



**Universität  
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The Effects of Adding a Microinsurance Product to the  
Portfolios of Microcredit Clients:  
a Data Analysis

**Master's Thesis**  
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## Executive Summary

In countries like Egypt with low public health expenditures and high out of pocket health care expenses, health emergencies can cause great financial distress. Low-income households are particularly vulnerable to such risks, since they need to undertake costly coping strategies to overcome the medical expenses. In case of a serious illness, loss of income resulting from an inability to work and starting to cut the spending on necessities, can lead to poverty (Rashad, 2014). According to Women's World Banking (WWB), low-income women are even more vulnerable to the risks of health emergencies. They have more limitations to access health care than men, although they are exposed to additional risks due to pregnancy and childbirth. WWB supports and aims to protect these women from the risks of health emergencies, by working with financial institutions and designing solutions, such as the Caregiver insurance product. This supplementary microinsurance product, which was officially launched in June 2016 in Egypt, is a simple product that pays a fixed amount of cash for each night spent at the hospital, regardless of the treatment costs. The Caregiver product is attached to the client's loan and its term, therefore, is linked to the loan term.

This study aims to identify the clients of this product and to gain a deeper understanding of how they use it. Within the framework of these findings, it determines trends in the client behavior. WWB provides three different sources of data: quantitative data on microcredit loan portfolio, quantitative data on the microinsurance portfolio and the survey data from the Shobra branch.

To identify the clients of this product, first, we examine the demographics of the clients and investigate the relationship between the attributes of the loan portfolio and the insurance usage of the client. Second, we examine the responses of the clients from the survey data, which contains information on which clients are confident to be able to pay back their hospital expenses, level of concern for their own health and their medical history.

We find that most of the Caregiver clients in Egypt are women, who are less confident than men to be able to pay their expenses in case of hospitalization. They take lower amounts of loans compared to their male counterparts and on average younger. Majority of these women take group loans and live in mixed (rural and urban) areas, where the income per capita is lower compared to the fully urban areas.

The second objective of this thesis is to gain a deeper understanding on the client's usage of the insurance. For younger clients, there are gender-specific differences in the average insurance claim payments, while for older clients there are no gender-specific differences. Younger women stay on average shorter at the hospital per claim than the older women. This is due to the differences in hospitalization reasons for younger and older women. While 33.8% younger women visit the hospital due to gynecological treatments, which includes childbirth, older women visit the hospital due to illnesses, that requires longer hospital stay. According to the research of WWB, the average duration of hospitalization after child birth is one day. Which also explains why younger women tend to receive smaller amounts claim payments, since Caregiver product make payments depending on the number of days spent at the hospital.

The third objective of this thesis is to determine trends in the client behavior. Over time, client awareness improves and the waiting time to submit a claim after the client leaves the hospital decreases. Moreover, we observe that after the launch of the Caregiver, there is a higher increase in the loan uptake. It can thus be suggested that demand for the loans increases because of the introduction of the caregiver product. Clients also tend to take higher loans in the second term. These trends indicate a growing asset under management(AuM) of the financial institution. A higher AuM can lead to a higher number of microcredit loans, higher number of Caregiver clients and therefore higher outreach. The trends in the client behavior indicates the success of the Caregiver product.

For future research on the topic, WWB may utilize panel-data sets providing information across years for the same individuals, to see long-term results of the Caregiver product. Further, adding variables into the data such as occupation, civil status, number of children, identifying members of the loan groups with an identification key as well as creating a data dictionary would increase the quality of the future research.