

# COMPASS COMMISSION

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*The Chilean Ministry of Planning asked J-PAL to convene a commission of local and international academics. The Compass Commission proposes the implementation of four social policies with their respective randomized impact evaluation. The goal is to guide the design and implementation of social development policy in Chile based on rigorous scientific evidence.*

# ABOUT J-PAL

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The Abdul Latif Jameel Poverty Action Lab (J-PAL) is a network of 54 affiliated professors around the world who are united by their use of Randomized Evaluations (REs) to answer questions critical to poverty alleviation. J-PAL's mission is to reduce poverty by ensuring that policy is based on scientific evidence. J-PAL works to achieve this by:

**Conducting Rigorous Impact Evaluations** J-PAL researchers conduct randomized evaluations to test and improve the effectiveness of programs and policies aimed at reducing poverty. There are more than 242 evaluations that have been either completed or are ongoing.

**Building Capacity** J-PAL provides expertise to people interested in rigorous program evaluation, and training to others on how to conduct randomized evaluations.

**Impacting Policy** J-PAL's policy group performs cost-effectiveness analysis to identify the most effective ways to achieve policy goals, disseminates this knowledge to policymakers, and works with governments, NGOs, foundations, and international development organizations to promote the scale-up of highly effective policies and programs around the world.

J-PAL was founded in 2003 at the Department of Economics of the Massachusetts Institute of Technology (MIT). During 2007, J-PAL opened two regional offices in Europe and South Asia aiming to form connections with local researchers and strengthening the impact of the results obtained from the evaluations of local programs. These offices are harbored by the Paris School of Economics (PSE) in France, and the Institute for Financial Management and Research (IFMR), in Chennai, India. With the same objective, during 2009 J-PAL inaugurated the Latin America regional office at the Catholic University of Chile (PUC). Finally, during 2011 the African regional office opened at the University of Cape Town in South Africa.

## ABOUT THE COMPASS COMMISSION

In 2010 the Ministry of Planning of Chile (MIDEPLAN) asked the Abdul Latif Jameel Poverty Action Lab (J-PAL) to convene a commission of experts who could identify the main social policy challenges in Chile and propose innovative programs that would then be evaluated via randomized impact evaluations.

To this end, J-PAL convened the Compass Commission, a group of international and local academics with extensive experience in public policy and rigorous impact evaluations. For six months, the Commission worked with a coordinating team at J-PAL formed by members of J-PAL's Policy Group and J-PAL Latin America, who provided research support and executive coordination.

In addition, representatives of MIDEPLAN informed the Commission about existing government programs as well as budgetary priorities that could be instrumental in implementing the proposed evaluations. MIDEPLAN's representatives facilitated dialogue and coordination with other ministries and public institutions that may be involved in the future implementation and evaluation of the proposed programs.

During its ten sessions, the Commission's work progressed through three stages:

### IDENTIFICATION OF SOCIAL POLICIES:

In the first stage, the Commission focused on identifying key policy questions for social development in Chile, which was followed by a series of proposed interventions and evaluation strategies that could provide answers to these questions. A wide range of topics was covered, including access and quality of education, labor market intermediation, child development, criminal rehabilitation and prevention of risky behaviors among youth.

### POLICY PROPOSALS:

In the second stage, after receiving inputs from several public agencies, the Commission selected the four interventions it considered most promising for the development of Chile. The selection criteria included the potential impact of the proposed programs, the administrative and political viability of these initiatives, and the feasibility of implementing a randomized impact evaluation to measure its results.

### IMPLEMENTATION AND EVALUATION DESIGN:

In the third stage, the Commission worked to design the implementation and experimental evaluation of the proposed programs in greater detail. To this end, the Commission was divided into four groups, each in charge of coordinating the progress of their respective proposals.

## THE COMPASS COMMISSION PROPOSALS

### THE PREFERENTIAL SCHOOL SUBSIDY: INFORMATION AND CHOICE

This proposal aims to understand how greater choice in school selection affects the educational decisions of low-income families, and ultimately, the academic performance of their children. Households will receive information on their eligibility for the recently created Preferential School Subsidy program, which increased the school subsidy for poor students by an additional 50 percent, and information on schools they can now access through the benefits of this program. Providing information about a benefit that many intended beneficiaries are unaware of may improve educational outcomes.

### SUPPORT AND INCENTIVES FOR TEACHERS

This proposal seeks to increase the quality of education by changing teacher incentives to bolster teaching performance and effort in the classroom. The accompanying study will evaluate the impact on academic outcomes of a program that combines an increase in the number of hours teachers spend on preparing for classes with individual monetary incentives tied to student academic performance.

### PROGRAMS FOR REHABILITATION AND SOCIAL INTEGRATION

This proposal focuses on public safety via strategies for rehabilitation and social reintegration of juvenile and adult offenders. The program would enhance services for rehabilitation and social reintegration at prisons and in juvenile facilities. In the case of prisons, the prison guards would be trained to support the program.

### OPPORTUNITIES FOR YOUTH

The fourth proposal describes a multidimensional program implemented in schools that includes job placement, business training, mentoring, and access to health services. The program seeks to facilitate youth access to the labor market and reduce risky behaviors that lead to drug use and teen pregnancy.

We hope that the work of the Commission serves not only to inform the design and implementation of social policies in Chile, but also as a forum to highlight the importance of public policy decisions based on rigorous evidence. A joint initiative between a government and an organization like J-PAL, committed to fighting poverty through scientific evidence, could bring positive results for Chile and for other countries that pursue similar partnerships.

# MEMBERS OF THE COMMISSION

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# THE PREFERENTIAL SCHOOL SUBSIDY: INFORMATION AND CHOICE



## PUBLIC POLICY RELEVANCE AND CONTEXT

In the Chilean educational system, in which families receive a subsidy or voucher and can choose the school they send their children to, the population is segmented into three socioeconomic groups. High-income students attend privately funded institutions that charge a fee that only high income families can afford. Students from middle and upper-middle income families tend to enroll in private, subsidized schools that operate mostly in the form of joint funding with contributions from the public sector and the families themselves. Finally, lower income students generally attend municipally managed schools free of charge.

The Preferential School Voucher (SEP), introduced in 2008, substantially modified the structure described above. All students of lower socioeconomic status that qualify as a priority student are now eligible to receive a subsidy that is 50 percent higher than the existing subsidy. Therefore, SEP significantly expands the field of school choice for about 40 percent of the poorest students. Many of the private subsidized schools that charge a co-payment and that have joined the new scheme are now open for low-income families for free.

However, it is not clear that families are making effective use of this increased range of school choice, and it is highly likely that they are not even aware of this option.

The proposal presented here consists of providing information to a group of families eligible for the SEP as a way to enhance their understanding of the scope of benefits derived from the grant and become aware of the characteristics of the schools available for them to send their children to. If families have now more choices and more information on school quality, they could potentially choose schools with better academic results. In this sense, the impact that greater educational choice exerts in the process of selection of schools - and eventually in the educational outcomes of low-income students - can be assessed through an experimental evaluation.

## EVALUATION DESIGN

Since the SEP is available to the entire eligible population but participation rates are still low, the proposed intervention is an induction to treatment, or encouragement strategy. To that effect, the information will be provided to a random sample of the eligible population.

The way in which this information will be compiled and delivered will be determined through focus groups, in which different alternatives will be tested on families with similar socioeconomic characteristics to the future beneficiaries of this intervention.

## RANDOMIZATION STRATEGY

The randomization of the delivery of information will take place at two levels: neighborhoods and household. First, around 397 neighborhoods will be selected. These neighborhoods will have a minimum number of educational establishments that families due to travel distance consider when choosing a school for their children. Then, the percentage of families within the neighborhood that receive the information will be randomized. In a first group of neighborhoods, 50 percent of the families will receive the information, while in a second group the information will be sent to only 30 percent of families. A third group of neighborhoods will serve as a comparison group.

Finally, families will be randomly selected to receive the information so as to meet the percentages established at the neighborhood level. This design will allow comparison of the families that received information versus those who did not, and capture potential general equilibrium effects when comparing results between neighborhoods with different percentages of treated families.

The experiment will be carried out among families with children entering the first and second years of primary education. In the group of first year students, the aim is to influence the choice of school that children enter, while the second year student group will measure any possible changes to better performing schools.

## OUTCOMES TO MEASURE

The main outcome variables to be measured are the SIMCE scores. SIMCE is a standardized, countrywide test that measures individual-level knowledge in the areas of Spanish and mathematics. A second objective of this research is to measure the impact of the intervention on repetition and dropout rates; both variables could be relevant in the case of low-income students, as well as the impact on family decisions regarding school choice.

These variables, as well as the information related to the socioeconomic characteristics of the families and students, are available from administrative data managed by the Ministries of Planning and Education. It is a viable option to consider complementing the administrative information available with surveys given to both treatment and comparison groups in each neighborhood. These surveys would inquire about the school election and application process, details which cannot be identified using administrative data.

## POTENTIAL PARTNERS

To implement the evaluation the cooperation of the Ministry of Planning and Ministry of Education will be required, particularly to gain access to the administrative data. Additionally, the evaluation requires the support of an institution that will serve as the sponsor of the information to be sent to families, which could be an academic entity linked to some of the country's universities.

## ESTIMATED COSTS

The total estimated cost of the proposal is 192 million Chilean pesos (approximately USD 0.38 million). This sum includes: the delivery of the information using certified letters, surveys to a group of families equivalent to 10 percent of the participants families, collection of descriptive data using focus groups, and the expenses related to the administration of the program evaluation.

# SUPPORT AND INCENTIVES FOR TEACHERS

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## PUBLIC POLICY RELEVANCE AND CONTEXT

One of the most discussed issues surrounding the quality of education in Chile is how best to train teachers throughout their careers, as well as the best ways to attract and retain individuals to the profession. It is perceived that improving both the equity and quality of education depends on a serious consideration of these topics.

Several proposals have been presented to address these issues. However, no real evidence of the effectiveness of these proposals or the amount of time needed to produce observable effects has been presented. With this aim, this proposal seeks to implement and evaluate an educational program that combines two interventions: First, the introduction of individual monetary incentives for teachers that improve the academic achievement of their students. Second, a reduction in the number of hours dedicated to teaching in class, and an increase in the amount of time spent on class preparation and planning.

Given the relevance of the topic and the potentially large amount of resources involved in this program's implementation, it seems appropriate to evaluate its effectiveness using a randomized impact evaluation, which could shed light on important policy lessons.

## EVALUATION DESIGN

The proposed program seeks to improve the academic achievement of students through a change in incentives and the behavior of teachers for a random sample of subsidized schools. Toward this end we propose two interventions. The first is an increase in the time spent in out-of-class activities for fourth grade teachers. Since the teachers are responsible for imparting all subjects in this grade, the program would increase the time for out-of-class activities by three hours replacing the teacher in subjects like physical education or informatics. This is equivalent to a 30 percent increase in the available time for planning and preparation of classes, correction of assignments and tests, and other tasks. This reduction also assumes the presentation of a plan for the use of these additional hours, and a monthly supervision of this plan.

The second intervention is an individual monetary incentive linked to students' academic achievement. This incentive would reward with a bonus varying between 500,000 and 1 million Chilean pesos (approximately USD 1,000 and 2,000), to the upper half of treated teachers that add more value to their students. In particular, the first 10 percent would be rewarded with an amount of one million pesos, equivalent to 1.4 times their gross monthly salary. The next 20 percent would be rewarded with a bonus of 720,000 pesos and the last 20 percent would receive 500,000 pesos.



## RANDOMIZATION STRATEGY

In order to evaluate the program's two components, a sample of schools to guarantee 600 fourth grade teachers participating will be selected. The schools would then be randomly assigned to either the treatment or comparison group. The treatment group would be divided into three subgroups. In the first subgroup, the only intervention would be the reduction in teaching hours for fourth grade teachers. In the second subgroup, the incentives would be combined to the reduction in teaching hours. In the last subgroup, only the monetary incentives would be implemented.

## OUTCOMES TO MEASURE

The results would be measured through standardized academic tests and a measure of value added. This last measure helps to determine the specific contribution of the teacher in students' learning. For this purpose, a test will be applied at the beginning and at the end of the school year. By measuring the value added, the outcome variable controls for the effect of other relevant variables in academic achievement that do not directly depend on the establishment or the teacher, like socioeconomic level of students and parents' schooling level. This determines more precisely how much the teacher has contributed to the student's learning.

An appropriate instrument to measure the outcomes of the students who participate in the program is the SEPA test which is aligned with the national curriculum. This test includes a series of questionnaires to students, parents and school principals, providing key additional information for the evaluation process related both to student achievement and variables that illustrate the characteristics of teachers, students and schools.

Surveying the teachers involved in the program is also recommended, in order to better interpret the results. Additionally, it is desirable to complement the information collected with administrative data from the Ministry of Education.

## POTENTIAL PARTNERS

The implementation of this program and its evaluation would be benefited with the collaboration of the Ministry of Education and the Ministry of Planning, particularly for the identification of schools and coordination between the evaluation team, participating schools, and principals.

## ESTIMATED COSTS

The total estimated costs for the implementation and evaluation of the proposed program is 425 million Chilean pesos (approximately USD 0.85 million). This includes the costs associated with teacher replacements, monetary incentives, the application of the initial and final tests, data collection, and a margin equivalent to 32 million pesos (approximately USD 64,000) to cover the administrative expenses related to the evaluation process.

# PROGRAMS FOR REHABILITATION AND SOCIAL INTEGRATION



## PUBLIC POLICY RELEVANCE AND CONTEXT

The reduction of crime in Chile has long been a policy priority for both citizens and politicians. Driving this attention is a combination of factors including rising prison populations, a concentration of crime activities in impoverished areas and high recidivism rates that have spearheaded the issue to the top of the political agenda.

One of the strategies to control crime and lower recidivism is the implementation of rehabilitation and social reinsertion programs for adults and young offenders. However, the available programs in this area in Chile are quite limited in scope as they are only capable of reaching a small subset of potential beneficiaries. Thus, even when they are effective, they would likely have no significant impact on crime reduction. The lack of services for offenders will only be aggravated by the continual growth of prison population, which is additionally causing problems due to prison overcrowding. In addition, there are a number of issues related to the design of these programs that, if fixed and implemented on a larger scale, might ease the problem.

Many of the existing programs and policies to control crime might conceptually have positive impact on reducing recidivism. However, a more promising strategy is creating a quasi-market for rehabilitation and social reinsertion programs that may incentivize the creation of holistic, scalable approaches to reduce recidivism and increase social integration of adult and young offenders.

This proposal outlines one such program and an associated randomized evaluation that can be used to measure the impact of using holistic, competitive rehabilitation and social reinsertion programs combined, in the case of adult offenders, with training and incentives for prison guards.

## EVALUATION DESIGN

The proposal aims to work with two separated groups of participants: adults imprisoned in jails managed by Gendarmería, and youths interred in detention centers administrated by SENAME. These groups of beneficiaries are institutionally distinct but can be served by similar programs centered on the shared goal of lowering recidivism and increasing social integration as measured in terms of labor participation and educational achievements.

For adult participants, the proposed program features the creation of rehabilitation and social insertion programs at the prison level. The programs to be offered will be selected via competitive bids. It is expected that current providers of such services from the private and public sector will be among the bidders. In addition to the reinsertion and rehabilitation programs targeted at inmates, participating establishments would also be served by training and incentive programs for prison guards on their supporting role in this process. In the case of the youth, the proposal consists of improving and expanding the current supply of rehabilitation and social reinsertion programs among juvenile offenders that have either dropped out from school or attend erratically.

## RANDOMIZATION STRATEGY

Within detention centers, prisoners meeting certain criteria will be invited to apply to participate in the program. Beneficiaries will then be selected randomly from the pool of applicants. Incentive and training programs for prison guards will be allocated randomly at the prison level to guards working in establishments with program beneficiaries.

This design allows for the creation of three subgroups within the treated population. The first subgroup would consist of individuals who take part in the rehabilitation programs and whose prison guards are also participating in the training and incentives program. The remaining two groups would only take part in one of the two programs described above.

A similar design is proposed in the case of underage offenders. They will be invited to participate in the program and then be randomly assigned to a treatment or control group.

## OUTCOMES TO MEASURE

The primary outcome measure is the recidivism rate of program participants. For this purpose, information about criminal record will be collected about both charges and arrests without charges, variables that can be obtained from administrative data managed by the Ministry of Justice. A second group of variables correspond to social reinsertion indicators such as labor participation, school dropouts, educational progress, and characteristics related to self-esteem. These variables can be obtained through administrative records and surveys at both the beginning and end of the program, and at a given time after the sentence is served in full.

## POTENTIAL PARTNERS

The implementation and evaluation of these programs requires the collaboration of the Ministry of Justice and the Ministry of Interior. The Ministry of Planning could play a role in the coordination of various government agencies, in particular for the collection of administrative data. The aid and support of the Public Security Department of the Ministry of Interior is expected in order to design the public bid for the selection of rehabilitation and social reintegration programs to be implemented.

## ESTIMATED COSTS

The cost of intervention for adults amounts to 2,817 million Chilean pesos a year (approximately USD 5.63 million). This amount includes costs associated with providing rehabilitation programs for 1,000 individuals, and training and incentives for 1,635 prison guards. The cost of intervention to treat 1,000 underage offenders amounts to 2,132 million Chilean pesos (approximately USD 4.26 million).

# OPPORTUNITIES FOR YOUTH



*A comprehensive approach to address the problems of labor market participation and risky behavior*

## PUBLIC POLICY RELEVANCE AND CONTEXT

Teens in high school are at a crucial stage of their lives. On the one hand, they can invest in their future through education or other activities that enhance their future employability. On the other, they can engage in risky behaviors that generate short-term benefits, but endanger their ability to successfully enter the labor market, lead to drug addiction, teen-age pregnancy or dropping out of school.

Unfortunately, the evidence shows that Chilean youth face significant problems entering the labor market and a significant proportion has engaged in activities associated with risky behaviors. According to figures from the CASEN, a national survey, 17 percent of teens between the ages of 15-19 are not enrolled in an education establishment and do not have a job, a figure that rises to 27 percent for those aged between 20-29. Further, between 14-17 percent of all births in Chile are to teenage mothers (18 years and younger) and the segment of young people between 12- 24 is the age group with the highest average alcohol consumption.

This proposal seeks to increase opportunities for young people by improving their employability and reducing the incidence of risky behavior through a multi-system approach. The suggested approach takes advantage of various initiatives already underway in Chile, including mentoring programs, job skills training, labor market intermediation services, and recreational, educational and health services. This proposal recommends summoning a

committee of experts from multiple backgrounds in 2011, to study the best way to implement this policy and refine the design of implementation described here. At this stage, this proposal recognizes the need for intervention in multiple dimensions and suggests the expansion of some existing policies in this regard.

Finally, in order to learn lessons about the most effective ways to address the problems and make good use of the resources involved, an evaluation of the effectiveness of the proposed programs using randomized controlled trials is proposed.

## EVALUATION DESIGN

This proposal seeks to link programs in various stages of development. Regarding labor market intermediation services, the proposition would take advantage of existing job placement programs currently managed by The Ministry of Labor. The intervention consisting of training in job skills will be based on the “Aprendimiento” micro-enterprise workshops by Endeavor Chile. The health care proposal will bring the supply of health services for adolescents into spaces designed especially for them, through “Espacios Amigables,” an initiative of the Ministry of Health. Finally, the mentoring programs and information on higher education could be implemented through a public agency based at the Ministry of Interior, which plans to carry out a specific mentoring program in 2011.

Due to differences in implementation timing of the programs cited above, the proposal recommends to proceed with a two-part intervention. The first will deal directly with the job opportunities of teens that have completed high school no more than a year ago, offering them job placement services.

In the second step, and contingent on the success of the first year's intervention, the evaluation will look to assess the impact of the proposed multidimensional program. This will combine the provision of job placement services with the other proposed programs.

### RANDOMIZATION STRATEGY

During the first stage of implementation, the randomization will take place at the individual level. The target population that will receive job placement services will consist of graduates of higher education with less than a year outside the education system and who are inactive in the labor market.

In a second phase, the randomization will be done at the school level. As the rest of the interventions begin being implemented, the impact of the program as a whole will be evaluated on students from 7th to 12th grade. Specifically, the "Espacios Amigables" intervention will treat students in 7th and 9th grade students, the entrepreneurship program and mentoring will treat students belonging to 10th and 12th grade, and the labor market intermediation and job placement services will target recent graduates from high school who are not pursuing higher education.

### OUTCOMES TO MEASURE

Since the proposal includes interventions in different dimensions, different outcome variables will be observed at different points in time. The outcome variables of interest include enrollment rates in higher education, labor force participation and characteristics of the jobs obtained, entrepreneurship, teen pregnancy, and drug and alcohol consumption. The data source for the evaluation can be obtained through various surveys and administrative data from the different institutions involved in implementing the programs described.

### POTENTIAL PARTNERS

The programs that would form the proposed multidimensional intervention already exist. Some exist at the pilot stage, while others are operating on a small scale. Thus, the support of the respective implementing institutions will be necessary. The cited interventions are dependent on the Ministry of Interior through CONACE, the Ministry of Labor through SENCE, and the Ministries of Economy, Health and Education. The Ministry of Planning will serve as coordinator of the various institutions involved and the evaluating team.

### ESTIMATED COSTS

The total cost of intervention for the first year amounts to 233 million Chilean pesos (approximately USD 0.46 million), which is divided equally between the costs related to the implementation and evaluation of the programs. Half of this amount is already in the government's budget, since the labor intermediation programs have already been included. In the second year, the cost of implementing the multidimensional interventions is estimated to be 1,415 million Chilean pesos (approximately USD 2.83 million), while the total cost of the evaluation is 976 million Chilean pesos (approximately USD 1.95 million).

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TRADUCIENDO LA INVESTIGACION EN ACCION