HIGHER EDUCATION FINANCE FUND (HEFF)

CASE ANALYSIS

FINAL REPORT

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Omtrix acknowledges that the views expressed in this paper are the views of the authors and may not reflect the views held by the shareholders, funders or sponsors of HEFF.

*__About Mastercard Foundation__

The Mastercard Foundation works with visionary organizations to provide greater access to education, skills training and financial services for people living in poverty, primarily in Africa. As one of the largest private foundations its work is guided by its mission to advance learning and promote financial inclusion to create an inclusive and equitable world. Based in Toronto, Canada, its independence was established by Mastercard when the Foundation was created in 2006. For more information and to sign up for the Foundation's newsletter, please visit www.mastercardfdn.org. Follow the Foundation at @MastercardFdn on Twitter.

Contents

Contents

Introduction

The Higher Education Finance Fund (HEFF) is a US$33 million fund designed to provide long-term credit to microfinance institutions (MFIs) and other financial institutions (Fis or IFS)[1] in Latin America and the Caribbean. These funds are provided for the financing of higher education for low-income youth. HEFF was funded by KfW, Norfund, SIFEM/OBVIAN, Luxembourg Microfinance Development Fund, CAF, Omtrix Inc., and Calvert Foundation. It also secured debt funding from SIFEM/OBVIAM, Calvert Foundation, and OPIC.

The development of the HEFF is based on a basic hypothesis: financial and microfinancial bodies with social goals can include educational credit in their portfolio of products if this offer is developed with the appropriate methodology. That is, educational credit is a viable product.

The HEFF fund was complemented by a technical assistance program - the Technical Assistance Facility (TAF) - of US$1.6 million to support participating entities in adapting the credit methodology used in other markets and, among other activities, in the design, launch and implementation of the product. The funding for the TAF came from three main Donors: KfW (US$916,200), Mastercard Foundation (US$600,000), and USAID (US$94,100).

After the experience of product development by the HEFF and TAF, the team conducted an analysis of the business case, which is useful both for the participating FIs and for the fund itself in order to identify the possibilities of repeating it in other regions. The study included the development of a frame of reference so that the different agents could analyse the business case both quantitatively and qualitatively.

The study sought to answer large questions such as:

- Is the funding structure of the HEFF adequate for the objectives sought?
- Did the financial entities participating in TAF benefit from it?
- Which services were found to be most valued?
- Is educational credit a viable product for MFIs?
    - What key adaptations did the FIs introduce in the design of the educational loan product conceived by the HEFF?
    - Did educational credit require more effort than expected?
    - How do FIs view their profitability and sustainability?
- Under what conditions could the HEFF and/or TAF be replicated and what considerations should FIs who wish to offer educational credit take into account?

This document contains the results of this analysis, divided into three chapters.

Chapter 1 explains the main features of the conception and implementation of the project, including the details of the HEFF as a financial fund and TAF as a technical assistance instrument.

Chapter 2 presents the results of the experience of the participating and financial and microfinancial institutions. The main characteristics of the process are highlighted, including the adjustments that these institutions made to several components. Various FIs now operate with a product that is markedly different from the original design. So far, these products have not yielded satisfactory returns, however, FIs would like to maintain their educational credit offer while exploring mechanisms to make it sustainable.

Finally, Chapter 3 includes the main lessons learned by the HEFF, TAF and participating FIs. Its purpose is to facilitate the possible replication of the experience.

The team would especially like to thank the investors and financing funds, the Omtrix officials and the FIs participating in the HEFF[2]. These institutions kindly gave us their time for interviews, shared information and made it possible to identify the advances, adjustments, lessons and challenges in the implementation of educational loans. We hope that we have presented the experience fairly.

1 From now on, MFIs and financial institutions focused on low-income demographics will be grouped under the common name of financial institutions (FI or IF). MFIs will only be referred to when discussing a particular feature that is applicable to institutions specialising in micro-businesses. In this case, we use the acronym MFI.

2 Appendix I includes a list of people and institutions interviewed.

1 What role did the HEFF/TAF play in the development of educational credit?

1.1 Conception and implementation of the project

The HEFF was structured as an investment vehicle to provide credit and provide technical assistance to MFIs and other financial intermediaries that serve low-income populations in developing countries. The fund was financed with resources from investors interested in assisting the development of the selected countries and, at the same time, obtaining a reasonable financial return.

The HEFF was created as a pilot scheme which would provide repeatable lessons. Although designed to operate in a few Latin American countries, the HEFF could be expanded into other regions once its effectiveness in promoting credit for higher education studies has been demonstrated.

The HEFF aims to facilitate access to higher education for the section of the population without sufficient income to finance their studies. It is based on the premise that education is essential for individual growth, facilitates economic development and promotes social cohesion[3]. Within this premise, equal access to higher education is a tool to reduce the economic and social inequality of developing countries.

A significant reason behind the HEFF is the growing demand for educational credit in Latin America. At present, there are more students interested in entering higher education at private universities and technical institutes.

The context of this process is relevant, since, in the face of this greater demand - and the scarcity of resources to finance it - in several countries, funding institutions have been created mostly with public resources.

For the fund's design, the following limitations of access to educational credit were identified:

• The costs of higher education - direct and indirect - are very high for the financial capacities of the low-income population. It is not only the cost of education itself, but the resources necessary for its maintenance and the lost income during the time spent studying.
• While credit for higher education is increasingly common, the population that typically accesses it belongs to the middle and high-income bracket.

With these considerations, the HEFF was structured to facilitate access to higher education of a) sections of the population with motivation and intellectual capacity, b) those who are excluded from public programs of access to higher education[4] and c) without the financial resources to pay for it.
The HEFF's resources were distributed through MFIs focused on the low-income population that already had credit products suitable for this population section. In these MFIs, traits were identified that gave indications of positive results in the

3 This idea is based on considerations of the Higher Education Finance Fund Private Offering Memorandum.

4 Public universities and/or scholarship programs.

development of the credit. One factor that would make this type of credit successful is, precisely, the effectiveness of MFIs in bringing financial services to low-income population in an efficient, profitable and sustainable manner.[5] The development of microfinance products -such as housing microcredit, for example- demonstrates the ability of MFIs to handle complex products. The success in the administration and recovery of credits were also considered necessary ingredients for an entity's inclusion.[6]

The hypotheses that guided the development of the HEFF project were:

• MFIs could effectively support low-income families - particularly their clients' children - by financing studies in technical or professional careers through an appropriate credit strategy and long-term funding.

• The offer of student credit to low-income populations is sustainable. In fact, there were expectations that the development of educational microcredit could sustainably finance higher education in contrast to the limited sustainability and growth of publicly-funded programs present in several Latin American countries.

• Once developed, educational microcredit could be incorporated into the portfolio of products offered by the FIs.

The ultimate goal of the exercise was to prove that it is feasible to use financial institutions to provide credit for higher education. On the one hand, the FI portfolio would have a new product on the market, while on the other, there are social benefits in improving access to education for populations with little or no options in financing their higher education.

The HEFF proposed the development of a product inspired by successful educational credit programs financed with public resources, such as ICETEX from Colombia, CONAPE from Costa Rica or FUNDAPEC, in the Dominican Republic.

In the manner of these experiences, the product to be developed by each FI would have the following features:

• **Aim:** financing a complete degree.

• **Target population:** students entering higher education for the first time, children of microentrepreneur clients.

• **Amount and disbursements:** the semi-annual cost of enrolment would be paid; semi-annual disbursements

• **Amortisation:** the client would pay interest during the period of study and the capital at its conclusion, having already started work.

• **Term:** twice the period of study.

• **Grace period:** 6 months after the end of the period of study.

The HEFF would provide financing and technical assistance to FIs that offer educational loans with adequate terms for students without their own resources to pay for their degrees. In addition, the fund would work with regional experts and innovative FIs to design and launch these specialised products under appropriate terms and conditions.[7]

The success of the process is based on the strengths of Omtrix[8] as the fund's administrator, the channelling of resources through strong MFIs with experience in the provision of financial services to low-income population, and the use of technical assistance (TAF) in order to strengthen the capacity of the agents to "deliver" a special product, even though educational credit is not radically different from what the entities already offered, and still offer.

The HEFF placed its resources in a select group of MFIs with a solid financial structure, a good track record, a clear interest in the new product and a mission statement consistent with that of the fund. The project worked with 10 financial bodies.[9]

The team considered that the FIs would benefit from the HEFF's resources and technical assistance to develop the product and the possibility of diversifying their portfolios. It was expected that the new product would contribute to the entities' growth, reducing the general credit risk (due to the diversification of the portfolio) and strengthening their income flow.

Initially, the HEFF was designed for countries with a strong microfinance industry and with financial institutions focused on low-income demographics, with low enrollment of students in public universities and limited availability of educational credit. Efforts were focused on Guatemala, Honduras, the Dominican Republic, Peru, Bolivia and Paraguay. An institution from Costa Rica was incorporated at the end.

It was based on the idea that there was a significant demand for educational credit in Latin America and Africa, and the assumption that a limited number of students entering higher education do so at private institutions. According to predictions[10], only a small proportion of those who enter private universities have financing programs.

According to estimates made during the design stage of the project, in the six countries identified by the HEFF, the number of potential clients for higher education credits would exceed 200,000 people, suggesting a total educational loan portfolio of US$1,021 million per year, with an average of US$5,000 per student.[11]

5 This was demonstrated by the results of 50 MFIs affiliated with ELF (Emergency Liquidity Fund) located in 13 countries in Latin America and the Caribbean.
6 Once the project was developed, other types of FI willing to launch education credits were incorporated.
7 Description taken from the Private Offering Memorandum presented to potential investors in 2010.
8 Omtrix was founded in 1995 to design, establish and manage ProFund Internacional, the first capital investment fund focused on MFIs in Latin America and the Caribbean. Product of the success of ProFund, Omtrix Inc. was established as a Fund Manager of a consulting firm in finance and investment. Their specialty is the design, entrepreneurship and administration of innovative initiatives that support inclusive financial systems and projects devoted to providing a solution to social inequalities. Omtrix provides financial and technical assistance to the financial industry. They have successfully managed other funds such as Emergency Liquidity Facility (ELF) and Risk Management Facility.
9 Initially, the HEFF intended to connect between six and eight MFIs, but during the development stage two other interested parties were involved.
10 See Offering Memorandum.
11 All estimates are based on figures from 2009.

These figures forecasted an optimistic placement of educational loans financed with HEFF resources before considering the growth of student access to higher education in Latin America, estimated at 7.5% per year. The expectation was that HEFF's resources would be placed quickly, allowing the results and objectives of the fund to be achieved.

However, this optimism was dashed by a slow implementation process. The placement of credit, in addition, was less than had been calculated. As this document illustrates, the design and adaptation that the FIs made to the product was not as fast or as effective as wished, because the HEFF proposal had to be adjusted to the conditions of each entity, prolonging the implementation times.

The assumption that the experience of MFIs in the development of microcredit products would allow the new offer to adapt easily was not proven correct either. Educational credit required a different approach to risks, incurring new operating costs, accepting lower margins, developing an appropriate channel and, furthermore, adapting systems to support it. For the clients, it implied accepting different methods to those to which they were accustomed (for example, exclusively studying instead of combining work and study) and assuming greater debt with much longer terms. For these reasons, in many cases FIs had to explore new customer bases.

However, despite the limitations, the participating entities managed to develop the product proposed by the HEFF with changes adjusted to their operational needs and markets. As the process took more time, HEFF had to provide more technical assistance than expected.

1.2 The HEFF as a financial fund

The HEFF was designed for a 10-year term, with four years of grace on capital. The extended grace period should allow the educational credit offered to FIs to be sustained. This funding structure was designed based on the long-term financing needs that the product required.

The initial closing value was set at US$30 million - with the potential to reach US$50 million - following the first studies of potential demand. However, the placement of resources was difficult. Disbursements occurred slowly. For these reasons, the commitment term was extended for one year - from December 2015 to December 2016 - as well as the maximum period of disbursement of resources, which was from December 2016 to December 2017.

Finally, the fund was closed at US$32.9 million. Of this total, US$2.9 million was allocated to cover operational costs and losses. These losses - incurred in the initial years and up to 2015 - were primarily caused by the devaluation of currencies in the participating countries.

All HEFF funds were placed in local currency, as was initially forecast. The FIs correctly considered that it would be impossible to assume the risk of change in long-term debt and that the educational loan could not be subject to monetary fluctuations.

The fund aimed to grant investors a lower return than those already on the market but still higher than one digit (upper one digit). The project's social profitability would be added to the financial results, which is why the fund's investors were development institutions that recognised the impact of educational credit. These resources were supplemented by loans, partly from the same investors and from other financiers[12], who also accepted lower interest rates .[13]

12 The participating institutions and the resources provided are in Table 1.
13 On average, these rates were lower than 4% per year.

Despite these forecasts, the losses in the exchange rates and the slowness to place the resources yielded much lower profitability for shareholders, estimated at 2.34% in December 2016 for the 11-year term of the operation.

At the time they were selected by the HEFF, the main benefit of FIs was the technical assistance they would receive in developing a new product that would help diversify their portfolio at times of increasing competition in local markets.

Other assumptions were not so correct. Although the project design considered that the interest rates that would be charged to MFIs would be low compared to the international market, the abundant liquidity of the markets after 2009 made those offered by the HEFF uncompetitive to the FIs .[14]

The assumption that the extended term would be attractive to MFIs was also wrong, since their business model based on short-term credits does not usually incorporate the price of maturity mismatch. The delay and slowness in the placement of resources, along with the term and fixed grace periods of the fund, made the long term HEFF look less and less attractive over time.

In order to illustrate the case, the first FI that received resources from the fund had an effective term of nine years, while the last one to sign had only 7.3 years. (In any case, the term is long for the conditions in which the credit is typically offered, and was adjusted perfectly to the shorter-term credit that the entities ended up implementing, as will be seen later).

Table 1. HEFF financing sources In US$.

Source of funds	Original commitment	Amount disbursed
KFW	$5,890,050	$5,890,050
NORFUND	$5,000,000	$5,000,000
SIFEM/OBVIAM	$2,000,000	$2,000,000
LMDF	$1,500,000	$1,500,000
CAF	$500,000	$500,000
OMTRIX, INC.	$200,000	$200,000
CALVERT	$100,000	$100,000
SUB-TOTAL CAPITAL	$15,190,050	$15,190,050
DEUTSCHE BANK	$300,000	$150,000
KFW	$6,282,720	$6,282,720
SUB-TOTAL SUBORDINATED LOANS	$6,582,720	$6,432,720
OPIC	$10,000,000	$10,000,000
SIFEM/OBVIAM	$1,000,000	$1,000,000
CALVERT	$1,000,000	$250,000
SUB-TOTAL OF SENIOR LOANS	$12,000,000	$11,250,000
TOTAL	$33,772,770	$32,872,770

SOURCE: OMTRIX.

Table 2. Financial conditions established with the FIs. Quotas and deadlines.

Institution	Day of signing of contract	Amount	Term*	Disbursement period*	Disbursement period*
Génesis Empresarial	9 July 2012	$ 4,500.00	108	48	48
Banco FIE	28 November 2012	$ 1,500.00	108	48	48
FUNDAPEC	18 December 2012	$ 3,500.00	108	48	48
Visión Banco	27 December 2012	$ 2,000.00	108	48	48
DESYFIN	9 July 2013	$ 4,000.00	100	48	48
ADOPEM	24 July 2013	$ 3,500.00	100	48	48
ADEMI	1 October 2013	$ 3,000.00	96	48	48
PROEMPRESA	4 February 2013	$ 3,000.00	108	48	48
Banco LAFISE	26 September 2014	$ 4,000.00	103	48	48
Financiera Confianza	14 July 2015	$ 1,500.00	88	48	28

SOURCE: OMTRIX.
*In months

14 There was a reduction of liquidity which caused the increase of interest rates during the financial crisis of 2007-2008. The HEFF was designed between 2009 and 2010, so when it was launched, in 2011, the liquidity had returned to above pre-crisis levels.

The difficulties of implementing the new product meant that some MFIs rejected the concept. Some resented the penalties in place in case of prepayment of the credit line or its non-payment. Even though these conditions are typically included in any international fund, some FIs were not happy as resources were slow to settle.

The HEFF's administrators and investors took into account the changing circumstances and adjusted the value of the penalties and the rules for disbursements. While the original idea was to standardise the pace of HEFF disbursements with the rate of disbursements of educational loans, the slow pace of placements forced meant that the provision of money to the FIs had to be adjusted - even anticipated.

In almost all cases - with minimal exceptions over brief periods - the resources that the MFIs received from the HEFF were greater than the resources they disbursed to the students. (Figure 1 illustrates the difference between HEFF disbursements and MFI disbursements.)

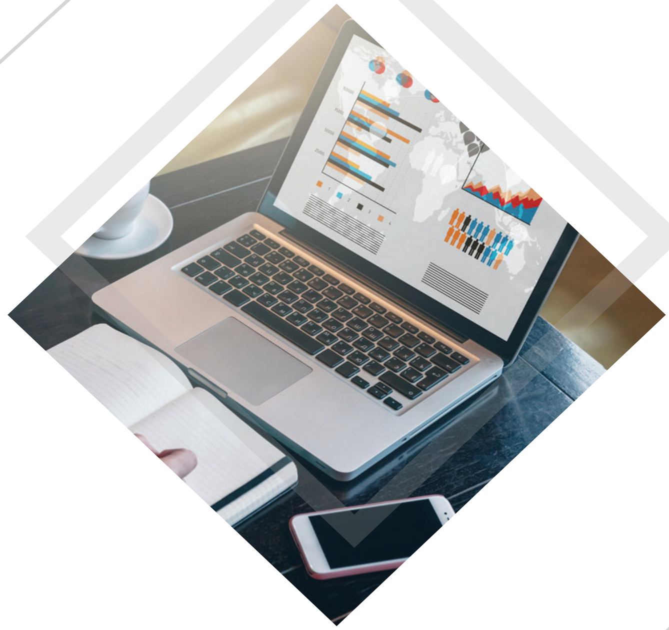
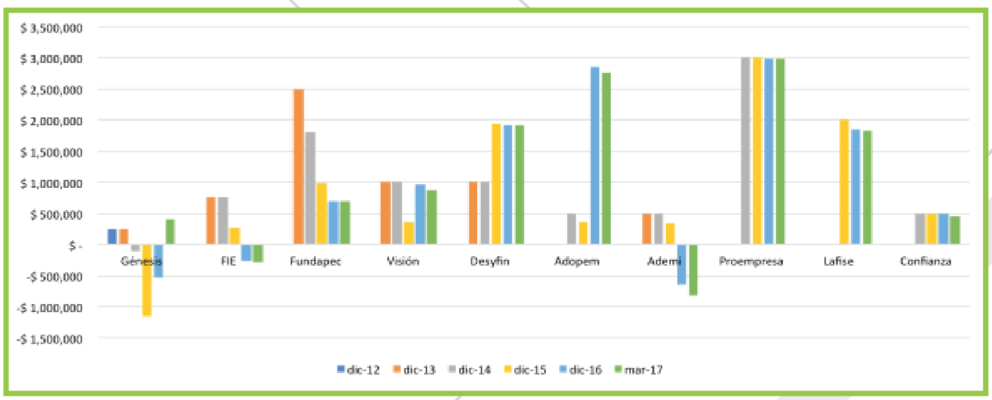


Figure1. Difference between HEFF disbursements and MFI disbursements to students. December 2012 to March 2017



SOURCE: REPORTS TO THE BOARD AND SOCIO-ECONOMIC REPORTS.

As a result, by March 2017, and despite having placed almost 80% of the US$30.5 million approved, the educational loan portfolio generated by FIs only amounted to US$13.2 million. This gave the institutions a surplus of US$10.8 million.

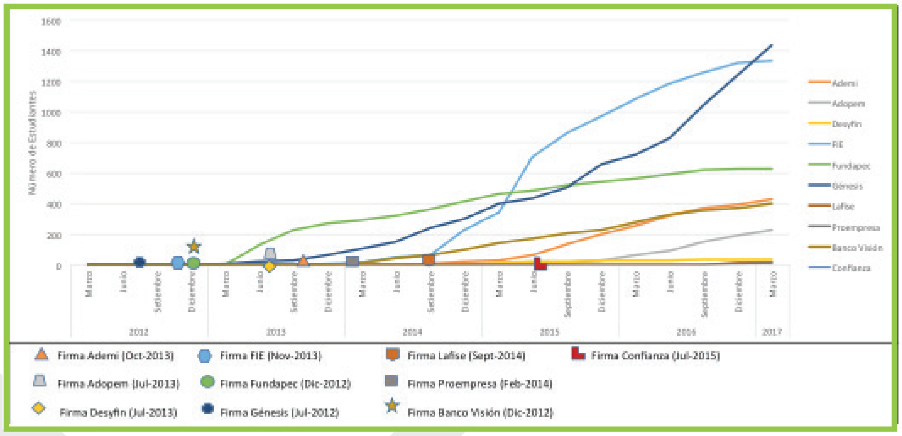
Table 3. Approved quotas, disbursements, portfolios and surpluses to be placed.
March 2017

	Resources approved by the HEFF	Disbursements of HEFF resources	Pending disbursements	Educational credit portfolio	Surplus to be placed*
Génesis	$4,500,000	$4,500,000	-	$ 4,088,295	$411,705
Proempresa	$3,000,000	$3,000,000	-	$ 9,578	$ 2,990,422
Confianza	$1,500,000	$500,000	$1,000,000	$ 49,972	$ 450,028
Adopem	$3,500,00	$3,500,00	-	$ 740,383	$ 2,759,617
Ademi	$3,000,000	$1,500,000	$1,500,000	$ 2,323,761	(-823,761)
FIE	$1,500,000	$1,500,000	-	$ 1,780,519	(-280,519)
Visión	$2,000,000	$2,000,000	-	$ 1,130,533	$ 869,467
Lafise	$4,000,000	$2,000,000	$2,000,000	$ 170,187	$ 1,829,813
Desyfin	$4,000,000	$2,000,000	$2,000,000	$ 90,815	$ 1,909,185
Fundapec	$3,500,000	$3,500,000	-	$ 2,815,388	$ 684,612
Total	$30,500,000	$24,000,000	$6,500,000	$ 13,199,432	$ 10,800,568

Source: Drawn up by us according to information from Omtrix and reports from the FIs.
* The result is the difference between the disbursement of HEFF resources (column 2) and the educational loan portfolio of each FI (column 4).

One explanation for the result is the slowness in rolling out the product, which meant that only four financial entities had reached 400 loans by March 2017.

Figure2. Date of signing the contract and evolution of the number of educational credits. By institution.



SOURCE: REPORTS TO THE BOARD AND SOCIO-ECONOMIC REPORTS.

On the positive side of the balance sheet, the number of loans placed exceeded the initial goals. The program had set a goal of 450 annual credits with a total goal of 2250 in March 2017, but by that date the FIs had granted 4,613 loans (see Table 4).

However, the amount received per student was far below any forecast. Initial estimates assumed that each student would receive around US $10,000, since the project financed complete undergraduate or technical courses. But with the adjustments made, the average loan only reached US$2900, to the detriment of the value of educational loan portfolios, which ended up well below any projection.

Table 4. Projection of the estimated number of students to be financed and the actual number reached. In March 2017

	# projected students	# Estudiantes (marzo 2017)
Génesis	205	1,473
FIE	68	1,335
Fundapec	159	630
Ademi	136	431
Visión	91	399
Adopem	159	226
Confianza	23	55
Desyfin	182	35
Lafise	182	17
Proempresa	136	12

SOURCE: OUR OWN CALCULATIONS AND SOCIOECONOMIC REPORTS.

Several elements stand out in the analysis of the results of the fund and the conversations with various stakeholders:

• The HEFF administrator and Board were able to recognise the changing market conditions and understand the complexity of developing, piloting and launching the new product for FIs, as well as the difficulties they faced. Therefore, they agreed to adjust the conditions of the credits within the limits of minimum profitability agreed with their financiers.
• It was assumed that an interesting combination of factors - financial structure of 46%-54% (capital-debt) with a long term of 10 years and investors that were mostly development institutions - would allow favourable conditions to attract financial institutions that wanted to innovate with a new product. But that attraction faced several difficulties:
(i) the liquidity conditions of the international market changed significantly between the structuring stage of the fund and the IMF recruitment period;
(ii) the financial structure and preferences of MFIs still prioritise the level of the rate above the term;
(iii) given the delay in the placements and the fixed seasonality of the fund, the institutions that experienced more delay did not receive the benefits of the extended term as did the first ones incorporated;
(iv) even when interest rates were reduced for FIs, the adjustment was insufficient[15], partly because investors maintained expectations for returns that, although lower than those of other funds, were high.
• In retrospect, the fund's financial structure was not sufficiently "patient" with the changes and challenges that MFIs/FIs had to overcome in the implementation stage.
• This could have been due to the underestimation of the level of changes and adjustments that MFIs had to make and the belief that the long term was a sufficient condition to support a type of credit originally created for the long term.
• From the beginning, it was explicit that educational credit would have a lower profitability than microcredit. Given this clarity, it is difficult to understand why investors in the fund expected similar returns to other funds. The level of commitment of the financiers to the objective and social mission of the HEFF was questioned in several interviews with stakeholders and institutions.

15 This affirmation comes from comments submitted by the FIs.

1.3 1.3 TAF as technical assistance tools

Given that educational loans were a new product for FIs, from the beginning it was necessary for the HEFF's resources to be complemented with technical assistance managed by Omtrix as fund manager. TAF resources were hired by expert consultants in higher education funding to link the product to the operations of the MFIs.

TAF was created as a mechanism to ensure the adequate adaptation of educational credit and as a tool to disseminate the product to FIs that were already HEFF clients. It was expected that TAF would ensure the allocation of resources in order to finance students enrolled in high demand programs at universities and quality technical institutes. The reasoning held that these programs would help new graduates obtain good remuneration when they joined the workforce.

Initially, TAF collected contributions of US$1,600,300 from donors. These resources were incorporated into the HEFF project and were managed exclusively by Omtrix, the fund administrator. The HEFF was to provide technical assistance to FIs following an agreement signed with donors.

According to the Offering Memorandum, the objectives of TAF were:

• Transmit the higher educational credit method to the participating IFs. For this, expert consultants in higher education were hired. These specialists worked with the FIs that received loans from the HEFF in the implementation of a methodology and the monitoring and effective recovery of higher education credit.
• Train the executives of the FIs that would participate in the program (as part of that transmission of methodology).
• Develop and facilitate access to an updated list of degrees and higher education centres in high demand in the countries where the participating FIs operated. This list was created according to a cost-benefit analysis[16] of the financed degrees and each country's job market. The intention was for the FIs to direct their loans toward these degrees to improve the likelihood that, upon completion of their studies, the student would find a job that paid well enough to allow them to pay off the loan.

The products of these activities were market studies, the general credit manual and the tool for estimating the cost-benefit ratio of the degrees in each market that could be financed.

The market studies of higher education and the labour market were designed to give a general overview of each national market. These results were not necessarily relevant for the section of the population that the FIs catered to. In several cases, it was possible to characterise the population as a whole, but this profile was inadequate to describe the reality of low-income families or the sections of the FIs linked to the HEFF.

In Paraguay, for example, the market study did not pick up on a particular cultural feature. In this country, students start working as soon as they finish high school and pay for their higher education with their salaries. This implies that, in general, Paraguayan students choose short, technical degrees that they can afford, and/or that they can start studying much earlier than in other countries in the region (due to having income).

The credit manual specifically refers to the product initially proposed by the HEFF, the creation of which involved experts with a wealth of experience in other educational funds[17] experts in training and credit methodology. The main idea was for the consultants to form a team with the Omtrix employees in charge of managing the HEFF to incorporate their knowledge and experience in microfinance into the technical assistance plan. The manual required some adjustment as, in several cases, the design of the product was modified to cover the demand and the particular processes of each FI.

The financial tool for estimating the cost-benefit ratio of the chosen degree was included as a complementary tool to the credit evaluation carried out by the FI analysts. Additionally, FIs would benefit from the in-depth analysis of the higher education industry in their respective countries, including the most in-demand degrees and typical professional salaries.

Technical assistance had to be adapted to the individual needs of each entity, since the process soon showed the difficulty of applying the same model to all entities,[18] each with different challenges. In the process, it was found that the potential markets for educational credit were different in each nation, as well as the specific microfinance market of each entity.

16 Cost-benefit analysis is an Excel tool developed with technical assistance resources. The tool allows a student's future salary, once they have finished their studies, to be estimated and it is compared with the total cost of the degree - including matriculation fees, books, etc. - to determine the amount of credit. Once the amount of credit has been determined, the fee that the student has to pay is calculated (interest and principal) and measured against their future income.
17 Among them, Icetex from Colombia and Fundapec from the Dominican Republic.
18 Among those factors were internal reorganisation processes, core banking changes, changes in the liquidity of the environment and profitability difficulties. Each one required individual adjustments.

Other factors lead to the adaptation of the technical assistance. For example, the financial and institutional situation of some entities was not adequate for the implementation of a new product. On other occasions, it was necessary to adapt the technical support to the internal product development processes of each FI. The approach taken by the FIs to educational credit also defined the need for technical assistance. On some occasions, FIs had to define whether it would be a product of their offer or a strategic one, necessary to face the competition. Or if, on the contrary, it was a product developed only because it was associated with an external source of financing - but that it would not be sustainable if funded with their own resources.

As a result of all these dynamics, the HEFF included additional activities. Among them were:

• **Support in the design of each FI's product.** Specific manuals and support for their application were developed.

• **Development of incentives for commercial strength**[19]. In the process of introducing the product, it was identified that the advisers were not inclined to offer educational credit because it required more sales effort than traditional microcredit. Since educational credit was proposed among their own clients, the placement required more visits both to the debtor and the educational institution. In addition, more information was needed than is required to grant microcredit.

While the follow-up was expected to be less demanding - because of the bi-annual test periods that the financial entities carry out with respect to the students' academic progress and automatic disbursements - for some MFIs the start of each academic year required collecting the information again and carrying out another credit evaluation. The reason for this was the bi-annual disbursements and interest payment (without capital payment) created a considerable increase in the client's debt - much more than in staggered microcredit operations.

• **Support for the definitions of degrees to finance** (with the goal of basing the analysis of borrowing capacity on the product's variations).

• **Introduction of financial education.** Given that the debtor would be a student, they had to be included to explain the concept of credit and its concomitant obligations.

• **Work fairs and help finding employment.** The product offered by the HEFF - wherein capital amortisation begins once the student has finished studying and joined the workforce - includes support in finding a job, which is a way of reducing the credit risk.

• **Student office.** Designed to provide help to students experiencing difficulties in repaying their credit due to unforeseen circumstances. The office would also help to identify the best academic direction for students.

• **Direct support for FIs.** Faced with the slow pace of placement, the goal was to identify and help to resolve limitations in taking out credit (permanent communication through chat, email and/or visits).

• **Organising a workshop.** Designed for the entities supported by the HEFF to share their experiences.

TAF also received additional donated resources. The following table shows the activities carried out under the heading of technical assistance. According to Omtrix reports, the original activities planned in the design of TAF were "Method Adaptation, Country Analysis, IMF Training and Financial Education". Activities related to advising, planning, work fairs, videos and promotional materials and consulting in the launching of the product were grouped together after the fact.

Table 5. TAF Activities and Resources

Activity	Totals
1) Method adaptation	87,358
2) Country analysis	213,306
3) IMF training	217,868
4) Financial education	54,150
5) Advice for students in difficulty	31,073
6) Work and professional direction planning	-
7) Work fairs	-
8) Promotional videos	29,741
9) Direction for product launching	297,080
10) Promotional material	224,760
11) General Omtrix expenses	129,709
12) Technical Assistance and Administration Officer's salary	239,499
13) Independent evaluation	106,239
14) Facilities expenses	1,592
TOTAL (ORIGINAL + ADDITIONAL)	1,632,375

As of June 2017.

19 Esta práctica era necesaria pues se utilizaría el canal comercial tradicional, que en el caso de las IMF son los asesores de microcrédito.

The distribution of resources for technical assistance depended on the conditions of the country and the maturity of the FI's portfolio. In any case, it was expected that most of the TAF resources would be used in the first four years of HEFF. 15% of these resources would be spent in subsequent years, depending on the needs of the FIs and the maturity of the loans. As of December 2016, there was still US$456,099 to be used, equivalent to 28% of the total committed resources, mostly from KFW.

The majority of the FIs interviewed said that technical assistance was decisive during the process of implementing the education loan. This allowed, for example, the entities most focused on supporting formal segments to benefit from learning from the financing of informal sectors. The FIs with greater advances in product development highlighted the importance of supporting students.

According to these FIs, without the HEFF project they would not have developed any educational loan product. However, some tools were not so useful to all the entities in the design and implementation of the product. For example, several FIs had to modify the product design not only in relation to the debtor[20] but also in aspects such as the amortisation system and the terms, in order to adapt them to the features of the products that they already possessed.

Overall, the FIs took about a year to cover the internal implementation of the product. Each one began that period once it received the first resources committed by the HEFF.

According to the visit reports of the consultants and the interviews with the entities, the main challenges faced by the FIs at this stage were related to the internal processes and their institutional situation. In one case, financial and institutional weaknesses were identified and the entity had to begin a restructuring process that led to the departure of most of the team in charge of the development and implementation of the project. Circumstances such as these demanded a greater effort in technical assistance in areas where support activities were not planned.

The flexibility of FIs in radically adapting to changing situations and a variety of challenges was also decisive. In the visits to the FIs it was found that TAF's support had been adjusted and adapted to each particular situation to ensure the implementation of educational credit. Although the initial product was the same, the technical assistance was adjusted to the possibilities of implementation and internal development of each FI. The initial tools (credit manual and cost-benefit tool) were not modified, but the FIs received support to ensure the particular development of higher education financing mechanisms according to the needs of their domestic markets.

20 For example, from a non-working student to a microentrepreneur or salaried working student.

2 Is educational credit a viable product for microfinance institutions?

The process developed by the Omtrix team and the staff of the FIs yields multiple lessons. These lessons make it possible to gauge the challenges of implementing a product that has substantial differences from traditional microcredit but also brings the possibility of success to include it in order to diversify the portfolio.

The FIs had an obvious need for more people to gain access to tools to finance higher or technical education, but the possibility of offering an integral and more complete portfolio of products to their own clients was also unique. The HEFF product was intended to generate that interest among executives and members of the boards of directors of FIs.

Through the HEFF, the people in charge of the implementation in the FIs recognise the viability of the product today, although they also point out that it should have been proposed in conditions different from those of the original design. Educational credit is a product with low profitability (for the time being) and which, due to its very specific features and conditions, requires the implementation of various adjustments that would facilitate its inclusion in the entities' portfolios.

The HEFF connected a diverse group of institutions - ten in all - replacing the original idea of prioritising MFIs. These MFIs were distributed across seven countries (see Table 1) and comprised: seven microfinance institutions with extensive experience, specialisation in and social vocation for the microenterprise sector; a commercial bank that provides banking services for individuals and corporate entities; a finance company specialising in discount of invoices to SMEs; and a fund with more than 40 years of experience in the provision of educational credit .[21]

Table 1. Types of financial institutions linked to the HEFF.

Entities specialising in microenterprises (and with a larger social commitment).	NGO	Génesis Empresarial (Guatemala).
	Banks and financial companies	Adopem (Dominican Republic), Ademi (Dominican Republic), Banco Visión (Paraguay), Banco FIE (Bolivia), Financiera Confianza (Peru) and Financiera Proempresa (Peru).
Multi-sector entities		Banco Lafise (Honduras), Financiera Desyfin (Costa Rica).
Educational fund		Fundapec (Dominican Republic).

Long-term credit was a new product for most institutions, because, until the project, only three (Ademi, Visión and Lafise) offered a product with a term of more than ten years (a mortgage).[22]

Although most of the entities had little experience in the development of new products, four institutions already granted educational loans: Fundapec, which is a specialised educational credit fund, had a structure, terms and forms of payment similar to the product offered by the HEFF; Lafise and Vision Banco had a product for masters and postgraduate students in the country and abroad,[23] financed by second-tier banks or multilateral entities, but aimed at higher income markets; and the Bolivian FIE, which had a product to finance children of microentrepreneurs (without many prerequisites) and oriented to support short degrees (three or four years) .[24]

21 In Appendix 2, there is a brief description of each institution.
22 Outside of this offer, other portfolios tended to focus on short or medium-term products. Among the medium term, the Dominican Adopem had a 60- month housing remodelling loan; Desyfin and Ademi had credit lines for SMEs of up to five years in term.
23 In the case of Banco Lafise, the tool was funded by BCIE and Banprovi lines. The latter defined degree listings and the possibility of financing for local institutions and abroad (only Banprovi allowed financing of degrees at local universities). In Paraguay, however, Banco Visión administered a ten-year loan financed by the Agencia Financiera de Desarrollo (AFD).
24 It was early in the FIE product's development when the HEFF was launched.

Table 2. Long-term loans offered by the institutions (before associating with the HEFF).

Institution	Long-term credit product	Educational credit product
Génesis Empresarial	Housing remodelling, 36 months.	No.
Proempresa	None.	No.
Adopem	Housing remodelling, 60 months.	No.
Ademi	SMEs (60 months) and 20-year housing mortgages (not widely promoted).	No.
Visión	Long-term housing credit. Emerging. Financed with AFD resources.	Postgraduate credit, financed with AFD resources.
FIE	None.	"Self-improvement" educational credit (short-term; 3 or 4 years maximum). Aimed at microenterprises to pay for their children's studies.
Confianza	None.	No.
Lafise	Mortgage (up to 20 years) and educational (up to 10) loans.	Since 2011, there has been educational credit available for masters (2 years), postgraduates and doctorates, in and out of the country. Prerequisites: trust-based security for up to 7 years and mortgage guarantee for up to 10 years.
Desyfin	Mortgage loan (in their portfolio since 2014) and leasing for teams (3 to 5 years).	No.
Fundapec	Educational credit (up to 10 years) for undergraduate and technical studies. Up to 4 years grace period. In 2011, 68% of the portfolio was awarded to students who were not working and were looking for undergraduate, postgraduate and masters studies.	Educational credit for tuition, undergraduate, technical studies, postgraduate, masters, equipment and continuing education in and out of the country.

The HEFF focused on solid entities with the idea that, with them, it would be easier to make internal adjustments and it would be more beneficial to introduce new products. However, all FIs - and even the strongest and most regulated MFIs - had difficulty introducing changes and new products. In practice, they are mono-sector and mono-product.

The following sections show the areas where the adjustments were concentrated and the factors that allowed consolidating an offer of educational credit in some FIs. This product was very different from the one conceived by the HEFF and has not (as of now) shown satisfactory profitability.

That said, it is foreseeable that several FIs maintain their educational credit offer and continue to explore mechanisms to make it sustainable.

2.1 Educational credit required more work than was anticipated.

The HEFF conceived of educational credit as a complete product. It contained a package of tools - a market study, a credit manual and a cost-benefit tool - including in-depth training of the institutions' staff and top-level teams were involved in its design.

The product was based on the experience of specialised institutions such as Icetex in Colombia, Conape in Costa Rica and Fundapec in the Dominican Republic. The offer was based on the model that conceives that "credit is given to the student to be repaid by the professional". Under this premise, education is conceived of as an investment that beneficiaries appreciate as a tool that will help generate future income and, therefore, repay credit itself.

The institutions used this hypothesis as a conceptual basis to design the product, supported by the training provided by the HEFF as an initial component of technical assistance .[25] However, as this chapter shows, the implementation of the new product required a much greater effort than initially anticipated by all involved. Even when the teams were motivated by the training and willing to adjust the design and implement the product, in practice major adjustments were necessary that took more time, for several reasons.

Some of these reasons were:

• Several regulated entities required prior authorisation to launch new products. Ademi and Adopem, for example, relied on approval from the Superintendency of Banks of the Dominican Republic to receive the HEFF's resources and to approve and register the product. The Peruvian entities also required the approval of the Superintendency; the Central Bank of Paraguay closely monitored Visión Banco, and requested that they separate the educational credit within its statistics to avoid confusing it with refinanced loans.[26] In the case of Adopem, starting their activities took one year (between the signing of the contract with the HEFF and the first disbursement of resources) and it was another year before the first HEFF disbursement and the delivery of the first loan of its EDUCA-T product[27](See detail in Appendix 3).

• It was necessary, but not enough, to provide the tools and train the management and sales staff, as the institutions also had slow internal processes. The product required an official actively in charge of monitoring, solving problems and mobilising the areas involved.

• There were many obstacles to the adaptation of credit origination models. The changes in typical variables used by most microcredit institutions (visits, calculations of the repayment capacity according to the business's cash flow, client profile, etc.) were radical. The model came up against a culture that was deeply rooted in the institutions.

• It was difficult to calculate incentives for the advisers, since the educational loan is a seasonal product of amounts much greater than the traditional microcredit and with staggered payments and disbursements. It was not easy to adjust it to the typical incentives already designed for placing microcredits.

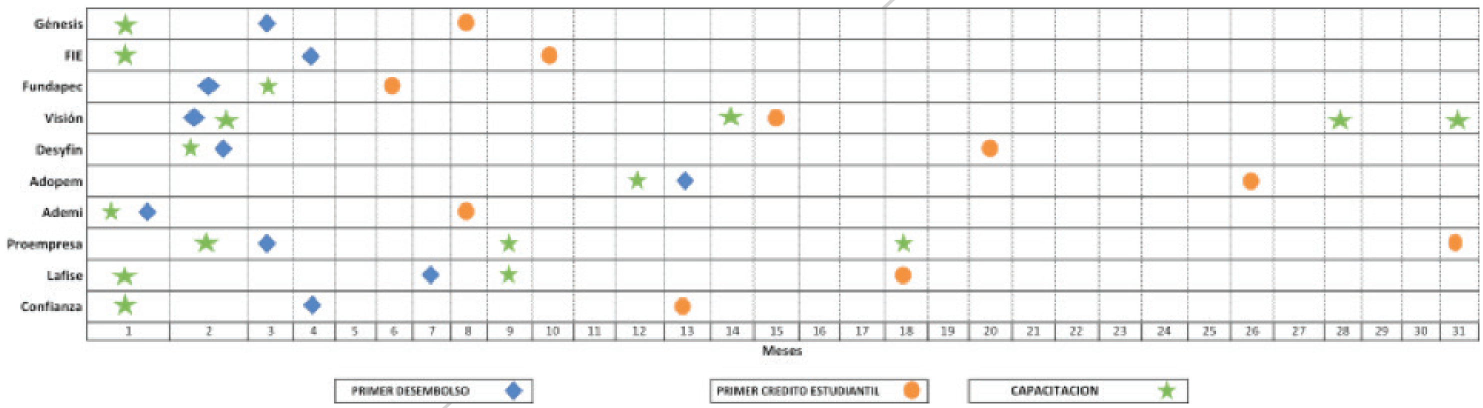
• In the case of risk analysis, the product required understanding a new client without current income and trusting that that person would repay high amounts with uncertain future income, a situation totally different from their previous microentrepreneur clients. (In addition, the amount of credit required special approval levels.)

• The changes in the technological platforms -which initially were considered unnecessary because it was a pilot- were required in several institutions. This situation subjected the project to the typical expectation of prioritisation of demands from the technical areas of FIs.

•In several institutions, it was necessary to repeat the training for the rotation of the personnel linked to the project.

25 This training was not necessary in the case of Fundapec, as the fund already granted this type of credit.
26 The amortisation and disbursement characteristics made educational credit look like refinancings, a condition that was discussed with the Central Bank of Paraguay.
27 It was also necessary to send the characteristics of the product to the Superintendency of Banks of the Dominican Republic to obtain a permit for the launch.

Figure3. Difference between contract date with the HEFF, training and product launch. In months



Source: Consultants reports, quarterly reports, interviews with institutions and reports to the Board. Note: In all cases, month 1 corresponds to the month of signing the contract. The date of the first disbursed educational credit corresponds to the final month of the first quarterly report that contained information on funded students.

As a result, as shown in Figure 3, a considerable period of time elapsed between the signing of the contract with HEFF, the first training and the launch of the product.

2.1.1 The market segment was different from the FIs' natural market.

In the beginning, the HEFF considered that the natural clients for the educational loan would be the children or relatives of the micro and small entrepreneurs who are clients of the institutions. The manual recognised that, in the medium term, new external clients could be recruited, or clients referred by higher education institutions (HEIs). In practice, when confronted with their particular realities, the institutions found that the segments that were best suited to educational loans and provided the most demand for them did not always coincide with their microenterprise clientele.

The placement of resources among the same microentrepreneur clients was not easy. Only a few mentions allow us to quantify if the clients of the entities participated in the educational loan portfolio as holders or guarantors. In Génesis, these represent 5% of 1473 students; in Ademi, 30% of the 431 loans granted; and in Lafise, which only funded 17 students, it reached 60%, but with the consideration that its clients were not microentrepreneurs. The information obtained in the interviews of the other cases allows us to conclude that the FIs had to refocus on other segments to provide product dynamics and adapt to the conditions of the demand.[28]

It was the features of each market that made it more difficult to place the resources of educational credit among the FI clients themselves. In Guatemala, where access to higher education or technical education is minimal, only 2% of the students who sit the diversified baccalaureate enter university. Génesis, for example, verified the interest in this type of financing through a small consultation with its clients, but it was not easy to sell the product to microentrepreneurs: their children typically do not pursue technical or university studies and are not prepared to accept large loans, nor are microentrepreneurs able to borrow to be their guarantors. In the case of Paraguay, as mentioned, young people do not enter university once they finish high school, rather they start working early and finance their studies with their income. Adopem, Ademi and Confianza also did not find a sufficient captive domestic market to allocate all of the resources received.

In all cases, the difficulties led to a change in approach in order to link clients identified by the study centres and design new marketing strategies to bring in clients/students with financing needs, which now should now only have to belong to low income families, but not necessarily be part of the microenterprise segment.

28 Appendix 4 contains information on this strategy.

In the process, the institutions understood that the target customer for an educational loan as designed by the HEFF is different, and that it should include, to a greater degree, the employees, as guarantors or as clients. In effect, a microentrepreneur's borrowing capacity is limited to assume greater indebtedness. Even when a parent wants their children to study a university degree or long-term techniques, the reality is that they require support from their children in their micro or small business in an even shorter term. Executives from institutions in the Dominican Republic, Guatemala, Honduras and Paraguay even mentioned that the children of microentrepreneurs in many cases do not even finish high school. In Peru, meanwhile, parents did not let their children take the loan because they were afraid that they could not face the debt, while they were not certain about obtaining a job at the end of the career.

In non-microfinance institutions such as Banco Lafise and Desyfin, the natural seekers of this product were not children of clients either. Lafise, for example, considered that the credit would be easily marketable among its captive market of 20,000 employees who receive monthly salaries. However, although it was launched in 2015, the first loan was granted in March 2016 and a year later only 17 students received financing. Lafise's clients mostly came from agreements with the universities and from a new advertising stake focused on massive networks.

Desyfin, meanwhile, found that the owners of SMEs were not interested in taking out loans for their children's education because their borrowing capacity allows them to finance them with their own resources. In addition, there are financing facilities available in Costa Rica at a lower cost than Desyfin's product. This situation was not so clear at the time of the product launch, since, according to Desyfin, Conape, the main local source of specialised financing, had budgetary restrictions and that created an opportunity. Such momentum changed over time, as public banks were forced to allocate a percentage of their profits to financing Conape[29]. With this, Conape expanded its offer of loans to master's degrees both in the country and abroad, with rates below 4%, while Desyfin offered its credit ten points above and had limited staff to place it in the HEI.

The educational credit product not only served to diversify the portfolio of institutions, as was thought by HEFF, but also allowed several entities to find a different market niche with potential for development. Even so, all those involved had to make a greater effort than initially anticipated. For the MFIs, it involved understanding a new market, another segment of customers - salaried employees - and developing a specialised channel, in addition to adjusting their operational systems.

Adopem confirmed statistically that the natural market for educational credit is not its microentrepreneurs.
The analysis of socioeconomic conditions among their almost 400,000 clients showed that only 600 met with the required borrowing capacity, despite the fact that 10,000 clients had children of college age. Of those 600, only 10% met all the requirements to access the product. Even so, the loan reached a minimal percentage of their existing clients. The product is offered in branches, tellers, call centres and higher education institutions.
Interview with the person in charge of educational credit.

2.1.2 Use of channels different from the traditional ones

The HEFF considered that the advisers of microcredit and credits for SMEs of the FIs would be the natural channel of promotion and the sales force adequate to reach the target market of the families of micro and small entrepreneurs. To do this, they trained the sales forces in their product manual. However, with the exception of one entity, the advisers were unable to raise the level of demand for educational credit as much as was expected. The product only took off when it had dedicated staff who specialised in promotional and sales activities.[30]

It was difficult to incorporate educational credit into the routine of the MFIs' credit advisers: it required more resources and the operational cost ended up being higher. As it was a different product - in both its terms and financial conditions - it created insecurity, distrust and rejection of the advisers.

As a result, the product was not widely promoted and was hardly supported - initially for fear of worsening the overall default of the office - in the MFIs' branches. Those in charge of the areas that administered the teams were not completely interested in the product either, and such decisions led several institutions to rethink whether this was really the right channel for their development.

29 See www.conape.go.cr. Management report, November 2016. In January 2013, the Restitutional Bill was signed for Conape's income, reducing Law 8.634 of 2008. For this project, public banks should allocate part of their profits to fund Conape operations. The percentage allocated to Conape started at 2% in 2007 and gradually increased to 5% in 2017.

30 See the detail by FI in appendix 5.

These are some of the factors that prevented the advisers from being the natural channel for the sale of educational credit.

• **The structure of the credit and the documentation required from the student and the guarantor required a longer approval time than a typical microcredit**. The information needed to document the loan, even in HEIs, is different and more specialised. The notes and visits to the student and guarantor and the understanding and use of the cost-benefit tool required the advisers to think outside of the traditional sales scheme.[31]

The demand for information did not end there. The sociodemographic information required by the HEFF was needed as well as visits to the work or home of the potential client and the guarantor, searching the student's background, the documentation of their curriculum, a family photo, their academic records, and a commitment to maintain a grade level of over 70 points (out of 100).

The same case was repeated in Financiera Confianza, where the credit counselors discovered that requesting documents from the universities and the guarantor was more expensive and complicated than completing the documentation of a traditional microloan. The time spent on visits and the time spent estimating borrowing capacity was longer and therefore more costly for the analyst, significantly limiting the attractiveness of the educational loan offer.

In some institutions, especially in the Dominican Republic, it was decided that specialised advisers in higher amounts of credit would be named as a specific product promotion channel. For Ademi, they were Personal Banking advisers; for Adopem, small company or loans of over US$2000, constituting a group of 100 people. Additionally, in these institutions, it was necessary to adjust the PDA mobile devices that the consultants use to record information on the conditions of the educational credit product. In Ademi, the inconveniences included manually completing a form which was close to 30 pages long - and, complicate things further, each payment was also processed by hand, requiring frequent updates to the documentation.

• The processing difficulties discouraged the promotion of the credits and affected the allocation. In Banco Lafise and Financiera Desyfin, an adviser who was already responsible for selling different products to different segments lost all ability to give time to educational credit. (That adviser usually decided to go after the clients he already knew, not those who would demand more work). In Adopem, meanwhile, it was reported that the advisers had no reason to sell the product if the operation did not include a monetary incentive to improve their variable salaries.[32] This option was implemented in the Bolivian FIE, but because the product there was released to the market with a return period of less than one year.

• The seasonality of the product generated a very different discipline and work routine compared to the credit flow that an adviser handles. Even though the HEFF manual showed how to plan visits to HEIs and schools, in practice the coordination of promotional dates and seasons, in addition to the creation of agreements with the universities, clashed with the stable and continuous routine of an adviser.

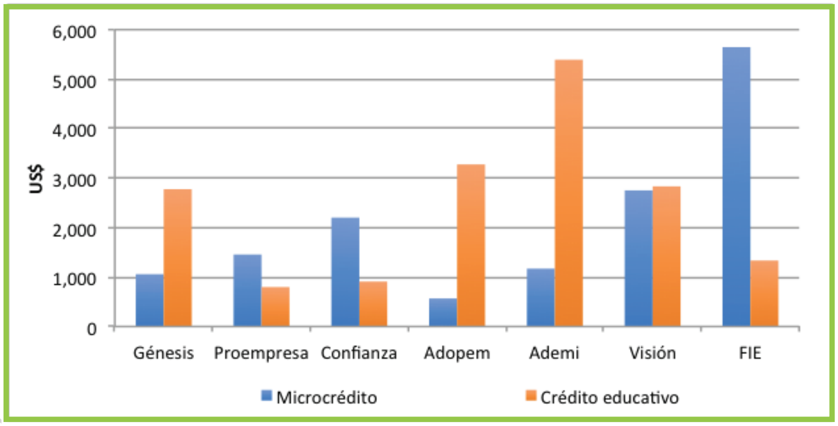
2.1.3 Difficulty in changing the risk perception of the product

The risk assessment model of traditional microcredit focuses on the analysis of the microenterprise's cash availability. The model of educational credit is based on the future income from an investment (education). In several cases, this change in model gave rise to a product that is difficult to implement, a problem that must be considered for innovation processes that require methodologies determined by long-term future income.

Initially, MFIs were also concerned about the high allotment balance compared to the lower average shown in traditional microloans.[33] The entities expressed uncertainty about how to maintain a continuous monitoring of the portfolio with such long-term operations and the repayment risk, concerned, above all, by the uncertain future income and the limited borrowing capacity of microentrepreneurs to cope with the accumulated volume of debt at the time of completion of studies.

31 In the case of Génesis, for example, the form ended up being very long (approximately 10 pages).
32 This possibility was considered, but at the time of visiting had not happened.
33 Inclusive compared with larger loans granted by the MFIs to small and medium businesses.

Figure4. Average amount of educational loans and average value of the microcredit portfolio, by MFI. December 2016.



Source: Annual reports published on the official websites of the institutions and interview information.
Note: Figures from Desyfin, Lafise and Fundapec are not included, given that they are not microfinance entities. The average amount of credit per student corresponds to the average disbursements per student of each FI that were reported in the socioeconomic reports.

Figure 4 shows the difference between the educational loans disbursed to students and the average value of the microcredit portfolio[34]. This situation is visible in the institutions that implemented the educational credit in a way which was most faithful to the HEFF manual. On the contrary, it is not fulfilled in the cases of FIE or Vision, where the educational credits were adapted both to the reality of the demand and to their own institutional limitations. (These loans were converted into loans with a term of less than one year, a mechanism that prevented both from accumulating high balances.)

The risk areas raised alerts to mitigate the risks. The measures required a strengthened approval structure (similar to that used for larger loans), frequent monitoring and the determination to strengthen support with another guarantor.

The product design did not generate uncertainty during the grace period - during which only interest was paid - but it did exist when facing the accumulation of balances[35]. The strategy for mitigating these risks relied on actions such as knowing the student's academic situation or improving their employability possibilities, among others, but the implementation of such measures demanded a close relationship with the HEIs and the adoption of the figure of the academic counselor. Unfortunately, both relationships are quite uncommon for MFIs. The daily monitoring of these aspects involves serious difficulties for an MFI and, although its importance is recognised, several institutions had not implemented these measures at the close of this report.

As for the other institutions, the risk area found it inconvenient to accept the educational loan. Risk analysts demanded that the loan be covered by 100% guarantees with the purpose of not affecting capital adequacy[36]. As some institutions could not obtain good guarantees, analysts estimated the credit risk at 100%. Executives from Génesis, for example, mentioned that they had doubts about the student's ability to generate the expected income at the end of their degree, given the dynamics of the salary market in Guatemala. (To mitigate this risk, the Guatemalan entity Banco FIE and Confianza offered the product with a shorter term.)

An additional complication was the rotation of the risk analysts who were trained by the HEFF.

2.1.4 The tools offered by the HEFF were too standardised

The institutions recognised the support and importance of the HEFF in launching the product, given that without it the dynamics would have been more complicated. Some institutions may even have suspended their application due to the specialisation demanded by the educational loan, its term and amounts, and the characteristics of their own operating structures.

34 The chart does not include student debt amounts.
35 Both the grace period and the increase in debt as they advance in their studies.
36 An obligation imposed on the regulating agency by the banking Superintendency of each country.

However, despite the commitment made to the HEFF, the constant pressure from Omtrix consultants and support for the launch and promotion of the sale, not all FIs implemented the product, nor was it possible for educational credit to acquire greater importance in their strategies, as will be seen later.

Furthermore, not all institutions recognised the usefulness of the proposed tools or adopted them in their entirety (see Appendix 5).

Market study and cost-benefit tool

The market study provided relevant information to understand the education market, degrees, institutions and labour demand. All new topics, including for Fundapec, which already sold educational credit.

However, in all cases the need to know the target market itself, and its greater relevance, was evident. With the exception of Adopem, Confianza and Fundapec, the survey of the needs of the FI clients themselves was insufficient.[37]

The market study, linked to the cost-benefit tool, showed Fundapec that the limited number of degrees and universities would not allow them to allocate all the resources received. In effect, the combination of degrees allowed by the HEFF and the household income required of students[38] requiring finance proved a difficult hurdle to overcome during the process of searching for potential clients.[39] Fundapec's natural market is mainly composed of middle-class clients with limited income, but who aspire to relatively prestigious universities which guarantee higher income in the future. People with lower income, in general, have not completed the baccalaureate or have mostly attended public universities. The HEFF had demanded that students be financed with a maximum income of 4.4 times the legal minimum wage in force.[40] In practice, it was difficult to find people in these conditions who wanted to finance full undergraduate or technical courses. (Some entities recommended that a possible HEFF-2 does not limit degrees or universities.)

Dominican Adopem and Peruvian Financiera Confianza conducted additional market studies before the products were launched. Adopem hired a local consultant to design the product and update the market study delivered by Omtrix. Their recommendation: to have a wider range of alternatives to finance, such as the secondary or high school stages and master's degrees. (This option was not implemented as it had not been foreseen in the HEFF design.) Confianza studied its clients to identify specific demands. The results allowed the design of the product to be modified and adapted to their market. The Peruvian entity identified educational needs which were more focused on short-term technical courses[41], so that it launched its product with a shorter term per year.

In the case of Visión Banco, the market study had to land on the characteristics of Paraguayan students, who move from the baccalaureate straight into the labour market and finance their studies with their work. Visión Banco does not finance students in full-time education and the terms of their credits may be short, given the immediate borrowing capacity generated by young people working.

In the Dominican Republic they argued that it would be excellent to update the HEFF study.[42] Thanks to the fund, Dominican FIs increased their offer of educational loans: before the HEFF, only Fundapec offered the product, and now that offer is shared between Adopem and Ademi.

In relation to the cost-benefit tool, most of the institutions requested authorisation from Omtrix to update it, including, with due justifications, some degrees or universities requested by potential clients.

37 However, the FIs recognise the necessity for market studies and keep them updated and focused to understand the dynamic of the demand and the employability of the identified market segments.
38 Until the HEFF came along, Fundapec did not collect statistics on household income, which began to be implemented after they received funding resources.
39 HEFF's monetary contribution supplied Fundapec's resource fund. Only resources which comply with the characteristics requested by the HEFF are awarded to this funding.
40 SMLV is current legal monthly wage. The maximum income that the HEFF allows per household is US$1434; the minimum wage for workers for private companies - out of "sectorised" - in 2017 was US$326. Details of resolution 05-2017, National Committee of wages of the Dominican Republic.
41 46% of their customers were interested in funding one or two cycles (semesters).
42 This type of operation is costly and based on financing that is not likely in the future.

The tool served nine institutions as a reference for the promotional process, but it has been little used to evaluate the risk and repayment capacity of long-term credit. In particular, the tool has no use for the entities that adjusted the terms and studies and generated credits that can be repaid in a short period of time. The Superintendencies of Costa Rica and Honduras - where the multi-segment supervised entities Desyfin and Lafise operate, respectively - warned of the inconvenience of using the tool to calculate the student's borrowing capacity based on uncertain future income. Banco Lafise does not use it either because it has not been approved for their risk area; Desyfin uses it as an additional means of consultation, especially to validate the accepted degrees. Confianza also do not use it; Visión, in Paraguay, have not integrated it into their evaluation process.

Credit manual

It was important and necessary to contextualise the credit manual within each of the institutions. All the institutions needed to adjust and adapt the manual to their own circumstances, a task that required time and work from their internal teams and the Omtrix support consultants.

Academic counselor for student monitoring

HEFF recommended having an academic counselor to provide psychosocial support to students whose academic performance was suffering. The institutions with the highest number of credits found the recommendation useful, because as the number of students grows, more follow-up and support are needed. Génesis already has this support, FIE has not implemented it; neither has Adopem, although they consider it to be fundamental. Lafise still has few credits (and the university, generally, has this type of services). In Fundapec, the figure of the academic counselor does not exist, but since 2016 it has incorporated the Fundapec Community, which conducts financial education workshops where they advise potential students about credit, degrees and universities to be selected based on the economic capacity of their family. (A good orientation has a direct impact on the level of subsequent dropouts.)

Table 3. Academic counselor.

Génesis	Proempresa	Adopem	Ademi	Confianza	Visión*	FIE	Lafise	Desyfin	Fundapec**
☺	☹	☺	☺	☹	☹	☹	☹	☹	☺

Source: Interviews with FIs.
Symbol references:
☺ Implemented. ☹ Not implemented.

* Has a special contract that does not include the academic counselor.
** Implemented (without TAF resources) the Fundapec Community for similar purposes; in this case, the contract is special and does not include the academic counselor.

Adaptations to operational systems

The operational systems must have been adapted to the new product, considering a new amortisation scheme and terms that were radically different from typical microcredit. While this is completely standardised, educational credit requires adaptation to the financing, term and amortisation conditions required by the client and the HEI.

HEIs and technical institutes are heterogeneous within and without the countries; they work in different cycles and with payments of different seasonality[43]. In some cases, they broker a payment agreement between the financing institution and the HEI to make a single disbursement. Some institutions, such as FIE or Banco Lafise, have allowed, in the absence of an agreement, the disbursement to be made to the credit holder and whoever makes the payment .[44]

Adopem, in the Dominican Republic, created a new amortisation model and had to classify the educational loan before the Superintendency as a consumer loan[45]. Their technology area indicated that creating the product took a few months, the same period as in Proempresa and Banco Ademi. In these two institutions, however, each disbursement creates the need to sign a new promissory note, with new document verification and new signatures - a slow operation for clients, HEIs and credit advisers. Another hurdle was the agreement to share student information between HEIs and financial institutions.

In the case of Confianza, the loan is disbursed directly to the client and not to the HEI. And even when their product was adapted to make it compatible with their usual microcredit, the amortisation system requires that the previous credit be cancelled biannually and accumulated with the next disbursement, updating the balance[46]. The decision to adapt it to a credit technology that the entity already had was based on the fact that the development of new systems would have implied greater delays, and the FI was eager to meet the conditions of the contract with HEFF. Lastly, Proempresa also grants short-term loans - renewed with each disbursement - while at Visión the regulation considers this type of financing to be a refinancing, so that the credit is reported separately from the rest of the loans granted, so as not to hide refinancings in their portfolio.

HEFF socioeconomic information requirements

The socioeconomic information requirements of HEFF demanded development and adaptation in the core banking practices of all the institutions, including Fundapec, which did not gather information from the families of the students. At Lafise, the reports were created online. In institutions such as FIE, for example, the information was collected manually by the credit counselor (another official uploaded the information to Excel). Ademi, which has a standardised technological process to eliminate the use of paper, ended up collecting information on paper because the change in core banking practices caught the attention of the technology department and the bank in general. Then, that information was collected and sent to the HEFF[47]. For Peruvian Confianza, it has been difficult to collect and process information.

2.2 What were the main adaptations that FIs made to the product designed by the HEFF?

The entities modified the product, the processes and channels originally conceived by the HEFF to meet their needs, those of the market and the sectors to which the educational loan was directed in order to streamline and make its offer viable.

43 For example, they may have a single enrollment in two or three annual cycles or recurring payments during the study period.
44 In this case, the student must send the documentation to the bank later.
45 This was the alternative also authorised to Ademi by the Superintendency of Banks of the Dominican Republic.
46 Their platform does not allow you to add more than the previous credit.
47 A requirement for having received the funds.

The main adjustments made were as follows:

2.2.1 Focus on customer segments where latent demand was clearer and easier to meet

As mentioned, the original HEFF hypothesis was that a significant part of the potential demand coincided with microentrepreneurs (or their family members) who are clients of the FIs. With this in mind, the educational loan would be a natural diversification of the portfolio.

In practice, this was not necessarily true, as the MFIs found during implementation. In most cases, it was collaboration with educational institutions that made it possible to identify the target clients for the loans with greater precision. On many occasions, these clients coincided with segments that behave more like a salaried market than the microentrepreneurs traditionally served by MFIs.

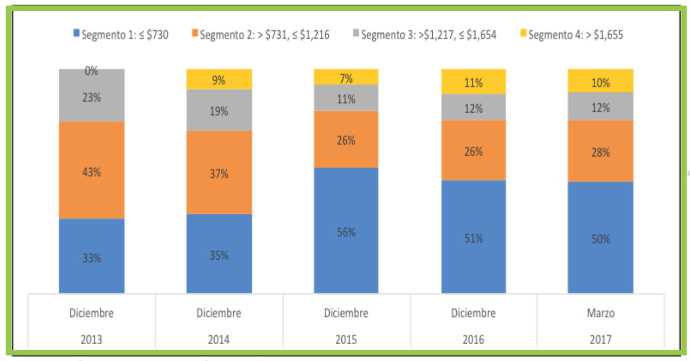
Only Confianza and Adopem conducted studies of their own market. Confianza, with
financial support from the HEFF/TAF and the use of specialised methodologies such as surveys and interviews, identified that the educational interests of its clients were not necessarily represented in the results of the initial market study. The FI found that the characteristics of the educational loan proposed by the HEFF were not adapted to the needs and borrowing capabilities of its clients, in terms of amount, term and amortisation system. For this reason they adapted the HEFF product to their own operation, market and channel (see Box 2).

Adopem also started by analysing its internal market and validating the market study delivered by the HEFF. On the basis of these results, they concluded that they had to expand the supply of educational loans for school financing - a product that would eventually be demanded by current clients - as well as identifying a certain demand to finance undergraduate, technical studies and master's degrees. Adopem searched its database using the characteristics of the ideal client for the educational credit product designed by HEFF as a filter, and found that only 60 clients out of a total of almost 400,000 matched all the characteristics: that is, they not only had children in suitable stages but also enough borrowing capacity of their own to be guarantors. Adopem had to identify new sales channels and sign agreements with universities and educational centres, in addition to generating a new culture and understanding of the product within the organisation, one of its most difficult tasks.

Génesis, meanwhile, analysed their customer base after launching the product and identified that many of them matched the desirable characteristics, but in practice they did not want to get into debt because, in their culture, their children do not have access to university.

In terms of the structure of household income, the lowest income families have been losing share - students with household incomes of US$730, which were initially 56% of the total, had been reduced to 50% by March 2017 - while 10% of loans were to people with a household income over US$1655.

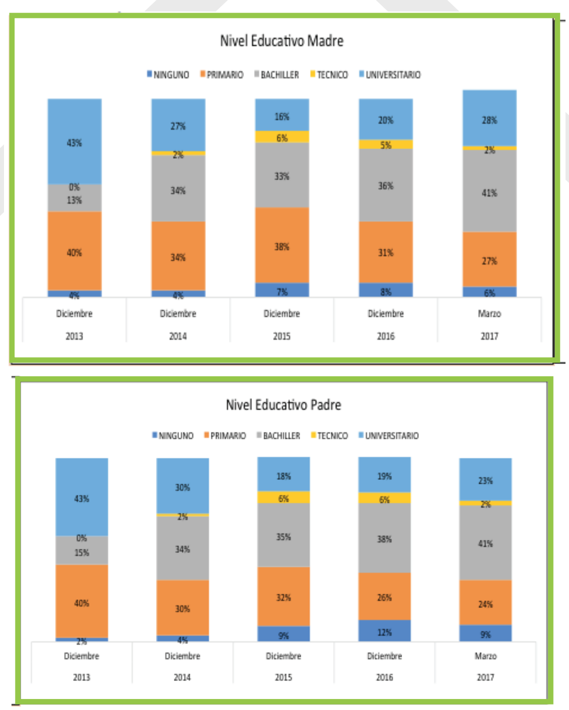
Figure5. Evolution of student participation, by level of household income.
Consolidated, December 2013 to March 2017.



Source: HEFF socioeconomic reports.

Slowly, parents who work and those who have a better level of education have also gained a greater participation in the consolidation, a double operation that reflects the greater formality sought in the clients provided with educational credit.

Figure6. Level of education of the student's parents.
Consolidated, December 2013 to March 2017.



Source: HEFF Socioeconomic reports.

However, the assumption that the student was dedicated exclusively to studying and began to work once they had finished their degree ended was proved wrong. In most countries, the reality is that young people finish their high school studies and go to work to pay for their undergraduate or technical studies, among other reasons.

In many cases, it is a cultural attitude - as in Paraguay - but it could also be related to the scarcity of financial skills, typical of the student stage, that would allow them to cover the lack of resources. This pattern of behaviour is difficult to change while the volume of credit is consolidated and constitutes a valid and sufficiently recognised offer on the market. Therefore, the highest percentage of students served by the program combine work with study (see Figure 7).

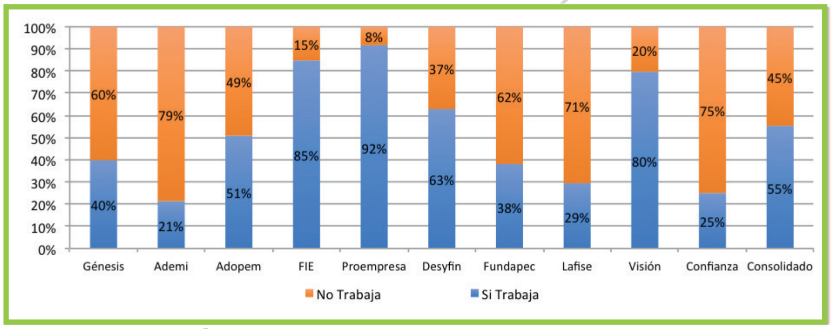


Figure7. Percentage of students who work, by institution. March 2017.

Source: HEFF socioeconomic reports

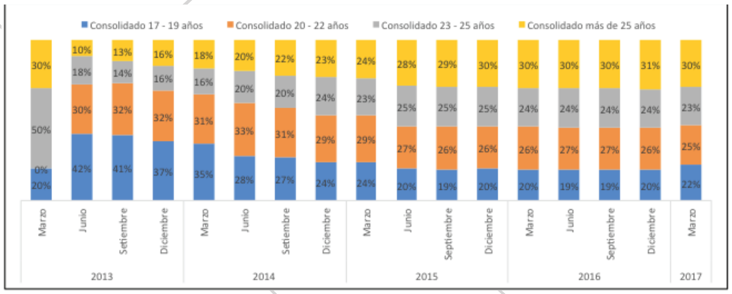


Figure8. Students funded, by age range.

In March 2017
Source: HEFF Socioeconomic Report.

Overall, 56% of educational loans went to students who work and study. This percentage is higher in microfinance institutions such as Visión (80%), FIE (85%) and Proempresa (92%).[48] Still, when these credits are classified as university or technical in the socioeconomic reports - and could be assimilated to long-term loans - they do not necessarily mean that they constitute financing granted to cover full degrees, given the variety of options granted to the product, as indicated below.

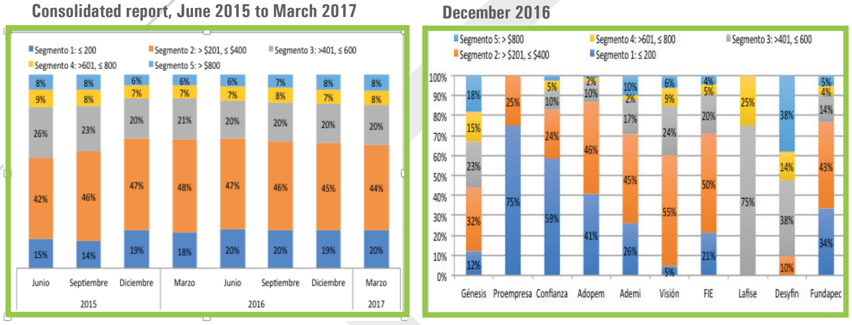
FIs also began financing older students to ensure faster loan repayment. 53% of the students are over 23 years-old, while the youngest - who are certainly candidates for total degree financing - only represent 22% of the total.

In the consolidated report from the institutions there is no preference for students with a higher average income at the time of taking out the loan. In this variable, there appear to be no significant historical variations. Rather, the composition reflects that, as long as there is income from work and the requirements demanded by the FI are met, there would not be a tendency to look for students with higher salaries.

However, there are some differences between institutions. Only in December 2016, entities such as Visión, FIE, Lafise and Desyfin had a greater preference for taking less risk by concentrating on students with higher salaries. Génesis has diversified its portfolio in this area, while Proempresa, Confianza and Adopem include a higher percentage of students with lower salaries.

Figure9. Student's salary at the time of credit approval.

Consolidated report, June 2015 to March 2017 **December 2016**



Source: HEFF socioeconomic reports.

48 Ademi (21%) and Genesis (40%) have the lowest percentage of students who work.

2.2.2 The product was adapted to the demand and to reduce the risk

The educational credit product, especially the long-term design, was re-evaluated to allow a diverse range of features that were better suited to the needs of the student and allowed FIs to reduce the risk.

The entities identified clients seeking short-term educational financing - such as the final semesters of an undergraduate or technical career, the payment of fees for registration or graduation procedures - and the financing of short courses. In this case, the conditions allowed a stable instalment credit (which includes capital and interest from the beginning) to be offered, with terms of one or two years. According to the executives interviewed, this type of credit is better suited to the loans traditionally granted by MFIs, which are perceived as having a lower inherent risk.

The range of options to be financed is associated with the range of clients: from full-time students, who need long-term financing, to working students who study at night, and who can repay their short-term loans.

The recommendation that the student was responsible for the repayment of educational credit - even if they had a guarantor, usually a family member - was only applied in Fundapec, FIE, Ademi, Adopem and Desyfin. In these cases, if required, an extra guarantor was required to further reduce the risk of default.

To the extent that the institutions were better acquainted with the segment and risk management, the product experienced variations on its original conditions. For example, as of 2017, if the student does not work, Génesis fills in - and uses for risk analysis - only the guarantor's CEF [49]. The maximum monthly payment is then set considering 50% of the liquid excess of the debt. Also, as of 2017, all loans must have a guarantor and, if necessary, may include a security interest to endorse or strengthen the case. Banco Lafise, meanwhile, eliminated the need for collateral to help the product take off more easily.

In the other institutions, a working student is the one who holds the credit, but it can also be the microentrepreneur (if the parent), or the guarantor as long as the student assumes the moral commitment to the payment.

Table 4. Holders and guarantors of educational credit.

Entidad	Titular del crédito	Garante y/o fiador
Génesis Empresarial	Estudiante. Inicialmente solo accesible a mayores de edad, el crédito ahora puede ser tomado por un menor, aunque con la firma de su apoderado. Desde 2017, si el estudiante no trabaja, para el análisis del crédito se llena y toma la FEC del fiador. La cuota se fija tomando como parámetro el 50% del excedente líquido de la deuda.	Desde 2017, todos los créditos llevan un fiador obligatorio. Se puede adjuntar una garantía real si fuera necesaria para avalar o fortalecer el caso.
Proempresa	Estudiante (cuando trabaja) o microempresario. Si el estudiante trabaja, no necesita garante.	Requiere garante.
Ademi	Estudiante, aunque no trabaje.	Requiere garante y fiador (60% de la cartera tiene garante solidario)
Adopem	Estudiante, trabaje o no.	Garante (familiar). Si es necesario, se solicita fiador.
Banco Visión	Microempresarios o sus hijos que trabajan.	
FIE	Estudiante.	Con codeudor (los padres) y/o garante (familiar).
Confianza	Microempresario o estudiante, si trabaja.	Aval, en caso de necesidad.
Banco Lafise	Estudiante (si trabaja). El titular no puede ser una persona sin ingresos.	Eliminaron el requisito de contar con un aval para dinamizar el producto.
Desyfin	Estudiante.	Garante solidariamente responsable; garantía principalmente fiduciaria. Si es necesario, se pide garantía real.
Fundapec	Estudiante.	Garante.

2.2.3 The specialised operational areas effectively boosted the product

The experience showed that educational credit only becomes dynamic when it has a dedicated person in charge. Given the low rate of allocation, an insistent recommendation of Omtrix consultants to most institutions was to appoint a manager or area manager for educational credit. The success resulting from this recommendation was varied, according to the time spent by each entity.

The dedicated manager was the option with the best results among the MFIs. In Génesis, which funds the largest number of students, the structure is exclusive and consists of 16 specialised advisers. The area has been so successful that the person in charge went from managing the CREE product to being in charge of the "sector" [50]. The director in charge of the sector now seeks to create new products to make the area profitable and serve the new group of clients. To this end, at the end of 2016, Gesis began to market unemployment insurance and more recently began selling a housing loan. Once the results have been consolidated, Génesis could design a simpler form for microcredit advisers and the offices to promote the product, which has had a lot of publicity at the national level and has earned entity awards in Guatemala and internationally.

49 Credit evaluation file.
50 The educational credit is seasonal while the exclusive sales force is large and expensive.

Table 5. Persons in charge of educational credit product in each institution.

Genesis	Under the Development Management and managed by a director. 14 specialised advisers.
Proempresa	Exclusive executive.
Adopem	Coordinator of educational credit, who is in charge of training the offices and advisers to SMEs, promotion and coordination with students.
Ademi	Personal Banking Area. One manager in charge (not dedicated) and three dedicated consultants for educational credit (in three cities).
Confianza	Marketing area.
Visión	Agreements.
Lafise	In charge of Personal Banking, with a specialised consultant who happened to have exclusive management of the two educational credit products. Will have more responsibilities.
Desyfin	Educational credit coordinator (non-exclusive).
Fundapec	Specialised commercial advisers.
FIE	Depends on the Business Management. Its head is the head of Agroproductive Credits. Has an adviser.

Adopem was also successful with a full-time officer who deals with the promotion and relationship with HEIs and the coordination and internal training of the different channels (offices, the call centre). The most effective communication tool with students is WhatsApp, so the contact number of the EDUCA-T coordinator, the Adopem product, is included in all the advertising tools.

FIE named their first manager seven months after launching the sale of educational credit. The person in charge was supported by an assistant who went to some offices to encourage the clients to purchase the product. Educational credit is already part of the entity's portfolio; however, FIE offers it only in some offices in cities with popular HEIs as a sales target.

In Visión, educational credit is under the control of the Agreements area[51] A team of six specialised advisers visit universities; the evaluation is the responsibility of the branch's analysts, who review the documentation collected by Agreements.

On the other side, given the seasonality of the product, Desyfin and Lafise considered it very expensive to appoint an exclusive adviser. At Lafise, the adviser (initially shared) became exclusive for their two educational credit products, but they may acquire other responsibilities. At Desyfin, there is only one official in charge, and they are not exclusive given the low number of students they deal with.

Box 1. Financiera Confianza: The last to enter and the one that implemented the most modifications.

Financiera Confianza launched its educational credit pilot in August 2016, thirteen months after signing a contract with Omtrix. Confianza did not use the tools designed by Omtrix, as they did not fit their monoproduct scheme. The entity considered that Omtrix's market study was "macro" - that is, it only referred to the most in-demand degrees and their expected salaries - so it conducted a study of its own with its clients to assess the demand. In the study, Confianza used quantitative and qualitative techniques, consulting microentrepreneurs to design the offer based on the type of education they needed, how much they were willing to pay and with what term. This is the only case where the product was modified to adapt it to its own market, without substantially transforming its operation or sales channel. Confianza uses the microcredit methodology to develop the product internally.
Its target sector is microentrepreneurs who want to finance the studies of their children, spouse, brothers or grandchildren (up to the second degree of consanguinity) and microentrepreneurs who intend to finance their own studies. Confianza also includes the possibility of financing dependent workers and students who work, but not clients without income.
The entity funds technical and/or undergraduate university studies (including matriculation, accommodation, thesis and degree expenses), training in specific trades (hairdressing, car repair, welding, etc.) and equipment (laptops, instruments, specialised calculators, among others). It also finances language and computer courses to complement undergraduate technical or university studies and/or as independent courses.
The total term of the loan cannot, under any circumstance, be longer than 46 months. In practice, 100% of the loans are used finance technical degrees with a duration of less than two years of study.
Confianza uses its microcredit advisers as a channel, with incentives for number of loans granted and for recovery.
The customer pays a stable fee, although not fixed. The structure must increase the term as the disbursements increase, but without exceeding the limit of 46 months and with a minimum of 12 months (for credit for four semesters). The fees policy consists of three structures; combining amount versus term, the rate increases as the term increases. The educational product is placed at an average rate equivalent to half the traditional microcredit rate. The rates are around 25% for new educational loans and 22% for old clients.
The product is used to build customer loyalty. The adviser decides the fate of the loan and the client can choose between increasing the instalments and maintaining the term or maintaining the instalment and increasing the term. The loan is re-evaluated with each disbursement. The advisers do not ask for more documents than typically requested for a microloan, as they would take longer to document the operation (and they already have difficulties collecting socio-economic information).
As of March 2017, Confianza financed 55 students. Their goal was to reach the end of 2017 with more than 500.

51 This is the area in charge of managing all the bank's agreements, including those signed with the universities or technical institutes. The speeds are different from those of microcredit, as more information must be processed, and more documents collected, and content confirmed. This dynamic led to the commercial development of the product in agreements, the person in charge of collecting information and monitoring the approval process. The evaluation is done with the microcredit analysts. The product is mandatory for Agreements and optional for microcredit analysts.

2.2.4 The HEI are the most appropriate sales channel (and they determine the studies to be financed)

When the FIs implemented the product, they had a wide range of demand to which they had to adapt .[52]

One of the earliest lessons was the understanding that traditional microcredit advisers were not the most appropriate channel for the product conceived by the HEFF, as they did not give it the importance or the dynamism it required.

On the other hand, from the beginning, the partnerships with the HEIs became a suitable channel to market the product and were decisive in identifying potential clients. This channel encouraged the allocation, making the marketing process more efficient, by bringing together the potential resource applicants in one time and one place, and making the students' other needs visible, thus facilitating understanding of the new sector.

These partnerships with universities and technical centres with higher demand and positioning, demanded time and involved various types of agreements[53] This is a very different placement and marketing process to what the MFIs are accustomed to with their microloans. Once the agreement with their HEIs was signed, the FIs could make themselves known and recruit clients through advertising within study centres, attending fairs to promote the loans and being visible during registration periods.

Box 2. It was difficult for Ademi and Desyfin to make partnerships with the HEIs

Initially, Ademi had difficulty getting into the HEIs. They resorted to relations of the members of their Board of Directors to get appointments and reach agreements. Part of their problems were that Fundapec, which already offered an educational credit product, is well known in the market and offered a more attractive rate (16.5% compared to 18%).

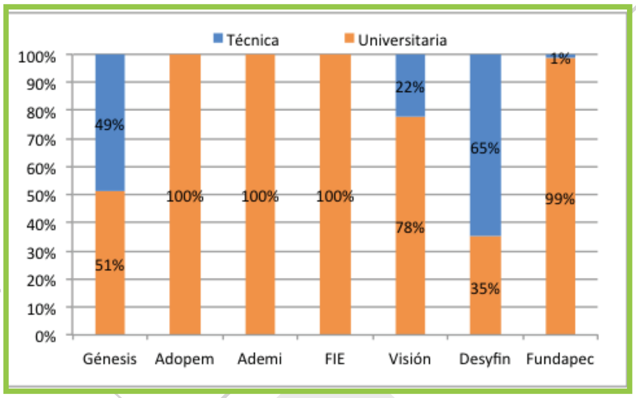
The operational dynamics also added complexity, as the credit executive in Santo Domingo had to go to the university to print the student-client's notes and complete the files.

It was no easier for Desyfin, since Costa Rica is a market served by Conape, which offers interest rates more favourable to students (between 4% and 6% per year) than their own educational credit (19%). Desyfin must invest resources and personnel to participate in events - a task difficult to fulfill with a single product manager.

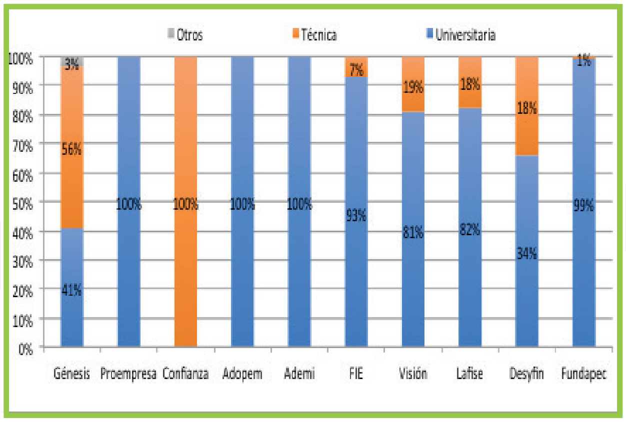
The strategy used by Génesis - who have several agreements with HEIs and educational institutions that offer short courses - included linking financing with certain work opportunities. For example, the entity finances English courses in Guatemala requested by call centres, nursing courses and even pilot training courses, which are requested by foreign airlines. After analysing their internal client, in October 2016, Génesis launched an educational loan for school for which he negotiated discounts (for example, for advance payments) that can be transferred to students. This allows them to offer a more competitive rate compared to the consumer loans of banks, which are their biggest competition.

Figure10. Percentage of participation of technical and university careers in the total loans granted. December 2015 to March 2017

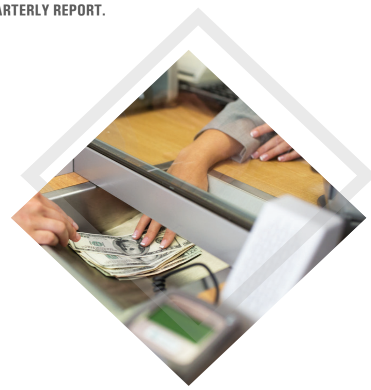
December 2015



March 2017



SOURCE: IF QUARTERLY REPORT.



52 Appendix 4 summarises the different channels used by the participating entities.
53 Agreements that even include the fixing of a specific competitive interest rate for their students, since some already offer this type of financing.

2.2.5 Methodology adaptations

As mentioned, each institution integrated the product into their line of promotion, evaluation and approval. The most important changes occurred at the methodology level.

Genesis, for example, eliminated family income as a source of income for the student and focused on the guarantor's. It also established that all loans must have a guarantee, a measure implemented in response to their particular risk assessment. Confianza also fully adapted the characteristics of the product to their microentrepreneur clientele.[54]

It is still too early to determine the risk of the product of long-term educational credit as the loans that finance complete university or technical courses have not yet completed their total repayment period. It is impossible, then, to validate the main assumption of the future salary as the main source of repayment of the loan. The product is new even for Génesis or FIE, the first entities to implement it.

Box 3. Génesis' experience to energise the CREE product.

In mid-2015, under the management of a new bank profile administration, Génesis decided to strengthen educational credit by adding someone with extensive banking experience to their team to boost new products.

By then, the product, launched in March 2013 with the name of CREE, financed more than 400 students and had a team of six full-time promoters, four of them outside of Guatemala City, where the market for superior and technical educational credit is very limited.

The new product was launched with few modifications. The person in charge found loans for very high amounts given the future borrowing capacity of the students (and guarantors), a cost-benefit tool with overvalued income for the real market salary and loans granted on the basis of the total household income, but without calculating household expenditure. At that time, there was a delay due to over-indebtedness, little internal dynamics and a product that was forced into the market because of the micro structure of the institution. There were no flowcharts, the processes were slow, and the educational loan asked a lot of the prospective clients, who had to fill out an extensive form. In addition, the high amount concerned the offices, since the risk could affect their portfolio. Lastly, the clientele very different from the traditional Génesis client base. The entity did not have any control of the students either.

However, part of the Board of Directors was convinced of the benefits of educational credit. They were confident that there was demand, since there was no offer of educational credit with these characteristics in the country and, in addition, access to higher education, concentrated in the capital, is low, presenting an opportunity to increase it.

The educational loan was designed with two types of payment, one with interest payments and the other with cancellation of capital and interest. Faced with the rise in arrears, Génesis identified that contrary to expected future revenues, which were overvalued, there was a great jump in the rate when the client went from paying only interest to also paying the capital.

The decision was to centralise and specialise the team in Guatemala City, make the credit process simpler and faster, improve the analysis process (it would no longer include all household income, but only that of the parent(s)), and adapt it to their clients' income (in practice, in the case of default, the father or mother would answer to the foundation, not the rest of the family). Génesis also improved loan monitoring, strengthened agreements with universities and technical centres, implemented the guidance of the academic counselor and supported its promotion through digital marketing strategies.

Today it has a specialised area of 14 advisers in Guatemala City dedicated exclusively to the product, which is more flexible and tailored to each student and associated institution. Génesis have been recognised by their CREE, which has also allowed them to distinguish themselves from its competitors. Now they have found new niche markets in employees, representing 40% of the total loans granted; the children of micro-entrepreneurs are only 5% of the total.

Their range has expanded over time. Micro-entrepreneurs require loans to fund earlier stages, such as school, so in late 2016 Génesis launched a product with interest payments of one to three years on a loan whose total term is five to six years, including the grace period. The new proposal requires a guarantor, who is evaluated.

Génesis also finances technical courses and works with educational centres linked to the job market, such as English schools or pilot courses. Its product range is aimed at all segments, but the entity recognises that it is still only halfway to reaching its goals.

In 2017, Génesis made CREE accessible nationally, no longer focused on microentrepreneurs and with a simpler and more understandable form for the advisers. With this, they exceeded their allocation goal. In March 2017, they had financed 1472 students with loans of an average of US$2770. Génesis complemented this offer with a loan for schools and unemployment insurance, and began designing complementary products such as mortgage loans. "Educational credit has gone from being a new product to being part of our range of products aimed at a new client base", say those in charge.

CREE is an established, registered and well-known brand in the Guatemalan market. The product is on track to be profitable.

The FIs said they had little concern about default, which they considered very low. Since there are also short-term credits, some entities already have students in the repayment stage. The rates of default in educational credit are very varied, ranging from 0% in one entity to 6.7% in another, owner in turn of a microcredit portfolio with a default rate of 2.3%.

In some cases, the default of students with lower incomes has been somewhat greater than the traditional default of the total educational loan portfolio granted to other debtors. It is still unknown if the repayment assumption is fulfilled at the beginning of the work stage or what type of delay there will be at the end of the study as there are no loans that finance a full degree.

54 Appendix 6 contains the details of each entity.

Most of the institutions found a way to reduce risk by complementing the portfolio of long-term educational credit with short-term loans and combining salaried employees, microentrepreneurs and students. Several entities even mentioned their desire to finance stages that were more secure in terms of repayment, such as master's degree studies (IF8, IF2, IF1, IF7)[55] undergraduate study abroad (IF8) and shorter courses (IF5, IF3, IF9, IF7, IF10), in addition to others that meet specific needs, such as payment of matriculation and final periods (one or two semesters), among others.

Table 6. Percentage of portfolio non-performing (general and educational credit) by institution. December 2015 to March 2017.

	For > 30 days Total portfolio			For > 30 days Credit Portfolio for students		Sanctions US$
	Dec 2015	Dec 2016	Mar 2017	Dec 2015	Dec 2016	Dec 2016
FI 1*	4.0%	4.5%	4.9%	0%	1.2%	NA
FI 2	3.4%	3.6%	4.0%	0%	0%	0
FI 3	2.3%	2.9%	3.5%	0%	0%	0
FI 4 *	2.1%	2.4%	2.6%	5%	NA	0
FI 5	1.5%	1.7%	2.2%	1%	NA	NA
FI 6	2.5%	1.1%	1.5%	2%	3%	9434
FI 7	2.2%	2.4%	2.3%	NA.	6.7%	100,314
FI 8 *	2.8%	2.4%	2.5%	0%	4%	0
FI 9	6.1%	3.6%	3.6%	0%	0%	0
FI 10	6.7%	6.8%	6.7%	3%	NA.	NA

Source: Reports to the Board and interviews with FIs. Default greater than 30 days for December 2016 corresponds to that reported by IF6 and IF1 in the interview. Data as of March 2017. (*) For IF4, IF1 and IF8, the default in December 2015 corresponds to defaults greater than 90 days. In the December 2016 data of IF4, the default is due to default payments after 30 days. NA: Not Available

2.2.6 The financial conditions of the product were modified

The most successful institutions in streamlining the allocation of educational loans incorporated modifications to the product. These changes are associated with the type of sector they serve, the type of careers and studies they finance, and the terms, amounts and payment schemes, always attending to the needs of the demand, which demanded flexibility and diversity. These modifications also allowed the institutions' risk areas to have lower precautions with the product.

The institutions that spent more time with the product reduced the average term of the loans, particularly Génesis (18 months), FIE (25) and Visión (six); Adopem and Ademi continue with terms of more than 70 months. Figure 11 presents the average terms of the educational credits of each FI.

Figure11. Average term of the credit, in months. June 2016

Source: Reports to the Board, Exhibit 2, Quarterly Portfolio Report, 4 April 2017.

Génesis, the oldest of the institutions, modified the terms, payment methods and eligible items of its CREE product. As of March 2017, 21% of its credits finance technical courses in English - the most popular degree - which are brief and have allowed the placement of credits for an average term of 18 months. The loan operates with two types of payment: with capital payments and interest payments during the degree or with payment of capital and interest at the end of the study period for a period equal to the duration of the study.

55 The names of the entities are not included due to confidentiality agreements.

Box 4. Short periods, preferred by institutions.

Visión. The Paraguayan entity decided to work with short degrees, given that in their country there is more work for technicians. Students who work - who also have an interest in partially financing their studies - can choose the amortisation system. The entity lowered the minimum qualification filter to access the product to 3, with the idea of helping students, since they work, have less free time and, therefore, lower performance.

Visión adjusted the list of educational entities to the segment that they serve and adapted the payment of tuition and monthly payments without making a single disbursement. The maximum amount of their loans is US$10,000 and the minimum age of the students is 18 years. The fee goes up as disbursements increase. Students pay interest during their period study, but they also have the option to pay the capital. If the client chooses, the grace period is included at the end.

FIE. The Bolivian FI combined a previous educational credit ("Superación", two years) with the new product "Mis estudios", initially structured for eight years. As the Bolivian idiosyncrasy is to avoid long-term debt, FIE eliminated the restriction on defining a disbursement plan from the beginning. The greatest demand from the students is for loans for matriculation and to finance one or two semesters. There are few long-term loans. FIE expanded the list of fundable degrees and created its own cost-benefit tool (simpler and more useful for similar degrees). The average loan does not exceed US$7000 and allows several forms of payment.

Proempresa. The institutes offer short-term studies (six semesters). The average loan is US$740, with an upper limit of US$4630. There is financing per cycle, in renewable short-term loans. In these cases, Proempresa evaluates the client and extends the credit without the need to finance the entire degree. Interest and capital begin to be financed upon renewal. The product has a fixed fee and rate. It incorporated only one new degree to the list of HEFF careers and universities. The entity requires the student to maintain good grades. If you work, you do not need a guarantor.

Adopem. Evaluates institutions with shorter technical careers that do not require matriculation and prepare the student for the job market. It is not a product that can be standardised. The loan was designed for a single disbursement per semester; Adopem respects this design, although in practice more flexibility is required. The entity requested the inclusion of new degrees and universities to allocate the credit. The cost-benefit tool allowed them to direct the product and reduce the risk.

There were also substantial changes in the average loan amount. This has played against the rate of disbursements of the lines approved by HEFF to each institution, even though the number of students served increased.

In the consolidated report - with a limit per student set by the HEFF at US$10,000[56]- more and more students are asking for less than US$3000, an amount that microfinance institutions, in particular, know how to administer. As of March 2017, these loans represented 68% of the total number of students funded. Lafise is the only microfinance institution that has made disbursements of US$10,000; Ademi and Fundapec have paid out amounts close to US$5000. The rest of the MFIs have made disbursements of amounts of less than US$3500.

Table 7. Amounts disbursed per student. In March 2017.

	Amounts (in USD)
Lafise	10,011
Ademi	5392
Fundapec	4469
Adopem	3276
Visión	2833
Génesis	2775
Desyfin	2595
FIE	1334
Confianza	909
Proempresa	798

Source: HEFF Socioeconomic Report.

56 FIs asked for exceptions. Ademi requested to increase the cap to US$15,000 per student; Desyfin obtained the approval to temporarily finance the HEIs. Although the authorisation was quickly suspended by the HEFF, it was a relief for Desyfin while it lasted, given the difficulty of allocating credit among students due to the competition in the Costa Rican market.

2.2.7 New marketing and advertising tools

The HEFF financed the FIs use of a new concept in digital marketing, more suited to the student demographic, a technologically modern clientele. For this Génesis, Adopem, Lafise and Proempresa modified the design of advertising tools to apply them to massive networks. They used designs with photos and testimonials from clients of the program and technology used by students[57] that gave the opportunity to follow up, for example, by studying metrics of visits to Facebook pages, comments and messages, likes, advertisements, website, YouTube views, and other types of personal approaches, such as WhatsApp.

Box 5. Some examples of innovative marketing strategies

At Adopem, EDUCA-T is offered through approved channels, branches, social networks, tellers, call centres and the inter-bank correspondents. In specific activities, they use media such as radio. The entity changed the graphic design of the product, introducing a new logo and youthful colours. Adopem participates in financial education programs and youth fairs in the Dominican Republic. Any request received by any channel and sent to an analyst that deals with the product in the area also goes to the educational credit coordinator for follow-up. The FI is in the process of eliminating paper; today, almost the entire recruitment process is done electronically.

Lafise educational credit has a marketing campaign and digital advertising based on behavioural studies. The entity uses Facebook for marketing aimed at a niche of young people between 17 and 35 years-old, focusing on its two credit products. The marketing is increased during the opening days of university enrollments and allows statistics of visits and links to be tracked. The product required a special graphic design, something youthful and fresh, very different from the classic aesthetic of the other credit products. Lafise has advertised in universities with large format images in areas frequented socially by students.

Fundapec have also resorted to digital media to promote their product. They complemented their strategy by creating the Fundapec Community, which provides digital information to students about the most in-demand degrees in the country, what skills they must develop to access them and a calculation of the expected salary at the end of their studies. Fundapec makes it possible to upload students' CVs to the Community site and apply for jobs. In addition, it gives information on personal finance management.

2.3 How FIs see the profitability and sustainability of the product

Most FIs were not able to share the initial projections about their expectations for the allocation of their educational credit product. Some, like Lafise[58], Desyfin and Ademi also could not easily define the composition of the current cost and the profitability of the product. Therefore, the conclusions of this section include the opinions and results of the conversations held with financial managers and educational credit officers. The figures obtained from some FIs serve as illustrative examples.

The opinion common among the institutions is that, according to their initial structuring, the product of educational credit was not profitable. This view is based on the dynamics and evolution of the allocation, the market conditions in each country and the situation of FIs in terms of cost of funds and setting interest rates for the credit in relation to the competition. However, entities such as FIE, Genesis, Vision, Trust, Adopem and Desyfin argue that the product contributes to their social responsibility plans.

There are mixed perceptions about the calculation of the operational cost of the product with that of funding by HEFF.[59]

57 Social networks like Facebook and Instagram, for example.
58 At the time of the visit to Lafise, they developed with a specialised consultancy the detailed costing of several much more significant products for their inclusion in the portfolio. At that time, it was not completely clear if they would offer educational credit.
59 The considerations on this last topic are included in the first part of the section; the second focuses on considering the profitability of the product itself.

2.3.1 Considerations on the cost of funding

Several FIs pointed out that the low profitability of the product could be related to the cost of funding by HEFF. The perception of the relationship between the cost of HEFF resources and the profitability of the product is due to particular circumstances that, due to market changes and the slowness to implement the new product, generated a special sensitivity to the funding rate. This meant that the HEFF's resources were perceived as especially expensive.

Initially, the rates negotiated with the majority of the FIs were in line with the funding cost at the time, but over time the financial conditions of the alternate sources varied. Even if the term conditions were not similar, the institutions estimate that the HEFF remained at the high end of the range. These perceptions are summarised in Table 6.

Table 8. Cost of funding by IF, initial and current. March 2017

Institution	Composition and cost of funding	
	Initial	**Current**
Génesis	The majority of funding is medium-term (2-3 years). Average cost is high and frequent international funding with Technical Assistance (TA). The HEFF called attention to the TA.	In March 2017, 45% of funding was equity capital; the rest was financed in equal parts by local banks and international resources (at a somewhat higher cost). They had IDB and FMO capital. The average cost of financing has not changed significantly.
Confianza	The HEFF was costly because of its variable rate, since at that time Confianza accessed resources at lower rates.	They entered the capital market; HEFF is their only small credit.
Proempresa	Were anchored with international resources, but they attract from the public since their conversion into financial institution. The funds were taken at a fixed rate.	There was no mention of the new conditions or unrest due to the cost of the funds.
FIE	The HEFF resources were not perceived as expensive. Called attention to the AT.	The average cost of funding is low; it is composed, fundamentally, of deposits. Very little international capital. The HEFF loan has a very high rate.
Ademi	The funding cost of HEFF matched market rates. The TA and the accompaniment of the line of credit were highly valued.	The average cost of financing is high. 85% of the loan portfolio is funded with local and international sources. The HEFF is more expensive (because it included a variable rate) than other international funds.
Adopem	HEFF was an expensive product, but AT was a bonus.	High cost. The Central Bank's reference rate has increased by close to two points since 2015.
Fundapec	When the HEFF arrived, its rate was very competitive and long term. They had reduced liquidity. They had already taken funds from international financiers.	Even more competitive than other sources. After the HEFF, resources came from other donors. They hope to securitise their portfolio. They have agreements with companies that provide financing for the entity to grant loans to its employees and family members.
Visión	Attracting the public; few international funds. The rate was not high. They value the relationship with Omtrix.	Attracting the public; few international resources.
Desyfin	Recruiting clients cost 66% of financing, with an average annual interest rate in local currency and low in dollars. 32% of funding is local and international and 2% is subordinated credit. They have credits in local currency between six months and 12 years.	The cost of international lines such as BCIE, OPIC and bonds in the long-term stock market have a medium cost average rate.
Lafise	The HEFF was negotiated with the stock exchange in the parent company. The funding was very small and at market rates.	Its main source is public deposits, but it has credits with the local development bank and the international one for specific products (Education and Housing) at low rates. HEFF represents only 4% of the funds.

Source: HEFF and interviews with entities.

2.3.2 nterest rates had to be adjusted to compete

The mention of the low profitability of the product is also related to the level of interest rates that each FI can charge for the educational loan compared to those charged for their traditional products. This is especially evident in MFIs, which compare the rate with that of microcredit: the margins are much lower.

The rate levels agreed with the HEFF allowed competition with other alternatives available to finance education and ensure that educational credit was granted on preferential - and repayable - terms in the future. As the following table shows, market conditions made substantial modifications difficult. However, some FIs reviewed their rates, especially the entities oriented towards working students that demand short-term credit.

Table 9. Charged and comparative interest rates, by educational credit product.

Institution	Educational loan interest rate	Interest rates of the competition
Génesis	17.5%	The banks have agreements with universities and finance the end client at 10%.
Proempresa	17%.	It charges a minimum of 25% to new clients and 22% to old ones.
Confianza	Minimum of 25% for new clients and 22% for former clients.	They compete with microcredit rates.
Adopem	18%.	The main competitors are Fundapec (16.5%) and Ademi (18%).
Ademi	18%.	The main competition is Fundapec (16.5%) and Adopem (18%). The Banks of Lopéz de Haro and the Asociación La Nacional have begun to grant loans.
FIE	Preferential interest rate, 14%.	Their main competition is Crecer (12% annual fixed throughout the duration of the loan).
Lafise	Reduced the interest rate from 18% to 14.95%.	Offers educational credit for masters and doctorates at 11.5%, as does BAC (with funding from Banprovi). Unitec, the largest private university, directly finances 10%.
Desyfin	19%.	Conape (4%), Coopeservidores (9%), Banco Nacional (15%), Banco de Costa Rica (14%).
Fundapec	They have decreased the rate from 19.95% in 2014 to 16-16.5% in 2017.	Their main competitors are Ademi and Adopem.

Source: Interviews with the institutions.

2.3.3 Estimates of other costs and product profitability

The team collected information from the entities to determine if the interest rates that can be charged to the clients cover the average cost of funds, the costs of starting credit and risk provisions. Specific data was obtained from only two FIs. The financial margin that the entities get from the interest rates of the educational loan and the specific cost of the HEFF fluctuates between 5% and 15%.

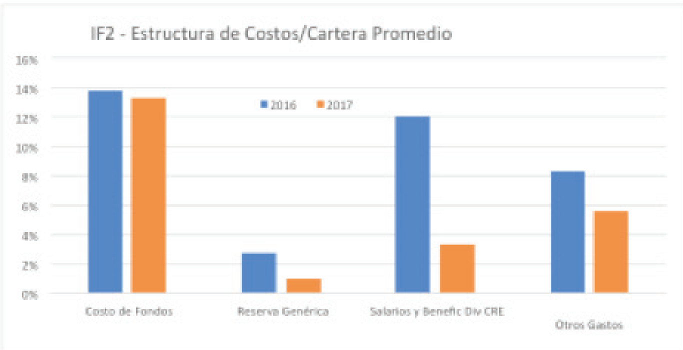
Even though it was difficult to find out the costs of starting the loan and other derivatives of the allocation, IF7 and IF2[60] shared their calculations. In the case of IF7, operating costs represented around 7% of each peso lent, while costs for risks (sum of the provisions and penalties figures) were at 7.9%. This left little margin to meet funding costs, since the allocation rate was 17.5%. The high provisions and write-offs surely reflect the placement problems and the high initial default rate, which at the end of 2016 represented a 90-day PAR of 6.7% .[61]

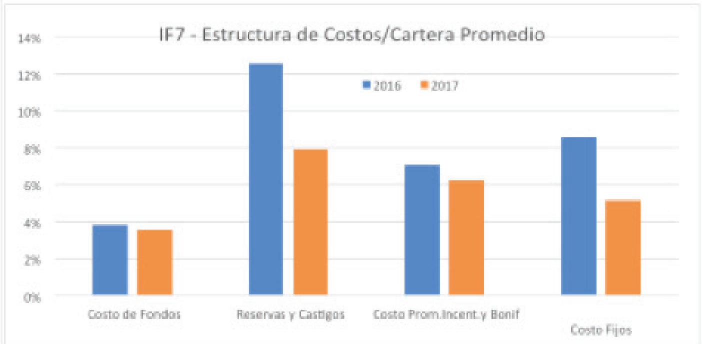
60 The names of FIs are not public because of confidentiality provision

61 This pair seemed to start to be controlled, as the projections for the end of 2017 reduced this item significantly.

Likewise, the reduction of so-called "fixed costs" shows a favourable trend; this type of credit must generate economies of scale to the extent that loans increase because investments and fixed expenses are reduced in proportion to the value of the resources lent. This situation is reflected in IF7, which went from a portfolio with a value of US$2 million in 2016 to a projected US$4.2 million the following year. Lastly, according to their own calculations, the cost of funding only equals less than 4% (per peso lent), which should reflect the average cost of their mix of resources. According to its calculations, the entity would reach the break-even point in August 2018.

Figure12. Composition of educational credit product/average portfolio costs (in IF7 and IF2). 2016 - 2017 period.





Source: Information provided by the financial area of IF7 and the educational credit area of IF2.

The cost structure for IF2 shows marked differences. The quality of the portfolio is higher and that allowed a generic provision to be managed. Although the way in which it presents costs does not allow fixed and variable values to be separated, the evolution between 2016 and the projected for 2017 confirms the possibility of generating economies of scale. In this case, this scale is reflected in the portfolio, which went from about US$400,000 to an estimated balance for the end of 2017 of US$1.2 million. If 23.8% placement income is added to this (including commissions), it is easy to understand why the product broke even in January 2017.

Although these details were not available, the other FIs commented on the origination cost of the educational loan. According to them, the product could have similar costs to the origination of a microcredit. They also pointed out that, at a substantially lower interest rate than the traditional rate, the margin for educational credit operations was low.

Executives from Génesis, Visión, Adopem, Ademi and Confianza said that the higher costs were the result of the need to set up an independent staff structure, the longer time required for the development of the product and/or the time it took to promote and evaluate it. Visión had to assemble a unit dedicated to processing and collecting a large volume of documents and confirming their content. This represented an additional economic effort, so the entity concluded that to break even it would need a minimum of 2000 clients. The problem: the bank has problems with increasing the number of executives in order to achieve that level of allocation.

Confianza's operating costs were also higher because their product required more attention, requires documentation from the universities and from guarantors and makes more visits to the client, in addition to the time spent estimating the liquidity and completion of the socioeconomic record. Proempresa, which has the newest product and 12 students funded as of March 2017, estimated that it would cover its costs with 100 clients and a portfolio of US$500,000.

At Desyfin, the cost is similar to an SME loan and at Lafise the product has an operating cost similar to another loan they offer (both products share personnel and operating expenses). However, the bank considers the other product more profitable, since it is destined to finance masters and postgraduate degrees and has a lower funding cost.[62]

62 The educational loan product is funded with a 7.5% annual rate and fiduciary guarantee.

Fundapec pointed out that its operating cost represents 5% of the total cost of the product. The loan provides a reasonable return when calculating the margin taking into account the average cost of resources.[63]

In both cases with concrete data, the operating costs of 2016 were equivalent to between 15% and 20% of each loan. However, given the economies of scale that characterise these products, it is expected that these costs will decrease with a greater portfolio volume. However, it is unquestionable that interest rates on educational loans are substantially lower, resulting in reduced margins compared to the microcredit portfolio.

It is important to recognise that the margins of microcredit have been reduced in all markets as a result of competition and that the growth possibilities of the segment are running out. For this reason, a product such as educational credit -which, even with a lower margin, has ample growth potential- should be key to the diversification of microfinance institutions. (In fact, this is the hypothesis on which the HEFF project was built.)

In other types of FIs, and even among MFIs, it is valid for shareholders to compare the capital needs of their products with their profitability. However, this calculation should not only include short-term profits but also the medium and long-term earnings potential. And in any case, the benefits achieved in social profitability should not be ignored, given the greater impact that an entity undoubtedly achieves with educational credit.

2.3.4 FIs recognise the social impact and profitability of the product

Educational credit has a very important connotation for its intervention and social contribution. For this reason, several institutions assured that, even without the HEFF's resources, it is very likely that they will keep the offer in their portfolio.

For Génesis, for example, educational credit has brought them closer to local and international recognition and awards, allowed them to explore new markets and provided important visibility and comparative advantages over the competition. Genesis believes that the product is 95% consolidated .[64]

Adopem's educational credit is already codified and it is sure that it will remain in the portfolio even without HEFF resources, since both its executive director and the president of the Board of Directors recognise its importance for the development of the country and new generations, including the children of their own clients.

FIE, meanwhile, made the first measurement of the scope of its mission and social balance.[65] In their report, they argue that "Banco FIE is the leading entity in Bolivia in educational financing, reaching a portfolio balance of over one million dollars. Through educational credit, the financial inclusion of young people is promoted, financing the start, continuity and completion of technical and university studies in favourable conditions for their personal and professional growth. Up to 2016, 4380 loans were disbursed for an amount of US$4.8 million. "

Ademi executives stressed the importance of the product, which fits perfectly in an entity oriented towards social development and family welfare. They also want to keep the product - even without the HEFF - and are looking for how to invest and allocate more resources. Confianza decided to sacrifice the margin for the missionary balance provided by its offer, while in Proempresa and Visión -where it also had a social impact, although without much short-term profitability - educational credit presents opportunities to attract new clients, supports the loyalty of current clients and it is an opportunity to cross-sell products for everyone.

63 This is not surprising, since it was this institution's specialty before joining the HEFF project.
64 To make it profitable, it would only be necessary to complement it with new products aimed at the same segment of the public.
65 Banco FIE - 2016 Social Balance and Sustainability Report. https://www.bancofie.com.bo/apifie/archivos/memorias/BALANCE%20SOCIAL%20%20final%20300617%20pliegos%20baja.compressed-ilovepdf-compressed%20(1).pdf

3 Thoughts on the future

The design, assembly and launch of the HEFF's educational credit product underwent substantial modifications. However, it is noteworthy that searching for best practices for the "ideal" design of a product based on an initial market failure, as well as creating instruments to encourage FIs to explore the market sector, allows the accumulation of lessons learned.

Moreover, now there are institutions willing to develop, innovate and adapt processes, conditions and characteristics so that educational credit is financially viable and better meets the needs of their markets. A not insignificant merit of HEFF lies precisely in the fact that FIs now have the possibility of further diversifying their portfolios and venturing into new markets and demographics.

More interesting still is to understand the learning of each one of the agents involved, from the investors/financiers of HEFF to the contributors of resources of TAF and the beneficiary institutions.

3.1 For HEFF

Using the structure of a microfinance fund that copied features of typical funds made the initiative attractive for several investors and FIs, accustomed in recent years to financing their portfolio, especially microcredit, through these types of instruments. However, given the adjustments and changes that institutions must make to offer an adequate educational credit product, the resources must reflect the support of more "patient" investors. That is, investors who place less emphasis on financial profitability and more on achieving a clear social impact by investing in education in developing countries and learning what several MFIs understood: educational credit is an investment in the future.

One objective of the study was to determine if the experience of the HEFF as a fund could be extended to Africa. While this document is not a definitive evaluation, the HEFF would require adaptations to support the development of an innovative product in the institutions:

• Main: the profitability model on which it was based must be redefined. It is necessary to understand that, while the FIs manage to adapt and generate scale with this type of products, their margins must be greater. And since the final client rate is much lower than that of a microloan, the cost of funding must also be lower.

• Somehow, the effort to develop the product is comparable that exercised by microfinance institutions when they began the process of giving viability to microcredit when they were NGOs. At that time, they were supported with soft funds - many not recoverable - that allowed them to learn from their mistakes, without fear of not being able to pay a debt.

• To solve the funding problem, investors should be, in some way, "partners" of the product through good and bad. They must share the profitability of educational credit after a few years. One could think of an instrument as a bond with a unique guarantee constituted by the promissory notes of the credit.

There is no clear answer to the question of whether providing non-refundable resources would have generated the same results and the same commitment from FIs. The heavy penalties for not disbursing motivated some MFIs to innovate and find mechanisms to generate a new model, but those same actions could also lead to sacrificing the methodology of the original long-term educational credit in favour of a short-term one with less impact.

When analysing the challenges and difficulties faced and the adjustments made by FIs, it would be more logical to think of alternative mechanisms, such as credit resources with a percentage of the non-reimbursable credit if disbursement conditions and certain commitments are met.

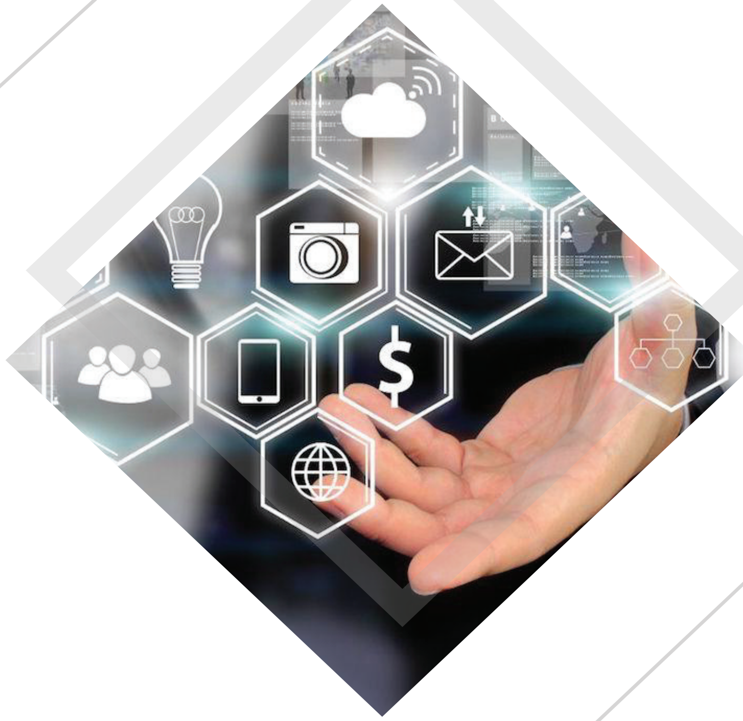
Finally, it is necessary to reflect if, in view of the modifications introduced by the majority of the institutions, the development of an innovative product demands a specific funding or if efforts should be directed to channelling only technical assistance resources. These funds, as discussed below, were the main and undisputed contribution of HEFF to the development of educational credit.

3.2 For TAF

These lessons learned can be important elements for future technical assistance projects in the implementation of educational credit:

• There is not just one educational loan product that is demanded -and/or that financial entities and microfinance institutions can develop commercially. As observed in the visits to the entities linked to the HEFF, several factors led to the adaptation of the idea of credit in order to develop a particular product adjusted to the needs of the demand and possibilities of each entity.

In effect, the needs of microentrepreneur clients and the way they approach the education of their children are not uniform, across countries or market segments. The internal processes of the MFIs in developing new products and the requirements of their technological platform were not homogeneous either. That made it difficult to implement a single type of product with rigid tools.



• The technological developments required for the implementation are not homogeneous either. In all cases, production took more time than planned. According to FIs, the technological developments required to implement new financial products can take a minimum of six months, as long as they "join the queue", as a matter of priority, of the entities' system requirements. For this reason, several MFIs developed the product separately from their "production line", and the results of this is that their future sustainability is not yet clear.

• Support for the design and implementation of educational credit can benefit from the processes already used by financial institutions to develop their products. In general, financial institutions have internal processes that can be used to introduce educational credit.

Of particular importance is the needs study of the specific market segment that each entity serves, as it allows the product to be adapted to their needs and achieve a customised design. Some FIs highlighted the importance of analysing the specific market segment, whose educational needs, borrowing capacity and repayment conditions differ from the of the country's average.[66]

66 This reality would be reflected, for example, in a study of the national market.

• The HEFF and TAF process showed the importance of dedicating time and activities to getting to know new market segments as input for the initial design of the product. In effect, the product proposed by the HEFF was not necessarily adaptable to the low-income population, where the transition from college to university does not occur as directly as it does among families with higher incomes. Moreover, it is important to consider the cultural differences between countries, because the transition between school and university is not always direct and/or at the same time.

• After the first stage of TAF and HEFF, it is a good idea to assess whether the project should start with the understanding of the market segment (to adapt the product later) or if it should start with the product itself. The experiences in traditional financial institutions and in MFIs indicate that, although the hypothesis of an initial product is important to guide the process, it is essential to understand the features and needs of the market to design an adapted and therefore sustainable offer. This understanding of the needs of the market should go so far as to inquire whether the MFI clientele has an interest in higher education, and if it requires credit for it.

• In all cases, Technical assistance (such as TAF) was critical in the design and implementation of the product. Several entities stated that without this support they would not have developed their educational credit. However, in the original proposal of technical assistance, the initial design stage was underestimated for the benefit of the implementation. Since most FIs are in the primary stages of product implementation, it is still difficult to determine the relevance of the TAF components aimed at facilitating the job search for students with educational credit.

• A large portion of the contribution made by TAF was due precisely to the flexibility of technical assistance to recognise the needs of the entities and adapt to them. In fact, more than the form of financing, this was the definitive factor in the development of the product.

Within the framework of this flexibility, the ability to adapt to variable periods of time was important, since it took some entities a year to prepare and design the product. This generated great pressure to disburse credits, since the initial disbursement of HEFF resources had already happened. With this in mind, it would be ideal in the future to provide more time for assistance, so that funding begins once the technical assistance is assimilated by the entities.

This also requires defining mechanisms to ensure the commitment of participating FIs, ensuring that they accept the program with awareness of the effort required to implement a new product. The order adopted by HEFF - to assemble first and then start TAF - meant that, after receiving the resources, several FIs remained in the initial phase, uncertain as to whether they would have a sustainable product. Additionally, the one-year delay of the design, development and implementation process created a lot of pressure to disburse.

• The support which technical assistance offers is essential to introducing such a different product to the portfolio of an MFI or a traditional financial institution. The technical assistance component had to be adapted, including adding unforeseen activities, since the requirements of the development of the product greatly exceeded the forecasts.

3.3 For MFIs/FIs interested in offering educational credit

After analysing the case and the implementation of the educational credit product in these 10 institutions, there are lessons learned and reflections for new FIs that wish to implement the scheme:

• The diversification of an MFI's portfolio is complex. Their structure is specialised, and they "suffer" a lot when innovating. Perhaps the most important question an MFI should ask before offering this type of credit is about its purpose. Complementing a portfolio of products to obtain greater profitability, develop a product for social responsibility purposes or carry out a strategic planning to expand the market segment is very different to providing a new product with features that differ from those traditionally used.

It is not easy to locate the institutions that participated in these three groups, because the conviction with which the product was born started, in all cases, from the good intentions of its managers. However, it was difficult to permeate the DNA of the entities and of all of their boards of directors when the development of the product was slow and its results negative.

This is especially relevant in MFIs, where the product was incorporated more forcefully and whose implementation required many adjustments. However, after overcoming the difficulties, all FIs value the product highly, rather than its financial results, for what it represents for the people in charge and the managers. They recognise the contribution of educational credit to the development of their countries. They understand it as an opportunity to know -and cultivate- a new demographic of customers and to cross-sell products, retain existing customers and improve their social indicators.

• Educational credit is an interesting product for all entities as it complements the portfolio and provides numerous benefits when they are adapted internally and encourage their allocation. Therefore, the MFIs have made the necessary adjustments in order to cover the costs and reach a positive net balance, a goal that is not yet clear in all cases.

• As for lessons for the FIs, it is necessary to understand the market and identify the target clientele, which varies substantially according to the idiosyncrasy and culture of each country. This demands an in-depth study of the needs of its clients and of the niches where the credit can be "sold", which are important conditions to define, a posteriori, the channel and the conditions of the product.

• The MFIs that financed a greater number of students used alliances with the HEIs, which were the most suitable channels for the sale. In turn, they had to change the advertising and marketing strategies to recruit clients. It was important to use social networks such as Facebook, radio stations focused on young people and tools such as WhatsApp to quickly approach students and resolve questions.

• In terms of product management, the correct administration required a specialised sales area, with dedicated personnel (where possible). This is important because educational credit requires serving a new segment through alliances with HEIs, an experience that, for example, is a little outside the day-to-day life of the MFI's microcredit advisers.

• It is premature to make conjectures about what the product can represent in an MFI, given the adjustments that some have made. Educational credit could be profitable if it is developed to penetrate lower income demographics, adjusting it to a shorter term and lower amounts and with an interest rate that covers the costs.

• In terms of risk, the biggest challenges are presented beyond the client, a student who does not presently earn and accumulates significant amounts of debt. MFIs have diversified the risk by combining other credits tailored to each student [67] with their educational credit portfolio. The most common decision has been to reduce the risk with a shorter term and amount. The institutions with the largest number of clients have diverted into financing shorter-term courses that are less seasonal, since they enroll students on a recurring basis and, therefore, have faster recovery. In addition, they usually have a guarantor and, if necessary, a co-signer or guarantee.

• The amounts determine who will be responsible for the evaluation and what committee will approve the credit. If it is short-term and for a low amount, it would be possible to resort to the traditional instances of approval, but in the case of credits for financing a full undergraduate or technical degree, a specialised committee is required to approve the larger amounts.

• The aforementioned adjustments make us reflect on the challenges faced when implementing educational credit as a new product. To do so, it is important to diversify the market by segments, adjust the risk analysis methodology, find new allies and develop a new channel. The entities that have been successful with the product have moved away from the informal sector (microenterprise) as originator of demand and found new client bases, along the way creating a sufficient portfolio of products and diversifying the risks. Given the scale of the changes demanded, in many cases the arrival of educational credit stopped being the simple implementation of a new product to become a process that demands a strategic refocus.

67 This includes several types of options, ranging from salaried clients and students to salaried and informal guarantors and even differential types of fees.

ANNEXED 1. LIST OF PERSONS AND INSTITUTIONS INTERVIEWED

Institution	Person interviewed	Position Held
Luxemburg Microfinance Development Fund (LMDF)	Kaspar Wansleven	Chief executive officer
Mastercard Foundation	Ruth Dueck-Mbeba	Senior Program Manager, Financial Inclusion.
Obviam	Adele Tilevalieva	Senior investment officer.
Norfund	Carlos Escobar	Senior investment manager.
KFW	Constanze Kreiss	Investment Officer
Omtrix	Alex Silva	General Manager
Omtrix	Juan Carlos Pereira	Former managing partner
Omtrix	Cinthya León	Former Investment Officer
Omtrix	Lorna Li	Senior investment officer.
Omtrix	Anais Concepción	Former Investment Officer
Omtrix	Catalina Olaya	Consultant and specialist in financing of higher education and cooperation projects.
Génesis Empresarial	Janina Díaz	Director, CREE Educational Segment.
	Rosario Sarmiento.	Financial, administrative and operations manager.
	Marlon Cach	Accounting manager.
	Adela de Rizzo	Social Performance Manager.
	Ana Lissette Méndez	Marketing Manager.
	Jenner Alberto López	CREE supervisor.
	Haly Guadalupe Cristina Caxaj	Student, loan beneficiary.
Acam Guatemala	Hans Berguis	Director-General
Banco Lafise	Enrique Ponce	Business Manager, Personal Banking.
	José Jorge Mondragón	Vice President, Personal Banking.
	Allan Rodríguez	Officer in charge of educational credit.
	Adriana Isabel Vale (student of José Cecilio del Valle)	Student, loan beneficiary.
	David Durón (student of Ceutec)	Student, loan beneficiary.
	Deroli Núñez	Finance Manager
Idea Works	Raúl Ramírez	Country Manager
Unitec	Gabriela Montoya	Head of educational credit.
Banco Adopem	Mercedes Canalda	Vice-chairperson of the Management Board
	Mercedes Canalda	CEO
	Manuel Ricardo Canalda	Treasurer of the Board of Directors.
	Eva Carvajal de Toribío	Executive Vice President of Business.

	Sonia Reyes	Vice President of Finance and Accounting.
	Juan Francisco Terrero	Vice President of Technology.
	Ivan Moquete	Risk Manager
	Hovel Matos	Coordinator of educational products.
	Laura Brea	International cooperation.
	Awilda Peralta	Marketing.
	NA	Student of the National Evangelical University.
Santo Domingo Educational Centre		Treasury.
	Sonia Reyes	Vice President of Finance and Accounting.
	Fernando Pérez	Vice-President of operations and administration.
	Juan Francisco Terrero	Vice-President of Technology and Communications.
Fundapec	Regla Brito	CEO.
	Modesto Lavandero	Deputy Director, Portfolio Management.
	Carmen Díaz Guerrero	Deputy Director of Administration and Finance.
	Miriam Díaz Santana	Planning and Development Manager.
	María José Vargas	Psychology student.
Banco Ademi	Danilda Almanzar	Director, Personal Banking.
	Adalgisa Mejía	Officer of Personal Banking.
	Félix Santos	
	Blass Díaz Francisco	Vice President of Risks.
	Osiris Cerda	Application Development Manager.
	Nurkis Lara	Vice President of Finance.
Technological Institute of Santo Domingo	Rossy Moreno	Cost officer.
	Student	
Financiera Desyfin	Silvio Lacayo	General Manager
	Jeffry Salazar	Assistant, Credit Management.
	Roy Valerio	Risk Manager.
	Ana Lucía Gómez	Credit Manager.
	Michael Ruiz	Business and Marketing Manager.
Banco Visión	Richar Meza	Manager of Commercial Alliances and Sales.
	Carolina Benítez	Deputy Manager of Agreements.
	Ronald Caffarena	Money Table Manager.

	Mario Román	Supervisor of sales of Corporate Services.
Universidad San Carlos	Rodrigo Galeano	Director of Quality of Attention.
Proempresa	Verónica Minchola	Head of Management and Development of Passive Products.
	William Alcántara	Business manager.
	Percy Rondón	Finance and Operations Manager.
	Edwin De La Cruz	Business executive.
Financiera Confianza	Diego Galarza	Treasury manager.
	Giovana Lozada	Marketing Manager - Product Manager.
	Anayte Olivera	Product analyst.
Universidad María Auxiliadora (UMA)	Gladys Morán	General Manager

ANNEXED 2. CHARACTERISTICS OF THE INSTITUTIONS INCLUDED IN THE HEFF.

Institution	Country	Year created	Clients	Credit profile*	General description
Génesis Empresarial	Guatemala	1988	97,150	US$102.7	Self-regulated MFI Provides financial and non-financial services to micro and small businesses and rural communities. 980 employees, 470 microcredit advisers and 98 offices covering the whole country.
Proempresa	Peru	1986	66,089	US$96.2	Financial entity supervised by the SBS. In particular, it finances micro and small businesses and provides some consumer credit. It has 57 regional offices in the country.
Financiera Confianza	Peru	2012 (merger)	200,000 in credit and 350,000 in savings	US$466.9	Merged with Caja Nuestra Gente. Belongs to the BBVA Foundation. Through its network of agents, it is considered the microfinance company with the largest rural coverage. Present in all 24 regions of the country, with 101 branches and 40 correspondent offices.
Banco Ademi	Dominican Republic	1983	232,360 (microcredit)	US$272.0	Started as an NGO in 1983 and became a development bank in 1997, a savings and credit bank in 2005 and in 2013 received authorisation to offer all the services of multiple banking. 73 offices. In 2016, joined the Global Alliance for Banking on Values (GABV), based in the Netherlands.

Banco Adopem	Dominican Republic	1982	224,760 (microcredit)	US$127.5	Started as an NGO and in 2005 became a savings and credit bank. Part of the BBVA Foundation. 74 branches and 135 banking sub-agents.
Fundapec	Dominican Republic	1967	9,030 (educational credit)	US$31.5	73 employees. The most recognised entity specialising in educational credit in the Dominican Republic.
Banco Lafise	Honduras	2004	NA	US$371.7	Commercial bank, regional, with offices in the Dominican Republic, Central America and Miami. In 2004, entered the Honduran market with the purchase of Banco Futuro.
Banco FIE	Bolivia	1985	234,816 (microcredit)	US$1,325.7	Started as an NGO, in 1998 became FFP and in 2005 became a bank. Present throughout the country, with 150 branches, 102 external offices and 126 ATMs.
Financiera Desyfin	Costa Rica	1991	5,500 clients (2,500 SMEs and 3,000 individuals).	US$62.6	Started with SMEs, has now expanded to individuals. They finance short-term (factoring) and medium-term (productive assets of 36 to 60 months).
Banco Visión	Paraguay	1992	276,780 (microcredit)	US$761.6	Created in 1992 as Visión Finanzas SA, in 2008 became a bank.

Source: Information gathered in interviews with the institutions.
*In millions of USD

ANNEXED 3. EXAMPLE OF THE ACTIVITY SCHEDULE FOR THE LAUNCH OF THE EDUCA-T PRODUCT, FROM BANCO ADOPEM.

Activity	Date
Signing the contract for Adopem-Omtrix-HEFF credit agreement and technical assistance	July 2013.
Sending documents of no objection from the Superintendency.	September 2013.
Receipt of the resolution of no objection by the Superintendency.	March 2014.
Meeting in Redcamif (Central American Microfinance Network).	June 2014
Sending the methodology, market studies, cost-benefit tool and other materials to Adopem.	July 2014
First training (management team).	July 2014
First meeting of the implementation team.	August 2014.
Application and processing of the first disbursement.	August 2014.
Receipt of the first disbursement in the amount of US$500,000.00.	22 August 2014
Registration of the product name in Onapi.	May 2015.
Receipt of the non-objection to the product by the Superintendency.	June 2015.
Omtrix training for business officers and branch sub-managers of the pilot program in methodology and commercialisation.	June 2015.
Adopem training (with coordinator and external consultant) in processes, methodology and commercialisation of the staff of the branches that participate in the pilot.	June - July 2015
Approval of the contract and promissory note for Pro-consumidor.	July 2015.
Launch of the Credit product EDUCA-T.	August 2015.

APPENDIX 4. CLIENT BASES.

Génesis Empresarial	In Guatemala, the possibility of attending university is very low. It is estimated that only 2% of students who get to the "*diversificado*" (high school) reach higher education. Only about 5% of the clients of the CREE are children of micro-entrepreneurs (the demand for the product comes from employees or children of employees). A recent segmentation of the customer database showed that the majority could be granted this product. However, for cultural reasons, microentrepreneurs have no interest in getting into debt. The children of microentrepreneurs do not go to university.
Proempresa	Children of their clients and external clients.
Banco Adopem	The clients are not the children of the microentrepreneurs. Analysis of the portfolio showed that there were 10,000 clients with children of college age (out of a total of 400,000 clients). However, only 600 had the required borrowing capacity. And, of them, barely 60 met all the requirements to acquire the product. This forced Adopem to explore a new market. They reached agreements with eight universities to finance their referrals.
Banco Ademi	Initially, they focused on the children of microentrepreneurs, but had a very low response. They took the product to other market segments and brokered agreements with universities. However, 30% of the guarantors of the bank's total portfolio are microentrepreneurs.
Financiera Confianza	They have financed their client's children, but this number was not enough to allocate the HEFF resources, so they looked for external clients, including working students.
Banco Visión	Paraguay's population is not the typical target population of the educational loan product designed by HEFF: unlike other countries in the region, Paraguayan students work and pay for their own studies. There are no accurate statistics, but it is possible that some debtors are children of clients.
Banco FIE	No information.
Financiera Desyfin	In Costa Rica, it is easy to finance education. There are very good public education centres. The children of their SME clients do not acquire the product, since they are financed with a credit card or with their own resources. It has not been easy to allocate Conape's financing product, with very low rates.
Banco Lafise	40% of the clients or guarantors are from the bank. 60% comes from agreements with universities.
Fundapec	Clients are within their natural market. They classify those that meet the requirements agreed with HEFF. They cannot exceed US$1,434 in household income. Degrees and universities are limited.

ANNEXED 5. DISTRIBUTION CHANNELS USED BY THE FIS

Génesis	Could not be allocated through micro advisers (they took a long time to document the credit). It was not attractive compared to the typical microcredit allocation. The product required adjusting the team of advisers and hiring an extra team. In July 2015, they had six promoters (four outside of Guatemala City). Now they have 16. The initial form had 10 pages. It documented visits to work, home, the guarantor, background, investment plan, family photo, the story told by analysts. It also included a letter with the students marks and the commitment to maintain a grade level of more than 70 points. Credit default reached 30%. They changed the structure by creating an address for the product at the same level as the director of micro products. They consider that in the typical sales channel they would have had lower costs, but due to their inoperability, they had to hire consultants and specialise them.

Lafise	The bank has had three people in charge of the product. The first two, partially dedicated, did not provide the attention it required. Since 2015, there has been one person for educational credit only (HEFF plus another product to finance masters and doctorates with BCIE and Banprovi funds).
Adopem	Initially they thought that the traditional analysts could sell the product, but given the characteristics of the program they decided to grant it to the analysts who handle higher amounts, like those of a small company, that take out loans of more than US$2100. Adopem concentrated educational credit in 100 small business offices. It worked. The most successful branches involved someone else from the office. The small business officers had to meet educational credit goals, which could be covered with branch clients, new or referred. Analysts must attend to the prospective clients that are recruited by the *call centre*. (Adopem has a specialised *call centre* that monitors stakeholders and channels them to different areas.) In addition to being programmed in the route of the credit officers, each request passes to the educational credit coordinator.
Ademi	Since 2015, it has been difficult to include the product in the PDA of the business officers. The elected officers came from Personal Banking. During the visit, the existence of manual processes for registering the Single Data Sheet, the Credit Assessment Card and the generation of credit documents were verified. This meant that quality control of the process had to be centralised mainly in Ademi's main office, creating bottlenecks. The branches were disconnected from the responsibility of the process and, consequently, the field staff did not know how to process the credit applications. Business officials expressed dissatisfaction at not being able to use their PDAs in the placement of the loan. The channel of advisers with variable salary did not work. The product required a pronounced manual component, since each payment originates a new credit and, therefore, demands a lot of documentation.
Desyfin	They believed that SME loan executives were going to allocate the product, but the small entrepreneurs were not interested in the product. The documentation requested from an SME during the analysis is not related to the personal situation of the employer but of the company.
Confianza	Requested additional documents from the university. It is more expensive and cumbersome to request documentation from third parties that are not debtors. It requires more visits and more hours to estimate liquidity. The product is much more expensive, due to the documentation and the completion of the socio-economic record (it involves filling out a form by hand and then transferring it onto the computer). If the form is too long, the advisers do
	not promote it. They cannot weight the credit more within the incentives. Only the best advisers are awarded this position. It was relaunched in 2017 by adjusting the advisers' incentives according to the number of closed transactions.
Proempresa	It is difficult for the advisers: customarily, evaluation is not so fast, and they have to work more.
Visión	The offices provide the product, but the conventions area officials are responsible for performing special processes (visits, collection of documents and filling in additional information) which educational credit requires.

APPENDIX 6. USE OF TOOLS SUPPLIED BY HEFF AND TAF.

Institution	Market research	Credit manual	Cost-benefit tool
Génesis Empresarial	Very useful.	Not used.	Used, but considers that it requires permanent updating (limiting degrees now may not be valid in the future). Because of its cost, it is complex to upgrade tools.
Proempresa	Useful as a frame of reference.	Used and adapted to their own process.	Used with their own technology.
Adopem	Useful, but they carried out their own market study with a local consultant.	Useful as a reference. Adapted to the institution with a local consultant.	They use the cost-benefit tool. It was simple to include it on the PDA.
Ademi	Useful. Used.	Provided a base. It was adjusted to their own process.	Used as a reference.
Financiera Confianza	Regarded as 'macro' study, since it referred to the most in-demand degrees and income (but Confianza wanted to know exactly what was required).	Not Used. Adapted to their usual credit process.	Not used.
Banco Lafise	It served to give an analysis of the market.	Not used. Used an appendix of the manual of credit they already owned.	Not used as it was designed by HEFF (cannot grant credit on the basis of a future income). Updated the tool with the product launch.
Financiera Desyfin	It is a "good study", useful for the launch of the product.	Based on the Omtrix manual, developed and adapted their own manual.	Did not work: as a regulated entity may not grant credit on the basis of uncertain future revenue.
Visión	Market research did not reflect the true market that exists in Paraguay for the product.	The product is based on the manual of credit, but is not integrated with the platform.	Not integrated in the evaluation process (not the socio-economic information). One by one analysis.
FIE	No comments were submitted. The respondent was in charge of the product seven months after launch.	Not used. A simpler manual was chosen, involving averages of similar degrees.	Adjusted requirements, deadlines and market segments and included future income in the manual of credit already employed for their other education credit product. Future revenues were adjusted because some clients currently have income. Homogenised the forms so as to have only one process.
Fundapec	Very useful to provide up-to-date market information from universities, degrees and labour demand in the country. For Fundapec, a student does not necessarily work in the field of their degree - sometimes they move into other fields. Therefore, the tool does not necessarily serve to evaluate as the entity did.	They had their own manual. They only included household income.	They use their own credit assessment process. It takes into account variables such as borrowing capacity and willingness. This willingness is measured by the backlog reported by the Credit Bureau, unless the student or their co-signer have already had loans in Fundapec (in this case, previous payments experience is also considered). The analyst studies the viability that revenues are sustainable. Management fixed interest rates.

APPENDIX 7. METHODOLOGY OF EDUCATIONAL CREDIT ORIGINATION.

Institution	Comments on the evaluation and approval process
Génesis	Receipt of documentation in office, visit to the home of the guarantor and student; goes to the committee for approval. The branch must meet allocation targets. Fee calculated on 50% of revenues. Initially, used the analysis of household income, which was then abolished.
Ademi	Receipt of documentation, visit to the student and guarantor; if the student works in a company, work references from the company are requested. Assess the household income. The fee is calculated according to the borrowing capacity (30% from the student and 50% from the guarantor). The sales agent has a variable salary, which considers portfolio growth, disbursements and portfolio quality. Credit factory (COS) is responsible for approvals. The guarantor must have their own car and house and must be solvent.
Adopem	The fee cannot be greater than 30% of disposable income. There are visits to the guarantor (father and mother) and the co-signer. Educational credit Coordinator reviews each record and makes a *petit comité* with the credit manager, the area coordinator and Deputy Manager for analysis and risk. Micro and SME advisers use the same tools. The SME adviser commissions according to the total amount of credit given (including all types of loans, from work capital, housing or education); there is not one single or exclusive incentive for educational credit.
Lafise	Requirement of a minimum household income (US$511). Joint credit (father, mother, sibling). Evaluated for each member of the family. The fees-income ratio is from 30% - up to 50% - of the income available. Credit factory carries out the review and assessment of the dossier, which is approved by the committee that oversees all personal banking products (personal loans, car and housing). The credit executive does not reimburse for particular results, but for overall goals.
Desyfin	Assess the household income. The fee cannot exceed 40% of the disposable income of the guarantor (including all of their debts) and 30% of the expected income of the student. 80% of students are direct debtors. Documents go to the branch or the university, are reviewed by the analyst and sent to the credit manager for approval. No visitation.
FIE	Use microcredit methodology, but taking into account the future income.
Confianza	Apply the microcredit methodology: short term, staggered amounts, support for microcredit advisers.
Proempresa	They used the microcredit methodology.
Visión	Analysts from the branch evaluate the documentation collected by the agreements department, so no visitation.

APPENDIX 8. SAMPLE OF LOGOS AND ADVERTISING EMPLOYED BY THE PARTICIPATING INSTITUTIONS.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