

Impact Evaluation of the Job Training Component (PROCAJOVEN) of the Assistance Program for the Building of a Training and Employment System in Panama (PN0125)

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PREFACE

The purpose of this report is to assess whether the job training program PROCAJOVEN has had positive impacts, i.e. to determine if it has increased the employability of its participants, and to determine whether the program has a positive payoff.

The main objective of PROCAJOVEN is to "improve prospects for jobless youths and disadvantaged groups." To achieve this goal the program has two modalities. The first modality, called insertion modality, provides short-term training for the low-income unemployed youths 18-29 years old. Classroom training has two parts, job readiness skill and technical training (120 and 150 hours, respectively), followed by 172 hours of internship in a firm, with a total cost of \$611. The second modality, called transition modality, focuses in the transition for the first-time job seekers with complete secondary education, providing job readiness and a longer internship (344 hours), with a total cost of \$375. In both cases, the cost includes a transfer to participants of \$255. Both courses follow the same procedure: competitive public bids are done periodically and training institutions need to provide with a letter from a training firm interested in providing internships to ensure relevance of the courses.

PROCAJOVEN does not have an evaluation design. Nevertheless, it was possible to follow a natural experiment approach because during 2004 there was a set of courses (from both modalities) that were approved but not financed. Given that this was exogenous to the eligible participants who were enrolled by the training institutes of the cancelled courses, those would-be participants could be used as a useful comparison group. In other words, the control groups were selected among the eligible participants of both modalities that never received the treatment mainly due to budgetary and administrative issues that affected the execution of PROCAJOVEN. Given the validity of the comparison group, the difference in the outcomes for treatment and controls groups is a valid estimate of the treatment effect on the treated. The evaluation data is a sub-sample of the beneficiaries and the eligible participants that not received the training.

The results show that although there is a five percentage point difference between the treatments and controls in employment rates (47% vs 42%), this difference is not statistically significant. However, the results suggest that there is heterogeneity of impacts. The program has a significant effect on employment rates and labor earnings for women (44% for treatment and 32% for controls) especially for those living in Panama City (47% for treatments, 32% for controls). Within modalities, the general effects are similar. Although there are no discernable impacts on wages, the employment effects imply that the cost of the courses –excluding the transfers—is recovered in about a year. On this dimension there is also variation, for the recovery time for women in the transition modality is only three months.

In terms of the planning and execution of the program, this report shows that the implementation has not been as planned. In more than two years of execution the program has disbursed less than 30% of its approved original amount. Only 3,700 beneficiaries have been trained between 2002 and up until to June 2006. These execution results are mainly explained by political and institutional factors that have undermined the program implementation.

This information should be used in the current debate around the changes in the national training institution in Panama, as well as to how to try to improve the performance of the program. The

results of the evaluation are clear: the program works, particularly for women. In the case of the two subcomponents, we find that the impacts are similar, however due to cost differentials the returns are higher for the transition component.

Specific recommendations could be made in terms of the monitoring and evaluation. The methodology applied for this report cannot be relied upon in the future, for hopefully implementation will be improved and natural experiments will not be available. Hence, it is important to define and implement an evaluation strategy clearly identifying the comparison group and specifying the indicators and data gathering strategy.

I. Introduction

Within the monitoring and evaluation (M&E) framework of the Inter-American Development Bank (IDB), the Office of Evaluation and Oversight (OVE) undertakes the independent evaluation of Bank interventions, in accordance with the Bank's policy on ex-post evaluation of operations approved in 2003. For the 2005 ex post evaluation cycle projects under the following three themes have been selected: (i) Job Training Programs; (ii) Rural Roads; and (iii) Science and Technology. OVE has reviewed the bank's interventions on the labor market since the early 1990s, specifically on job training for the unemployed or underemployed, and has selected eleven programs to evaluate. Individual evaluations will be produced for each country, and a thematic evaluation will be done based on the case studies.

The report presents an impact evaluation of the first component of the program (PROCAJOVEN). This component has two different subprograms (modalities) that are similar to the labor training programs that are considered by the thematic evaluation. Therefore the EPPR contributes to enhance the general knowledge of the Bank by taking a detailed look at the achievement of the development objectives of PROCAJOVEN.

In 1997 the Ministry of Labor and Workforce Development (MITRADEL) received support through a technical cooperation¹ for a pilot project for a demand-based employment and training system. That pilot project aimed to build an initial capacity to begin the modernization of the employment and training system, by developing consensus among the public and private sectors on new training policies, formulating reform proposals, stimulating the creation of a private training industry and building long-term program development capacities. These new policies were characterized by being demand driven, much in the spirit of the mechanism originated in Chile with the program Chile Joven. The PN0125 is a continuation of the technical cooperation.

The medium term objective of the program is to build a training and placement system that improves employment prospects and competitiveness of Panamanian workers through the development of a training system that responds to the needs of job seekers and active workers. The specific objectives of the program are: (1) to improve employment prospects for jobless youths; (2) to improve the performance and skills level of workers in micro, small and medium-sized firms; and (3) to strength program management, strategic planning and labor market policy analysis capabilities to improve their relevance to and effect on nation's economic development.

The program includes two substantial components, training for the disadvantaged and unemployed youths (PROCAJOVEN) and training for active workers in micro, small and medium firms (PROCAPYME). The following table shows the basic data for this project:

"to build initial capacity to begin the modernization of the employment and training system".

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¹ The objective of the "Pilot Project for Demand-Based Employment and Training System" (TC-97-05-24-7) was:

Table 1.1: Basic information of the PN0125

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Project	Assistance Program for the Building of a Training and Employment System in Panama					
Project Number	PN0125					
Loan Number	1403/OC-PN					
Executing unit	MITRADEL					
Approval date	05/29/2002					
Current disbursement expiration date	11/06/2007					
US \$ (IDB)	8,400,000					
- Component 1: "PROCAJOVEN"	6,134,000					
- Component 2: "PROCAMYPE"	1,124,000					
- Component 3	968,000					
- Others costs	90,000					
US \$ (Country)	2,100,000					
- Component 1: "PROCAJOVEN"	121,000					
- Component 2: "PROCAMYPE"	39,740					
- Component 3	297,900					
- Others costs	1,050,000					

II. CONTEXT AND PROBLEM TACKLED²

A. Macroeconomic and labor market context

Most of Panama's economic progress has been related to its privileged geographic location. According to the CPE in modern times the country: "has looked to three pillars to advance its economy: the Canal, the Colón Free Trade Zone (CFZ), and the International Banking Center (IBC), in all of which foreign capital figures prominently. As a result, the economy took on (and still has today) a dual structure in which a modern, dynamic, competitive, service-based sector fully engaged in the global economy operates alongside less advanced agricultural and manufacturing sectors that have less outside participation and are not globally competitive, producing thus mostly for the home market. This duality, driven in part by intrinsic or structural features of the leading economic sectors—limited integration with the rest of the economy, scant job creation (and a demand for advanced skills for the small number of jobs that were created), pressure on the general wage level and, except for the Canal, not much revenue for the treasury1—has been exacerbated over time by the adoption of distorting policies, such as price controls and tariff protection, and inadequate social policy targeting". Therefore, the country has suffered from some measure of "Dutch disease" with negative consequence on the growth and employment creation of the labor-intensive segments of the economy (tradable goods sectors), such as the agriculture and industry. On the other hand, the modern sector of the economy (for example the financial sector) creates a small number of jobs and usually demands advanced skills.

The economy grew strongly during the first half of the nineties but the growth slowing down since 1997. It is important to remark that the MIF pilot program started been design this year. Box II.1 presents the findings of the CPE in terms of the economy growth.

According to the LD, the economic slowdown hurt the labor market. The LD mentions that: "rigid requirements in labor legislation inflating the labor costs, combined with the fact that more than 75% of the country's population lacks the necessary preparation to meet needs on the labor market, continue to thwart efforts to boost employment". Moreover, according to the MIF_LD the rate of unemployment was high but in a slightly decline (the unemployment rate was 14% in 1994 and 13% in 1996). It was expected that the unemployment would fall gradually to 10% and 8% in 1998 and 1999. However, this positive scenario did not occur. The unemployment rate was approximately 12% at the end of the nineties and the unemployment has maintained high levels during this current decade (for example 13% in 2003). The unemployment affects the most

² In 2004, the CPE of Panama (RE305) made a complete analysis of the country and economic context. Thus, in this section we will refer to the findings of this CPE that are relevant to our own evaluation. We will complete this information with other sources, such as the loan documents of the MIF pilot program (MIF_LD) and of the program PN0125 (LD), as well as other relevant literature.

³ Paragraph 1.5.

⁴ Paragraph 1.3.

the women and the young people and particularly those with a lack of skills⁵. Unemployment also affects the most the areas inhabited by indigenous people.

Box 2.1: Economic growth between 1991-2003

By virtue of Panama's strong external links plus its unique currency regime, prices have remained stable and service-related industries have grown, particularly international business services⁶. In the period 1991-2003 such service-based activities contributed on average 76% of GDP; the primary sector provided around 9% of output and industry between 8% and 11%⁷. This sharp economic duality has made Panama a singular case: even though it has a relatively small population and its economic growth rates have outpaced the Latin American and Caribbean average for 20 years, its unemployment, poverty, and income inequality rates are high.

Panama's average growth rate of nearly 5% between 1990 and 2003 places it among the 10 fastest-growing countries in the region in the 1990s⁸. However, the relatively high growth rates of the early 1990s trended down over the course of the period examined here⁹. With a virtually constant population growth rate of about 1.9%, increases in per capita GDP have been a constant except in 1995 and 2001. In 1996 dollars, per capita GDP in 2003 was US\$3,906¹⁰.

The prime economic growth drivers in the 1990s were investment (some of it public, most of it private) and private consumption (...). The rapid expansion in the early years of that decade marked the economy's rebound from the late-1980s crisis: investment, particularly for reconstruction, and normalization of exports explain the strong growth in the first half of the 1990s. The slowdown starting mid-decade suggests that the core pillars of the economy were losing strength, and is attributable mainly to private consumption. Other important elements in the second half of the decade were poor external sector performance and shrinking exports: overall, the external sector's effect on economic growth was either nil (up until 1995) or negative, as CFZ re-export activity slowed and IBC business fell off as those sectors' competitiveness slipped and Panama's economy felt the effects of global crises¹¹.

⁵ For example, according to the LD in 2000 the female unemployment rate was 18% while the male unemployment rate was 12%. Also, the unemployment rates for young people between 15-19 years of age and 20-24 years of age were 29% and 21%. Moreover, according to the IPES 2004 72% of the people with some tertiary education found a job while only 60% of those with secondary education succeeded to enter into the labor market.

⁶ The U.S. dollar is used as local currency, denominated as the balboa. Hence, the nation earns no seigniorage from currency issuance. Though this gives Panama price stability it also means that the fiscal deficit is financed with debt (domestic or external borrowings).

⁷ According to the Manufacturing Output Index industry did not improve between 1999 and 2002.

⁸ The GDP calculation basis changed in 1996, so caution is needed in making intertemporal comparisons. Based on the Ministry of Economy and Finance's 2002 Economic Statistics report, the base change variation in nominal terms is US\$1,002.9 million, equivalent to a 12.3% increase over the value of the previous series with base year 1982.

⁹ Economic growth rates averaged 6.8% between 1990 and 1994, 4.5% in 1995-1999, and 2.4% between 2000 and 2003.

¹⁰ According to ECLAC's 2002 Statistical Yearbook of Latin America and the Caribbean and World Bank data (World Development Indicators), Panama's per capita GDP in current U.S. dollars that year measured by purchasing power parity (PPP) was US\$6,170, similar to the Dominican Republic with US\$6,640 and Belize with US\$6,080, but trailing Costa Rica (US\$8,840) and Mexico (US\$8,970). Figures for the other Central American countries are lower than Panama's.

¹¹ The falloff in CFZ business in the 1990s has affected Panama's merchandise balance, which has been structurally negative because the economy is so service-driven. The situation worsened toward the end of the decade as it became clear that the traditionally surplus-generating Canal and IBC activities were no longer enough to finance the increasingly negative merchandise trade balance. The result was a widening of the balance of payments current account deficit. If this problem was remedied in part from 2001 onward, it was largely because the slowing economy and changes in Panama's tariff policy depressed imports.

B. The training system

According to the MIF LD, in 1997 33% of the workforce needed skills upgrading and at least 75% of the unemployed people needed training to be more competitive in the labor market. Thus, the country needed to complement the structural reforms with "targeted skills training", "labor market orientation" and "job placement programs" in order to reduce unemployment. Almost five years later, the LD reported the same problem of a lack of appropriate skills and it recommended similar solutions. In terms of the solutions the LD mentions that: "to accomplish this, it needs to reform its current job training system and provide appropriate incentives for the building of a training and employment system geared to the following types of needs: (i) job placement assistance for the new workforce entrants, (ii) retraining and job placement assistance for unemployed and underemployed workers; (iii) continuing in-service training geared to current production dynamics; and (iv) satisfaction of investor requirements" 12. The lack of skills is linked in the LD to the insufficiencies of the educational and training system. A study for the MIF LD concluded that the existing training system was not capable of meeting the country human resources needs, nor was it capable of responding to the unemployment problems. 13 The project document for PN0125 also coincides with this diagnosis and it also integrates the problems of the employment system.¹⁴

Currently, the key actors of the training system are the Ministry of Labor and Workforce Development (MITRADEL), the newly created Professional Training and Human Development National Institute ("Instituto Nacional de Formación Profesional y Capacitación para el Desarrollo Humano", INADEH), and the private training institutions (OCAs).

1. The MITRADEL

The diagnosis of the project was that the country did not have a policy-making framework or institutional capacity to guide training policy and investments and to monitor the performance of training programs. The Ministry of labor, did not have this capacity. Within the MITRADEL an executing agency was created, called the Gerencia de Capacitación Laboral (GDCAL), that was in charge of administrating the new training system. The GDCAL was not created as an external unit, but rather the purpose was to incorporate it in the organic structure of MITRADEL.

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¹² Paragraph 1.6.

¹³ The specific problems were: "(i) lack of a policy framework or institutional basis to coordinate training policy initiatives/programs; (ii) inefficient allocation of public training funds; (iii) limited supply of private sector training and the need for a wider range of training delivery schemes; and (iv) ineffectiveness of existing programs which are often irrelevant to labor market needs and lack the rigor of having to be accountable". Moreover, the same document mentions that: "the current system is heavily public sector oriented with limited private sector providers and little focus on demand".

¹⁴ Paragraph 1.7 mentions the following: "(...) the country still lacks a training and employment system geared to its current human capital development needs. It lacks the institutional capacity to target training efforts to meet emerging needs, the private job counseling and employment services industry is still in an incipient stage of development and public services report low placement rates ands lack the necessary instruments with which to successfully match job seekers with employment or job training opportunities".

2. The INADEH

Panama has a public training institution named the INADEH that was created by the Law 8 of February 2006. Before 2006, the INADEH was named the "Instituto Nacional de Formación Profesional" (INAFORP). Therefore, both the MIF program and the PN0125 were designed and approved when the INAFORP still existed. Both IDB programs mentioned that the training provided by the INAFORP was not demand driven and thus, it did not respond to the needs of the economy. The institution suffered from a lack of resources and a bad management¹⁵. Moreover, and according to the LD, an independent evaluation made in 2001 found that: "a number of its courses are out-of-date and it has no monitoring systems and no means of measuring the impact of its training activities. Its financial and accounting system is inadequate, which only heightens the inefficiency of its operations¹⁶".

The INADEH has additional objectives and functions than its predecessor. By mandate, it will be the supervisory agency of the entire training system, its duties being to: "adoptar, dirigir, implementar y supervisar la ejecución de las políticas, estrategias y programas de formación profesional, capacitación laboral y capacitación en gestión empresarial, tanto para el sector publico como para el sector privado, así como administrar y distribuir los recursos públicos asignados para tal fin"¹⁷. Among the different functions of the INADEH, two are interesting to note. First, the institution is in charge of the organization and the promotion of the entire training system in the country (public and private training institutions, evaluators, teachers, etc.). Second, the INADEH has to create and maintain a monitoring and evaluation system. The law mentions that the INADE will have a "Comisión Nacional de Gestión de la Calidad" that will be in charge of the evaluation, accreditation and continuous revision of the public and private training institutions and also of the maintenance of a national registry of training institutions. Finally, the budget allocated to the institution was increased because the INADEH will receive 18% of the 73% of the taxes resources.

C. The private training sector

There is not a lot of evidence about the main characteristics of the private supply of training. The MIF_LD mentions that in 1997 there were a number of OCAs but the training industry was not developed or regulated. The LD mentions that the MIF pilot encouraged the development of the

¹⁵ The INAFORP was fund by a 2.7% payroll/income tax payable in the form of employer (55%) and employee contributions (45%). In 2004, the INAFORP received around 14% of the 73% of the taxes resources (around US\$ 10 million). Besides this amount the institution received some other resources, such as resources from the government to finance specific projects. These resources were not efficiently used. For example, nearly 95% of the amount received by INAFORP served to cover its recurrent expenditures. Also, the instructors represented only 20% of the total staff (750). The institution needed to contract part time instructors (around 468) to offer training to an increasing number of trainees each year. For example, the number of courses offered by the institution increased during the period 2000-2004 from 1,365 to 2,125. In terms of trainees the numbers were 20,919 and 30,813. This increase of the number of trainees did not provoke an increase of the budget of the institution. During the visit to the field in March 2005 the Director of the INAFORP complain about the lack of resources and also about the political intervention. He recognized that the training offered by its institution was supply driven and has poor relation with the needs of the economy.

¹⁶ Paragraph 1.11.

¹⁷ Chapter 2 of the Law 8.

private training market and that more than 300 OCAs competed to offer training under the program. We will develop these findings in the following sections.

Both IDB labor-training interventions in Panama can be considered pertinent because they try to solve a development problem of the country. Panama was affected by an economic downturn in 1997 that affected the labor markets results, in terms of employment and unemployment. The unemployment affected the most the young people and the women that were disadvantaged and with a lack of skills. At the same time, the training system was not working properly. The INAFORP offered poor quality training that was not related to the needs of the economy. Also, the training system has not the capacity to improve the employability of the unemployed disadvantage people.

III. PROGRAM DESIGN: A THEORY BASED EVALUATION

A. Background information: the MIF pilot project

In 1997 the government and the MIF approved the Pilot Project For a Demand-Based Employment and Training System, which had a total cost of US\$ 5.4 million. Its objective was to build initial capacity to begin the modernization of the employment and training system, specifically "(1) to develop a consensus among the public and private sectors on new training policies and program; (2) to formulate reform proposals; (3) to stimulate the creation of training industry; and (4) build long-term program development and implementation capacity" (see Box 3.1).

The GDCAL had to execute the program in collaboration with a Public-Private Employment and Training Council (the Council)¹⁹. Also, in order to mitigate the potential opposition from the National Vocational Training Institute (INAFORP), the MIF pilot considered some dialogue activities with INAFORP. As part of the training system reform the INAFORP was supposed to reform itself based on a 2001 assessment of the institution. However, the project document for PN0125 does not consider the participation of INAFORP at any stage in the substantial components.

The final evaluation of the MIF project mentions that political and budgetary factors that caused important delays in its execution (in June 2000 the program had only disbursed 5% of its original approved amount)²⁰. Also, the distribution of the budget by components was modified during the execution; especially for the second component where the amount of the first pilot training subprogram was reduced by 66% while the amount of the second pilot training subprogram was increased by 62%. The Box 3.2 describes some of the main findings of the FE.

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¹⁸ Paragraph 3.5 of the TC-97-05-24-7.

¹⁹ Paragraph 3.25 mentions that the Council was already created by an Executive Decree. The Council was composed by private sector employers, labor organizations, training institutes and the ministries of Labor, Education and Planning.

²⁰ For example, since 1998 there was a political and institutional instability that was generated by the presidential elections of 1999. The elections occurred in May 1999 but the new government started working in September. Also, the government confronted financial problems in 1998 and 1999 that affected the budget allocated to the program. Moreover, with the new government, the GDCAL received the charge of new training programs. Particularly, a new training program for first job seekers was implemented. In total, the GDCAL had to execute 5 programs. Finally, the program was design without the active participation of the MITRADEL. This problem affected the ownership of the ministry and also provoke that the design did not consider important institutional characteristics of the ministry that undermined the execution phase of the program.

Box 3.1: Pilot Project For a Demand-Based Employment and Training System

This project had two interlinked components aimed to (1) establish an institutional framework in order to define future training policy and guide training investments; and (2) labor training pilots based on a demand driven mechanism. The main lines of the first component were: (i) the implementation of new financing policies, procedures, and mechanisms for the training system; (ii) the design and the agreement on an institutional scheme to manage the system; and (iii) the design of a comprehensive proposal to finance, develop and implement demand-driven programs. The second component financed the implementation of two training pilot programs:

The first pilot subprogram offered short enterprise-based training and was planed to work with 300 small and medium firms²¹²² and to train 2,000 workers. The training was procured by training institutions (OCA) selected by the firms. It was planned that, on average, firms will receive US\$ 2,000 with a maximum of US\$ 7,500 per firm. The maximum amount of co-financing to be provided per worker was US\$ 500. Beneficiaries firms had to finance 100% of the training and other related activities before they received 50% of reimbursement. The program also offered technical assistance to the firms to help them identify their training needs. The training offered was of short term (average of 70 hours) and focused to upgrade workers skills. The expected results of this first pilot were the following: "the participants firms will increase their investments in training and improve their capacity to select training services. This should have the effect of improving the supply of training services available to firms by stimulating demand for quality services. It is also intended to have a demonstration effect on building private-public partnerships in training"²³.

The second pilot subprogram offered training and job placement for disadvantage people. It was planned that this program will provide "placement opportunities" for 2,000 unemployed low-income youths of 15-29 years old. The training combined two phases: (a) classroom instruction offered by training institutions²⁴ that last approximately 250 hours. This phase considered three modules: (i) training in an specific occupational skill for an average duration of 140 hours and a maximum of 200 hours; (ii) employment counseling and job placement support and (iii) complementary remedial training for beneficiaries that needed to upgrade their basic skills or needed a specific training. The last two modules lasted 40 to 50 hours. (b) Two to three months of full time "practical on-the-job training". To be accepted the training institutions had to demonstrate that their proposals guaranteed the on-the-job training for 80% of the beneficiaries. The TC document mentioned that the experience of Chile and USA showed that this is was effective way to increase labor insertion rates²⁵. Finally, this pilot program financed the participant costs (transportation, stipends, accident insurance, and other related expenses).

B. Main characteristics of the project PN0125

The *Programa de Apoyo para un Sistema Panameño de Capacitación y Empleo* (PN0125) is a continuation of the MIF pilot program. The LD indicates that the MIF pilot generated "demonstrative effects" that conducted the Government of Panama to require the support of the Bank to develop and to implement the program. The LD considered that the MIF pilot motivated the modernization of the MITRADEL and showed the effectiveness of two demand-driven training models. This is surprising because the impact of the MIF pilot was not properly evaluated. Moreover, the final evaluation of the pilot project found that the results of both training pilots projects were not obvious and also that the demand driven mechanism was not correctly implemented.

²¹ The definitions used were: micro enterprises: less than 5 workers, small enterprises: 5-15 workers, medium enterprises: 16-50 workers; and large firms: more than 50 employees.

²² The program considered that micro enterprises were not likely to meet the minimum financial requirements. It also considered that large firms would not participate because the financial incentives (grants) were small. In any case, the number of potential large firms was limited to 10% of the total recipients.

²³ Paragraph 3.19

²⁴ The INAFORP was able to participate but a limit of 100 trainees per proposal was considered.

²⁵ Paragraph 3.22.

Box 3.2: Main findings of the Final Evaluation

The FE found that the MIF program attained its main objective because it created the conditions to start with the modernization of the employment and training system. However, the program failed to accomplish its specific objectives. For example, the project did not succeed to develop a consensus among the public and private sectors and the participation of the Council was not required during the execution phase. Moreover, even if the program stimulated the private training supply (300 OCAs were registered, 24 participated in the first pilot training program and 51 participated in the second pilot) the quality of the OCAs was heterogeneous (the registry of OCAs did not consider a quality measurement). Also, the project improved the institutional capacity of the MITRADEL but this improvement was not considered to be sufficient. The dialogue with the INAFORP did not occur during the execution of the program²⁶. A positive result of the program was that the private sector (firms and OCAs) started to collaborate with the MITRADEL.

The main results of the two training pilot projects financed by the second component are ambiguous.

The design of the <u>first training pilot project</u> was modified during the execution phase. For example, the limit of 10% for the participation of large firms was first increased to 20% and then it was eliminated. In fact, this pilot did not attaint its main objective because it did not succeed to increase the enterprise-based training in the country. Moreover, only 59 firms of the 300 planned participated in the program and 65% of them were large firms. Thus, these firms had a high probability to offer some training to their own workers without the program. Also, the demand driven mechanism did not work properly because the firms were not able to determine theirs needs and the OCAs took an active role on the promotion of the program and on the definition of the courses. Therefore, the training offered by this pilot project was not always related to the needs of the firms. Finally, the effect of the pilot on the training supply was not significant.

The second training pilot project succeeded to increase the private supply of training (300 OCAs were registered) but did not to increase the employability of the beneficiaries. The project had five public calls, it offered 154 courses and trained 3,055 youths (150% of the original target) but only around 10% and 20% of the trainees found a job after the program. In fact, during the execution the demand driven mechanism was not correctly used. The requirement that OCAs present letters of intent from private firms to provide internships was eliminated. Instead, the OCAS had to show "support letters" ("Cartas de Apoyo) 120 days after the beginning of the courses. Also, the OCAS were not in charge of the definition of the courses they offered. The MITRADEL defined the training needs of the firms using different statistics, such as the "Compendio Estadistico Relacionado a la Demanda"). Most of the courses were in the services, agro industry and hotel sectors. Finally, the evaluation found that many OCAs used an additional criterion for the selection of the beneficiaries because they require complete secondary education. This requirement could provoke a "cream-skinning" bias selection.

The project document for PN0125 mentions the reasons for the lower demand that characterized the first training pilot: "(i) misgivings with respect to the government ability to run a training program for private and, more specifically, to duly and properly process payments for training services rendered in a timely manner, (ii) the need to provide private enterprises with more help in assessing their training needs; (iii) a shortage of manpower to assist with the formulation of enterprise training plans; and (iv) rigid administrative procedures incompatibles with private sector dynamics". It is also mention that this first pilot confirmed that an enterprise-based training program could have a greater impact if it was be manage by the enterprise sector per se and also if it considers technical assistance services. The LD refers to the examples of the OECD

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²⁶ However, the program financed a consultancy to support the implementation of the institutional reforms of the INAFORP.

²⁷ Paragraph 1.16.

countries and Mexico.²⁸ According to the LD, the MITRADEL was planning to use the services of the Private Enterprise Council for Educational Assistance (COSPAE).

The LD mentions that the success of the first pilot encouraged the MITRADEL to finance school-to-work transition assistance services for youths with a higher level of educational attainment than the original target group of the second MIF pilot. The problem of "inconsistency" of the quality of the OCAs is mentioned. The following lessons were considered: "a special effort will be made to standardize training content, control procedures and incentives to ensure the consistently high quality of all services furnished under the proposed program. Stricter measures will be taken to encourage service providers to meet employment targets and to create a placement culture within training service providers". ²⁹

The design of the new program is based on the Bank's experience with other projects implemented in Mexico, Chile and Argentina³⁰. Particularly, the new program considers the following: "(i) new mechanisms fostering public/private sector cooperation in labor policy analysis and in the operation of training, employment and institution-strengthening programs; (ii) new incentives for the employment of youths; and (iii) the use of a private organization to promote and administer assistance programs for in-service training activities"³¹. The design of the program includes the recommendations made by the final evaluation (see table VI.1).

1. Objectives

The medium term objective of the program PN0125 is to build a training and placement system that improves employment prospects and competitiveness of Panamanian workers through the development of a training system that respond to the needs of job seekers and active workers. The specific objectives of the program are: (1) to improve employment prospects for jobless youths; (2) to improve the performance and skills level of workers in micro, small and medium-sized firms; and (3) to strength program management, strategic planning and labor market policy analysis capabilities to improve their relevance to and effect on nation's economic development.

Of these objectives, the impact evaluation will center on the first one, to improve the employment prospects of jobless youths.

Like for the MIF pilot program, the executing agency of the program is the MITRADEL and the coordination unit is the GDCAL.

²⁸ Given that team members that participated both in the MIF and in the PN0125 had experience in Mexico, it is not surprising that the components are similar to the Mexican labor training programs financed by the IDB (ME0118 and ME0186).

²⁹ Paragraph 1.16.

³⁰ The paragraph 1.18 mentions that these programs demonstrate that: "(i) active labor market policies tend to be more relevant when developed as part of a collaborative effort by the public and private sectors; (ii) job training is more effective when combined with practical working experience, (iii) workforce training activities yield better results in the form of in-service training, where workers have better opportunity to assimilate new technologies and practice their newly acquired skills in a work environment; and (iv) programs based, in part, on private funding better ensure that resulting training is more relevant and geared directly to constantly changing production dynamics".

³¹ Paragraph 1.19.

2. Components

The program considers three different components that will promote the development of a demand-driven training and a job placement model, the participation of the private sector in the execution of the enterprise-based training activities and it will also strength the institutional capacity of the MITRADEL. These components are the following:

Component 1: Training and work force entry assistance for youths and other at-risk groups (PROCAJOVEN)

The main objective of this component is to "improve prospects for jobless youths and disadvantaged groups"³². The OCAs have to provide demand-driven training but also job orientation and job placement activities. They are in charge of the detection and selection of the potential beneficiaries³³. Two subprograms are financed by this component.³⁴

The first modality, called *insertion modality*, provides short-term training for the low-income unemployed youths 18-29 years old (target: 7,000 trainees). Classroom training has two parts, job readiness skill and technical training (120 and 150 hours, respectively), followed by 172 hours of internship in a firm, with a total cost of \$611³⁵. The second modality, called *transition modality*, focuses in the transition for the first-time job seekers with complete secondary education aged 16-23 (target: 4,400 trainees), providing job readiness and a longer internship (344 hours), with a total cost of \$375. In both cases, the cost includes a transfer to participants of \$255. Both courses follow the same procedure: competitive public bids are done periodically and training institutions need to provide with a letter from a training firm interested in providing internships to ensure relevance of the courses.

Component 2: Training of workers in micro, small and medium sized enterprises (PROCAMYPE)

The objective of this component is: "to boost the productivity and skills levels of workers employed in micro, small and medium-sized enterprises to make spending on training activities more relevant to internal needs" The main activity of the component is similar to the activity of the first training pilot in the MIF program because it consists of providing enterprise-based training ("in-service training" according to the LD). The basic idea is to provide matching funds and also technical assistance to the firms in order to encourage them to invest in labor training activities and to improve their human resource development. Compared to the MIF pilot program, the micro enterprises are allowed to participate in the program. However, large firms are not considered; this is surprising because the FE found that the most important participants of the MIF program were the large firms. Moreover, the firms have to select and contract the OCAs that are available in the register of bidders. The subprogram covers 65% for the micro enterprises

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³² Paragraph 2.4.

³³ The OCAS use the employment database of the MITRADEL to find the potential candidates.

³⁴ A third modality was considered for disadvantaged groups such indigenous people, Afro-Panamanians, elderly, the disabled and female household heads. However, no activities have taken place.

³⁵ According, to the LD the experience of the MIF pilot served to reduce the number of the training courses hours and to put emphasis on the internship phase because it was considered that this phase: "produce better outcomes". This is surprising because the FE did not find solid evidence of this assumption.

³⁶ Paragraph 2.6.

and 50% for the small and medium firms of the training costs up to 100 hours of training per year, subject to a ceiling of US\$ 5,000 per firm and per year. It also offers 20 hours of technical assistance. The targets are fixed to 420 firms and 5,400 workers. Other activities are also considered. For example, 30 promotion activities have to be organized to show to approximately 900 firms the advantages of investing in continuing enterprise-based training services.³⁷

Component 3: Institution-strengthening and assistance in active labor market policy development and analysis

The objective of this component is "to strengthen sector operating, strategic planning and technical capabilities for the design, analysis and implementation of labor market policy"³⁸. Different activities are considered. Some of these activities are: (1) the program has to make it possible for MITRADEL to standardize the consultative mechanisms in order to involve the private sector in the development of the training policy and also to target public investments in training. Like in the MIF pilot, the establishment of the Consultative Job and Workforce Development Council is planned.³⁹ (2) The LD also mentions that, as the FE recommended, the MITRADEL has to use the technical assistance that is provided by the program to strengthen the INAFORP. However, the LD does not mention activities in order to involucrate the INAFORP with the future training programs. (3) The program has to finance the implementation of an employment services network that will connect the public employment service operated by the MITRADEL with the private employment services. Also, it has to strengthen the public employment service. (4) The program has to help and coordinate activities with the FUNTRAB in order to implement a system of certification of labor competencies. (5) Finally, the program will finance the implementation of a register of bidders (OCAs).

The register of bidders has to consider the quality and the capacity of the OCAs to detect the needs of the economy. To be accepted in the register the OCAs has to satisfy the following requirements: "(1) the submission of required legal and technical documentation; (2) the presentation of proof of completion of the program orientation course; and (3) the submission of a declaration of intent to abide by program requirements". Moreover, this register has to be computerized and on-line accessible to clients (private service providers, client business owners and training program operators). The register has to be available on the MITRADEL website, central and regional offices and at COSPAE offices. Finally, the MITRADEL also has to maintain the register of beneficiaries and regularly updated it. This register has to be accessible to all the participants of the program.

To summarize, the program is a continuation of the MIF pilot program. Overall, the PN0125 considers the same main activities but integrates new ones that are target to different populations. The LD includes several of the recommendations made by the FE of the MIF pilot, in particular to include financial incentives to OCAs linked to successful insertion, as well as some

³⁷ Given that this component will not be subject to evaluation in this report, we do not elaborate on it.

³⁸ Paragraph 2.23.

³⁹ Paragraph 2.25 mentions that this mechanism can be used to: "conduct sector investment studies and recommend different options for heightening the efficiency and relevance of the training and employment system; and (ii) jointly formulate human capital development strategies, with training initiatives geared to actual employment opportunities; and (iii) analyze labor policy and training and employment strategies".

⁴⁰ Paragraph 3.80.

administrative procedures aimed and simplifying procedures and ensuring that the program was demand-driven.

C. The model behind the program

Publicly funded job training is a policy instrument within the Active Labor Market Policies framework. In the literature there are several definitions of these policies, from those "aiming at improving the access of unemployed to the labor market and jobs, job-related skills and the functioning of the labor market" (Martin, 2000) to "activities intended to increase the quality of labor supply, to increase labor demand; or to increase the matching of workers and jobs" (Betcherman et. al, 2000). It is possible to identify the central elements as a direct intervention of the government aimed at impacting the functioning of the labor market, centered around two issues: improving the opportunities for the unemployed and improving the skills of the labor force.

Within the set of active labor market policies, training is one of the most common instruments. It has several modalities (training for unemployed, displaced or active workers) and it is used to address various issues. Training programs are intended to impact on labor supply, by providing or updating relevant skills to the population, with the ultimate goal of increasing employment and incomes. In some cases, training is closely linked with intermediations services.

Labor markets have various important failures, which could justify government intervention to increase its efficiency. These failures include imperfect and asymmetric information, the lack of complete contracts (the prohibition of long-term binding contracts in labor relations), and externalities (that arise insofar as training creates knowledge, which may be considered a public good). Additionally, a major political economy rationale for these programs is to create support for economic reform; an added motivation is that of equity concerns.

With this background, the rationale behind job training programs could seem straightforward. Several purposes could be pursued:

- To provide new knowledge or abilities (enhance human capital or employability)
- To serve as a labor intermediation instrument
- To integrate trainees to the social institutions (enhance social capital)

These purposes are not mutually exclusive, for example, training and counseling programs could aim at meeting two or all of the objectives. In any case, the ultimate goal of a training program for the unemployed or underemployed is to insert the trainee in the labor market. The programs usually stress that they do not provide jobs, but rather with elements (theoretical training and practical experience) to improve the chances of a successful participation in the labor market; i.e. they promote employability (which, ultimately, should translate into employment). In the particular case of Panama, the objective of the program is more ambitious. According to the LD the medium-term objective is to help build a training and employment system improving the employment prospects and competitiveness of workers. The program considered different training subprograms but also institutional strengthening activities. However, it did not consider the participation of the INAFORP.

The underlying assumption is that people are not able to find a job because they lack the skills that are demanded by the productive sector, and/or because they lack relevant labor market experience.

At-risk youth unable Once the trainee These skills can be to insert to the labor gains the skills provided in short and has a shortmarked due to lack term courses that are of job readiness term internship, pertinent for the skills and relevant she will be ready private sector to find and keep a labor market experience iob

Succinctly, the assumptions behind these programs can be described as follows:

- Unemployment is due to a lack of the skills demanded by the productive sector.
- The skills needed could be acquired in short-term courses
- Courses are relevant and pertinent to local labor markets

The LD shows poor evidence for the first assumption. It only mentions that youths that finished formal education lack the basic skills required to compete on the labor market, which limits their employment prospects. It is estimated that around 75% of the population lacks the necessary preparation to meet needs on the labor market. It also mentions that the country does not have a training and employment system geared to its current human capital development needs. The LD also mentions that the unemployment affects the most the youths and women. However, it does not provide enough evidence, from a careful analysis of the household surveys, to justify the intervention as a solution to the problem of unemployment. In fact, it gives an incomplete description of the Panamanian labor market situation.

On the second assumption, as in most similar programs, it is assumed that this is the case. The program aims at providing training at the semi-skilled level, so it is considered that less than three months of intensive training in a particular trade or occupation could be enough to acquire the basic necessary skills to perform that occupation. Although it is unlikely that people will acquire relevant skills in few months, for some of these occupations less than three months could provide the basic skills to start a career in that trade. If the primary purpose was to increase the human capital of the trainee, it is uncertain whether short part-time courses could reasonably aim at providing with enough skills or techniques to effectively improve the productivity of workers. However, the course was for semi-skilled positions, for which the basic skills could be acquired in a short course. In general, what is stressed is that basic social skills for the labor market can be provided, thus increasing the social capital of participants. Also, the internship experience allows the trainee to have real world contact with the labor market. Besides, participation in the program also constitutes a valuable signal for potential employers, thus helping to reduce information asymmetries in the labor market.

On the other hand, if the stress is around labor intermediation or social capital enhancement, then the training component serves more as a function of signaling or of socialization, and the improvements to human capital are not as important. For example, in Chile, Argentina and in Colombia the purpose of the courses was to attend at-risk populations, in the sense of them being marginalized from the main social institutions⁴¹. In Panama different target populations were consider by the program: unemployed youths, first job seekers with completed secondary education, disadvantage youths and employees that work in micro, small or medium enterprises.

In these programs it is usually argued that even if the economy is able to create jobs these groups could be marginalized due to the uncertainty that employers face when considering whether to hire someone from the target population. In this sense, the program is able to provide a signal (in terms of the trainee being certified or accredited) in order to correct for asymmetries of information.

Box 3.3: Demand-Driven Models

In the early 1990s an innovative program was implemented in Chile. The "Chile Joven" was the first demand-driven model financed by the IDB, and had the following salient features:

- a) Focalization: youth and disadvantaged unemployed population with low chances of inserting into the formal labor market
- b) Training is intended not only to increase the human capital of participants, but mainly to increase their social capital and to increase the employability of participants. c) Training is completed by an internship in a firm. This phase is supposed to allow the participants to gain valuable experience in a formal sector job
- d) The training institutions have to contact private sector firms to detect the demand, and these firms agree to provide internships to trainees for two to three months
- e) The model is market-oriented for it relies on the market to reveal the demand for training (the participation of the private firms by providing internships is suppose to guarantee the pertinence of the courses) and the provision of courses is determined competitively through the functioning of a market of training institutions.

For a further discussion, see OVE's Approach Paper and the Meta-Evaluation –forthcoming in 2006)

The third assumption about the relevance and pertinence of training courses is crucial. An important critique to the traditional provision of training by national training institutions is that the content of the courses is driven by the supplier of these courses. Even if efforts are made to periodically consult with the productive sectors in order to determine their training needs, in many cases it was considered that those large public institutions in charge of the financing, planning and provision of training were not respondent to the needs of the productive sectors, and that they operated inefficiently and had little incentives to improve their performance⁴². This is the case in Panama were the large and powerful public training institution is INAFORP. The LD mentions that: "as is typically the case in other countries, training services provided by government agencies such as INAFORP have little relevance to the needs of private enterprise and all such agencies have serious cost management problems".

One of the main innovations from the Chilean experience was the use of market mechanisms to provide the training and to guarantee the relevance of the courses (see Box 3.3. Demand Driven Models). To assure that courses were relevant, proposals needed to be presented along with a letter from a private firm stating that the content of the course was agreed with the Training

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⁴¹ This purpose justifies the intervention of the government in the financing of the training required by private firms.

⁴² The exception to this is Brazilian SENAI, which is managed by the private sector, thus assuring the relevance of its operations.

⁴³ Paragraph 1.11.

institutions, and that the firm was committed to providing internship opportunities for trainees. This mechanism implies that training institutions are crucial for the functioning of the demand-driven feature of the program. For this to happen, training institutions need to be solid institutions capable of developing course contents and of contacting the private sector in order to determine its needs and to adjust their courses to the requirement of those demanding training. In Chile this was the case before Chile Joven was implemented (see Box 3.4).

Perhaps the most questionable assumption behind the basic model that supports this type of intervention is to suggest that unemployment or inactivity is due (largely) to supply problems. These models operate under the assumption that job creation is not the main issue. In the face of a poor rate of employment growth, perhaps these programs accept the consensus that a stable macroeconomic and fiscal policy, together with deregulation, free trade promotion and other basic pro-market reforms would be the ideal climate and best policy for job creation.

This, conceivably, is the most important risk of this program: that the economy does not grow fast enough to create the jobs necessary to place the trainees. In Panama this is particular the case because the program was designed and implemented during an economic recession. The LD recognizes that the economic slowdown has hurt the job market.

Box 3.4: Peculiarities from Chile Joven

The first demand-driven IDB-financed program was in Chile in 1992. Closely after, together the ILO and the IDB promoted and implemented similar programs in Venezuela (1993), Argentina (1994), Paraguay (1994) and Peru (1996). Chilean inspired programs have also been implemented in Panama (1999), the Dominican Republic (1999), Colombia (2002), Honduras (2004) and Haiti (2005).

There are several peculiarities from Chile that are not present in many other countries, and that should alert on the replication of the Chilean experience without a thorough consideration. Among them:

- a) Existence of a solid regulatory agency for training policies (SENCE, created in 1976)
- b) The separation of financing, design and provision of public sponsored training had been in place for over twenty five years.
- c) The existence of private training institutions in a competitive market used to work closely with the productive sector
- d) A stock problem: it was considered that about 200,000 people were at risk. This group was formed by young people that dropped school due to the crisis from the mid 80s. It was assumed that this problem would not persist, that new pools of at-risk people would not appear
- e) There was a massive effort to solve the stock problem. The dimension of the project was large in order to solve this issue.

In this sense, from a Chilean perspective, the innovation of *Chile Joven* was not the mechanism, bur rather that it was one of the first social programs that used the institutional infrastructure created by SENCE in 1976.

(For a further discussion, see OVE's Approach Paper, the EPPER for *Chile Joven* and the Meta-Evaluation – forthcoming in 2006)

IV. EVALUABILITY AND EVALUATION STRATEGY

A. Evaluability

The CPE of Panama analyzed the evaluability of the program.⁴⁴ Overall, it found that the program has satisfactory levels of evaluability. In terms of indicators, it considered that most of the outputs indicators were adequately defined. On the opposite, it found that most of the outcome indicators were inadequately defined. The baselines for the outputs and outcome indicators have to be established during the execution of the program. Table IV.1 in the appendix shows the logical framework of the component under evaluation, based on the LD and the Logical Framework (LF). It also shows, form the data available, whether the targets have been met.

The original design has not suffered important modifications during the implementation phase. Overall, the main and specific objectives and also the main features of the program are unchanged. The main modifications that were introduced concerned the outcome and outputs indicators.

B. Evaluation strategy

OVE decided to undertake an evaluation of the insertion and transition subprograms (modalities) of the first component of the program (PROCAJOVEN) as part of the 2005 job training thematic evaluation. This component does not have an evaluation design. Although a monitoring system exists, it is not yet operational and it is not linked to any evaluation framework. The lack of a proper monitoring and evaluation system is a major concern, for the LD explicitly mentioned that the insertion modality needed to follow beneficiaries three and six months after graduation in order to link payments to OCAs to the placement of beneficiaries. Also, the LD mentioned that the transition modality would be subject to an impact evaluation in order to determine its continuation. So, even though evaluations were considered, no provisions were taken for them to be carried out, and the result of the supervision of the Bank in this dimension have been rather poor.

In spite of these problems, OVE considered that it was possible to follow a natural experiment approach because during 2004 there was a set of courses (from both modalities) that were approved but not financed. Given that this was exogenous to the eligible participants who were enrolled by the OCAs of the cancelled courses, we consider those would-be participants as a useful comparison group. Clearly, the fact that administrative troubles facilitated an impact

⁴⁴ Evaluable projects are defined as those that clearly identified a problem, proposed a logical intervention to address the problem, had adequate indicators to determine progress, and monitored those indicators during project execution to determine whether the anticipated degree of progress was being achieved (4.7 of RE-300). See also RE-275, both available at www.iadb.org/ove.

⁴⁵ The GDCAL contracted consultants in order to make a proposal for the indicators that will be used to evaluate the program. This proposal did not specify the methodology that has to be adopted to evaluate the program. It only mentions that a control group has to be construct using two alternatives: (1) the eligible youths that did not attend the training; or (2) the 5th closest neighbor with similar characteristics to each beneficiary.

evaluation should not be reason to congratulate anyone: the ideal situation is that, as stated in the LD, an evaluation system would be in place and implementation would be much smoother.

In any case, for each modality the outcomes for treatment and controls groups are compared in order to estimate the treatment effect on the treated⁴⁶. The control groups were selected among the eligible participants of both modalities that never received the treatment mainly due to budgetary and administrative issues that affected the execution of PROCAJOVEN. A survey on the beneficiaries and control groups was implemented by OVE in order to obtain the information that is necessary to evaluate the component. This is done for a sample of the population in each modality, and also for relevant subgroups based on gender, age, education and region

The indicators used for the evaluation are drawn from two main sources, which have high degrees of overlap. One is the original LD indicators and the LF indicators and the new indicators introduced during the execution phase (see PPMR). The second one is the vast literature on the evaluation of job training programs in both developed and developing countries. The main indicators used are: employment status, level of monthly income, number of hours worked, with social protection, and the level of employability.

For the last indicator, employability, the evaluation by Card et al. (2006) contributed to the literature by providing the first operational definition for that concept. Using a dynamic random coefficient logit model, employability was defined as the probability of finding a job for the non-employed, and of retaining a job for those employed.

Prior to presenting the impact evaluation for both modalities of PROCAJOVEN, this document will present a process evaluation based on the information obtained during visits to the country and by the analysis of the administrative reports and studies, especially the Mid Term Evaluation that was completed in December 2004.

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⁴⁶ Actually, we estimate the intent-to-treat effect, for we include those beneficiaries that did not complete the program.

V. FINDINGS: EXECUTION EFFICIENCY AND EFFICACY

A. Budget of the program

Table 5.1 shows that the program costs US\$10.5 million, of which US\$ 8.4 millions are funded by the IDB and US\$ 2.1 millions by the government of Panama. The direct costs of the program represent 83% of the total amount and are almost entirely financed by the IDB. The most important component in terms of resources is the PROCAJOVEN, which represents 60% of the total budget. However, the work force entry subprogram received the majority of the budget. This subprogram represents 40% of the total budget and 67% of resources allocated to the first component.

Table 5.1: CO0247 Project Costs

Program costs (US\$ thousands)									
Investment Categories	IDB	Local	Total	%					
Direct Costs	8,226	459	8,685	83					
Component 1: PROCAJOVEN	6,134	121	6,255	60					
- Workforce entry	4,210	8	4,218	40					
- School-to-work transition	1,584	109	1,693	16					
- Assistance for disadvantage groups	340	4	344	3					
Component 2: PROCAMYPE	1,124	40	1,164	11					
- In service training	766	10	776	7					
- Coordination and monitoring	358	30	388	4					
Component 3: Institution-strengthening	968	298	1,266	12					
- Institutional development assistance	215	8	223	2					
- Employment intermediation	70	265	335	3					
- Modernization of administrative management procedures	159	12	171	2					
- Monitoring and evaluation	310	3	313	3					
- Social marketing	214	10	224	2					
Administration	-	1,050	1,050	10					
Outside auditing	90	-	90	1					
Subtotal	8,316	1,509	9,825	94					
Financial Costs	84	591	675	6					
Interest	-	528	528	5					
Credit Fee	-	63	63	1					
Inspection and supervision	84	<u> </u>	84	1					
Gran Total	8,400	2,100	10,500	100					
% By Source	80	20	100						

Source: Loan Document

The program has suffered important delays but the date of last disbursement has not changed (see Table 5.2). In three years the program has only disbursed 29% of its total amount.

Table 5.2: Timeline

	PN
	(months)
Earliest Profile to Approval	
Approval to Signature	4
Approval to Elegibility	10
Elegibility to Original Final Disbursement	31
Elegibility to Current Final Disbursement	55
Approval to Current Final Disbursement	65

These delays did not affect the original budget because the program has not suffered cancellations (the current approval amount is equal to the original approval amount). Also, the distribution of the budget by components has been modified slightly (see Table 5.3) and without apparent consequences for the implementation. For example, the amount of resources allocated to the third component increased from US\$ 968,000 to US\$ 1,046,000.

Table 5.3: Budget modifications during the execution

Budget modifications during the execution (US\$ thousands)								
Investment Categories	Approved Current	Disbursed	%					
Direct Costs	8,304	2,107	25					
Component 1: PROCAJOVEN	6,134	1,237	20					
- Workforce entry	4,210	766	18					
- School-to-work transition	1,584	472	30					
- Assistance for disadvantage groups	340	-	-					
Component 2: PROCAMYPE	1,124	635	56					
- In service training	766	369	48					
- Coordination and monitoring	358	266	74					
Component 3: Institution-strengthening	1,046	235	22					
- Institutional development assistance	215	-	-					
- Employment intermediation	78	19	25					
- Modernization of administrative management procedures	159	4	3					
- Monitoring and evaluation	374	212	57					
- Social marketing	220	-	-					
Administration	-	-	-					
Outside auditing	90	30	33					
Subtotal	8,394	2,136	25					
Financial Costs	6	6	100					
Interest	-	-	-					
Credit Fee	-		-					
Inspection and supervision	6	-	-					
Revolving funds	-	274	-					
Gran Total	8,400	2,416	29					

Source: LMS1-Executive Financial Summary

B. Problems that affected the implementation of the program

The PPMRs and the MMT report and analyze the main problems that undermined the execution of the program. Most of these problems were related to institutional, such as the solidity of the MITRADEL, and political factors that affected the counterpart budgetary allocations of the program. The program was not a priority of the government and received little support that undermined its implementation.

The last PPMR's that is available does not report potential problems that could affect the achievement of the program objectives. However, the historical ratings show unsatisfactory qualifications for the implementation progress during the period June 2004-June 2005 (see Table 5.4). According to the PPMR of June 2005 these negative ratings were due to internal and external factors that affected the execution.

Table 5.4: PN0125 Bank's Evaluations Ratings

Historical PPMR Ratings										
	Dec. 2002	Jun. 2003	Dec. 2003	Jun. 2004	Dec. 2004	Jun. 2005	Dec. 2005			
Month Year										
IP – Implementation Progress										
Classification	HS	S	S	U	U	U	S			
AS – DO Assumptions Classification	Н	Н	Н	Н	Н	Н	Н			
DO – Development Objectives										
Classification	HP	P	P	P	P	P	P			

The main negative factors that are mentioned are the following: (i) 5 months of delay to accomplish the planned previous conditions, (ii) the budget allocated to the program was reduced in 2003 and 2004 because the MITRADEL prioritized other programs; and (iii) a high turnover rate of the staff working at the GDCAL⁴⁷. The situation improved in the second semester of 2005.

During the visits to the field OVE confirmed the importance of the institutional and political problems. It also found that for PROCAJOVEN the supervision that was practiced by the GDECAL to verify the quality of the courses and of the internships was insufficient. For example, in March 2005 the program only had 4 supervisors and realized only one supervision visit by firm. Moreover, even if PROCAMYPE had better results the COSPAE was discontent with the execution and was considering leaving the program because it was worried that its reputation would be affected. According to COSPAE the quality of the OCAS was low and in 6 months, from a list of 200 OCAS, they only succeeded to select twenty and finally they contracted only fourteen.

C. Outputs

OVE had two sources of information to evaluate the achievements of the program in terms of its outputs and activities. First a Mid Term Evaluation (MMT) of the entire program was realized in December 2004. Second, the GDCAL electronic database reports obtained during the mission to the field that was realized in March 2005. We will put emphasis in the PRCAJOVEN results.

1. The MMT of December 2004

This evaluation gives descriptive information of the main activities of the program and also the targets that were attained by each component during the first 18 months of execution (from April 2003 to August 2004). The main findings are: that PROCAJOVEN did not show any progress for the third subprogram (disadvantaged groups) and the two first subprograms (modalities) started operating very slow. Table 5.5 shows that in August 2004 the modality of insertion (1) and the modality of transition (2) had only provided 43 and 35 courses and received more than 1600 participants. 44% of the courses were offered in the Panama region. Among the participants the women represented almost 60%. Finally, 440 firms participated in PROCAJOVEN, 90% of these firms worked in the tertiary sector.

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⁴⁷ According to the Mid term evaluation during the period 2003-2004 the rate of turnover was 79%.

Table 5.5: Number of courses and beneficiaries of the insertion and transition modalities of PROCAJOVEN

		Modality	1		Modality	1
	Executed	In execution	in preparation	Executed	In execution	in preparation
Courses	43	16	7	35	4	16
Participants	828	285	140	871	100	395

Source: Mid term evaluation, build by the authors

The institutional strengthening component also showed little progresses during this period, and as correctly mentioned by the consultant, this had negative consequences for the other two components. The most important result was the implementation of the register of bidders. In total, 270 OCAs were registered. The main characteristics of these OCAS were: (1) an important proportion (70%) was relatively young because these OCAs started operating during the period 2000-2004. It is possible that this large proportion of new OCAs was related to the MIF pilot program. (2) The majority was specialized in the tertiary (44%) and the secondary sectors (33%) and they operated in all the regions of the country. (3) A small proportion of these OCAs participated in the PROCAJOVEN (13%) and the PROCAMYPE subprograms (7%). The MMT did not analyze the reasons behind this low level of participation of the OCAs. It only indicates some potential reasons, such as the bad quality of the proposals and a lack of information about the administrative requirements of the program.

2. The GDCAL information of March 2005

This information was obtained from the GDCAL electronic database. Table 5.6 confirmed the slow execution of the PROCAJOVEN component. It shows the main results of the modalities of insertion (modality 1) and transition (modality 2) of this component. Overall, until March 2005 these modalities only offered 35% and 29% of the courses that were planned. In terms of the number of trainees the proportions were 35% and 32%.

Table 5.6 also confirmed that the poor rate of accomplishment of the targets is mainly related to budget allocation problems. For example, for the years 2003 and 2004 the budget allocated to the modality 2 was only 27% and 50% of the budget that was expected. In total, during the period 2003-2005 the insertion modality and the modality 2 received respectively 36% and 29% of their expected budgetary allocations.

Table 5.6: Main results of the modalities 1 and 2 of PROCAJOVEN

Modality /		Planned		E	xecuted (numb	er)		Executed (%)		
Year	Courses	Participants	Budget	Courses	Participants	Budget	Courses	Participants	Budget	
Modality 1										
2003	75	1,500	688,977	28	535	326,885	37.3	35.7	47.4	
2004	79	1,422	954,580	39	703	429,533	49.4	49.4	45.0	
2005	39	713	469,639	1	20	12,220	2.6	2.8	2.6	
Total	193	3,635	2,113,196	68	1,258	768,638	35.2	34.6	36.4	
Modality 2										
2003	40	1,000	350,000	10	250	93,750	25.0	25.0	26.8	
2004	60	1,320	544,450	29	721	270,375	48.3	54.6	49.7	
2005	47	967	452,835	3	75	28,150	6.4	7.8	6.2	
Total	147	3,287	1,347,285	42	1,046	392,275	28.6	31.8	29.1	

Also, the PPMR of December 2005 mentions than one year after the completion of the MMT, the program did not improve its results. Overall, in more than two years and half of execution the program achieved few of the activities that were planned in each component.

The latest information, as of June 2006, reports a total of 3,286 trainees between 2003 and 2006 (1,516 in Transition and 1,770 in Insertion):

Table 5.7

	Total	2006	2005	2004	2003
Transición	1516	370	175	721	250
Inserción	1,770	160	372	686	552
Total	3,286	530	547	1,407	802

VI. FINDINGS: DEVELOPMENT OUTCOMES OF PROCAJOVEN

A. Data

1. The Evaluation Sample

The evaluation data was collected for a sub-sample of the beneficiaries (treatment) and the eligible participants that not received the training (control) of the modalities of insertion (modality 1) and transition (modality 2) of PROCAJOVEN. This sub-sample was drawn by stratified sampling (using age, gender, and education classes as strata) from the list of 761 controls (modality 1: 351, modality 2: 410) and 1041 treatments (modality 1: 486, modality 2: 555) provided by the GDCAL. The total sub-sample includes 295 controls (modality 1: 186, modality 2: 109) and 471 treatments (modality 1: 199, modality 2: 272). Table 6.1 shows some general characteristics of the sub-sample.

Table 6.1: Descriptive statistics of the treatment and control groups

		All			Modality 1			Modality 2	
	Control	Treatment	Total	Control	Treatment	Total	Control	Treatment	Total
Males	118	181	299	71	76	147	47	105	152
	40%	38%		38%	38%		43%	39%	
Females	177	290	467	115	123	238	62	167	229
	60%	62%		62%	62%		57%	61%	
18 - 24 years old	215	352	567	122	104	226	93	248	341
	73%	62%		66%	52%		85%	91%	
25 - 33 years old	79	119	198	63	95	158	16	24	40
	27%	25%		34%	48%		15%	9%	
Secondary	144	203	347	89	88	177	55	115	170
	49%	43%		48%	44%		50%	42%	
More than secondary	151	267	418	97	111	208	54	156	210
	51%	57%		52%	56%		50%	57%	
Panama	184	214	398	125	102	227	59	112	171
	62%	45%		67%	51%		54%	41%	
Other Provinces	111	257	368	61	97	158	50	160	210
	38%	55%		33%	49%		46%	59%	
N	295	471	766	186	199	385	109	272	381

Source: SPD survey, build by the authors.

The survey was conducted in the second week of September 2005 by the Panamanian consultants of SPD. In the survey, members of the treatment group were asked to provide monthly information on their activities, starting from the month that they completed (or left) their classroom-training program. Because of variation in the date of entry into the program, and variation in the duration of classroom training, the number of months of post-classroom training data available for members of the treatment group ranges from 9 to 20 months.

Information on the treatment group members who completed the survey enables us to estimate the fractions of the trainees, for both modalities, who completed the various phases of treatment.

A total of 95.8% of the treatment group completed their classroom training. The fraction is relatively higher for the modality 1 (92.5%) than for the modality 2 (98.2%). Of the completers, 87.6% started an internship. This fraction also differs by modality because for the modality 1 only 80.4% of the trainees started an internship while for the modality 2 the fraction is 92.5%. Finally, of those who started the internship 91.7% completed it. By modality this proportion was 95.3% for modality 1 and 89.5% for modality 2. Thus, the completion rate for the entire classroom and internship program was 77% (=.958 \times .876 \times .917), which compares favorably with other training programs. However, the completion rate differs by modality of training because it was 71% for modality 1 but 81% for modality 2.

2. Basic Sample Characteristics and Tests for Randomness

The program does not have an evaluation design, however, as explained above, OVE detected the opportunity of following a natural experiment approach. For this purpose, it is very important to test the randomness of the sample of treatment and control groups, to verify that the groups are comparable and that we can therefore proceed as if a controlled experiment had taken place. Table 6.2 shows some basic characteristics for members of the treatment and control groups by modality⁴⁸.

Looking first at the differences between the treatment and control groups for the entire sample, without differentiating by modality, there appears to be only three significant differences between the groups. Especially, the treatment group appears to have a lower proportion of individuals that are from Panama than the control group. This result is related, in part, to how the survey was constructed (it was difficult to find sufficient controls for all the regions).

The differences between the groups become more important if we differentiate by modality. In fact, the groups from the modality 1 have the most important and significant differences while the results for the second modality are similar to those found for the entire sample. On average, for the first modality the treatment group appears to be a little older and to have a lower proportion of individuals that are from Panama than the control group. Also, the labor situation before the training was significantly different. The control group has a lower proportion of people that were students but higher proportions of individuals that were employed or unemployed. However, this group also had in average more jobs before the training that the treatment group. The last significant difference concerns the mother level of education. Overall, the mothers of the individuals from the control group have higher levels of education.

⁴⁸ Depending on whether the variables are binary, categorical or continuous the t, chi2 or kolmogorov tests are used to verify the randomness of the sample.

Table 6.2: Basic Characteristics of the sample of treatment and control groups

	А	ll .	Moda	lity1	Modality 2	
Variables	Treatment group	Control group	Treatment group	Control group	Treatment group	Control group
Age (in Years)	23.1	23.1	24.7	23.5 +++	22.0	22.4
Panama	62.4	45.4 ****	51.3	67.2 ***	41.2	54.1 **
Male	38.4	40.0	38.2	38.2	38.6	43.1
Father education						
Primary	33.8	28.8	34.2	24.2	33.5	36.7
Secondary	40.8	45.8	37.2	44.6 #	43.4	47.7
Post-secondary	25.5	25.4	28.6	31.2	23.2	15.6
Mother education						
Primary	34.2	30.2	39.2	26.3	30.5	36.7
Secondary	49.3	51.2	40.7	52.2 ##	55.5	49.5
Post-secondary	16.6	18.6	20.1	21.5	14.0	13.8
Post-secondary education	56.8	51.1	55.8	52.2	57.6	49.5
Student	27.6	28.1	26.1	29.6	28.7	25.7
Labor market situation before the training						
Employed	10.8	8.1	12.6	8.6	9.9	7.3
Unemployed (1 month before)	37.2	36.6	41.2	36.6	34.2	36.7
Student	29.3	37.6	24.6	37.1	327	38.5
Household activities	17.0	13.2	17.7	12.4	16.9	14.7
Other	5.7	4.4	5.4	5.3	6.3	2.8
With labor experience before the training	34.4	32.2	41.7	36.0	29.0	25.7
Number of jobs longer than 2 months before the training	1.7	23 +++	1.6	23 +++	1.8	22 +++
Source of information about the existence of the program: Family and friends	62.6	60.7	56.3	64.5 *	67.3	54.1 **
Children of the household	66.0	69.8	62.8	67.2	68.4	74.3
Household size	4.7	4.6	4.7	4.6	4.8	4.6
With children	28.5	28.5	32.7	29.6	25.4	26.6
Number of children	0.4	0.4	0.5	0.4	0.3	0.3
With dependants	38.2	40.3	38.7	40.3	37.9	40.4
Number of dependants	0.6	0.8	0.7	0.8	0.6	0.7
Number of income earners	1.5	1.5	1.5	1.5	1.5	1.4
Married or in couple	27.2	24.8	32.2	27.4	23.5	20.2
Number of rooms in the house	3.9	3.6 +	3.8	3.7	4.0	3.5 +
Swage service in the house						
Latrine	24.0	21.5	25.1	19.0	23.2	25.7
City system	44.6	46.7	49.3	51.6	41.2	38.5
Septic tank	31.4	31.7	25.6	29.4	35.7	35.8
N .	471	295	199	186	272	109

Source: SPD survey, build by the authors.

Notes: Statistical difference at 1%, 5% and 10%. Binary variables: t test (*, ** or ***), continuous variables: Kolgomorov test (+, ++ or +++), categorical variables: Chi2 test (#, ##, ###).

In recognition of the differences found, especially for the first modality of the program, in the comparisons below we present both "unadjusted" comparisons of the mean differences between the two groups, and a reweighted difference, which uses the method described by DiNardo, Fortin, and Lemieux (1996) to "balance" the distribution of the characteristics of the two groups. This is a simple semi-parametric alternative to a regression adjustment. Results from a regression adjusted comparison are quite similar and in the interests of simplicity we report only the unadjusted and reweighted comparisons⁴⁹.

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⁴⁹ Additionally, in order to validate our results we also estimated a probit model controlling by a propensity score. Similar effects, in terms of size and statistic significance were found with this methodology.

B. Impacts

1. Unconditional Impacts: Employment, Earnings and Hours Worked.

The main purpose of both modalities of PROCAJOVEN was to increase the chances of obtaining a job for the beneficiaries. Hence, the natural yardstick for assessing both modalities is a comparison of employment rates of the treatment and control groups, which, under the assumption that we have a natural experiment, is an unbiased estimate of the average treatment effect. Tables 6.3, 6.3.1 and 6.3.2 report the employment rates for both groups, as well as the raw and weighted difference, for the entire sample and for each modality. For the general population, the results show that although there is five-percentage point difference between treatments and controls, the differences are not statistically significant. Thus, at the time of the survey 47% of treatments were employed versus 42% of controls. These proportions are 48% and 42% for the insertion modality and 46% and 43% for the transition modality.

Table 6.3: Employment status for the entire sample

G1-	TF44	C41		D D:ee	W-:-1-4-4 D:66
Sample	Treatment	Control		Raw Diff	Weighted Diff
All	46.92%	42.37%		4.55%	6.76%
	2.30%	2.88%		3.70%	3.69%
Males	51.38%	57.63%		-6.25%	-4.29%
	3.73%	4.57%		5.91%	5.82%
Females	44.14%	32.20%	**	11.93%	14.03%
	2.92%	3.52%		4.64%	4.62%
18 - 24 years old	45.45%	40.00%		5.45%	6.44%
	2.66%	3.35%		4.29%	4.30%
25 - 33 years old	51.26%	49.37%		1.89%	7.01%
	4.60%	5.66%		7.29%	7.18%
Secondary	46.80%	45.14%		1.66%	5.40%
-	3.51%	4.16%		5.45%	5.33%
More than secondary	46.82%	39.74%		7.08%	8.09%
	3.06%	4.00%		5.06%	5.13%
Panama	52.80%	42.39%	**	10.41%	10.92%
	3.42%	3.65%		5.01%	4.67%
Other Provinces	42.02%	42.34%		-0.32%	-0.25%
	3.08%	4.71%		5.62%	6.02%
Panama - Males	60.92%	60.00%		0.92%	0.61%
	5.26%	5.90%		7.90%	7.91%
Panama - Females	47.24%	31.58%	**	15.66%	16.36%
	4.44%	4.37%		6.23%	6.24%
Other Provinces - Males	42.55%	54.16%		-11.61%	-14.40%
	5.13%	7.27%		8.89%	8.87%
Other Provinces - Females	41.71%	33.33%		8.38%	10.22%
	7.79%	7.20%		10.61%	8.19%

Source: SPD survey, build by the authors.

Notes: standard errors in italics. In the last column, the mean for the treatment group is a weighted mean, where the weight for a given person is p/(1-p), and p is the estimated probability the person is in the control group, given his/her covariates.

Table 6.3.1: Employment status for the insertion modality

Sample	Treatment	Control		Raw Diff	Weighted Diff
All	47.74%	41.94%		5.80%	10.38%
	3.55%	3.63%		5.08%	6.58%
	2.2270	2.0270		2.00,0	0.0070
Males	48.68%	52.11%		-3.43%	4.28%
	5.77%	5.97%		8.30%	10.54%
Females	47.15%	35.65%	*	11.50%	13.99%
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4.52%	4.49%		6.38%	8.38%
10. 24. 11	44.220/	26.900/		7.250	9.260/
18 - 24 years old	44.23%	36.89% 4.39%		7.35%	8.36%
	4.89%	4.39%		6.56%	9.79%
25 - 33 years old	51.58%	52.38%		-0.80%	4.50%
_	5.15%	6.34%		8.17%	9.44%
g 1	47.720/	42.920/		3.91%	9.400/
Secondary	47.73%	43.82%			8.40%
	5.36%	5.29%		7.53%	9.37%
More than secondary	47.75%	40.21%		7.54%	12.22%
	4.76%	5.00%		6.92%	9.29%
Panama	55.88%	40.80%	**	15.08%	16.84%
	4.94%	4.41%		6.62%	7.80%
				0.000	
Other Provinces	39.18%	44.26%		-5.09%	-5.43%
	4.98%	6.41%		8.08%	11.96%
Panama - Males	58.54%	53.06%		5.47%	9.85%
	7.79%	7.20%		10.61%	10.50%
					-1.0
Panama - Females	54.10%	32.89%	**	21.20%	21.07%
	6.43%	5.42%		8.41%	8.41%
Other Provinces - Males	37.14%	50.00%		-12.86%	-12.51%
	8.28%	10.91%		13.70%	13.71%
Other Provinces - Females	40.32%	41.02%		-0.70%	-1.43%
Other Flovinces - Females	6.28%	7.98%		-0.70% 10.15%	-1.43% 10.14%
	0.28%	1.98%		10.13%	10.14%

Source: SPD survey, build by the authors.

Notes: standard errors in italics. In the last column, the mean for the treatment group is a weighted mean, where the weight for a given person is p/(1-p), and p is the estimated probability the person is in the control group, given his/her covariates.

Table 6.3.2: Employment status for the transition modality

Sample	Treatment	Control		Raw Diff	Weighted Diff
All	46.32%	43.12%		3.20%	5.12%
	3.03%	4.77%		5.66%	6.54%
Males	53.33%	65.96%		-12.62%	-14.64%
	4.89%	6.99%		8.68%	9.58%
Females	41.92%	25.81%	**	16.11%	19.71%
	3.83%	5.60%		7.15%	8.30%
18 - 24 years old	45.97%	44.09%		1.88%	2.90%
10 2. years ord	3.17%	5.18%		6.07%	6.92%
25 22 years ald	50.000/	07.500/		40.500/	20.400/
25 - 33 years old	50.00%	37.50%		12.50%	32.48%
	10.43%	12.50%		16.35%	21.88%
Secondary	46.09%	47.27%		-1.19%	4.33%
	4.67%	6.79%		8.22%	9.25%
More than secondary	46.15%	38.89%		7.26%	5.85%
	4.00%	6.70%		7.86%	9.24%
Panama	50.00%	45.76%		4.24%	6.23%
	4.75%	6.54%		8.08%	9.26%
	4.7070	0.5476		0.0070	3.2070
Other Provinces	43.75%	40.00%		3.75%	4.93%
	3.93%	7.00%		8.05%	9.30%
Panama - Males	63.04%	76.19%		-13.14%	-16.75%
	7.20%	9.52%		11.94%	12.01%
Panama - Females	40.91%	28.95%		11.96%	16.10%
2 4.1.4.1.0	6.10%	7.46%		9.63%	9.68%
Other Provinces - Males	45.76%	57.69%		-11.93%	-13.92%
Other Frontices - Maies	43.76% 6.54%	37.09% 9.88%		-11.95% 11.85%	11.83%
	0.34%	9.88%		11.83%	11.83%
Other Provinces - Females	42.57%	20.83%	**	21.74%	25.07%
	4.94%	8.47%		9.80%	9.84%

Source: SPD survey, build by the authors.

Notes: standard errors in italics. In the last column, the mean for the treatment group is a weighted mean, where the weight for a given person is p/(1-p), and p is the estimated probability the person is in the control group, given his/her covariates.

However, when we disaggregate the results by gender and region we find significant effects. The insertion modality has a marginally significant impact on the employment rate of women (47% for the treated and 35% for the controls) and a significant impact for the residents of Panama City (56% against 41%), while the transition modality has a large and significant impact for the women (42% against 26%).

While the main focus of both modalities of PROCAJOVEN is on employment, it is also interesting and important to consider their effects on earnings. To explore these effects, we begin by looking at monthly labor earnings and hours worked per week. Tables 6.4, 6.4.1 and 6.4.2 show total monthly labor income for the two groups, assigning zero earnings for non-workers, for the entire sample and for each modality. For the insertion modality and transition modality the members of the treatment group have monthly total labor earnings which are US\$27 and US\$16 higher than the control group but these differences are not statistically significant. However, as for the probability of being employed the insertion modality has an impact on earnings for the women and people from Panama City. Actually, the effect on earnings is imprecisely estimated, reflecting the small samples sizes and the underlying variability in earnings.

Table 6.4: Labor earnings in the month of the survey for the entire sample

Sample	Treatment	Control		Raw Diff	Weighted Diff
All	\$134	\$118		\$16	\$28
	\$9	\$10		\$14	\$14
Males	\$164	\$170		-\$6	\$12
	\$16	\$19		\$25	\$25
Females	\$115	\$84	**	\$32	\$38
	\$10	\$12		\$16	\$15
18 - 24 years old	\$120	\$108		\$12	\$18
	\$9	\$12		\$15	\$15
25 - 33 years old	\$174	\$146		\$28	\$53
	\$21	\$22		\$32	\$31
Secondary	\$124	\$113		\$11	\$25
	\$12	\$14		\$18	\$18
More than secondary	\$142	\$123		\$19	\$31
	\$12	\$16		\$20	\$21
Panama	\$177	\$138	*	\$40	\$37
	\$15	\$14		\$21	\$19
Other Provinces	\$98	\$86		\$12	\$13
	\$9	\$14		\$17	\$18

Source: SPD survey, build by the authors.

Notes: standard errors in italics. See note to table VI.3 The dependent variable is monthly earnings (including 0's for non-earners). The value of earnings is censored at the 99th percentile.

Table 6.4.1: Labor earnings in the month of the survey for the insertion modality

Sample	Treatment	Control		Raw Diff	Weighted Diff
Батріс	Treatment	Control		Raw Dili	Weighted Diff
All	\$148	\$122		\$27	\$61
	\$15	\$14		\$20	\$29
Males	\$176	\$170		\$6	\$66
	\$28	\$26		\$38	\$55
Females	\$131	\$92	*	\$39	\$57
	\$17	\$15		\$23	\$32
18 - 24 years old	\$126	\$105		\$21	\$31
	\$19	\$16		\$24	\$39
25 - 33 years old	\$172	\$156		\$16	\$57
	\$23	\$26		\$36	\$44
Secondary	\$139	\$107		\$32	\$66
	\$21	\$17		\$27	\$38
More than secondary	\$155	\$135		\$21	\$58
	\$21	\$21		\$30	\$45
Panama	\$212	\$137	**	\$75	\$87
	\$25	\$18		\$30	\$38
Other Provinces	\$81	\$91		-\$10	-\$12
	\$12	\$19		\$21	\$31

Source: SPD survey, build by the authors.

Notes: standard errors in italics. See note to table VI.3. The dependent variable is monthly earnings (including 0's for non-earners). The value of earnings is censored at the 99th percentile.

Table 6.4.2: Labor earnings in the month of the survey for the transition modality

Sample	Treatment	Control	Raw Diff	Weighted Diff
All	\$124	\$112	\$12	\$16
7111	\$10	\$16	\$19	\$22
Males	\$155	\$169	-\$14	-\$24
	\$18	\$27	\$33	\$36
Females	\$104	\$69	\$35	\$45
	\$12	\$18	\$22	\$26
18 - 24 years old	\$118	\$113	\$5	\$9
	\$10	\$17	\$20	\$23
25 - 33 years old	\$182	\$106	\$76	\$134
	\$50	\$44	\$71	\$105
Secondary	\$112	\$122	-\$10	\$4
	\$14	\$24	\$26	\$31
More than secondary	\$133	\$102	\$31	\$29
	\$15	\$21	\$28	\$32
Panama	\$146	\$139	\$6	\$4
	\$17	\$23	\$29	\$32
Other Provinces	\$108	\$80	\$28	\$35
	\$13	\$21	\$25	\$29

Source: SPD survey, build by the authors.

Notes: standard errors in italics. See note to table VI.3. The dependent variable is monthly earnings (including 0's for non-earners). The value of earnings is censored at the 99th percentile.

Tables 6.5, 6.5.1 and 6.5.2 show the impacts on hours worked per week. For the entire sample we observe an effect on hours on overall sample and also if we disaggregate by gender, age and region. However, the results for both modalities are more consistent with the results on the probability of employment. There do not seem to be large or systematic effects on hours of the overall sample and there are significant effects for women. Interestingly, if we disaggregate by region the results are different between the modalities. The insertion modality has a significant effect on earnings for the residents of Panama while the transition modality has an effect only for residents from other regions. Nevertheless these effects are only marginally significant.

Table 6.5: Hours of work per week for the entire sample

Sample	Treatment	Control		Raw Diff	Weighted Diff
		00111101		14,112,111	T CIGITOG DIL
All	18.91	16.00	*	2.91	3.56
	1.05	1.25		1.66	1.64
Males	21.98	23.94		-1.96	-0.98
	1.80	2.12		2.81	2.77
Females	16.99	10.70	***	6.29	6.50
	1.28	1.39		1.96	1.90
18 - 24 years old	18.58	15.40	*	3.18	3.35
	1.20	1.47		1.92	1.90
25 - 33 years old	19.87	17.82		2.05	3.88
	2.19	2.39		3.32	3.24
Secondary	19.53	16.50		3.03	4.01
	1.65	1.78		2.47	2.37
More than secondary	18.40	15.52		2.88	3.15
	1.37	1.75		2.25	2.28
Panama	20.25	16.99	*	3.26	3.67
	1.59	1.64		2.29	2.13
Other Provinces	17.79	14.35	*	3.44	3.34
	1.41	1.90		2.48	2.55

Source: SPD survey, build by the authors.

Notes: standard errors in italics. See note to table VI.3. The dependent variable is weekly hours (including 0's for non-workers).

Table 6.5.1: Hours of work per week for the insertion modality

Sample	Treatment	Control	e mser t	Raw Diff	Weighted Diff
All	18.45	15.59		2.86	4.09
	1.62	1.55		2.24	3.01
Males	20.25	22.04		-1.79	1.78
	2.79	2.76		3.93	5.31
Females	17.33	11.61	**	5.72	5.35
	1.97	1.74		2.64	3.50
18 - 24 years old	17.81	14.48		3.33	3.67
	2.16	1.92		2.89	4.33
25 - 33 years old	19.15	18.00		1.15	2.67
	2.43	2.63		3.68	4.34
Secondary	19.09	16.22		2.87	3.67
	2.46	2.33		3.38	4.30
More than secondary	17.94	15.01		2.93	4.45
,	2.16	2.07		3.01	4.26
Panama	20.72	15.67	*	5.04	5.36
	2.36	1.91		3.00	3.67
Other Provinces	16.06	15.43		0.64	0.84
	2.18	2.66		3.47	5.21

Source: SPD survey, build by the authors.

Notes: standard errors in italics. See note to table VI.3. The dependent variable is weekly hours (including 0's for non-workers).

Table 6.5.2: Hours of work per week for the transition modality

Sample	Treatment	Control		Raw Diff	Weighted Diff
All	19.24	16.69		2.55	3.20
All	1.39	2.10		2.57	2.94
Males	23.23	26.81		-3.58	-4.80
	2.36	3.32		4.17	4.55
Females	16.74	9.02	**	7.72	8.99
	1.69	2.29		3.11	3.54
18 - 24 years old	18.90	16.61		2.29	2.59
	1.45	2.27		2.74	3.08
25 - 33 years old	22.75	17.13		5.63	14.66
	5.11	5.78		7.84	10.83
Secondary	19.87	16.95		2.92	4.76
	2.24	2.78		3.77	4.07
More than secondary	18.72	16.43		2.30	1.57
	1.78	3.19		3.56	4.24
Panama	19.82	19.78		0.04	0.87
	2.16	3.10		3.73	4.31
Other Provinces	18.84	13.04	*	5.80	6.17
	1.83	2.71		3.61	3.91

Source: SPD survey, build by the authors.

Notes: standard errors in italics. See note to table VI.3. The dependent variable is weekly hours (including 0's for non-workers).

2. Conditional Impacts on Workers

Tables 6.6.1 and 6.6.2 present results for the entire sample and for the female sample respectively (the results are not disaggregated by age, education or region). The top row simply reproduces the employment impacts from Tables 6.3. The remaining rows show means of income, hours worked, hourly wages, and the probability of social security, conditional on working, for the treatment and control groups, as well as the unadjusted and adjusted (reweighed) gaps between them.

As in the case of employment, the results are very different for women. As reported, for the whole sample there are not significant results in employment rates, the effect of PROCAJOVEN in females is positive and highly significant. Focusing on them, there are no significant differences in monthly income but there is a positive effect in hours worked per week and a small negative effect in hourly income. This can be interpreted as that females in the treatment

group are getting relatively low-paid jobs, but they are able to work enough hours get the same monthly labor income (i.e., conditional on employment) than the control group.

Table 6.6.1: Summary of labor market outcomes for the entire sample

Sample	Treatment	Control		Raw Diff	Weighted Diff
E 1 (D)	46.020/	40.270/		4.550/	6.760/
Employment Rate	46.92% 2.30%	42.37% 2.88%		4.55% 3.70%	6.76% 3.69%
Marshly Income (All John)	\$275.11	\$277.64		¢2.52	\$277.6A
Monthly Income (All Jobs)	\$275.11 \$11.26	\$277.64 \$15.84		-\$2.53 \$19.10	-\$277.64 \$15.84
Hours worked per week (All Jobs)	42.88	40.08	*	2.80	-40.08
The state of the s	0.88	1.31		1.52	1.31
Hourly Income (All Jobs)	\$6.77	\$8.48	**	-\$1.71	-\$8.48
	\$0.31	\$0.90		\$0.79	\$0.90
Social protection	62.50%	59.13%		3.37%	-59.13%
_	3.43%	4.60%		5.72%	4.60%

Source: SPD survey, build by the authors.

Notes: standard errors in italics. See note to table 6.3. The sample for employment includes everyone. The sample for income, hours per week, hourly wage, and social protection includes those with positive earnings and between 10 and 85 hours per week. The value of earnings is censored at the 99th percentile.

Table 6.6.2: FEMALES: Summary of labor market outcomes for the entire sample

Sample	Treatment	Control		Raw Diff	Weighted Diff
	44.140/	22.2004		11.020/	1.4.020/
Employment Rate	44.14%	32.20%	**	11.93%	14.03%
	2.92%	3.52%		4.64%	4.62%
Monthly Income (All Jobs)	\$251.04	\$267.99		-\$16.95	-\$17.89
	\$14.01	\$24.41		\$26.65	\$27.95
Hours worked per week (All Jobs)	41.76	36.92	**	4.84	3.73
	1.17	2.19		2.28	2.52
Hourly Income (All Jobs)	\$6.49	\$9.30	**	-\$2.81	-\$2.49
	\$0.44	\$1.60		\$1.25	\$1.67
Carial manda etia m	62.50/	CO 00/		2.50/	2.10/
Social protection	63.5%	60.0%		3.5%	3.1%
	4.5%	7.0%		8.2%	8.3%

Source: SPD survey, build by the authors.

Notes: standard errors in italics. See note to table 6.3. The sample for employment includes everyone. The sample for income, hours per week, hourly wage, and social protection includes those with positive earnings and between 10 and 85 hours per week. The value of earnings is censored at the 99th percentile.

Table 6.6.3: FEMALES: Summary of labor market outcomes for the insertion modality

Muestra	Treatment	Control	Raw Diff	Weighted Diff
				10.00
Employment Rate	47.15%	35.65%	11.50%	13.99%
	4.52%	4.49%	6.38%	8.38%
Monthly Income (All Jobs)	\$263.17	\$265.57	-\$2.40	\$8.85
	\$23.94	\$30.26	\$38.11	\$46.79
Hours worked per week (All Jobs)	41.86	36.19	5.66	5.15
	1.77	2.51	2.98	3.90
Hourly Income (All Jobs)	\$6.88	\$9.41	-\$2.54	-\$1.99
	\$0.76	\$1.98	\$1.91	\$2.35
Social protection	69.4%	61.1%	8.3%	8.5%
1	6.7%	8.2%	10.5%	13.4%

Source: SPD survey, build by the authors.

Notes: standard errors in italics. See note to table 6.3. The sample for employment includes everyone. The sample for income, hours per week, hourly wage, and social protection includes those with positive earnings and between 10 and 85 hours per week. The value of earnings is censored at the 99th percentile.

Table 6.6.4: FEMALES: Summary of labor market outcomes for the transition modality

Muestra	Treatment	Control	Raw Diff	Weighted Diff
Employment Rate	41.92%	25.81%	16.11%	19.71%
Employment Rate	3.83%	5.60%	7.15%	8.30%
Monthly Income (All Jobs)	\$242.03	\$274.22	-\$32.19	-\$30.34
, , , , , , , , , , , , , , , , , , , ,	\$16.82	\$40.93	\$41.05	\$47.73
Hours worked per week (All Jobs)	41.68	38.79	2.90	2.02
	1.56	4.54	3.98	5.15
Hourly Income (All Jobs)	\$6.20	\$9.03	-\$2.82	-\$2.59
	\$0.52	\$2.75	\$1.68	\$2.84
Social protection	59.1%	57.1%	1.9%	0.9%
	6.1%	13.7%	14.7%	16.6%

Source: SPD survey, build by the authors.

Notes: standard errors in italics. See note to table 6.3. The sample for employment includes everyone. The sample for income, hours per week, hourly wage, and social protection includes those with positive earnings and between 10 and 85 hours per week. The value of earnings is censored at the 99th percentile.

Tables 6.7, 6.7.1 and 6.7.2 conduct the same exercise for different subgroups and show the results using the reweighing procedure to standardize the characteristics of the treatment group back to those of the controls. For the first modality and across the various subgroups there is no evidence of a significant effect on the monthly earnings, hours per week (conditional on

working), hourly wages and social protection. The transition modality shows some significant effects for the probability of having social protection. Therefore, none of the estimated effects on hourly wages are significant. We conclude that the suggestive positive effects seen on wages seen for the overall sample in Table 5 are relatively evenly distributed across the sample. Unfortunately, given the small sample sizes in the evaluation sample, it is impossible to draw stronger inferences.

Table 6.7: Reweighted differences for selected indicators, entire sample

		monthly	hours per		Social
	employment	_	week	hrly wage	Protection
All	6.76%	\$9.53	2.59	-\$1.30	3.44%
	3.69%	\$19.57	1.60	\$0.95	5.71%
Male	-4.29%	\$47.96	2.64	-\$0.23	3.49%
	5.82%	\$27.88	2.01	\$1.08	7.99%
Female	14.03%	-\$17.89	3.73	-\$2.49	3.07%
	4.62%	\$27.95	2.52	\$1.67	8.34%
18 - 24 years old	6.44%	\$1.15	0.91	-\$1.44	10.13%
	4.30%	\$13.22	1.91	\$1.22	6.88%
25 - 33 years old	7.01%	\$35.31	6.87	-\$0.90	-11.30%
	7.18%	\$37.24	2.92	\$1.47	9.68%
Secondary	5.40%	\$26.23	4.01	-\$1.01	8.80%
	5.33%	\$25.91	2.25	\$1.37	8.17%
More than secundary	8.09%	-\$8.59	1.11	-\$1.63	-2.36%
	5.13%	\$28.89	1.29	\$1.31	7.76%
Panama	10.92%	-\$0.17	0.25	-\$1.60	-9.42%
	4.67%	\$23.75	1.95	\$1.28	6.57%
Other provinces	-0.25%	\$16.80	6.55	-\$1.05	24.16%
1	6.02%	\$29.58	2.68	\$1.30	9.36%

Source: SPD survey, build by the authors.

Notes: standard errors in italics. See notes to Table 6.6

Table 6.7.1: Reweighted differences for selected indicators, insertion modality

		monthly	hours per		Social
	em ployment	earnings	week	hrly wage	Protection
A 11	10.38%	\$38.67	3.30	-\$0.53	-6.93%
	6.58%	\$38.11	2.71	\$1.37	10.08%
M ale	4.28%	\$81.92	1.81	\$1.10	-25.17%
	10.54%	\$60.25	3.62	\$1.33	15.09%
Fem ale	13.99%	\$8.85	5.15	-\$1.99	8.54%
	8.38%	\$46.79	3.90	\$ 2 . 3 5	13.39%
18 - 24 years old	8.36%	\$20.52	-0.25	-\$0.26	4.33%
	9.79%	\$55.71	3.98	\$ 2.18	1 4 . 7 7 %
25 - 33 years old	4.50%	\$47.72	7.25	-\$1.03	-19.12%
·	9 .4 4 %	\$49.94	3.84	\$1.79	13.81%
Secondary	8.40%	\$104.71	5.11	\$0.42	-5.95%
·	9.37%	\$52.05	3.67	\$1.97	1 4 . 4 7 %
M ore than secundary	12.22%	-\$27.27	1.23	-\$1.42	-7.46%
·	9.29%	\$ 5 4 . 5 0	3.35	\$1.93	14.11%
Panam a	16.84%	\$37.49	2.16	-\$1.02	-20.78%
	7.80%	\$ 45.41	3 . 2 8	\$1.88	1 1 . 2 7 %
O ther provinces	-5.43%	-\$1.23	5.27	-\$0.66	17.40%
ī	11.96%	\$48.34	4.62	\$1.16	19.47%

Source: SPD survey, build by the authors.

Notes: standard errors in italics. See notes to Table 6.6.1

Table 6.7.2: Reweighted differences for selected indicators, transition modality

		m on th ly	hours per		Social	
	em ployment	earnings	week	hrly wage	Protection	
A 11	5 . 1 2 %	-\$7.14	1.64	-\$1.98	16.96%	
	6 . 5 4 %	\$ 3 0 . 0 1	2 . 7 6	\$ 1 . 6 7	9.95%	
M ale	-14.64%	\$12.39	2.37	-\$1.64	26.94%	
	9.58%	\$ 3 9 . 8 1	3 . 3 7	\$ 2 . 1 1	1 2 .7 5 %	
Fem ale	19.71%	-\$30.34	2.02	-\$2.59	0.86%	
	8.30%	\$47.73	5 . 1 5	\$ 2 . 8 4	16.55%	
18 - 24 years old	2.90%	-\$7.93	2.01	-\$2.39	20.88%	
·	6.92%	\$17.96	3.05	\$1.88	10.50%	
25 - 33 years old	3 2 .4 8 %	\$16.50	1.71	\$0.82	4.17%	
·	21.88%	\$116.36	6.36	\$ 4 . 0 4	23.56%	
Secondary	4.33%	-\$27.80	5.04	-\$2.40	29.54%	
·	9 . 2 5 %	\$41.76	3 . 5 6	\$ 2.20	1 3 .0 4 %	
M ore than secundary	5.85%	\$16.99	-2.41	-\$1.51	1.78%	
•	9 . 2 4 %	\$42.96	2.28	\$ 2.62	1 4 . 3 3 %	
Panam a	6.23%	-\$24.32	-3.17	-\$1.63	6.48%	
	9 . 2 6 %	\$36.77	3 . 6 5	\$ 2.04	1 3 .0 8 %	
O ther provinces	4.93%	\$ 2 6 . 9 3	8.17	-\$2.13	34.39%	
r	9.30%	\$49.28	4.16	\$ 2 . 9 1	13.81%	

Source: SPD survey, build by the authors.

Notes: standard errors in italics. See notes to Table 6.6.2

C. Cost – Benefit Considerations

A central issue is whether the program has generated sufficient benefits to cover its costs. For this, we computed the benefits from the impact evaluation: namely a positive impact in employment rates and no impact on wages. We compare that to the cost excluding transfers, and assume –for simplicity—an interest rate equal to the discount rate. The results show that overall the costs are recovered in 12.6 months, with a larger payoff in the transition modality for women, where in three months the costs are recovered.

			ALL	ONLY	WOMEN
	Cost Excluding Transfers	Benefits	Months to recoup costs	Benefits	Months to recoup costs
Insertion	\$ 356	\$ 19	a 18.7	\$ 32	11.2
Transition	\$ 140	\$ 11	b 12.8	\$ 47	3.0
Total	\$ 231	\$ 18	a 12.6	\$ 31	7.5

a: assumes zero employment effect for men, 12% for women

b: assumes -12% employment effect for men, 17% for women

VII. CONCLUSIONS AND RECOMMENDATIONS

The program PN1025 is a close continuation of the MIF pilot program approved in 1997. and its design considered the recommendations made by the final evaluation of the MIF program. The program is also more ambitious in terms of its objectives and activities. Its main objective is to build a training and employment system for the. However, in terms of the number of trainees its targets are modest because it considers to offer training to less than 12,000 youths, and after four years it has only trained about a third of them.

The slow execution is mainly explained by political and institutional factors that have undermined the program implementation. Particularly, the program was not a priority of the government and suffered from a lack of resources. Moreover, the MITRADEL has a very low institutional capacity. Other problems have also affected the execution of the program, such as the quality of the OCAs and the fact that the program did not consider to give an active participation to the national training institution.

OVE evaluated the impacts of the first component of the program. This task was not simple because the program did not develop neither implemented an evaluation methodology and a baseline. The outcomes indicators were specified only in 2004 by the GDCAL and the methodology for the impact evaluation is still undefined. However, OVE considered that it was possible to follow a natural experiment approach because during 2004 there was a set of courses that were approved but not financed. Given that this was exogenous to the eligible participants who were enrolled by the OCAs of the cancelled courses, OVE considered those would-be participants as a useful comparison group. The test of randomness validated this approach because the differences between the treatment and controls groups were not significant.

In terms of the impacts on employment the PROCAJOVEN component has a 5% effect but this impact is not significant. However, it has a high and significant effect for the women, particularly in the region of Panama. Overall, both modalities of the component have significant effects in terms of earnings, hours worked and social security for these two subgroups of beneficiaries. These results are similar to those found in the literature about the evaluation of training programs.

This information should be used in the current debate around the changes in the national training institution in Panama, as well as to how to try to improve the performance of the program. The results of the evaluation are clear: the program works, particularly for women. In the case of the two subcomponents, we find that the impacts are similar, however due to cost differentials the returns are higher for the transition component. However, it is important to note that this modality has a longer internship (two months instead of one), and that the trainees have secondary education, a pre-requisite to most employers in Panama. Hence, the beneficiaries are better positioned to benefit from the program (this may be an illustration of the tensions between equity –helping those in cost need—and efficiency).

Specific recommendations could be made in terms of the monitoring and evaluation. The methodology applied for this report cannot be relied upon in the future, for hopefully implementation will be improved and natural experiments will not be available. Hence, it is

important to define and implement an evaluation strategy clearly identifying the comparison group and specifying the indicators and data gathering strategy.

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APPENDIX A

Logical framework of the Job Training Component

Objectives	Indicators	Baseline	Mile stones	Target	Results
Objective 1: To improve employment prospects for jobless youths (Youth Training Program (PROCAJOVEN)					
Subprogram 1: Labor	1.1 Number of low-income jobless youths between 18 and 29	NA	NA	1.1) 7,000;	
insertion for the	that are given training (one month skills development courses				
unemployed youths	and two months of on-the-job training and practical instruction)			1.2) 40%, 2,800;	1.2) 60%
	for workforce entry;			1.3) 70%;	
	1.2 Percentage of trainees that are women;			1.4) 65%;	1.3) 20%
	1.3 Percentage of youths trained hired upon completion of			1.5) 30%;	1.4) 52%
	training;			1.6) NA;	(employment
	1.4 Percentage of youths employed after training that are still			1.7) NA;	at time of
	employed 6 months later;				survey)
	1.5 Percentage less time that program participants take to find a				1.5) 21 %
	job than the control group;				(measured as
	1.6 Youths taking part in the training program retain jobs longer				time spent
	than those in the control group;				looking for
	1.7 Boost (increase) in the percentage of business owners using				current job)
	program services to hire youths;				
Subprogram 2: School-	1.8 Number of lower secondary or middle school graduate	NA	NA	1.8) 4,400;	
to-work transition	youths given employment counseling and training for the			4.00.450.4.000	4.00.445.
	selection of further education or career paths;			1.9) 45%, 1,980;	1.9) 61%
	1.9 Percentage of employment counseling program participants			1.10) 80%;	4.40
	that are women;				1.10) 75%
	1.10 Percentage of youths that pursue their vocational training				
	or find a job upon completing their training;				

Source: Loan Document and Logical Framework



Inter-American Development Bank Washington, D.C.