

ABSTRACT

Analysis on Education Investment and performance of Municipality

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□ Overview

Recently, many local governments have promoted education as the biggest driving force to boost local community, and they have scrambled to invest more in their education system. Municipal governments across Korea, which traditionally relegated education to local education offices, have taken up more interest in education than ever before to satisfy and lure parents who choose to move from less well-off to privileged school districts in search of opportunity for better education for their children. At the same time, they have expanded the funding set aside for education from local government general account. As funds transferred from municipality general account to education office's special account which is not mandated by law, and educational expenditure subsidies - subsidies provided from municipality general account to individual schools-- have increased, a gap in the level of investment in education by local governments has widened depending on their financial condition.

This study explores increasing disparity in investment in education among

municipalities in terms of the size, programs, and methods depending on what kind of financial shape they are in and who makes a decision. It also strives to analyze determinants that impact the size of municipal investment in education and the investment gap among local governments. Furthermore, this paper aims to highlight both achievement and limitation of current municipality's educational investment by analyzing how much it accomplished and to draw lessons as to how to make such investments more effective in order to achieve progress in primary and secondary education system.

Local Education Financing Structure and Significance of Municipality Investment in Education

By contributor, revenues for educational expenditure special account consist of contributions from central government (State), from local municipalities (local governments) and other sources (private sector), and incomes of offices of education (including parents' portion), local education bond, and funds carried over from a previous year. The central government contribution comprises Local Education Financial Grants and subsidies from national treasury. The local government contribution consists of funds transferred from local government general account (funds coming from local education tax, cigarette consumption tax, city and provincial tax revenues, and school land purchase fund) which are mandated by law, and funds which are not. Local education offices' own revenues include incomes derived from teaching and learning activities, including entrance and tuition fees, administrative activities, property and interest incomes, etc. School incomes are: school education and program funds transferred from city and provincial special account for educational expenditure; educational expenditure subsidies transferred from municipality general account; various fees paid for by students and parents including school operation fees;

user fees; and resources coming from school development funds.

In this study, the scope of analysis is limited to non legally-mandated portions in city and provincial educational expenditure special account and educational expenditure subsidies. The significance of municipality's educational investment and aid may be summarized as: mechanism for securing funding for education, cooperation between local government and educational authority, and their political functions.

□ Analysis for Local Government's Investment in Education

In order to analyze municipal investment in education, a survey was undertaken by city and provincial offices of education among 244 local government agencies (16 metropolitan and provincial; 228 city-, county-, and district-level government agencies) with regard to allocation of non-legally mandated revenues of city and provincial education expenditure special account and subsidies for educational expenditure in school accounting based on FY 2010 settlement.

The survey broke down local governments into metropolitan/provincial and city/county/district level categories. The metropolitan/provincial category was further categorized as capital, metropolitan city, provincial governments, and city/county/district governments to: 1) city with a population of 500,000 and above; 2) city with a population of 500,000 and under; 3) city with a population of 50,000 and above; 4) city with a population of 50,000 and under; and 5) self-governing districts in order to assess the ratio of educational investment to municipality budget and amount invested per school and per student. The following is the summary of the analysis.

First, based on 2010 settlement, the size of fund that came from municipality's general account invested in education totaled KRW 1,1816 trillion (444.6 billion

in non-legally mandated fund transferred to educational expenditure special account; 737 billion in subsidies for educational expenditure). The figure excluded physical goods and direct investment by municipality. By type of municipality, capital and metropolitan cities spent KRW143 billion, and provincial governments spent KRW 63 billion. As for city/county/district governments, total amount of money spent in cities with population of 500,000 and above was KRW 248.5 billion; cities with population of 500,000 and under, KRW302.6 billion; counties with population of 50,000 and above, KRW130.6 billion; counties with population of 50,000 and under, KRW76.4 billion; and self-governing districts KRW217.4 billion.

Second, the average ratio of educational investment to total municipality budget stood at: .38% for capital and metropolitan cities; .20% for provincial governments; 1.78% for cities with population of 500,000 and above; 1.37% for cities with population of 500,000 and under; 1.14% for counties with population of 50,000 and over; 0.78% for counties with population of 50,000 and under; and 1.15% for self-governing districts.

Third, the average amount invested in education per school was: KRW32.8 million in capital and metropolitan cities; KRW14.59 million in provinces; KRW123.73 million in cities with population of 500,000 and above; KRW112.21 million in cities with population of 500,000 and under; KRW91.7 million in counties with population of 50,000 and above; KRW70.39 million in counties with population of 50,000 and under; and KRW 61.67 million in self-governing districts.

Fourth, the average amount invested in education per pupil: KRW 39,000 in capital and metropolitan cities; KRW32,000 in provinces; KRW138,000 in cities with population of 500,000 and above; KRW213,000 in cities with population of 500,000 and below; KRW377,000 in counties with population of 50,000 and

above; KRW512,000 in counties with population of 50,000 and under; and KRW 69,000 in self-governing districts.

Fifth, further analysis for programs in which the money was invested showed that as for non legally-mandated portions from city and provincial special account for educational expenditure, KRW144.8 billion (32.6% of the total 444.6 billion), which accounted for the biggest portion of the fund, went to facility programs such as building new school auditoriums or grass playgrounds. Under educational expenditure subsidy program for individual schools, the biggest part of funding, KRW255.2 billion (34.6% of 737 billion in total funding) was allocated to school curriculum operation programs including after-school programs, learning ability enhancement programs, and hiring more native English-speaking teachers (stipulated in Regulation on Local Government Aid for Educational Expenditure, Article 2, Item 3). Further analysis for investment by type of funding source (non-legally mandated fund and educational expenditure subsidies) actually reflected great similarity in terms of nature of programs. In other words, the difference in proportion of non legally mandated fund and educational expenditure subsidies was derived from differences in the way how money is invested—allocation of resources through city and provincial offices of education or direct funneling of funds to individual schools. With expansion of investment programs for education initiated by local governments, systematic management and guidelines would be necessary to ensure effectiveness in educational investments.

Analysis for Disparity in Educational Expenditure Subsidies and Determining Factors

In order to understand disparity in investment in education system across municipalities, this study focused on educational expenditure subsidies which

reflected school level revenues to analyze regional gap and determining factors that influenced their size per each school. To help with this task, the research employed Gini coefficient and reverse McLoone Index, indicators of equity in education finance. It also examined size of districts, level and size of schools, enactment of regulations governing funding for educational expenditure, and amount of joint investment as some of determining factors that could impact the size of resources allocated for educational expenditure for individual schools.

Three major findings emerged from the analysis for disparity (equity) in educational resources across local governments: first, all in all there was a great deal of inequality, despite the differential level, in educational expenditure subsidies and non-legally mandated revenues. In particular, the analysis revealed that inequality observed in self-governing districts in the bottom 50% in terms of the size of educational investment was more pronounced than overall inter-district inequality. The degree of inequity in educational expenditure subsidies was much severe compared to non-legal authorized revenue.

Second, there was a significant deviation in disparity (equity) index across local municipalities, cities and provinces. Greater degree of inequality was witnessed across counties and self-governing districts than it was across cities, and the degree of inequality in the low-income municipality in the bottom 50% was bigger than overall inter-municipality inequity. Deviation in inter-city and inter-province disparity (equity) index was shown to be just as significant as it was in inter-municipality disparity.

Third, analysis for disparity (equity) by type of educational expenditure subsidies revealed a relatively great degree of inequity in Item 4 (Program for Development and Operation of Education Curriculum for Local Community

Members), Item 1 (School Meal Facility and Equipment Program), and Item 3 (Program to Support School Education Curriculum Operation) among others. However the fact that the gap was only small proved that inequality existed regardless of subsidy type.

This paper also studied determinants that could impact the size of resources allocated for school educational expenditure subsidies: first the size of subsidies across schools was determined by a city or district that they belonged to. Such finding indicates that the size of education expenditure subsidies is not likely to be determined by efforts of individual schools but by which city or district they belong to.

Second, the size of educational expenditure subsidies differed across different layers of school system. In general, the higher the level of school was, the larger the subsidies. As for the size of funding depending on the size of district, the amount of fund that went to cities and counties was bigger than the amount of fund that went to self-governing districts. In particular, aids received by counties were noticeably big compared to those received by cities and districts.

Third, school size, public school, and the enactment of regulation on aids for educational expenditure were shown to have negative correlation with the size of funding for educational expenditure subsidies. While public schools received more funds than private schools for certain types of programs-- Item 2-2 (Education Informatization Project), Item 3 (Program to Support School Education Curriculum Operation), Item 6 (Other programs designed to improve school conditions deemed necessary by head of municipality), the amount of money they received for other programs was actually less than the amount private schools received. The enactment of regulation that governed funding for educational spending was shown to have a negative impact on funding for all

programs except Item 3 (Program to Support School Education Curriculum Operation).

□ Analysis for Performance of Local Governments' Investment in Education

Based on a survey conducted on officials engaged in education investment programs across local government agencies and offices of education, the research analyzed performance of educational programs in which municipal governments invested throughout entire phase from the planning to final stage to better understand the level of cooperation between local government agencies and education offices, decision-making approach and process, operation and management of the programs, and their effectiveness. The following is the summary of major findings:

First, the study showed that local government agencies and education offices maintained decent level of cooperation among responsible departments in terms of human resource and enactment of relevant regulations. But in terms of activities such as forming a joint consultative body or signing of cooperation agreement, the level of coordination remained relatively low. Whereas working-level and top-level coordination was shown to work relatively well, agencies in provincial level tend to do better than their counterparts at capital and metropolitan level in cooperation arena.

Second, according to the research, local office of education was shown to have a relatively great say in the decision-making process for education investment initiatives. However the study found that there was a difference in opinion between local government agencies and education offices in terms of priority of programs funded by education expenditure subsidies. Local governments saw the Program to Support School Education Curriculum Operation as the highest priority item while education offices attached the

greatest importance to School Meal Facility and Equipment Program. Such a difference in perception also existed in other domains of educational expenditure subsidy-funded programs. According to a survey, local offices of education prioritized school meal programs while local government agencies prioritized initiatives designed to improve academic ability within their own districts.

Third, both parties recognized the need for program screening result to be notified to education offices by municipality. Such a need for notification was particularly felt more strongly by education offices than by municipality. Compared to offices of education, municipal governments responded that ‘lack of awareness’ and ‘frequent turnover of responsible officials’ as serious issues from a program management perspective.

Fourth, both parties surveyed responded that ‘lack of financing ability,’ ‘Difficulty to obtain approval from National Assembly’ were the two biggest challenges in executing programs. Whereas education offices cited ‘regulatory limitation,’ ‘lack of interest among top level officials’ as obstacles, local governments said that ‘lack of cooperation among education institutions,’ ‘difficulty in obtaining information’ as a major stumbling block, which indicated differences in perception among the two parties.

Fifth, those surveyed believed that the programs were very effective in terms of ‘local education financing,’ ‘Satisfying local community’s need for better education,’ ‘contribution to progress in local education,’ and ‘building positive image about municipality among community members.’

Keywords : Education financing structure, Education investment of municipality, Local government’s investment in education, Non-legally mandated revenues, subsidies for educational expenditure, Performance of local governments’ Investment in education