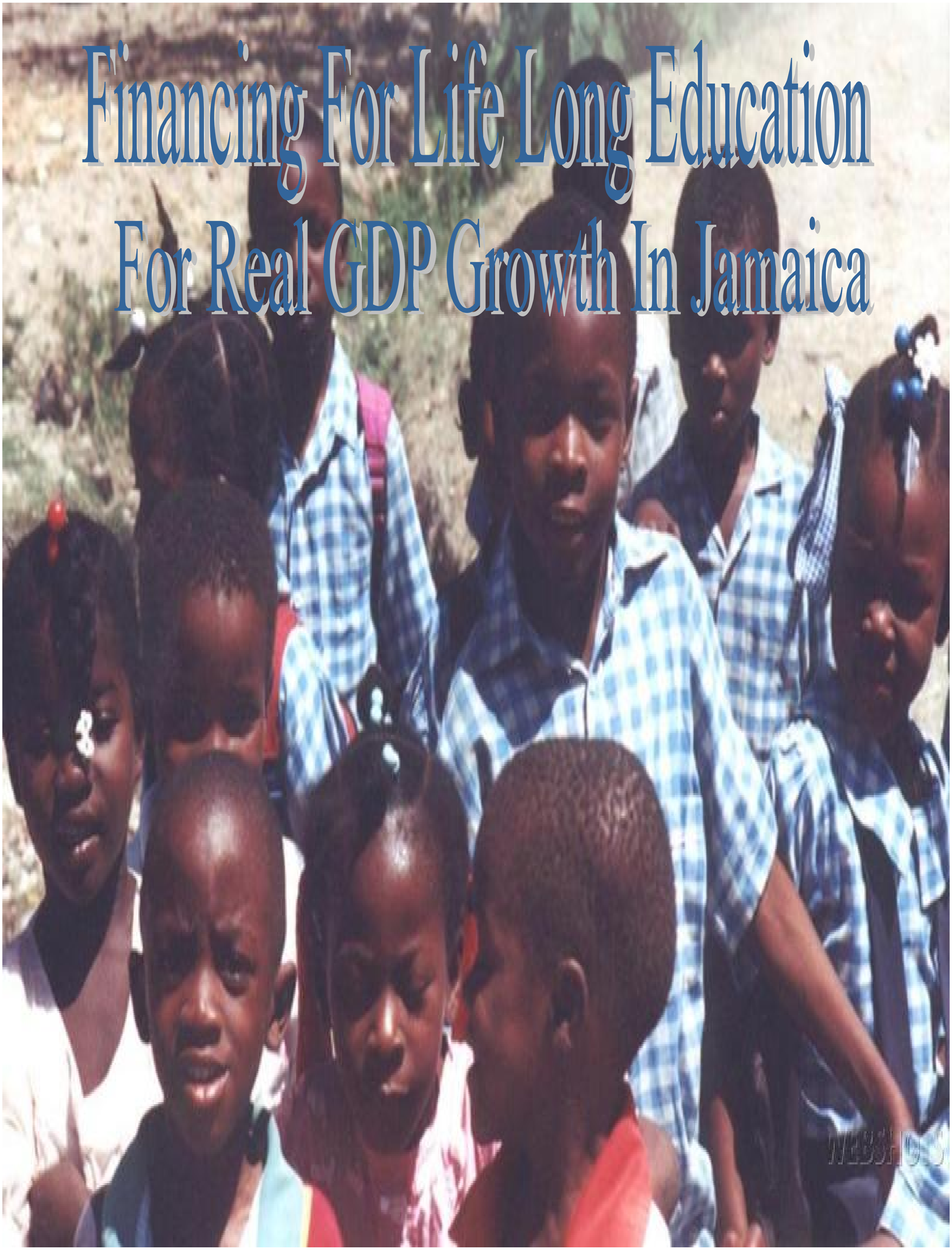
Financing For Life Long Education For Real GDP Growth In Jamaica



Financing Lifelong Education For Real GDP Growth in Jamaica

Economic Development Institute

Peter W Jones

5 Pawsey Place, Kingston 5
(876) 434-6474
www.edi.bravehost.com

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In order for Jamaica to transition from a **Developing Country** to a **Developed Country** it will be highly necessary to create a Knowledge based society, the inability to seriously overcome this challenge will mean Jamaica will be in transition to a developed country for an infinite number of years.

A lifelong learning framework encompasses learning throughout the lifecycle, from early childhood through retirement. It encompasses formal learning (schools, training institutions, universities); non-formal learning (structured on-the job training); and informal learning (skills learned from family members or people in the community). It allows people to access learning opportunities, as they need them rather than because they have reached a certain age.

Lifelong learning in Jamaica is an important policy topic for government. This assumption is based on the impact of additional training on economic growth and on income distribution, particularly in an age when previously acquired knowledge is depreciating faster than before.

Using the Palacios (2003) framework we examine different education financing mechanisms, that could be examined by the Government of Jamaica (GOJ) in light of the particular characteristics of **lifelong learning**.

The framework compares the different financing alternatives on four dimensions: (1) who ultimately pays for the education, (2) who finances its immediate costs, (3) how payments are made, and (4) who collects the payments.

The characteristics are that the individual should (1) decide what and where to study, (2) carry a significant part of the financial burden, and (3) be encouraged to continue learning through all life stages.

The financing alternatives are analyzed according to who ultimately pays for the education.

Cost-recovery

- Traditional loans,
- A graduate tax,
- Human Capital Contracts and
- Income-Contingent Loans.

Subsidization

- Those in which the state directly subsidizes institutions
- State gives vouchers to students.

The analysis concludes that combining Income-Contingent Loans and Human Capital Contracts with vouchers is the most efficient and equitable method for financing lifelong learning.

Shifting towards cost recovery alternatives, focusing on collection of payments and aiming for the involvement of private capital are assessed as key issues that should be addressed to ensure that lifelong learning will be available for all equitably and efficiently.

Government (GOJ) Framework for Analyzing Alternatives in Financing Lifelong Learning.

It is convenient to develop a framework to better understand the differences between options for financing education. The following framework analyzes each instrument according to the following dimensions:

(1) Who ultimately pays for education,
(2) Who provides the financing,
(3) Who collects the payments, and
(4) What financing mechanism is used. Each of them is explained in more detail below

Who ultimately pays for the financing?

This dimension of education financing asks who ends up paying for education costs over a lifetime. It should not be confused with who pays at the point of use, which is part of the initial financial arrangements. Major parties involved in the financing of education are:

(1) The state,
(2) Employers,

(3) Other private entities, and
(4) Students and close relations.

State provides funds for education

This arrangement is not considered the best for two main reasons:

(1) It is inequitable and
(2) States simply do not have enough resources to cover the demand for education.
    - When the state provides most of the funds this is inequitable because they use society's resources for an investment where the individual is the main beneficiary.
    - The second limitation is a consequence of constrained national budgets combined with increasing demand for education services.

The way in which the state makes its contributions is relevant given the economic results it generates. There are two possibilities:

(1) The state gives the resources to institutions, also known as supply-side financing, or
(2) The state gives the resources to students, also known as demand-side schemes.

Employer Funding

A second source of funding comes from employers. They benefit from having access to an educated workforce and should thus be willing to compensate for this benefit. They can also benefit themselves s by receiving knowledge from educational institutions.

Regarding the benefit of an educated workforce, **Becker's (1993) analysis shows that employers will only be willing to cover the costs of education and training when the student acquires particular skills that cannot be transferable to other jobs.** Conversely, they are not willing to pay for general, easily transferable skills.

Private Funding

This will come from such entities as NGOs and religious 0rganizations. These entities invest resources in education without seeking a monetary return on their investment. They constitute many of the grants available for students and are usually directed at students in need of financial aid. However, the resources that society can spend on education without any expected return are limited, and these organizations will never be able to provide all the funding required to meet the increasing demand for higher education and lifelong training.

Student-Self Funding

This arrangement is equitable because the student is the greatest beneficiary of additional training received; it is efficient because students then have an economic incentive to shop around for the best educational institution to spend their money on, creating competition among schools.

Conclusion

It is virtually impossible to arrive at an ideal combination of all of these sources.

- On one hand, theory suggests that a system completely state funded (no student fees) is not equitable.

- Some funding is required to attract certain groups who have been systematically marginalized from education opportunities.

Any solution will have to consider the constraints of the state for funding education but must not deny its important role in promoting equal opportunities in education.

Who Finances Education

Who provides the immediate funding for education at the point of use? This question is relevant because it is current resources, not future ones, which allow institutions to function on an everyday basis. Thus, the principle that students should pay for education should be combined with the principle that education should not require payments at the point of use. If payments are demanded from the student, only students who have resources before studying will be able to pay the costs of the investment. Upfront financing of education is key to making students pay for education without harming access to disadvantaged groups.

The major sources for the financing of education are

(1) The private financial sector,

(2) The state, and

(3) Students.

Private sector financing

This should enable investment in education in an efficient market.

Other possibilities are the educational institutions themselves and employers. Financial instruments are as follows:

- Private loans,
- Human Capital Contracts and
- Income-contingent loans

Unfortunately, the education market is not efficient, and thus relying on the private sector alone to provide the funds for education is not feasible, at least while the inefficiencies are not addressed.

However, the involvement of private sector financing in education, even if only partially, is fundamental for its expansion.

State Financing

Under this arrangement the state provides the resources initially, but expects the student to ultimately pay. The most prominent examples are public student loans, including some income-contingent loans, and the graduate tax. The use of the state for financing education is a response to the lack of private funding for education. However, current budgetary constraints do not allow governments to meet the increased demands for higher and continuing education.

Student Financing

The student, and as an extension, his or her family. This alternative is the only one available when the others are not, denying access to higher and continuing education to the student who does not have the resources to pay for it.

Financing Mechanism

The financing arrangement between the funding agency (state, private, etc.) and the individual can take many different forms. The following description offers an overview of the major alternatives available.

Student Loans

Although they are the most straightforward mechanism for making capital available, they are not a good alternative for financing education. The most common type, also called mortgage-type, expects students to pay a fixed amount each period, typically per month, for a certain amount of time. The main problems with this kind of loan are that it does not adapt to the needs of the student and leaves lenders with little protection against default.

One way to adapt loans to the needs of students is to match required payments with the student's capacity to pay. The simplest solution is to create a schedule in which payments increase according to how a student's income is supposed to increase. This particular kind of loan is called a graduated loan. The next step in making loans more accessible to students is to provide additional flexibility to take into account special circumstances such as unemployment, further training, or periods of low-income. Ideally, payments could be made at the discretion of the student, almost like credit card payments.

However, flexibility requires a price and presumably a more flexible instrument would become more expensive for students. Also, complete flexibility might not be realistic as this may encourage defaults, making the system unsustainable. Nevertheless, additional flexibility as a solution for private education financing has been identified as key to improving the options for students.

Equity Financing

As far back as 1955 economist Milton Friedman suggested equity financing, the method used for investing in high-risk investments, as a possible approach to financing education. This arrangement compensates investors by allowing them a possibility of higher returns for the higher risk they take on when financing students. This kind of financing would demand from a student a percentage of his or her income during a specific period of time. Such an instrument is a **Human Capital Contract**.

Hybrid Financing

An intermediate approach between loans and equity- like investments has been gaining popularity since the 1970s: **income-contingent loans**. These loans combine the flexibility of Human Capital Contracts with the fixed-obligation characteristic of loans.

Who Collects Payments

The experience of payment collections in countries with publicly collected income contingent loans, such as in Australia, and in countries where private entitlements are collected along with taxes, such as the private pension fund in Chile; open up the possibility for combining different kinds of financing with two main collection methods:

- Private collection of payments is what banks use to collect their debts.
- Public collection uses existing institutions, such as taxing authorities, to collect education payments.

Requires very different degrees of participation from the state. In the case of private collection, the state need only enforce contracts. In contrast, in the case of public collection the state enforces law into its collection mechanism and also uses its tax collection agency to enforce payments. Public collection of payments is relevant because it provides a cost-effective way of collecting payments from students, using the already existing state machinery.

General Requirements of an Education Financing Scheme

(1) Equitable access,

(2) Impact On the education market, and

(3) Impact on the labor market.

Equitable access

A solution for financing education should aim at making education accessible to anybody who has the capacity and will to undergo additional training. Any other arrangement, such as one that might detract individuals with low-incomes from participating, would create a situation in which only better-off individuals can continue to improve their skills (a situation which is observed today). Such an arrangement would not be equitable for those who want to increase their skills but do not have the resources.

Impact

Different policies have different impacts on the behavior of the education market. Following the classic economic model, policies for financing education should aim to enhance the choices available to potential students, increase the information available to help them decide on what course to take and what institutions to attend, and increase competition between educational institutions.

Impact on the labor market

The impact of a particular policy on the labor market should be taken into account, since the performance of the economy is one of the reasons why education is considered important. The impact of different schemes can be studied by analyzing the effect that particular repayment methods have on the decisions individuals make when deciding where to work. For instance, Oosterbeek (1998) discusses the possible effect that income-contingent payments might have when an individual chooses whether to work or not, and what levels of income to seek. He concludes that these arrangements may produce a disincentive for the individual to work. The possible welfare costs that this generates should thus be considered when evaluating the use of income-contingent payments.

Lifelong Learning Financing Requirements

At this point it is relevant to ask why the financing of lifelong learning should be different from that of other kinds of education. Lifelong learning is defined here as the learning that takes place after primary, secondary and tertiary levels, even if the student did not actually go through these levels. The differences between these stages of learning are the foundation for the following principles:

- First, lifelong learning should be mostly privately financed and pursued;
- Second, some kind of government intervention and financial support is required to target marginalized groups and to take account of

externalities; and

- Third, the actual provision of lifelong learning should remain in private enterprises.

Conclusion

A proposal that seeks to promote lifelong learning should not discriminate against particular kinds of learning, and against particular ages or periods of life for which it should be undertaken. A proposal that favors age groups, or experience groups, will defeat the purpose of enhancing opportunities for additional training throughout a lifetime.

1. The individual should be responsible for deciding what additional training to pursue and when to continue training.
2. The individual should also carry most of the financial burden.
3. The system should be equitable. Government can use subsidies to attract students from marginalized backgrounds.
4. Government has an important role regulating the provision of education.
5. The system should promote efficiency in the education market.
6. The system should promote efficiency in the labor market.
7. Finally, the system should encourage learning throughout all life's stages.

Government Policy Options for Financing Lifelong Learning

In the previous section we discussed the principles that a system for financing lifelong learning should follow and exploring the framework through which different policies will be analyzed, this section analyzes a wide variety of instruments for financing education and provides a recommendation as to the feasibility of each one in light of the principles discussed in the previous section.

Two distinct kinds of alternatives are presented:

(1) Those where the student is expected to pay for at least part of the cost of education, also known as cost-recovery schemes, and

(2) Those where government pays for education.

This division corresponds to the fundamental difference in objectives between these alternatives. One focuses on the mechanism used to make students pay for their education and the other focuses on the best way in which government support can be delivered to students to promote lifelong learning.

Cost-Recovery Schemes

Cost-recovery schemes expect that the student pays for at least part of the cost of education.

Cost-recovery is equitable because it asks those who benefit from education to pay for it. Individuals are the primary beneficiaries of education, enjoying higher average earnings after graduation than they would earn otherwise. On the other hand, cost-recovery strategies always raise concerns regarding the potential harm to access they can cause. The concern is that if cost-recovery schemes are not introduced carefully, they can marginalize low-income students from the possibility of obtaining additional education.

Four cost recovery instruments will be examined:

(1) Traditional loans,
(2) Human Capital Contracts (HCCs),
(3) Graduate tax and
(4) Income-contingent loans.

Traditional Loans

Traditional mortgage-type loans provide the easiest arrangement for financing education. They operate in the same way as other loans, requiring fixed payments for a specific period of time. The amount that students have to pay each period, typically each month, depends on the total amount borrowed, the interest rate, and the repayment period.

Advantages

The main advantages of traditional mortgage-type loans are its simplicity and the existing knowledge about them. Traditional mortgage-type loans are probably the most basic financial instrument used to satisfy cash needs. They are also widely used and understood. Thus, implementing mortgage-type loans is probably relatively easy from a policymaker's point of view. From an investment point of view, the knowledge that investors have of these loans makes them easy to evaluate.

Weaknesses

Unfortunately, mortgage-type loans have several weaknesses when used for financing education.

- First, education is an intangible asset that cannot be used as collateral, thus the risk for the lender increases. The absence of collateral typically results in mortgage type loans being offered only to families who have enough assets to serve as collateral, precisely those who need financial aid the least.
- Second, the returns to investments in education are wide, with some obtaining high returns while others struggling to maintain an income level high enough to pay the debt. Students cannot know with certainty before investing in their education that their investment will allow them to repay their debt comfortably. This problem is exasperated by the inflexibility of the payment schedule of traditional loans.

Human Capital Contracts (HCC)

Human Capital Contracts have been proposed as a viable alternative for financing education in recent years. Originally proposed as a financial alternative for education by Milton Friedman (1945 and 1955), the idea behind Human Capital Contracts provided the basis for the graduate tax and for income-contingent loans. During the 1960s and 1970s these two variations became more popular, and Human Capital Contracts were not considered again until the early 1990s as a viable option.

A Human Capital Contract (HCC) is a contract in which a student commits part of his future earnings for a fixed period of time in exchange for capital for financing education.

The main parameters required to design a Human Capital Contracts are the percentage of income and the repayment period. The instrument works best when market forces determine the parameters of the contract.

Advantages

(1) They decrease the risk of the investment to the student, they are equitable, and

(2) They can offer a measure of the expected value of

(3) Education, becoming a source of information for students and regulating authorities.

Weaknesses

Human Capital Contracts have several implementation limitations. The most relevant are

(1) The capacity to determine information accurately from the individual,

(2) The phenomenon of adverse selection and

(3) The negative effect they can have in the labor market.

Graduate Tax

A graduate tax would tax each graduate for having attended college. Thus, each student would end up paying a percentage of their income throughout their productive life.

Advantages

The graduate tax shares with HCCs the advantages of

(1) Lowering the risk that students face in their lifelong earnings,

(2) Lowering risk of defaulting on payments due to financial distress, and

(3) The satisfaction of dynamic equity.

Weaknesses

(1) For the graduate tax to work, a state-collection agency has to have the ability to determine graduates' incomes and to collect the tax from them. In the absence of a state-collection agency, a national insurance system, or a social security system can aid in

determining income. However, without any of these, the amount that can be recovered might be very low.

(2) A graduate tax cannot be levied when the individual emigrates.

(3) A third problem with the graduate tax is the adverse selection that it generates among individuals with different levels of ability. In particular, a graduate tax taxes all earnings equally, without discriminating between earnings due to additional education and those due to other factors, such as ability or occupation industry.

(4) A fourth drawback of the graduate tax is its inability to create immediate resources for funding education.

(5) Finally, the percentage of income that will represent the graduate tax will be the result of a political process, rather than something that reflects the value of education n. To start, in order to accurately reflect the expected value of education, the tax would have to be different for individuals attending different schools and pursuing different careers.

Income-Contingent Loans

The last income-contingent repayment scheme that is discussed here is the income contingent loan (ICL). An ICL collects a percentage of income from a graduate until the value of the loan has been repaid or until a maximum repayment period has been reached. Income-contingent loans have been the most publicized new instrument for financing education and there has been a growing bibliography that supports them. As a result of this, several countries have implemented income-contingent repayment schemes.

The main parameters of ICLs are:

(1) The interest rate,
(2) The repayment period,
(3) The percentage of income paid by the student,
(4) The collection mechanism,
(5) And the conditions of termination of a student obligation.

Advantages

(1) Income-contingent loans (ICLs), like HCCs and the graduate tax, decrease the risk for the student in terms of their earnings- net-of-education-payments.
(2) ICLs also satisfy a concept of fairness based on dynamic equity, since students end up paying less than the value of the loan only if they end up with low incomes during the repayment period.
(3) Another advantage ICLs have is the lack of a strong adverse selection problem. Students who see in themselves high future incomes will not have an unlimited liability and will not have a disincentive to join.

Weaknesses

ICLs share with HCCs and the graduate tax some common weaknesses and obstacles to implementation. They require the measurement of income, are subject to some adverse selection and distort the labor market, though to a lesser degree. By far their greatest disadvantage.

Conclusion

(1) Traditional mortgage-type loans can be a simple solution for financing education, but do not seem to be effective.

(2) Human Capital Contracts represent an alternative that addresses the most important concerns regarding traditional "mortgage-type" loans. HCCs decrease risk for the student, compensate investors for risk by offering upside potential, and offer information to the market regarding information on the expected value of education.

(3) The graduate tax, like HCCs, also addresses some of the problems of traditional loans. It can be universally applied and students will not have the burden of an inflexible debt. However, there are other features that make them less attractive than HCCs.

(4) Income-contingent loans decrease risk for the student, have attracted private capital in the past, and do not have the negative incentives present in Human Capital Contracts and the graduate tax. Their only particular disadvantage, when contrasted against Human Capital Contracts, is that they do not offer information to the market regarding the expected value of education.

Government Subsidization Alternatives

These are the alternatives for financing education that are used to implement government subsidization of education. These schemes are concerned with the mechanisms available to policymakers to provide aid for education. The main methods considered here are:

(1) Public funding of educational institutions and

(2) Vouchers and voucher- like instruments. As is the case with cost recovery schemes, the methods for subsidizing education are usually combined.

Public Funding of Educational Institutions

Under this arrangement government owns and funds educational institutions. Transfers are negotiated directly between government and institutions to cover educational expenses.

The lack of responsiveness of institutions to the needs of students and labor markets are the result of the existing incentives. The primary constituency of school administrators is not the student body, or the labor market, but the agencies in government responsible for giving schools the funds to operate.

For lifelong learning in particular, there are two additional arguments against public provision of education:

- First, because there is a wide and complex variety of fields for training, the effort that centralized public agencies would have to make to align services offered with market demand is far more complicated than in higher-education.
- Second, embracing lifelong learning requires accepting informal education mechanisms, such as on-the-job training, which are hard to model in the context of a public education institution.

Even though public funding of higher and other noncompulsory education will continue for a time, a complete solution for financing lifelong learning does not lie in public funding. The attention has gradually shifted towards the alternatives explored below, where government gives funds directly to students.

Vouchers

The basic idea behind a voucher is to give the resources to students so that they can go and enroll in the educational institution of their choice. This is the essence of demand-side financing.

The main policy considerations when designing voucher programs are:

1)Voucher amount: How much will be given to each student? Will it depend on the school the individual attends or on the field of study pursued? Will it be proportional to tax payments? To training cost? To students who save? To income? Other variables?

2) Student spending limit: Is the voucher supposed to cover the whole cost of education, or can the student add to the voucher value to pay for tuition? Can the voucher be used for other costs, such as transportation?

3) Voucher target: Will the voucher be given to everybody? Only students from particular income backgrounds? To particular schools?

Voucher use: For what kind of education are vouchers going to be used? Basic education? General skills training?

Advantages

1. a subsidy that increase consumer sovereignty, thereby increasing efficiency in the education market, and
2. Vouchers can be used to target particular social groups, thus fostering equity in society.

Weaknesses

1. As with any source of public aid, the administration of a voucher program requires controls in order to prevent their misuse.
2. An obstacle to implementation is the way public opinion and legal institutions view the transfer of funds to private entities.

Conclusion

1. Vouchers enhance efficiency in the education market and can be used to promote equitable access to education, making them a preferable alternative to the direct transfer of public funds to educational institutions.
2. Their design can be quite complex and entails an important political effort, and their execution requires control systems to ensure that public funds are being used in the way they were intended to be used.

Design and implementation of lifelong learning policies.

We now conclude with a short guide on key elements that government should consider when embarking on the design and implementation of lifelong learning policies.

The Model

The model that best addresses the financing of lifelong learning is a voucher program in combination with income contingent loans and Human Capital Contracts. Such a combination addresses equity concerns, both from a static and dynamic point of view, and promotes efficiency in the labor and education markets. In line with the objectives of lifelong learning, entitlements should be available for a wide variety of skills, should promote saving, and should promote spreading learning throughout the productive life of the individual.

The Role of the Jamaican Government

The way that the Jamaican government faces the problem of financing lifelong learning will result in consequences that affect an important part of the population. Following is an important set of challenges that the government of Jamaica will face in order to create a suitable system for financing lifelong learning:

1) Shifting towards cost-recovery policies: A sustainable, efficient and equitable system for financing lifelong learning requires a cost-recovery mechanism. Implementing such a mechanism can

be a challenge given the tradition of free state- funded education.

2) Focusing on collection of payments: The success of cost-recovery policies will depend on the success in collecting payments from former students. The participation of tax-collection agencies or social security systems is a possibility that should be considered.
3) Involving private capital: A substantial increase in the amount of resources available for financing education, particularly for lifelong learning, is not feasible without the intervention of the private sector. Attracting private capital will probably require commitment to honor agreements, guarantees from governments, aid in collecting payments, and decisions by private parties on the particular characteristics of each instrument offered.
4) Designing voucher-like systems: A complete scheme for financing lifelong learning requires subsidies from government. Following the above discussion, these should ideally be voucher- like systems. Government needs to make a political decision to support these systems. Particularly for financing lifelong learning, a decision has to be made to make vouchers available to the population for different types of training and for the period in life that the individual chooses to attain more knowledge. Vouchers can be made available at any given moment, or after the individual has saved for learning. Finally, vouchers should also be targeted to particular marginalized socioeconomic groups.

5) Providing Information: An important feature that contributes to making the education market more efficient is the compiling and distribution of information regarding the quality of educational institutions, costs of education and the demand for particular skills.

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