

The impact of Cash-Based Interventions on the dignity enhancement in persistent humanitarian refugee crises

Saeed Taheri¹, Fahimeh Allahi², Ramez Kian¹,
Ehsan Sabet³, Sander de Leeuw¹

1) Nottingham Business School, Nottingham Trent University, Nottingham, UK

2) DIME, University of Genoa, Genoa, Italy

3) Wolfson School of Mechanical, Electrical and Manufacturing Engineering, Loughborough University, Leicestershire, UK

Extended Abstract:

Cash-based interventions (CBIs) as one form of aid have recently received substantial interest from humanitarian organizations in persistent humanitarian crises. We used a system dynamics model to study the impact of CBIs on the beneficiaries' dignity, specifically in refugee crises like the Syrian refugees in Turkey. System dynamics models are useful tools in supporting decision makers by generating detailed components and their complex relations to assess the various alternatives. In addition, this methodology represents an opportunity to model different phenomena in humanitarian aid to support managers in designing more effective policy interventions in the long run. Despite an increase in the adaptation of SD models in humanitarian aid in recent years, there has been no attempt to implement a holistic set of parameters to gauge and model beneficiaries' dignity and well-being in a persistent and long-term refugee crisis, the gap which this study tries to fill.

We started by reviewing crisis management and humanitarian aid literature in order to find the building blocks of refugees' dignity and the interactions between them and the CBIs. We categorised these building blocks under three headings of coping strategy, health and social security, and education. Coping strategies includes the beneficiaries' decisions to overcome the existing and mainly financial problems in emergency situations, and may involve using emergency savings, selling assets,

incurring debts, exploitative or degrading employment, and child labour. CBIs enhance dignity by enabling beneficiaries to fulfil their high-priority needs with less reliance on exercising their coping strategies (Hagen-Zanker et. Al, 2017). Access to healthcare services are basic human rights which humanitarian organizations aim to provide (Doocy, S. and Tappis, 2017), and one of the most effective means of increasing refugees' access to healthcare services has been reported to be CBIs. In addition, CBIs could reduce violence in refugee communities and hence improve the mental health of the community in general. Finally, CBIs could reduce the number of children missing school by covering a part of their education costs (Abu Hamad et. Al, 2017). Outcomes of CBI evaluations to this end shows considerable improvements in school enrolment rates as well as a decreased rate of child labour. Based on these findings, we developed a qualitative causal loop diagram, in which ten reinforcing loops and six balancing loops show the interaction between CBIs and factors related to coping strategies, health and social security and education.

In the next stage of this research we used the major factors in the causal model to build a quantitative stock and flow diagram, using Vensim. In this model seven main stock variables related to the case of Syrian refugees in turkey were modelled: net incomes for the refugees' population, total anti-social expenditures by the refugees' population, number of employed refugees, amount of child labour, number of refugees receiving health services, number of refugees receiving educational services, and number of self-accommodated refugees. We validated the S&F model using different structural and behavioural validity tests. The model also passed the dimensional consistency and extreme condition analysis tests. The model calibration estimated the values of different indices to best fit the real time-series data related to Syrian refugees in Turkey in a time horizon of six years (2012–2018). The data used was continuous, and the 6-year period is selected based on availability of the real data. the model calibration was based on the numerical optimization which was conducted using Vensim's built-in Powell conjugate search algorithm. The stopping criterion was 1000 iterations, among which the best fit between the model outcomes and the real data was evolved.

At the final stage of the study we run the calibrated model according to different scenarios for CBI level. Analysis of the results showed that all stocks except the number of employed refugees are sensitive to the changes in the CBI level where the trends of the variables change with almost a linear multiplier offset for each factor. Results also showed that CBIs only contribute up to 20% of beneficiaries' total income, and thus they often seek and secure formal or informal jobs and sources of income to support themselves and their family, regardless the CBIs they receive. In addition, some differences in the magnitude of sensitivity between different variables are observed. Considering the long-term importance of education in refugees' dignity and its contribution to the hosting community in a long-run persistent crisis, this result should raise a red flag to policy makers. In contrast, health service and self-accommodation were more sensitive to CBI changes in the short term while became less sensitive in the longer term which might be due to the infrastructure and resource capacity consideration of the hosting society. Based on the historical data, the model included a linear growth of investment in infrastructure, proportional to the population of inflow refugees, and therefore, the number of refugees who received health service or were self-accommodated were still restricted by the capacity for these services over time. As a result, these stock variables were saturated in the long term and behaved less sensitive to the CBI level.

To conclude, the result of CBI amount sensitivity and payment time-periods showed that CBIs are significantly more effective in diminishing child labour rates and to improve in health and accommodation service reception by the refugees in short-terms, but to be as much effective in longer terms, humanitarian organizations must be more directly contribute to service capacity-building activities that are strategies by the hosting governments and supported by the international bodies such as EU and UN. Otherwise, the long-term or enhanced CBI supports can only lead to accelerated service capacity saturation and thus put extra pressure on already strained services and cause tensions between hosting and refugee communities.

References:

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