Summary

National Research Council of Thailand

Title Economics of Educational Reform of Thailand

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Background/ Problem:

The past decades evidenced a rise of education in Thai society with a remarkable expansion of learning institution induced to a large extent by the government and an extension of public school in rural and remote area. Budget allocation for educational always rank on top in the annual government budget. These have led to increases in the literary rate and the average year of education of Thai people, although the current level still below the target of 12 year of education. The Constitution law mandates the 'basic principles' for

government which include i) a universal provision of free 12-year of schooling; ii) an 'education for all' which encompasses 'self-learning' or 'family-arranged' learning; iii) new national agencies be established to play an independent role of quality monitoring and to conduct national test as means to provide information for parent and student in their decision-makings over choice of school.

Provision of educational services require resources, i.e., monetary- and nonmonetary as factor inputs. Financing of public education comes mainly from government budgetary support. Human resources also required, i.e., teacher, supporting staff, and school administrator. Besides financial support on the supply side, the government also lends support to family and children (demand-side) in various forms such as books and learning materials, free school lunch and milk, clothing, etc. Remind also that there is another resource put in education by family investment in children. Local governments have played an increasing role in education through decentralization program and transfer of functions (pre-school learning) from the government agencies. Public schools are not only provided by the Ministry of Education alone, the Bangkok Metropolitan Administration, the Provincial Administrative Organization and hundreds of municipality own public school and provide educational services. Thailand's budget allocation for education ranks on top in the annual government budget, with approximately 400 billion baht spent per annum and this amount accounted for 4 percent of GDP, which is comparable to those of OECD countries.

The budgetary support of education, however, does not guarantee a success in our education. It is also important that money is properly allocated and wisely managed. There is a growing concerns and criticisms against inefficiency use of money with an observation that Thai students perform below the international

average in international test (e.g., PISA test). Since 1996 the Student Loan Fund (SLF) began an operation by lending money for students with an objective to support poor students on concessional basis (a fixed interest rate of 1 percent for 15-year repayment scheme). The loan amount is divided into two items, namely, i) to pay for tuition fee, ii) to pay for living expense. As of 2011 there are approximately one million students who borrowed money from the student loan.

Despite progresses in our education as earlier mentioned, there is a concern over educational inequality between the rich and the poor which is the major focus in this study. The hypotheses of this study include: (a) the family investment in children is significantly different, largely due to variations in income generation; (b) access to tertiary education varies significantly between the rich and the poor; (c) an opportunity for on-the-job training is unequal between workers even within the same organization, i.e., high-, medium- and low- levels. This study provides empirical evidences and tests the above-mentioned hypotheses and discusses policy recommendation with a highlight on a reform of student loan.

Objective: (a) to compile empirical evidence family investment in children and to perform comparative analysis of family income; (b) to estimate the return to education by different levels of education; (c) to examine access to tertiary education and to test hypothesis of unequal opportunities; (d) to compile information about the chances of on-the-job training which is assumed to be unequal between workers of high-, medium- and low-level of employment.

Methodology: The researchers assume that parents are altruistic to their children but due to limitation of resource, the ability to invest in children varies from one family to another. This research adopts an economic approach to formulate the model that characterizes family investment in children. We compile data from

household- and labor- surveys to estimate econometric model and to test the hypotheses, specifically related to:

i) Family investment in children with a primary focus to age 0-14 year
ii) Accessibility to tertiary education among the youth (age 18-22 year) and the comparative analysis by socio-economic- and income-classes
iii) Econometric estimates for the return to education
iv) Public policy related to educational finance as means to narrow the gap between the rich and the poor.

Our units of analysis refer to household and household members. We assume that family members comprise of two-generations, namely, parent and children. We make use of the household survey and the labor force survey, both conducted by the National Statistical Office, to estimate the relationship by econometric tools. In addition we performed a small-scale primary survey for enterprises and their workers to understand their opportunities for on-the-job training which are assumed to be unequal.

Method: This study adopts *the life-cycle model of saving* and *the human capital theory* as framework with two-generations of household members as our focal actors. Our model traces dynamics of investment in children and inequality that might have transmitted from the first- to the second-generation. The researchers compile secondary data from the NSO (SES2552) to measure family investment in children and to test the hypothesis of unequal opportunity to tertiary education taken into consideration differences in socio-economic classes. Another secondary source is the labor force survey (LFS2551) which provides basic information for estimating the Mincerian equation and, later on, to infer the rates of return to education.

Topics of investigation include:

(a) Household educational expenses with descriptive statistics illustrated and summarized by income decile and by parent educational background;

(b) The marginal cost of children measured in terms of “food” and “non-food” family monthly expenditure

(c) Inequality in tertiary education among the children (second generation) given the family income and the parent educational attainment (first generation)

(d) The relationship between educational attainment, occupational choices, and socio-economic classes with the multinomial logit model. We adopt the classification of socio-economic classes as defined by the NSO but regroup into 3 broad grouping, which might be called “high” “medium” and “low” in income generation.

(e) Estimate of the chance for tertiary education of the second generation given income class and parent educational background

(f) Estimate of structural equations that comprise three endogenous variables, namely, household income (y), saving (s), and wealth (W). The model assumes that educational attainment E= {e1, e2,…., e6} might have influenced, along with other explanatory variables, occupational choices and work status. The model is utilized as tool to predict the lifetime income, saving, and wealth accumulation.

Result: A. The poor family invested little for their children; their investment per child is only a half of the national average and 5-6 times less than that of the rich family

B. The chance to attain tertiary education for the poor children is close to zero (1%) compared to 15% for the national average and 35% for the riches quintile (i.e. the top twenty percent)

C. The rate of return for tertiary education is estimated (from Mincerian equation) to be 14 percent per annum which is based on rather conservative assumptions. This result confirms that investment in tertiary education is worth undertaking. Our findings correspond to the studies in advanced countries that noted the phenomenon called "*skill biased technological progress"* especially after the 1990s. Such change is also related to the Third Wave of Globalization with exerts positive- and negative- impacts. First, the highly skilled and trained in sciences & technology tend to receive big increase in wages and salaries due to a higher demand for skill worker whereas the wages for low-skill workers remain constant or increase slowly in nominal term. And this gives rise to wage inequality which is similarly reported in a number of countries. To close the gap it may be necessary and socially desirable for the government to initiate empowerment program. This framework is translated into fiscal- or finance- program (such as educational finance) that supports the targeting for the poor tend to be more efficient and cost-effective than a universal assistance program.

The opportunities for OJT are not equal – although the disparity is not apparently large or at least "not serious". Most employers support their workers to have chance for on-the-job training, but the amount of investment in OJT may be unequal, that is to say, the high- or the medium-level workers have higher chances to training in the courses that are most costly or the chances of study tours externally (especially the multinational firms) whereas

the low-level workers have basic trainings related to safety measures and basic skill development.

Recommendation: This study adopts the New Institutional Economics (NIE) as framework on part of public policy. The main thesis of NIE is best summarized in the saying *"institutions matter"*. Our case study refers to student loan as the government instrument for lending support for college students. Specifically we recommend that "an area-based" subcommittee be established with delegation of power from student loan to perform "screening" function, i..e, to search for children of poor family with a fairly good records of school performance and to visit their family to inform their parents the value of university education and the potential benefits that their children may enjoy over working lifetime. Two schemes of targeting for the poor are recommended. First, the student age 18-22 who are carefully selected by the "area-based subcommittee" be entitled to borrow money from student loan to pay for tuition fee and entitled to receive a grant (free-of-obligation) as living expense. In recognition that there exists *"error of targeting",* it is important to have a national body to monitor the area-based subcommittees, along with this proposal it is recommended that a new database to keep track of student progress be initiated, i.e., their performance in tertiary education and after degree-completion, their employment and salaries and progress in employment. The second scheme is the empowerment that aimed at children 0-14 year among the poor family. The program is mainly to provide an income transfer for family to invest in their children, in cash or in kind, depending upon the decision of the "area-based subcommittee". Similar programs exists in many countries (in different titles) but commonly referred as "conditional cash transfer" (CCT).

Application: First, a dissemination of the findings in the form of journal articles published in economic journals (two publications already done, one article published in *NIDA Economic Review*, and another article in the *Journal of Economic and Public Policy*, supported by the Srinakarinwirot University.

Secondly, propagation of ideas reform in seminar, public policy forum, and the mass media interview. Specifically, the researchers articulate for institutional reform of the Student Loan as instrumental to motivate children (age 18-22) to continue tertiary education and the entitlement program to support poor family through income transfer that aimed at promoting investment in children (age 0-14) through an income transfer. Our study carefully calculates the fiscal cost of both programs which are assumed to be necessary information for policy decision-makers.