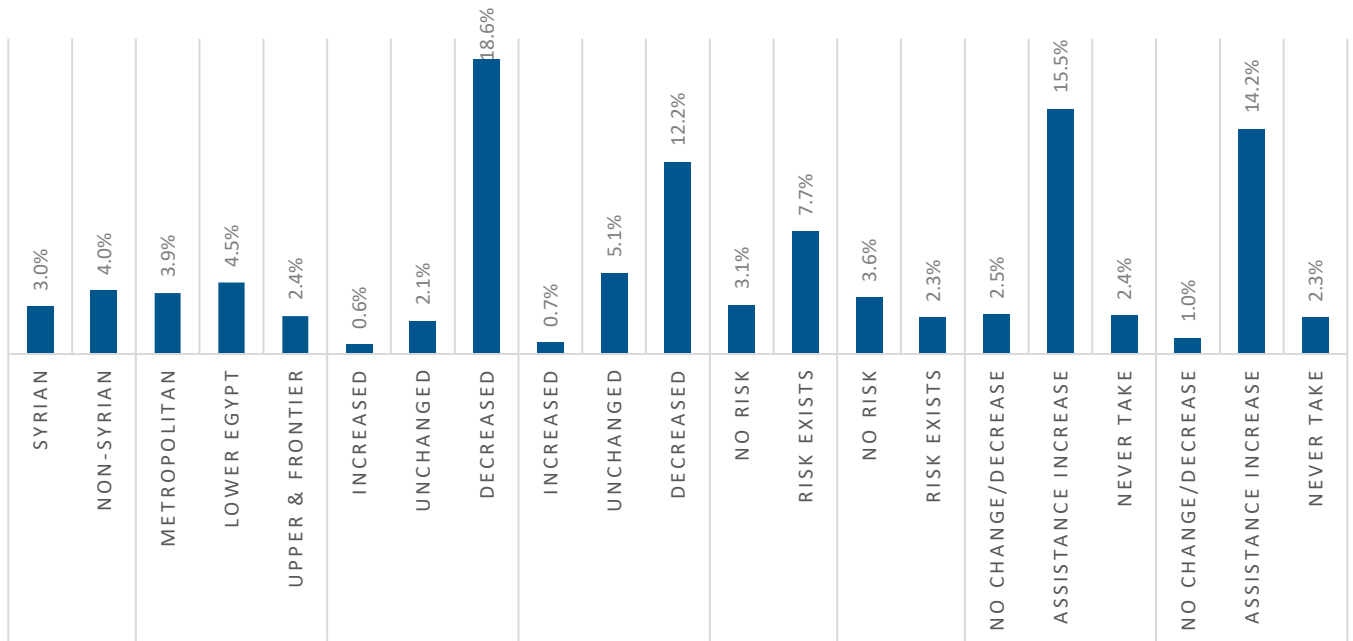


Figure 5.14: Marginal probabilities of falling into poverty between 2018-2022

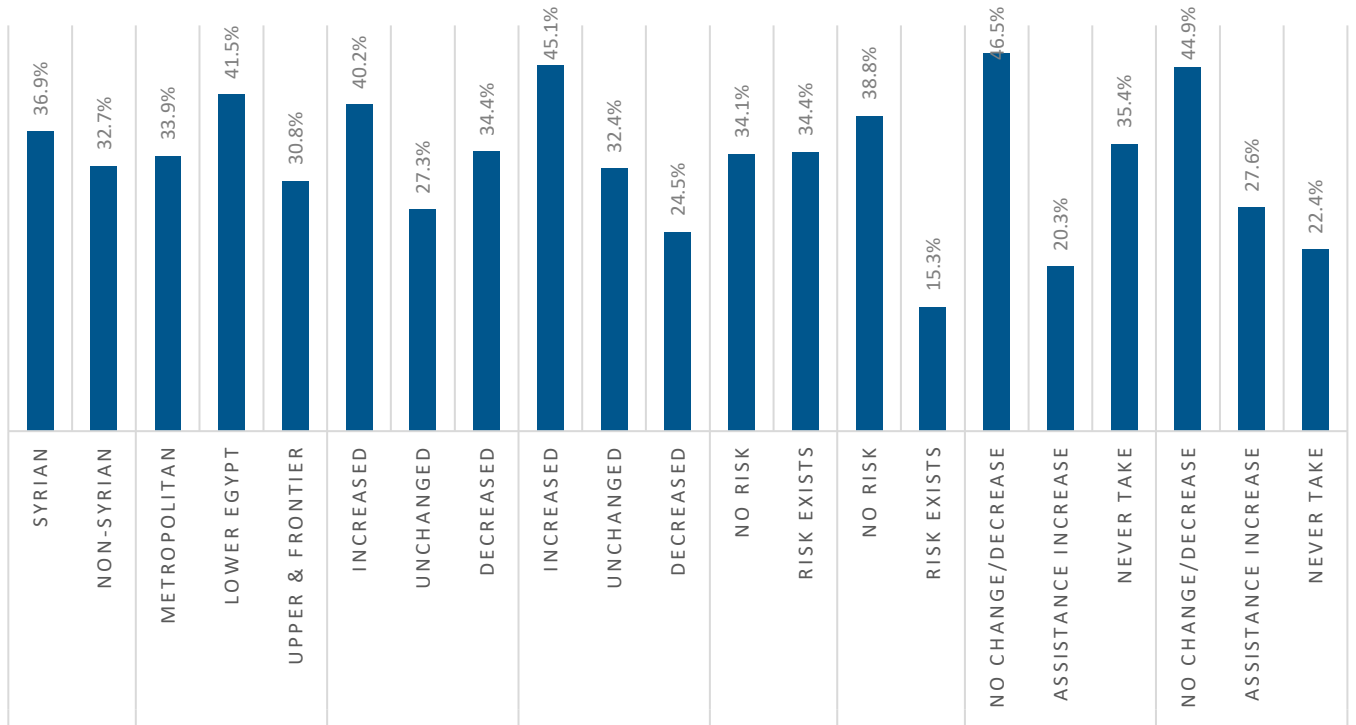
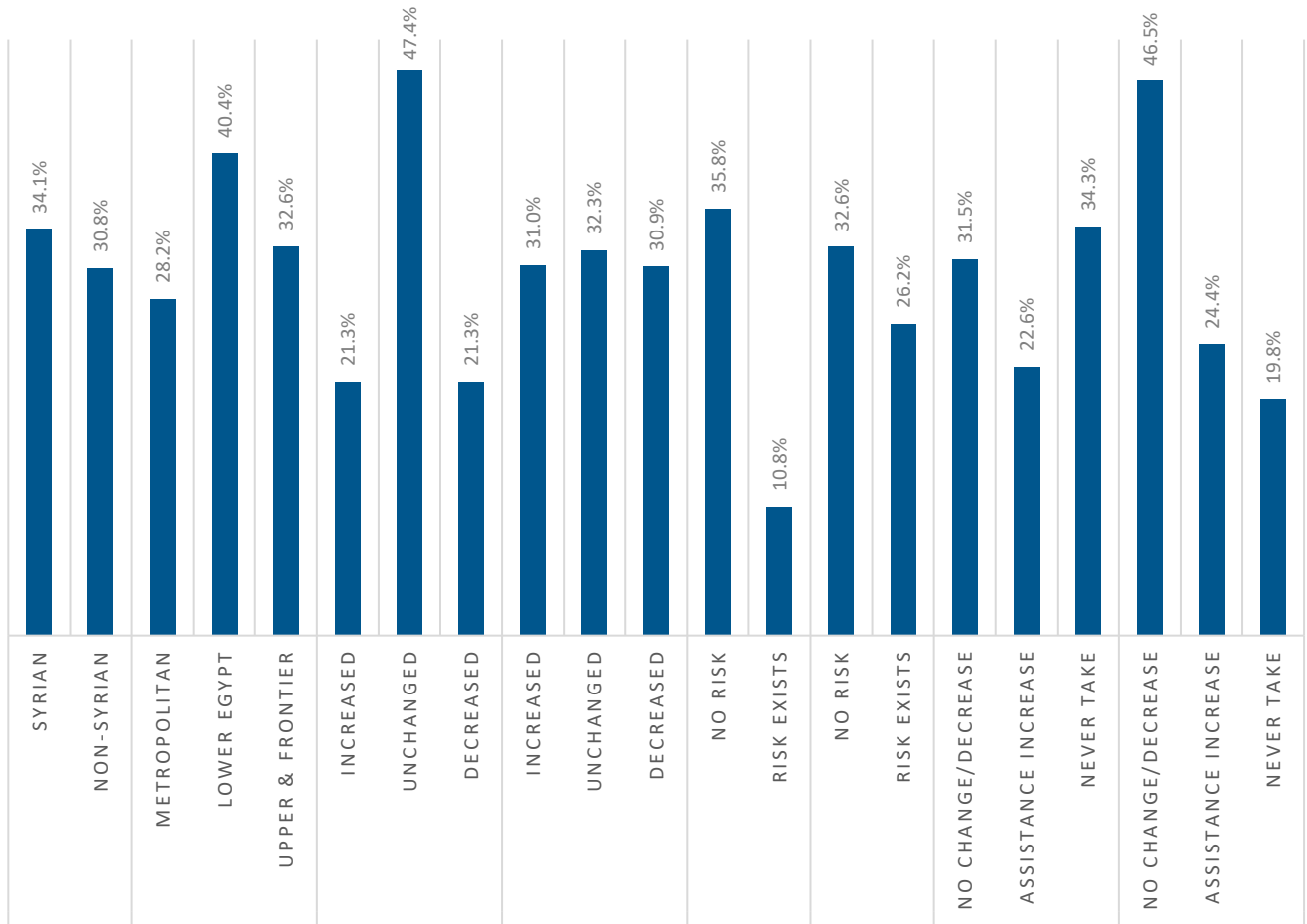


Figure 5.15: Marginal probabilities of being never poor between 2018-2022



## Main determinants of chronic poverty (always poor)

### ➤ Nationality

Non-Syrian households are more likely to be chronic poor with relative risk 1.4, thus being non-Syrian increase the probability of chronic poor by 40% compared with Syrian households.

### ➤ Place of residence and durable goods

**Living in metropolitan areas increases the risk of chronic poor compared with other regions.** Living in Metropolitan region increases the risk for being always poor category vs. in never poor category compared to other regions. The risk for being always poor category vs. in never poor category in Lower Egypt is 0.28, which means that living in metropolitan increases the risk of always poor by 3.6 times (1/0.28) compared with Lower Egypt, while the corresponding figure for Upper Egypt is only 1.16 times.

**Increases the number of items of durable goods decreases the risk of staying in poverty.** Increasing the durable goods<sup>15</sup> has significant impact on decreasing the risk of staying in poor category. The relative risk ratio for a one-unit increases in durable goods in 2018 and 2022 is .68 and 0.69, respectively, for being in always poor vs. always non-poor. This means increases durable goods by one unit decreases the risk of always poor by almost 45%.

### ➤ Demographic and socio-economic characteristics

**Households experienced increase in their number of members as well as increase in number of children are more likely to be always poor compared with never poor category.** Change in household size and age composition has great impact on being always poor vs. never poor category. The probability of being always poor to being never poor decreases as household size decrease. The relative risk ratio is 0.73 for being always poor vs. always non-poor. Thus, the probability of being never poor versus being always poor is 1.37 times for households who experienced decrease in the number of their members. Similar result is observed for change in number of children, where households experienced decline in the number of children has lower probability of being always poor relative to always non-poor by 48%.

Gender of head has a significant impact on being always poor vs. non-poor, where male headed household has lower risk of being always poor than female headed household.

**Heads have university education in base year (2018) decreases the risk of being always poor.** Education of heads has an impact on poverty mobility status, where increasing education of heads from being basic to secondary to university decreases the likelihood of being always poor. The probability of being never poor versus being always poor is 5 times for households with heads have university education compared with those with illiterate heads.

Additionally, the occurrence of valid residency of heads decreases the risk of being always poor vs. never poor category.

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<sup>15</sup> Durable goods include 10 items: Water heater, Washing machine, TV, Stove, smartphone, Refrigerator, motorcycle/car, Computer, Air conditioning and Heating for house.

**Table 5.27: Multinomial regression results: Always poor category between 2018 and 2022 compared with never poor category**

	Coef.	std error	z	P>z	Relative risk ratio
<i>Nationality</i>					
Non-Syrian	0.33	0.49	0.66	0.51	1.39
<i>Region in 2022</i>					
Lower Egypt	-1.28	0.56	-2.26	0.02	0.28
Upper & Frontier	-0.14	0.32	-0.45	0.65	0.87
<i>Changes in no. of children</i>					
unchanged	-1.29	0.59	-2.18	0.03	0.28
decreased	-0.39	0.93	-0.42	0.67	0.68
<i>Changes in no. of elderlies</i>					
unchanged	0.53	1.03	0.51	0.61	1.70
decreased	0.31	1.45	0.21	0.83	1.36
<i>Changes in no. of work age</i>					
unchanged	0.23	0.61	0.38	0.71	1.26
decreased	0.34	1.15	0.30	0.77	1.41
<i>Changes in hhsiz</i>					
Unchanged	-0.50	0.63	-0.78	0.43	0.61
Decreased	-0.31	1.19	-0.26	0.79	0.73
<i>Sex_head_2018 (Female ®)</i>	-1.38	0.41	-3.38	0.00	0.25
<i>Child labour in 2018</i>	-1.18	0.63	-1.85	0.06	0.31
<i>Child labour in 2022</i>	-3.09	1.11	-2.78	0.01	0.05
<i>Single_parent_2018</i>	0.14	1.46	0.10	0.92	1.15
<i>Child_risk_2018</i>	-2.24	1.32	-1.69	0.09	0.11
<i>Disability_2018</i>	-0.27	0.97	-0.28	0.78	0.76
<i>Single_parent_2022</i>					
Risk exists	1.75	1.25	1.41	0.16	5.77
<i>Child_risk_2022</i>					
Risk exists	-0.36	0.91	-0.39	0.70	0.70
<i>Disability_2022</i>					
Risk exists	1.03	0.89	1.16	0.25	2.81
<i>UNHCR_cash_2022</i>	-1.40	1.10	-1.27	0.20	0.25
<i>Difference_UNHCR_cash</i>					
Assistance increase	1.10	1.04	1.06	0.29	3.00
Never take	0.28	0.71	0.39	0.70	1.32
<i>WFP_food_voucher_2022</i>	0.02	0.96	0.02	0.98	1.02
<i>Difference_WFP_voucher</i>					
Assistance increase	2.13	0.68	3.14	0.00	8.45
Never take	2.84	0.92	3.10	0.00	17.14
<i>Regular_empl_2018</i>	-0.95	0.66	-1.43	0.15	0.39
<i>Temporary empl_2018</i>	-0.53	0.62	-0.85	0.39	0.59
<i>Change in no. of regular employed</i>					
unchanged	0.56	1.17	0.48	0.63	1.75
decreased	0.80	1.15	0.69	0.49	2.22
<i>No regular employed in both years</i>	1.09	0.51	2.15	0.03	2.97
<i>Change in no. of temp empl</i>					
unchanged	-0.27	0.79	-0.34	0.73	0.76

<i>decreased</i>	-1.96	1.24	-1.58	0.12	0.14
No temporary employed in both years	-0.16	0.42	-0.37	0.71	0.86
<i>head_reg_empl_2018</i>	0.34	0.71	0.47	0.64	1.40
<i>head_temp_empl_2018</i>	2.07	0.82	2.54	0.01	7.93
<i>changes_reg_empl_head</i>	-0.13	1.20	-0.11	0.91	0.88
<i>changes_temp_empl_head</i>	-2.17	0.80	-2.73	0.01	0.11
<i>illiterate_2018</i>	0.39	0.64	0.61	0.55	1.47
<i>basic_2018</i>	0.29	0.38	0.76	0.45	1.34
<i>sec_2018</i>	0.19	0.41	0.47	0.64	1.21
<i>university_2018</i>	0.99	0.41	2.44	0.02	2.69
<i>enrol_2018</i>	-0.02	0.20	-0.12	0.91	0.98
<i>illiterate_2022</i>	1.06	0.54	1.94	0.05	2.88
<i>basic_2022</i>	0.81	0.37	2.18	0.03	2.25
<i>sec_2022</i>	0.73	0.38	1.90	0.06	2.07
<i>university_2022</i>	0.00	0.40	-0.01	0.99	1.00
<i>enrol_2022</i>	1.38	0.19	7.32	0.00	3.96
<i>hh_basic_2018</i>	-0.69	0.72	-0.96	0.34	0.50
<i>hh_sec_2018</i>	-0.26	0.76	-0.35	0.73	0.77
<i>hh_university_2018</i>	-1.57	0.85	-1.84	0.07	0.21
<i>durable_2018</i>	-0.39	0.11	-3.58	0.00	0.68
<i>durable_2022</i>	-0.38	0.10	-3.69	0.00	0.69
<i>valid_residency_2018</i>	-0.21	0.32	-0.66	0.51	0.81
Constant	0.06	2.00	0.03	0.98	1.06

➤ **Main Determinants of moving out of poverty**

**Assistance**

**Increasing the amount/ continuation of UNHCR and WFP cash assistances increases significantly the probability of moving out of poverty.** Increases UNHCR cash assistance during the period 2018 and 2022 increases probability of moving out of poverty compared to being always non-poor by 8.7 times. In other words, the expected risk of moving out of poverty category is 8.7 times for households who have UNHCR assistance increased during the period 2018-2022. Similar result is observed for WFP cash/voucher assistance, where the expected risk of moving out of poverty is 27 times among households who experienced increase in WFP assistance compared to being always non-poor.

**Demographic and socio-economic characteristics**

**Decreasing number of children and elderlies increases significantly the relative risk of moving out of poverty.** The probability of moving out of poverty to being never poor increases as number of children decrease. The relative risk ratio is 31.4 for moving out of poverty vs. always non-poor. Similar result is observed for number of elderlies, where decreasing number of elderlies increases the relative risk of moving out of poverty by 16.4 times compared with being never poor.

**The relative risk of moving out of poverty vs. always non-poor increases when number of child labour decreases and enrollment rate increases as well as number having university education increases.** The probability of moving out of poverty increases as the number of adults having university education in the base year (2018) increases. Moreover, the relative risk of moving out of poverty increases as the enrollment rate among children 6-18 years at the end year (2022) increases.

**Table 5.28: Multinomial regression results: moving out of poverty category between 2018 and 2022**

	Coef.	std error	z	P>z	Relative risk ratio
<i>Nationality</i>					
Non-Syrian	0.39	0.50	0.79	0.43	1.48
<i>Region in 2022</i>					
Lower Egypt	-0.20	0.53	-0.37	0.71	0.82
Upper & Frontier	-0.62	0.41	-1.50	0.13	0.54
<i>Changes in no. of children</i>					
unchanged	0.45	0.80	0.56	0.58	1.57
decreased	3.45	1.09	3.16	0.00	31.38
<i>Changes in no. of elderlies</i>					
unchanged	2.57	1.22	2.11	0.04	13.11
decreased	2.80	1.60	1.75	0.08	16.43
<i>Changes in no. of work age</i>					
unchanged	1.90	0.76	2.50	0.01	6.71
decreased	2.81	1.30	2.17	0.03	16.66
<i>Changes in hhsiz</i>					
Unchanged	-1.52	0.73	-2.10	0.04	0.22
Decreased	-2.21	1.38	-1.60	0.11	0.11
<i>Sex_head_2018 (Female ®)</i>	-0.27	0.59	-0.46	0.64	0.76
<i>Child labour in 2018</i>	-0.99	0.56	-1.76	0.08	0.37
<i>Child labour in 2022</i>	-1.54	1.24	-1.24	0.22	0.21
<i>Single_parent_2018</i>	0.23	1.87	0.12	0.90	1.26



<i>Child_risk_2018</i>	-15.96	1.74	-9.16	0.00	0.00
<i>Disability_2018</i>	0.44	1.08	0.40	0.69	1.55
<i>Single_parent_2022</i>					
<i>Risk exists</i>	2.11	1.88	1.12	0.26	8.25
<i>Child_risk_2022</i>					
<i>Risk exists</i>	-0.89	1.24	-0.72	0.47	0.41
<i>Disability_2022</i>					
<i>Risk exists</i>	-0.23	1.02	-0.23	0.82	0.79
<i>UNHCR_cash_2022</i>	-2.09	1.03	-2.03	0.04	0.12
<i>Difference_UNHCR_cash</i>					
<i>Assistance increase</i>	2.16	1.03	2.11	0.04	8.71
<i>Never take</i>	-0.12	0.84	-0.14	0.89	0.89
<i>WFP_food_voucher_2022</i>	-1.46	0.97	-1.51	0.13	0.23
<i>Difference_WFP_voucher</i>					
<i>Assistance increase</i>	3.29	0.85	3.89	0.00	26.97
<i>Never take</i>	1.68	0.95	1.77	0.08	5.37
<i>Regular_empl_2018</i>	-14.60	1.17	-12.44	0.00	0.00
<i>Temporary empl_2018</i>	-1.28	0.67	-1.92	0.05	0.28
<i>Change in no. of temp empl</i>					
<i>unchanged</i>	0.52	0.90	0.58	0.56	1.68
<i>decreased</i>	0.87	1.09	0.80	0.42	2.39
<i>No temporary employed in both years</i>	-1.57	0.60	-2.64	0.01	0.21
<i>head_reg_empl_2018</i>	1.36	1.34	1.01	0.31	3.89
<i>head_temp_empl_2018</i>	-0.03	0.70	-0.05	0.96	0.97
<i>changes_reg_empl_head</i>	-2.35	1.37	-1.72	0.09	0.10
<i>changes_temp_empl_head</i>	-0.44	0.78	-0.57	0.57	0.64
<i>illiterate_2018</i>	1.41	0.74	1.90	0.06	4.10
<i>basic_2018</i>	0.11	0.38	0.30	0.76	1.12
<i>sec_2018</i>	0.55	0.43	1.28	0.20	1.74
<i>university_2018</i>	1.77	0.42	4.23	0.00	5.87
<i>enrol_2018</i>	-0.02	0.23	-0.09	0.93	0.98
<i>illiterate_2022</i>	-0.32	0.75	-0.43	0.67	0.72
<i>basic_2022</i>	0.24	0.40	0.61	0.54	1.28
<i>sec_2022</i>	-0.15	0.37	-0.40	0.69	0.86
<i>university_2022</i>	-1.20	0.44	-2.73	0.01	0.30
<i>enrol_2022</i>	0.72	0.22	3.32	0.00	2.05
<i>hh_basic_2018</i>	0.70	0.88	0.80	0.43	2.01
<i>hh_sec_2018</i>	0.82	0.94	0.87	0.39	2.26
<i>hh_university_2018</i>	-0.43	0.98	-0.44	0.66	0.65
<i>durable_2018</i>	-0.24	0.12	-1.98	0.05	0.79
<i>durable_2022</i>	-0.05	0.11	-0.44	0.66	0.95
<i>valid_residency_2018</i>	-0.60	0.37	-1.63	0.10	0.55
<i>Constant</i>	-5.34	2.51	-2.13	0.03	0.00

### ➤ *Main determinants of slipping into poverty*

Results of regression analysis show that non-Syrian households are more likely to be chronic poor or moved out of poverty but less likely to fall into poverty compared with Syrian households. Additionally, the results show that male headed households are less likely to fall into poverty compared to being always non-poor.

### ➤ *Assistance*

**Receiving UNHCR / WFP assistance in 2022 or increasing the amount of UNHCR cash assistances during the period 2018-2022 decreases markedly the probability of slipping into poverty.** UNHCR assistance in 2022 has an insignificant impact with relative risk ratio of 0.85, thus receiving UNHCR assistance in 2022 decreased the probability of slipping into poverty compared to being always non-poor. Additionally, the relative risk of slipping into poverty category vs. in never poor category decreases by 0.52 for households receiving WFP assistance in 2022. In other words, the expected risk of slipping into poverty category is half for households who are received WFP assistance.

### ➤ *Demographic and socio-economic characteristics*

The relationship between household size, number of children, elderlies and adults and slipping into poverty is obvious as shown in Table 5.29. The probability of slipping into poverty decreases as household size decrease, where the relative risk ratio is 0.25 for slipping into poverty vs. always non-poor. Thus, the probability of being never poor versus slipping into poverty is 4 times for households who experienced decrease in the number of their members. Similar result is observed regarding number of children, where the probability of being never poor versus slipping into poverty increased by 17% for households who experienced decrease in the number of their children.

**Occurrence of single parent and child at risk in 2022 increases the relative risk of slipping into poverty vs. always non-poor.** The relative risk of slipping into poverty for the existence of single parent in 2022 is 3 times compared with always never poor category. The corresponding figure for the existence of child at risk in 2022 is 2 times compared with always never poor category.

The relative risk of slipping into poverty vs. always non-poor increases as the number of regular employed members decreases. In other words, decrease the number one regular employment in 2022 increases the probability of slipping into poverty relative of being always non-poor by 23 times. The impact of the number of temporary employments followed similar direction, with smaller magnitude.

### ➤ *Place of residence, housing characteristics and durables*

Living in Metropolitan region increases the risk for slipping into poverty category vs. in never poor category compared to other regions. The relative risk for being in never poor category in Lower and Upper Egypt increased by 17% and 27% respectively compared with metropolitan region.

**For both 2018 and 2022, a one-unit increase in durable goods decreases the risk of slipping into poverty.** In other words, the probability of being in never poor category increases by 11% and 29% with one unit increase in durable goods in 2018 and 2022 respectively compared with slipping into poverty category.

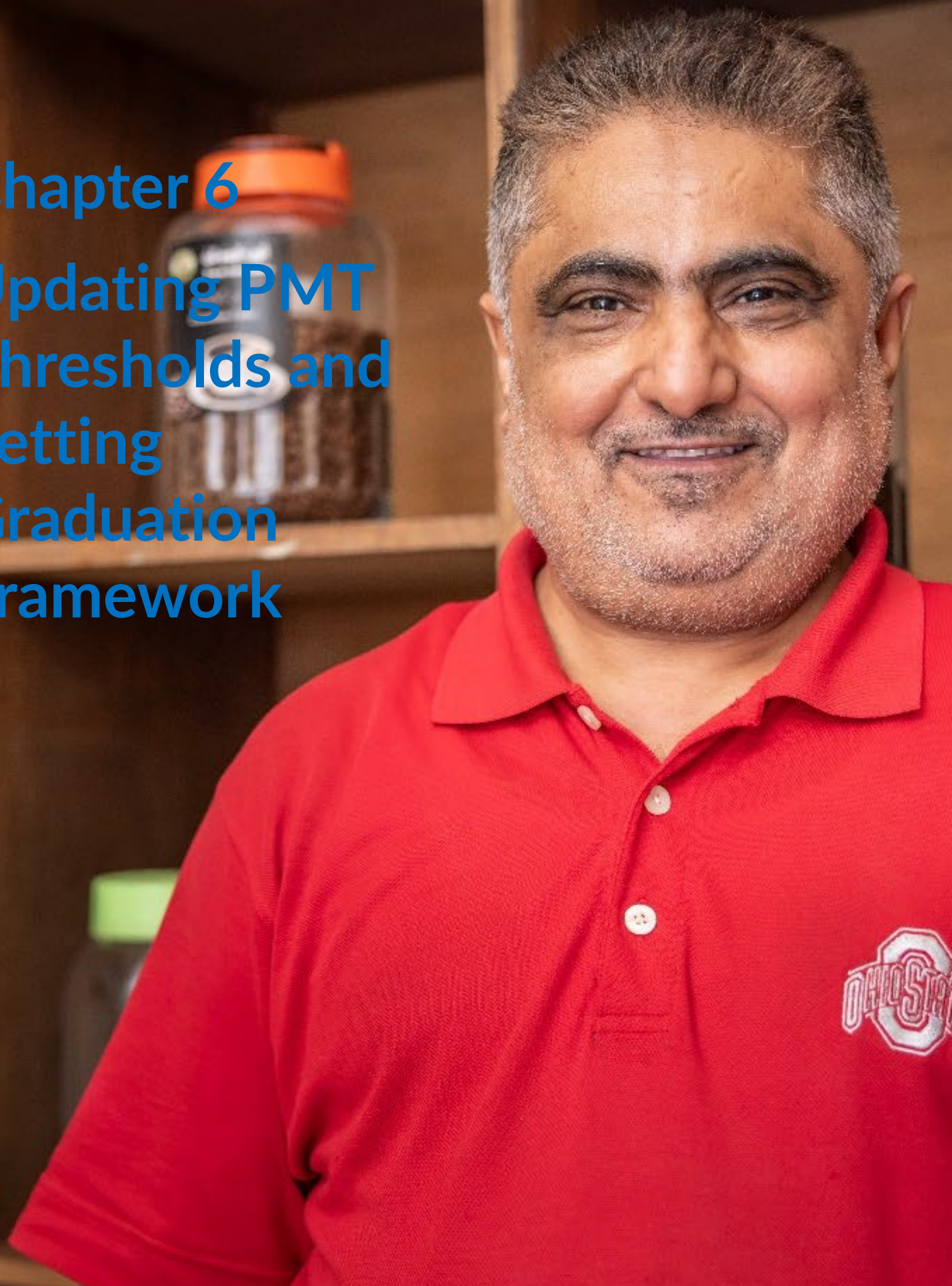
**Table 5.29: Multinomial regression results: Slipping into poverty category between 2018 and 2022**

	Coef.	std error	z	P>z	Relative risk ratio
Nationality					
Non-Syrian	-0.02	0.41	-0.05	0.96	0.98
Region in 2022					
Lower Egypt	-0.16	0.34	-0.46	0.65	0.85
Upper & Frontier	-0.24	0.28	-0.85	0.40	0.79
Changes in no. of children					
unchanged	-1.19	0.56	-2.14	0.03	0.31
decreased	-0.16	0.84	-0.18	0.85	0.86
Changes in no. of elderlies					
unchanged	-0.13	0.68	-0.19	0.85	0.88
decreased	-0.93	1.16	-0.80	0.43	0.40
Changes in no. of work age					
unchanged	-0.37	0.51	-0.73	0.47	0.69
decreased	-0.61	0.95	-0.64	0.53	0.55
Changes in hhsiz					
Unchanged	-0.21	0.59	-0.36	0.72	0.81
Decreased	-1.39	1.02	-1.37	0.17	0.25
Sex_head_2018 (Female ®)	-0.78	0.34	-2.28	0.02	0.46
Child labour in 2018	-0.49	0.57	-0.85	0.40	0.61
Child labour in 2022	-1.12	0.50	-2.27	0.02	0.33
Single_parent_2018	-0.46	1.29	-0.36	0.72	0.63
Child_risk_2018	-18.63	1.32	-14.09	0.00	0.00
Disability_2018	1.03	0.78	1.32	0.19	2.81
Single_parent_2022					
Risk exists	1.20	1.14	1.06	0.29	3.33
Child_risk_2022					
Risk exists	0.77	0.89	0.87	0.39	2.15
Disability_2022					
Risk exists	-0.71	0.71	-1.01	0.31	0.49
UNHCR_cash_2022	-0.16	0.66	-0.25	0.80	0.85
Difference_UNHCR_cash					
Assistance increase	-0.50	0.70	-0.71	0.48	0.61
Never take	-0.36	0.39	-0.92	0.36	0.70
WFP_food_voucher_2022	-0.65	0.55	-1.20	0.23	0.52
Difference_WFP_voucher					
Assistance increase	0.16	0.46	0.34	0.74	1.17
Never take	0.16	0.57	0.28	0.78	1.17
Regular_empl_2018	-1.01	0.49	-2.07	0.04	0.37
Temporary empl_2018	-1.13	0.57	-2.00	0.05	0.32
Change in no. of regular employed					

<i>unchanged</i>	2.58	0.80	3.22	0.00	13.23
<i>decreased</i>	3.15	0.86	3.68	0.00	23.33
<i>No regular employed in both years</i>	1.98	0.57	3.48	0.00	7.25
<i>Change in no. of temp empl</i>					
<i>unchanged</i>	0.45	0.69	0.64	0.52	1.56
<i>decreased</i>	0.20	1.00	0.20	0.84	1.22
<i>No temporary employed in both years</i>	0.20	0.37	0.55	0.58	1.22
<i>head_reg_empl_2018</i>	-0.90	0.56	-1.61	0.11	0.41
<i>head_temp_empl_2018</i>	1.69	0.73	2.30	0.02	5.39
<i>changes_reg_empl_head</i>	-0.13	0.88	-0.15	0.88	0.88
<i>changes_temp_empl_head</i>	-1.92	0.73	-2.61	0.01	0.15
<i>illiterate_2018</i>	1.23	0.57	2.16	0.03	3.41
<i>basic_2018</i>	0.57	0.34	1.65	0.10	1.76
<i>sec_2018</i>	0.53	0.30	1.78	0.08	1.70
<i>university_2018</i>	1.07	0.33	3.28	0.00	2.92
<i>enrol_2018</i>	0.03	0.18	0.18	0.86	1.03
<i>illiterate_2022</i>	0.33	0.44	0.74	0.46	1.39
<i>basic_2022</i>	0.04	0.31	0.14	0.89	1.04
<i>sec_2022</i>	-0.19	0.31	-0.62	0.54	0.83
<i>university_2022</i>	-0.57	0.33	-1.74	0.08	0.57
<i>enrol_2022</i>	0.81	0.17	4.68	0.00	2.25
<i>hh_basic_2018</i>	-0.20	0.66	-0.30	0.76	0.82
<i>hh_sec_2018</i>	0.47	0.74	0.63	0.53	1.59
<i>hh_university_2018</i>	-0.20	0.82	-0.24	0.81	0.82
<i>durable_2018</i>	-0.11	0.10	-1.09	0.28	0.90
<i>durable_2022</i>	-0.26	0.08	-3.16	0.00	0.77
<i>valid_residency_2018</i>	0.13	0.25	0.50	0.62	1.13
<i>Constant</i>	1.22	1.50	0.82	0.42	3.40



**Chapter 6**  
**Updating PMT**  
**Thresholds and**  
**Setting**  
**Graduation**  
**Framework**



## Overview

To support the most vulnerable refugees and to avoid their resorting to harmful coping strategies, UNHCR provides bimonthly unconditional cash grant ranging from EGP 1,440 to EGP 4,320 to the most vulnerable households. These cash transfers are provided to an average of 13,255 vulnerable refugee households. However, due to funding levels, the unconditional cash support to the most vulnerable households is limited to only 13% of the refugee population whereas previous household surveys and refugee consultations indicate that those in need are far much higher. Eligibility to this cash-based intervention has for most part been based on categorical targeting focusing on groups such as female headed households, persons with serious medical conditions or disabilities, older persons among other vulnerable groups.

However, since 2014 UNHCR has shifted targeting of food and cash assistance from a geographical and categorical basis to socio-economic criteria by understanding of economic vulnerability for the targeting of cash assistance. This is a relatively new approach in refugee contexts. To that end, a multi-sector household-level survey, under the auspices of the Egypt Vulnerability Assessment for Refugees (EVAR) was developed in 2018 to collect data to inform targeting efforts. UNHCR Egypt seeks to develop proxy means test (PMT) formula as the primary modality to identify refugees and asylum seekers to be targeted for this cash-based intervention.

In 2019, UNHCR Egypt has adopted the proxy means test (PMT)<sup>16</sup> as the primary modality to identify refugees and asylum seekers to be targeted for this cash-based intervention. Proxy-means tests (PMT) were developed to generate a score for applicants based on fairly easy to observe characteristics of the household such as the location and quality of the dwelling, ownership of durable goods, demographic structure of the household, and the education of adults. Scores are composite index that reflect welfare levels.

The design and implementation of PMT systems involved the following steps:

**Step 1: Determining PMT Variables and Weights.** Three models for PMT were developed. Model 1 performed better than other models with respect to under-coverage rates, followed by model 2 then model 3. Under-coverage rates are assessed at 16.76% for the first model, 16.74% for the second model and 20.7% for the third model. If Model 2 were applied about 78.83 % of the poor are reached.

**Step 2:** Established eligibility cut-offs (thresholds) for particular social programs. These cut-offs can be specific score levels or ranges of scores. Usually, different program eligibility criteria are considered to include or exclude certain population groups. The selection of the cutoff point is essentially a policy decision, and not a technical decision. Eligibility cutoff point is the threshold of actual value of per capita consumption that classifies population into eligible and ineligible. The choice of cutoff points balanced between under-coverage errors; leakage errors; the extent to which the target groups benefit (Percent of targeted group covered) and the impact in terms of poverty reduction. The top priority for UNHCR is to ensure that the people most in need are helped – in other words, to minimize exclusion/errors (although it is important to consider both inclusion and exclusion). With limited budget, it is essential to focus on reducing inclusion errors while ensuring fairness and avoiding unnecessary expense.

A natural choice of cutoff point is the poverty line estimated for HIECS 2017/18 at the region level. Poverty line for “Urban Governorates” region is LE 773 per person per month, for “Urban Lower Egypt” region is LE711 and for the other regions is LE727. According to EVAR 2018, poverty rates reached 39 percent and we are 95% confident that it ranges from 38% to 41%.

**Step 3: Collecting Data from Households.**

**Step 4: Determining Household Eligibility by Calculating Composite PMT Scores.** These household PMT scores are then compared to previously established eligibility cut-offs (thresholds) for particular social programs. Once eligibility

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<sup>16</sup> For a detailed explanation of the PMT and its variables, see reference: <https://www.unhcr.org/eg/wp-content/uploads/sites/36/2021/01/Multipurpose-Cash-Assistance-2019.pdf>

is determined by comparing household scores to the eligibility thresholds, program-specific beneficiary lists (sub registries) are created for the purposes of program implementation and payroll.

## Objectives

The objectives of this chapter are twofold

1. **Adjust thresholds to include more refugees exposed to different risks.** UNHCR pays special attention to at-risk groups such as people with disabilities, people with diverse sexual orientations and gender identities, as well as under-represented groups such as and older people<sup>17</sup>. Accordingly, adjusted thresholds need to be defined to eliminate errors of utilizing absolute poverty lines (such as the national poverty line or the minimum expenditure basket) by gathering empirical evidence on additional costs incurred by persons of concern with specific needs and/or applying existing modalities utilized by the national social protection programs.
2. **Defining an “exit threshold” potentially higher than the “entry threshold”,** for those who were eligible to receive benefits (poor) but during the recertification process, their living standards have improved, and they should not receive benefits anymore.

For the first objective, data of 49,059 families (163,882 individuals) who were assessed for eligibility to UNHCR MPCA was analyzed. Given that the assessed families were residing in different districts and governorates that were not covered through the EVAR 2018 baseline survey data, model 2 of the PMT formulas was selected in the below analysis. However, the selection of cutoff points is a policy decision variable and can be varied if UNHCR wishes to include more beneficiaries from specific groups.

To mitigate the exposure to risk caused by exclusion and to acknowledge potential inaccurate predictions, appeals mechanisms have to be established to allow refugees to request a re-evaluation of their eligibility for assistance after exclusion. The number of families with appeals received between 2019<sup>18</sup> and the end of 2022 is 9,865 (20 percent) out of the total 49,059 assessed families and they mostly have specific needs reported as follows:

- Heads of families:
  - 2,650 heads have serious medical conditions (27 per cent)
  - 1,700 heads are single parents (17 per cent)
  - 830 heads are survivors of Gender-based violence (8 per cent)
  - 578 heads are women at-risk (6 per cent)
  - 500 heads have disabilities (5 per cent)
  - 123 heads are older persons at-risk (1 per cent)
- Members including spouse:
  - 697 individuals have serious medical conditions.
  - 690 individuals are children at-risk.
  - 380 individuals are survivors of Gender-based violence.
  - 85 individuals are women at-risk.
  - 265 individuals have disabilities.

## Profile of Cases Assessed for UNHCR MPCA Eligibility

Out of 163,882 individuals included in the assessment data set, 51.7% are Syrians, 36.9% are non-Syrian Arabic speakers and only 12.4% are non-Syrian non-Arabic speakers.

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<sup>17</sup> See UNHCR policy on Age, Gender, and Diversity: [UNHCR, Policy on age, gender and diversity, 2018 0.pdf](#)

<sup>18</sup> The year during which UNHCR moved into using the proxy-means testing criteria.



About one-fifth of Syrians live in 6-October, another fifth in Alexandria and 13% live in Cairo. Non-Syrians Arabic speakers are mostly residing in Cairo (57%), Giza (22.5%) and in 6-October (14.5%). While 44.5% of non-Syrian non-Arabic speakers live in Cairo and 48.4% live in Giza, see Table 6.1.

Data of the assessed cases shows that the average duration of residence in the country of asylum reached 70 months. The duration significantly by strata, Syrian refugees have the longest duration of 77 months, followed by non-Syrian Arabic speakers of 66 month, and on average the assessed non-Syrian non-Arabic speakers stayed for 52 months.

**Table 6.1: Distribution of cases assessed by UNHCR for MPCA eligibility by place of residence**

	Syrians	Non-Syrians Arabic speakers	Non-Syrians non-Arabic speakers	Total
6 <sup>th</sup> of October	22.2	14.6	6.5	17.5
Alexandria	20.2	3.8	0.5	11.9
Assuit	0.2	0.0	0.0	0.1
Aswan	0.0	0.1	0.0	0.1
Cairo	13.6	57.2	44.5	32.9
Dakahlia	3.6	0.3	0.0	2.0
Damietta	9.8	0.1	0.0	5.2
El-Behera	0.9	0.1	0.0	0.5
Fayioum	0.2	0.0	0.0	0.1
Gharbia	0.9	0.1	0.0	0.5
Giza	3.7	22.5	48.4	16.0
Ismailia	0.5	0.1	0.0	0.3
kaf Elshiekh	0.6	0.0	0.0	0.3
Luxor	0.2	0.0	0.0	0.1
Matrouh	0.9	0.0	0.0	0.5
Menia	0.3	0.0	0.0	0.1
Monofiya	1.7	0.1	0.0	0.9
Port-said	0.4	0.0	0.0	0.2
Qalyubia	12.4	0.5	0.0	6.6
Qena	0.1	0.0	0.0	0.1
Sharkia	6.7	0.6	0.1	3.7
Sohag	0.1	0.0	0.0	0.1
Suez	0.1	0.0	0.0	0.1
The Red Sea	0.4	0.0	0.0	0.2
South Sinai	0.0	0.0	0.0	0.0
Bani Souwaif	0.2	0.0	0.0	0.1
North Sinai	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0

Overall, 55.8% of the assessed cases are identified as poor and thus they are eligible for receiving cash transfers. The prevalence of eligible cases is the least among Syrians reaching 38.6%, followed by non-Syrian Arabic speakers, where 72% of the assessed cases are eligible and 80.1% of non-Syrian non-Arabic speakers assessed are eligible to receive benefits. The poverty rate using EVAR 2018 is less than poverty rate among the assessed cases using PMT eligibility, confirming that the assessed cases for cash transfers are from the poorer segments of refugees, see Figure 6.1. However, poverty rates using EVAR may be different in magnitude compared to poverty rate among assessed cases, but both estimated followed the same trend.

Non-Syrian non-Arabic speakers have the smallest average household size (2.5 members), contrasting with Syrian and Arabic speaking refugees (almost 3.8 and 3.5 members, respectively). Larger families are more likely to be poor as identified by both EVAR 2018 and PMT compared to smaller ones. This agreed to what was observed using the actual figures of poverty. Eligibility for transfers (predicted poor) covers only 21% of households with one member, while 75% of households with 6 members and more are identified as poor by PMT, see Figure 6.2.

Figure 6.1: Poverty rate by nationality

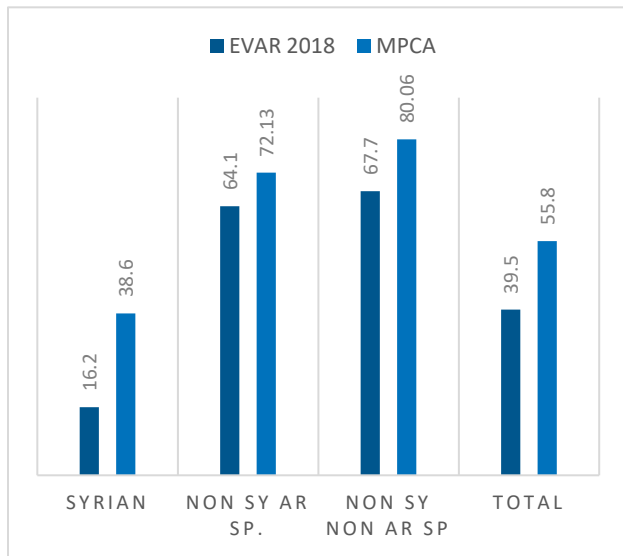
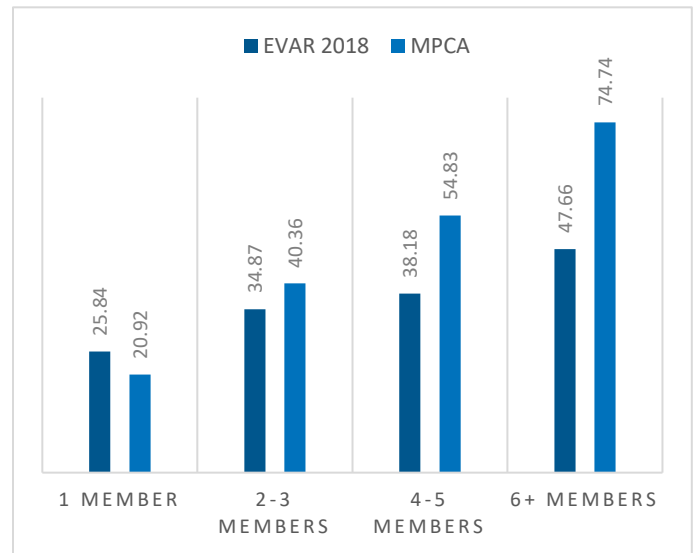


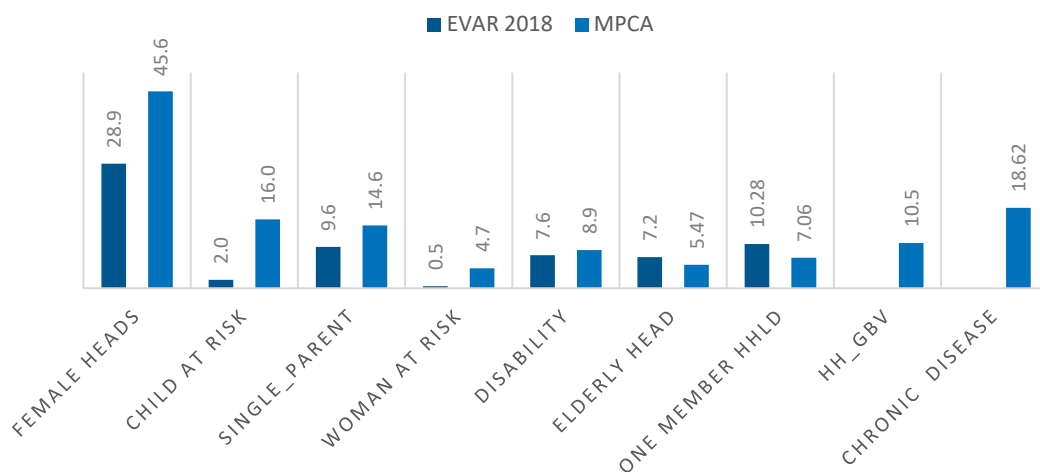
Figure 6.2: Poverty rate by household size



Household head is a self-reported information mentioned by refugees themselves. The assessments data, shows that 45.6% of the assessed cases live in households headed by females. Non-Syrian non-Arabic speakers exhibit the largest percentage of 72.6%, while 62.3% of non-Syrian Arabic speakers applicants live in female headed households, Syrians have the smallest percentage of female households reaching 27.5%. EVAR data shows that female headed households are at greater risk of poverty compared to male headed households. PMT identified also higher eligibility and hence poverty for female headed households.

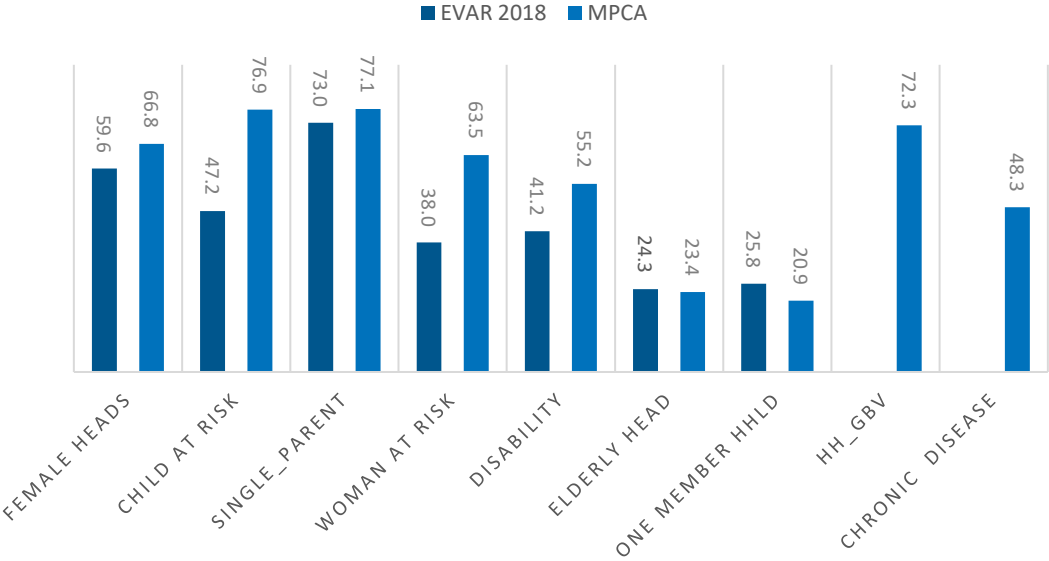
The data shows that the assessed cases have much higher specific needs compared to the representative sample of EVAR 2018, **indicating that they are from the most vulnerable group of refugees**. For instance, 16% of the assessed cases live in households having at least one child at risk, while the corresponding figure from EVAR 2018 data is 1.97%. Larger representation of specific needs among the assessed cases compared to EVAR 2018 data is also observed for women and older risks, see Figure 6.3.

Figure 6.3: Distribution of individuals living in households with specific needs



In general, as Figure 6.4 shows, predicted poverty using PMT (eligibility) for individuals live in households with at least on member with specific needs is higher than actual poverty using EVAR, this may be explained by higher prevalence of risks among assessed cases and because usually applicants are from the poorest segments of the population. However, if UNHCR wish to include more households with specific needs member, the cutoff points for eligibility can be increased which may increase the coverage rate and increase leakages.

Figure 6.4: Poverty rates for households with specific needs



### Adjusted Thresholds to Include More Persons with Specific Needs

First, we explore how much of the population at risk is covered using the suggested thresholds (poverty lines) and derive leakage and under-coverage errors for population at risk, using EVAR 2018. Second, using the assessment data, we identified the percentage of eligible population and especially among persons with specific needs. Third, adjustments of thresholds for different segments of population, to include more persons with specific needs are suggested.

➤ *Leakage and under-coverage of population at risk, using EVAR 2018 data and PMT formula and thresholds*

In practice, program officials do not have perfect information about who is poor because this information is difficult, time consuming, and costly to collect. Thus, when basing program eligibility on PMT, they may mistakenly commit errors of inclusion (Leakage)—identifying non-poor persons as poor and therefore admitting them to the program, or errors of exclusion (Under-coverage) — identifying poor persons as not poor and thus denying them access to the program. In general, the higher the priority assigned to raising the welfare of the poor, the more important it is to eliminate under-coverage. Conversely, the higher the priority assigned to saving limited budget funds, the more important it is to eliminate leakage. In this section we investigated how model 2 of PMT, is successful in reaching the poor refugees exposed to different risks, as such leakage and under-coverage errors. However, as UNHCR place high priority in reaching persons with specific needs, reducing under-coverage is top priority.

Out of eligible population, 79% of the poor, 9% of the near poor and 12% of the non-poor are covered, when we use PMT formula. Table 6.2 shows that under-coverage rates for poor refugees at risks are below the average rate of all population; it is 9% for households having at least one child at risk, 3% for households with single parent, and 7.4% for households having at least one disabled person. Women at-risk cannot be correctly assessed as the number of total households at risks in the sample of EVAR is small (9 households with women at risk). When the PMT formula was applied to EVAR2018, and using poverty lines as the cutoff points, the formula identifies 80.2%, 16% and 3.8% of poor, near poor and non-poor households with child at risk as eligible for transfers, respectively. The

corresponding figures for single parent households are 86.5%, 12.7% and 0.8%, respectively. For disability, 80% of the poor 18.3% of the near poor and 2.2% of the non-poor, are identified as eligible for receiving cash transfers.

To conclude, PMT classification performed very well for persons with specific needs and even better than population at large. However, if UNHCR would like to reach a larger population at risk, it can include both the poor and near poor, that is, it can use the near poor cutoff points as thresholds for eligibility.

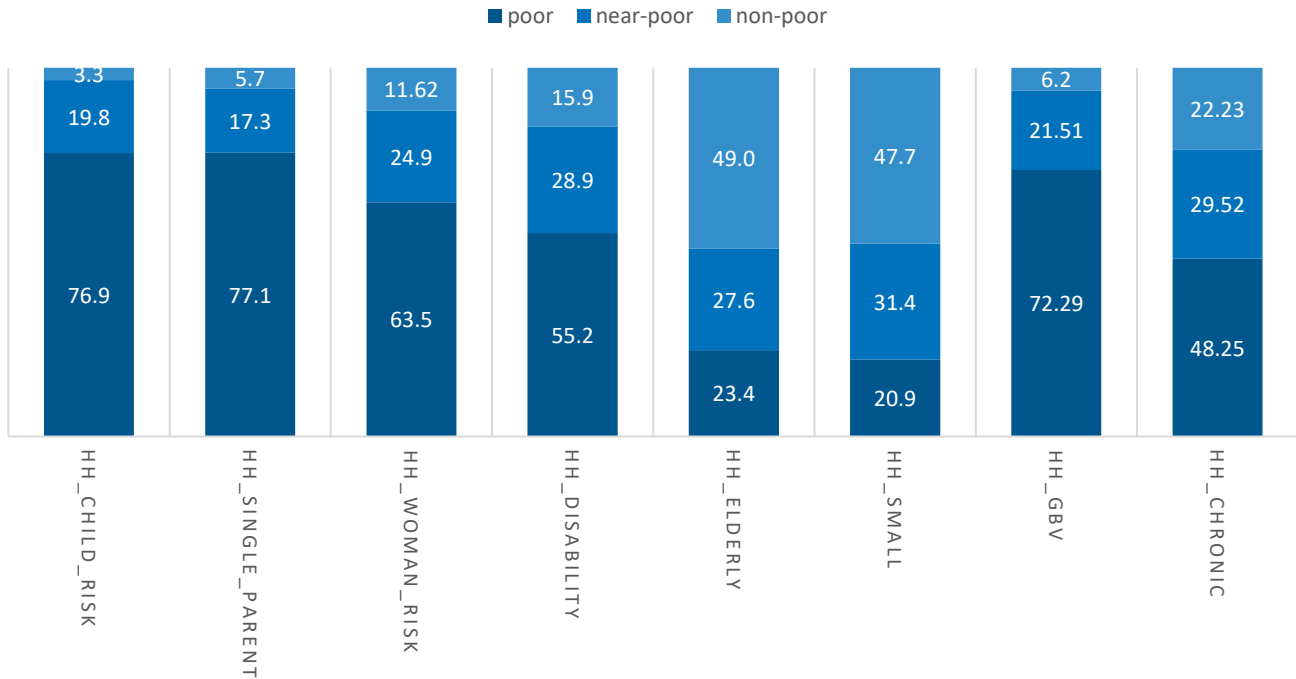
**Table 6.2: Targeting performance for population with specific needs, using EVAR 2018**

	Female heads	Child at risk	Single parent	woman at risk	Disability	elderly head	one member household
Under coverage	12.08	9.08	3.08	0.00	7.35	32.70	45.97
Leakage	14.74	19.80	13.49	46.70	20.41	12.80	24.77
% of the poor out of covered population	85.26	80.20	86.51	100.00	79.59	87.20	75.23
% of the near poor out of covered population	14.16	16.02	12.69	100.00	18.26	11.64	5.67
% of the non-poor out of covered population	0.58	3.77	0.80	0.00	2.15	1.16	19.11
% poor	59.62	47.15	73.02	38.00	41.21	24.28	25.84
Number of households	416	20	116	9	72	94	449
Number of members	1259	86	419	21	333	316	449

➤ **Identifying the percentage of eligible cases specially among persons with specific needs**

In this section we used the assessment data collected by UNHCR for MPCA eligibility determination to identify the percentage of the predicted poor, near poor, and non-poor reached when applying the PMT formula. The aim is to assess how much of applicants/ cases are covered by eligibility, especially among population at risk. Thus, we can propose different thresholds to increase the coverage rate among population at risks. Table 6.3 shows that the overall coverage is 55.8% of applicants using the poverty line threshold. It should be noted that the poor represented 39.5% of all population. PMT predicted poverty rate for applicants with no specific needs at 49.1%; below the overall rate for applicants but above the average rate prevailed among all population. However, the population at risk has higher percentages. Specifically, out of the 163,882 individuals, 16% have children at risk and 73.4% of them are identified as eligible for receiving transfers. On the other hand, 14.6% of the total individuals live in single parent households and 77.9% of them are eligible for receiving transfers. Besides, 4.7% of the individuals live in households with woman at risk and 63.2% of them are identified as poor. However, individuals with disability and with older risks have low percentage of predicted poverty, but these are also observed for population at large.

Figure 6.5: Distribution of predicted poverty status by specific needs



If the thresholds of the near poor are used to identify eligibility criteria for receiving transfers, more than 90% of population with child at risk and single parents' households will receive transfer, however the total applicants that will receive transfers exceed 85%, indicating an increase in assistance budget by 1.52 times.

There is a need to use different thresholds for different risks in order to achieve a larger coverage rate of persons with specific needs with limited budget increase. Several options were tried, and we reached the optimal thresholds that yield the best coverage, see Table 6.3. The table shows that the rate of coverage rates of all applicants at risks exceeds 90%, while the total coverage rate is 65% and the new budget is only 1.16 of the budgets when poverty thresholds are used.

We highly recommend using the suggested thresholds to increase the number of beneficiaries for households with different specific needs, while keep threshold as it is for other segments of applicants.

Table 6.3: Coverage rates by specific needs and updated thresholds

	Extreme Poor and Poor	near-poor	non-poor	Total	Factor multiplied by Poverty Line
Female headed household	91.56	6.8	1.63	100	1.6
has a child at risk	94.58	5.02	0.4	100	1.4
Single parent	92.52	6.63	0.85	100	1.4
woman at risk	90.96	7.17	1.87	100	1.6
household with disabled member	91.44	7.74	0.83	100	1.8
Elderly head	91.29	8.02	0.69	100	2.5
One member' household	88.14	10.58	1.28	100	2.5
A member with GBV	91.57	7.16	1.27	100	1.4
A member with chronic illness	91.48	7.83	0.69	100	2

## Identifying Exiting Criteria

Recertification processes<sup>19</sup> in cash transfers aim to keep programs well targeted by reassessing the socioeconomic conditions of the beneficiaries, then identifying and dismissing families that have risen above the eligibility threshold and no longer need income support. Some improvements in socioeconomic conditions would be due to income transfers as well as factors exogenous to the cash transfers, such as economic growth. Medllin et al. 2015<sup>20</sup>, mentioned that the frequency of the recertification processes should be more frequent in communities exhibited higher transient poor among its beneficiaries.

In all cash transfer programs, some concerns have been raised that cash transfers may create unintended negative consequences on beneficiaries' labor market decisions. Throughout the cash transfers program, it is necessary to adjust transfer parameters to reduce potential dependency. Several decisions must be undertaken by policy decision makers:

- Maximum time limits for cash transfer benefits have been actively used, for example it is two years in the Chile, US (five years), and Mexico (7-9 years) though with widely different time horizons reflecting different perceptions about the nature of poverty being addressed (transient vs. chronic).
- Defining an “exit threshold” for scores that are somewhat higher than the “entry threshold”.
- Gradual benefits reductions (over time and/or with increases in incomes) could apply to the UNHCR cash transfer.

Within the above three options, and for those who are to be graduated from the program, linking families to other social programs, including income-generating programs, strengthening and scaling up economic inclusion, are essential.

**This section is concerned with examining “exit threshold” potentially higher than the “entry threshold”,** for those who were eligible to receive benefits (poor) but during the recertification process, their living standards have improved, and they should not receive benefits anymore<sup>21</sup>. If the recertification process determines that specific beneficiaries are no longer poor, in theory they are no longer eligible to receive the transfers. However, some beneficiaries who exit the program have improved their socioeconomic condition in a sustained manner and some still face a high risk of falling back into poverty. In this regard, a common approach has been to adopt differentiated scores for program entry and exit. In other words, beneficiaries exit the program if their estimated socioeconomic condition exceeds a threshold that is higher than the one set to enter the program. The program may employ a vulnerability threshold that is higher than the eligibility threshold. Families above eligibility but below vulnerability should not immediately be dismissed from the program.

Panel data for a sample of EVAR 2018 is used to identify mobility across poverty groups between 2018 and 2022 (see Chapter 5). PMT scores were calculated for each household in the sample and for each year. Thus, each household is actually classified as “stayed in poverty”, “moved out of poverty”, “moved in poverty” and “never poor”, using their per capita expenditure. It is also predicted to be both poor and non-poor for 2018 and 2022. Three existing thresholds are examined: the thresholds for identifying the poor, 10% above these thresholds, and finally 20% above the poverty thresholds. That is; households who were predicted as poor in 2018, but whose predicted score is above the exiting thresholds should exit the program. Two criteria are used to examine the performance of the exiting thresholds. Error 1 occurs when those who are actually poor in 2022, but when the PMT scores and the

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<sup>19</sup> Recertification is not the only process to update the registry of beneficiaries. In most countries, beneficiaries may require being (re)evaluated at any time if they consider that their socioeconomic conditions have changed. Moreover, beneficiaries must communicate any change in the demographic structure of the family (e.g., a birth or a death) which are likely to alter the eligibility score and/or the amount of the transfers.

<sup>20</sup> Medellín, N., Pablo Ibararán, Marco Stampini, Juan Miguel Villa: Moving Ahead Recertification and Exit Strategies in Conditional Cash Transfer Programs, 2015, IDB. <https://publications.iadb.org/publications/english/viewer/Moving-Ahead-Recertification-and-Exit-Strategies-in-Conditional-Cash-Transfer-Programs.pdf>

<sup>21</sup> Ideally, actual data for applicants are available when they entered the program and when they are recertified. Then using the multinomial model, we can identify probabilities for each household to stay or exit poverty and calculate statistics for PMT scores for those who should exit the MPCA.

exiting thresholds are used, they are incorrectly eligible for exiting the program in 2022. This error is measured by the percentage of the poor in 2022 who exited the program out of the total poor in 2022. The other type of error is the error of including the non-poor in the program, that is, the non-poor in 2022 but the PMT scores and the exiting thresholds are used, they are incorrectly classified as eligible for the program in 2022 (stay in the program). This error is measured by the percentage of the non-poor in 2022 who are in the program out of total stayed in the program. Both percentages measure targeting errors and should be minimized. However, there are tradeoffs between including non-poor which entail leakage of resources and excluding some poor from the program. If UNHCR aims not to exclude any poor from the program, it may select thresholds that minimize the exclusion error at the cost of increasing leakages.

Table 6.4 shows that when households whose predicted expenditure is greater than the poverty threshold, the percentage of the actual poor in 2022 who are predicted to exit the program out of all poor 2022 is 10.3%, while with this exiting threshold, 29% of all who stayed in the program are non-poor in 2022 thus 29% of resources leak to the non-poor. When the exiting threshold increased by 10% above the poverty line, the corresponding figures of exclusion and leakage are 5.7% and 30.5%. Moreover, increasing the exiting threshold by 20% above the poverty line, only 4.3% of the poor will be excluded from the program but 33% of resources will be leaked to the non-poor.

**Table 6.4: Exclusion and leakage errors for different exiting thresholds**

	Exiting threshold		
	20% increase above the poverty line	10% increase above the poverty line	the current poverty line
<i>Non-Poor in 2022 but stay/total persons stayed (under-coverage-exclusion error)</i>	33.25%	30.48%	29.07%
<i>poor in 2022 but exiting / total poor -(error of inclusion)</i>	4.62%	5.71%	10.27%



# Chapter 7

## Key Messages and Recommendations

*Mona Botros, from Iraq, at Caritas, UNHCR's partner, receiving medical assistance. ©UNHCR/Pedro Costa Gomes*



Despite Egypt's hospitality and refugees' support system, economic reforms and rising costs have impacted refugees in Egypt particularly hard. Due to the country's high unemployment rate and the weak economy, many refugees are without access to education, healthcare, employment opportunities, and other services. Such issues force many to turn to extreme measures like child labor and early marriages to survive.

The below recommendations and suggested strategies emerged from evidence base analysis on poverty mobility.

➤ *Improve refugees' livelihood*

Previous analysis confirms the significant impact of the employment conditions of heads of refugee households of being "never poor" or moving out of poverty. Households with heads remaining in regular jobs are more likely to be "never poor" households. Additionally, increasing the number of members of permanent jobs helps in moving the household out of poverty. Moreover, working in the formal sector and benefiting from social security requires obtaining work permits through their employers, which may prevent them from engaging in the formal sector. Alternatively, refugees in Egypt work in the informal sector to secure their livelihoods in Egypt, with no legal framework governing their employment or their work being conducted outside any legal protection or social insurance coverage.

Price increases and limited job opportunities in Egypt have significantly affected all aspects of the lives of both Egyptians and refugees and asylum-seekers. As a result, many refugees are not able to meet their basic needs and are increasingly dependent on humanitarian assistance. Many struggle to find work, with long spells of unemployment or must settle for jobs that are below their skill level.

Thus, it is highly recommended to promote opportunities and livelihood as well as employment-generating programs that can have a positive impact on increasing the welfare of refugees. Policies for vocational training for skills in demand within the local market should be considered, together with soft skills specifically targeting youth and women. Specific short training to update existing skills should also be considered.

While state institutions already play a key role in supporting refugees, further assistance is required to provide broad and quality services for refugees. It is crucial for international organizations to support the GoE efforts to provide health services and education to refugees and further enhance the capacity of national institutions to absorb and respond to the increasing demand for public services.

➤ *Cash and food assistance*

Increasing the value of cash assistance and the duration of assistance increases the likelihood of vulnerable refugees moving out of poverty. Discontinuation of cash assistance provided to refugees has a significant impact on poverty mobility, as it increases the likelihood of refugees to fall into poverty.

Therefore, it is recommended to expand cash assistance and food voucher programs in terms of coverage and benefits. These programs have an important role in social protection as individuals may adopt harmful strategies that affect their well-being, such as dropping out, selling productive assets, and child labor.

Mechanisms must be established to allow refugees to request cash assistance as well as food vouchers. The community may be able to play a helpful role in this. Communications strategies also play an important role in ensuring awareness of the registry itself and the eligibility (targeting) process, as well as of key aspects of the registration process.

➤ *Facilitate residence permits*

A cross-cutting recommendation is to facilitate obtaining residence permits that permit access to formal works as well as basic services, such as health care and education. UNHCR should support refugees to obtain birth certificates, advocate for facilitating access to residence permits, continue to provide targeted support for refugees and disseminate information about the importance of permits.

Poverty mobility was found to be highly correlated with the type of residency permit. Syrian refugees who have access to tourism residency permits are more likely to be never poor. While non-Syrian heads who have education residences are more likely to be wealthier than their counterparts. Residence permits facilitate the lives of Syrian and non-Syrian refugees by permitting access to formal works as well as basic services, such as health care and education.

➤ *Continue to improve targeting mechanisms*

Proxy-means testing classification performed very well in identifying the poor and vulnerable refugees especially persons with specific needs. However, if UNHCR would like to reach a larger population at risk, it can include both the poor and near-poor, that is, it can use the near-poor cut-off points as thresholds for eligibility.

Continuous refining and updating of targeting mechanisms to identify households that are most economically vulnerable and most food insecure and to ensure that a harmonized package of assistance reaches those who are most in need. Both inclusion in assistance programs and discontinuation of benefits should be accompanied by messaging, communication, and advocacy efforts.

➤ *Provide economic opportunities for those who exiting the program*

Many linkages between cash transfer programs and income-generating interventions must be established and lists of cash transfer beneficiaries who may need income-generating services have to be exchanged with partners who provide opportunities to work and earn a living.

Economic inclusion programs are seen as an important complement to existing antipoverty efforts. Similar to the economic-inclusion intervention “Forsa” adopted by the Ministry of Social Solidarity (MoSS), UNHCR can provide several economic inclusion opportunities to those who graduated from cash transfer programs.

Graduates from the cash transfer programs should be encouraged to join the UNHCR interventions that promote livelihoods and economic inclusion of refugees in Egypt through waged and self-employment support.

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