An Examination of Educational Finance Practices in China

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Abstract: This study has investigated the school finance practices in China through the perceptions of school administrators in two provinces. A validated survey questionnaire was developed by the researchers to contain 14 open-ended questions to cover school revenues, expenditures, budget process, auditing system and equity issues. Sixty-two out of the 100 invited school administrators responded to the survey. Twenty-five of them also submitted school financial documents for review. Participants’ responses and their submitted documents were examined for patterns, themes and consistencies through triangulation. The findings indicated that the Central Government was responsible for 45.5% of the educational revenues in China. Major education expenditures include educational facilities and personnel employment with sizable resource disparity among schools. Results also showed that school budget and audit processes are primitive. The findings of the study will help Chinese educators improve their financial management practices.

Key words: school finance in China; school annual budgeting; school finance audits and educational resource equity

1. Introduction

In recent years, Chinese government’s open policy has attracted much foreign investments to take advantage of the low cost production conditions. China has thus become the world factory of daily commodities. As a result, China has become more and more stable with their national economy with continuously increasing world trade. After a brief downturn in 2008, the Chinese economy recovered and grew from 8% to 10% in subsequent years (Wong, 2011). With the prosperous development in economy, China’s government budget of revenues has been increasing year after year. Therefore, increasing revenues for education have become a high priority for the government (KPMG, 2010; Li, 2005). With increased monetary appropriations to the education section (Roberts, 2013), proper financial management of educational dollars (Peng & Peng, 2011) and fair distribution of fiscal resources in education (Roberts, 2013) become apparent concerns.
2. Purpose of the Study

As more and more financial resources become available to Chinese schools, much attention has been drawn to the distribution and management of these resources to improve student achievement and educational equity. A good and responsible system of school financial management is urgently needed in China. Review of current literature shows that studies on how educational finance is managed in Chinese schools are lacking. The purpose of this study is to fill the academic gap by examining the educational finance practices in Chinese education systems through the perceptions of school administrators in Zhejiang and Jiangsu provinces in China. It is hoped that through this study, the strengths and weaknesses of Chinese school financial practices can be identified and recommendations could be made to address critical issues to improve the financial management systems of Chinese schools.

3. Review of Current Literature

3.1 Increased Funding for Education

For many years, the development of primary and secondary education in China was hampered by the lack of sufficient resources. Even in the modernization movement that started thirty years ago, educational development was not placed as a priority (Chan, 2002). In the past decade, because of the vast economic development in manufacturing industries and international trades, the national wealth of China has tremendously increased (Wong, 2011; Zhao, 2009). More public funding is now made available for educational use from the Central, the provincial and the local governments (Flor Cruz, 2013; Roberts, 2013; Social and Technological Department, National Bureau of Statistics in China, 2010). On the other hand, educational contributions from overseas Chinese have substantially increased in recent years particularly in poor remote areas of China (KPMG, 2010; Li, 2005).

3.2 Inequity of Educational Funding

When more financial resources are available for educational use, the following issues the fairness in the distribution of the education dollars (Wang & Bergquist, 2003). While large cities in China are rich in educational resources, remote areas remain poor (Qin, 2011; Roberts, 2013). Even though the Central Government has established policy to appropriate additional funding to qualified poor and remote districts for educational use, the range of difference in educational conditions of wealthy and poor areas in China is still large. In recent years, volunteering and charitable organizations, many from overseas, have offered major contributions to improve the educational environment of the poor needed districts (Qin, 2011).

3.3 Issues of Financial Practices

For years, the finance for education in China was mostly the responsibility of the Central Government. This is an understandable model of central planning and direction under the control of the Central Government (Wang & Liu, 2011). However, even with increased revenues of the Central Government budget in the past years, the heavy educational finance burden on the Central Government is realized. Therefore, recent policies have been revised to “open up opportunities for local participation of education business” (Chan, 1999). Thus, in the last couple of decades, provincial and local governments have assumed more educational responsibilities by increasing their revenues in the investment of education. However, the proportion of financial responsibilities among the central government, the provincial government and the local government toward educational
development has not been clearly specified and has yet to be defined (Lin, 2009; Wang & Liu, 2011; Wang & Zhao, 2010). While public dollars are spent in educational use, a system of cash management has to be developed for accountability (Jiang, 1986; Lin, 2012). Fiscal budgeting and auditing practices need to be strictly enforced to ensure the proper use of educational resources (Lin, 2012; Peng & Peng, 2011; Wang & Bergquist, 2003).

### 3.4 Commonly Observed Financial Practices

Internationally known scholars (Guthrie, Hart, Ray, Candoli & Hack, 2008) have established Planning, Programing, Budgeting and Evaluation System (PPBES) as the basis of educational finance management. This has been a widely adopted model for use in public school financial management. Meanwhile, educational forecasting, budgeting, accounting, cash managing and auditing have been identified as the major components of sound educational finance practices (Alexander & Salmon, 1995; Baker, Green & Richards, 2008; Brimley Jr., Verstegen & Garfield, 2012; Owings & Kaplan, 2006; Swanson & King, 1997; Thompson & Wood, 2001). Professional organizations such as Association of School Business/International (ASBO/I) have also established professional standards to be observed in each of the educational finance areas (Wood, 1986).

### 4. Research Questions

1. How do Chinese school administrators perceive educational expenditures as investment for the future?
2. What are the sources of revenues in support of education in China?
3. What are the major education expenditures in China?
4. How are educational budgets developed and monitored in China?
5. Are educational finance systems audited in China? How?
6. Do school administrators perceive increased revenue help improve equality of educational opportunities in China?

### 5. Significance of the Study

The management of education finance in China has been reported to be confusing (Peng & Peng, 2011; Roberts, 2013). The outdated system has caused many loopholes which lead to potential corruptions. What the Central Government is launching now is the anti-corruption campaign to strike such corruptive activities including those happening in education. This study on educational finance practices in Chinese schools comes in timely to respond to the anti-corruption movement. It examines the weaknesses of the educational finance system in China and recommends alternative ways to build a more accountable system to address the loopholes.

As research on educational finance management in China is scarce, this study serves to fill the missing link in the research arena. It serves as a pioneer study for many other needed studies in the same area to be followed. Results of the study will indicate areas that need improvement including planning, supervising, monitoring and auditing of the educational finance management system. The findings of this study are particularly meaningful to Chinese school administrators who are now, like many other government officials, under close scrutiny of the Central Government as part of the corruption crackdown movement. The recommendations of the study point at ways that school administrators can do to keep a clean financial process and record to meet the administrative challenges of the time. Other developing countries can also follow the recommendations of this study in improving their school finance management systems.
6. Methodology

6.1 Research Design

A qualitative survey approach was used to conduct the study in the Zhejiang and Jiangsu provinces of China. Open-ended questions in qualitative surveys provide ample opportunities for participants to freely express themselves with the least restrictions (Creswell, 2009). In this study, school administrators are encouraged to freely respond to the open-ended questions with researchers’ consent of confidentiality. School documents relating to financial matters were also requested from school administrators for examination. These documents help to crosscheck the accuracy of the administrators’ responses. They serve as solid practical evidence of the administrators’ claimed financial practices.

6.2 Research Participants

A random sample of 100 school administrators in Zhejiang and Jiangsu provinces was invited to participate in the study. Sixty-two out of the 100 administrators agreed to participate by responding to the survey items and twenty-five of them also submitted some of their school financial documents for review as requested.

6.3 Research Instrument

To solicit their perceptions of school finance system management in their schools, the researchers developed a survey questionnaire based on educational finance practices as referenced in current literature (see survey instrument attached). The survey consists of 14 open-ended questions to cover the following areas of educational finance: sources of revenue, items of expenditure, budget process, auditing system and equity issues. Validity of the survey instrument was checked by a panel of seven school finance experts in the contents, the language and the question format of the instrument. Suggestions of the experts were incorporated into the revision of the survey for improvement and final adoption. Reliability of the study was established through triangulation of participants’ survey responses and the financial documents submitted by the school administrators.

6.4 Data Sources and Collection

The data in this study were collected by a qualitative survey sent to randomly selected school principals of Zhejiang and Jiangsu provinces, China. Invitation letters together with survey forms were mailed to the school principals directly. Out of 100 principals invited for the study, 62 principals returned the survey forms with responses to the survey items. Principals were also requested to submit school financial documents as part of the data of the study. These documents included annual school budget, school fiscal policies and school financial report. Twenty-five principals sent in school finance documents along with the surveys to help with the study. They included 9 proposed school budgets, 6 cash management handbooks, 5 school annual finance balance sheets, and 10 school financial management guidelines.

6.5 Data Analysis

Qualitative data were retrieved from answers to the open-ended questions provided by the school principals. The participants’ responses to the survey items were classified and summarized by category according to the research questions. All the items of data were coded to facilitate for citation. Data were closely observed for consistencies, patterns and themes that could emerge. The submitted financial documents were classified by type such as school budgets, cash management handbooks, balance sheets, and financial management guidelines. The contents of each type of financial document were carefully reviewed and analyzed to look for evidence to
triangulate with the answers to the open-ended questions.

7. Results of the Study

School principals were asked to self-report their demographic information in the survey. The information is summarized and displayed in the following:

- School Level of Principal: 28 primary schools, 20 junior high schools, and 14 senior high schools
- Gender of Principal: 36 males and 26 females
- Years as principal: 10–15 years
- Years as teacher: 16–20 years
- Education of Principal: 9 have M.A. Degree, 32 have B.A. Degree and 21 have no academic degree.

Answers of the school principals to the open-ended questions of the survey were analyzed by category with emerging themes. The contents of the financial documents were examined by searching for solid evidence in support of the administrators’ responses. The research questions in this study are answered in the following:

(1) How do Chinese school administrators perceive educational expenditures as investment for the future?

Most Chinese school administrators in this study perceived spending in education as a way to invest for the future of the country. As the Chinese saying goes, “sow your seeds this generation and reap in the next generation”. An examination of the principals’ survey responses and the supporting school financial documents showed a high degree of agreement. As one of the principal said, “Education is the foundation of all the modernization movements of the country. Increasing revenues to develop high quality education means a better future of the country.” Another principal also stated, “Resources put into educational use should not be considered expenditure items. They are accumulated assets for future development.” Yet another principal echoed, “Investing dollars where the educational needs are is definitely building for a better future.”

(2) What are the sources of revenues in support of education in China?

Analysis of the survey data and submitted financial documents indicated that a substantial portion (45.5%) of the local school revenues was allotted by the Central Government through the Zhejiang and Jiangsu provinces, and about one third of it (30.5%) was appropriated by the provincial administration. The rest of the school revenues (24%) were from local governments and private donations (see Table 1). Many wealthy local districts were able to contribute more dollars to their schools on top of Central and provincial funding to support educational functions. Quite the contrary, some poor districts, even with special Central Government supplementary funding, spent much less on per-pupil-expenditure than wealthy school districts. Result of the analysis showed that the ratio in per-pupil-expenditure between poor and wealthy schools was 31.5 to 100. Disparity of educational resource distribution was huge. Some school principals indicated that a small portion of the school revenues was actually coming from voluntary community contributions. Local schools and school districts were not allowed to raise bonds to support educational revenues.

<table>
<thead>
<tr>
<th>Source of educational revenue</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Government</td>
<td>45.5%</td>
</tr>
<tr>
<td>Province</td>
<td>30.5%</td>
</tr>
<tr>
<td>Local Districts and private sources</td>
<td>24.0%</td>
</tr>
</tbody>
</table>
(3) What are the major education expenditures in China?

Result of the data analysis indicated that the largest education expenditure item in the last ten years was on teacher and staff salaries (48.5%). In the past decades, when economy of the country soared high, the salaries of teachers and school staffs did not catch up with the economic growth. In recent years, school administrators have been trying their best to bring the teachers’ salaries up to keep their quality education team. However, 48.5% of the school budget for salaries is still comparatively low. The second largest item of educational spending was on educational facility construction and renovation. For that many past years of lack of proper maintenance, many school buildings in China need to be replaced or be undergoing major renovations to be usable. Administrative expenses took up to 13.1% of the budget which is averagely appropriate. The portion budgeted for student instructional expenses (11.6%) sounds insufficient. A special 3% of the budget was reserved for professional development of teachers and staff to meet their continuous learning needs (see Table 2).

Table 2  Educational Expenditures in China by Percentage

<table>
<thead>
<tr>
<th>Types of educational expenditures</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher &amp; Staff Salary</td>
<td>48.4%</td>
</tr>
<tr>
<td>Education Facilities</td>
<td>23.9%</td>
</tr>
<tr>
<td>Administrative Expenses</td>
<td>13.1%</td>
</tr>
<tr>
<td>Instructional Expenses</td>
<td>11.6%</td>
</tr>
<tr>
<td>Professional Development</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

(4) How are educational budgets developed and monitored in China?

Results of data analysis also showed that most of the schools used a primitive system of developing educational budgets simply by adjusting the revenue and expenditure items of previous years with reference to the cost of living indexes. New items were also found to be added to the budget for the upcoming year. Only two school administrators confirmed the use of zero–based budgeting as their principle of budget development which calls for building the budget from zero up while accounting for the identified needs of the next school year. As uttered by one school principal, “Developing the school budget from nothing allows me to identify all my real needs for the next school year.” Many schools have installed a system of monitoring the budget in the mid-year by comparing the real revenue receipts and expenditures with the corresponding budget items. This monitoring system would allow school administrators to scrutinize the budget situation during the school year. School principals have indicated that budget adjustment might be necessary in the budget year to avoid a year end over-draught. As one of the principals stated, “It is better to know ahead of time that we will not have enough revenue as originally allotted. We can trim the budget amount to meet the revenue shortage even within the budget year.” However, a review of the submitted year-end school balance sheets indicated that substantial amounts of the budgeted dollars were left unused in different accounts. Were the budget amounts inflated from the beginning to ensure having sufficient dollars to spend during the year? Further investigation is needed.

(5) Are educational finance systems audited in China? How?

Responses from school principals indicated that most schools performed an annual internal audit of their accounts and a property inventory. School principal sunder took proper financial procedures to show that they were in compliance with the requirements of the Central Government and the provincial governments. However, provincial financial policies do not require the use of independent auditors to confirm the results of internal auditing. School principals reported that provincial auditors could come to audit school accounts sometimes.
Basically, school principals and their assistants were held accountable for the financial development and management of their schools. As commented by a school principal, “We follow closely the financial guidelines provided by the school system. We cannot afford making mistakes in school financial management.” Another principal also added, “When the school district financial guidelines are not specific, we want to clarify with the district before we act. The use of some of the funds is sensitive.”

(6) Do school administrators perceive increased revenue help improve equality of educational opportunities in China?

School principals indicated that additional resources could certainly support the development of education particularly in some badly needed programs in school. It would help improve the equality of educational opportunities of students between rich and poor districts. As stated by a school principal, “Offer of higher salaries could keep good teachers in school.” Another principal also said, “More money to provide to poor schools may not help improve student achievement. These additional dollars certainly help satisfy the basic needs of the poor schools.” The principal of a poor school also expressed that more educational dollars did not always equal to more quality education depending on how the money was spent.

A careful examination was made to all the financial documents submitted by the school principals. The documents included 9 proposed school budgets, 6 cash management handbooks, 5 school annual finance balance sheets, and 10 school financial management guidelines.

The formats of the proposed school budgets look similar to one another. They usually consist of two parts: Part 1 — Anticipated Expenditures and Part 2 — Anticipated Revenues. Part 1 includes the categories of expenditures broken down by account. New and anticipated expenditures for the upcoming year are also included in Part 1. The anticipated revenues from Part 2 are shown by revenue sources such as Central Government, Provincial Government, City/County Government, and other sources like community contributions. The consistent increase of the budget figures has indicated that the budget development process was simply based on adjusting the dollar amounts of the previous year’s budget. Local cost of living index was probably used as a basis for the budget figure adjustment.

The cash management handbooks are distributed by the local government to the schools as common compliance guidelines. They basically cover the principles of account classification, the double entry bookkeeping approach, the cash book and petty cash book handling practices, student activities accounts, account transfers, contingency funds, and approval procedures for cash deposits and withdrawals. Specifically stated in the cash management handbooks is that local schools and school districts are disallowed from raising municipal bonds to help with educational revenues.

A total of 5 school accounting balance sheets were presented by the school principals to support the study. They are in the format of a typical balance sheet to indicate school assets and school liabilities. Most of the school assets are cash in hand, balances in accounts and inventory items of school properties. The liability items are mostly unpaid expenses and accounts due. All the balance sheets are showing positive balances of assets over liabilities. Some of the balances are showing pretty substantial amount left for next year.

Additionally, 10 school financial guidelines were also submitted for review. These guidelines are issued by school districts to indicate some of the general processes of handling financial matters in schools. Sections of the financial guidelines include designation of authorized personnel in charge of financial matters in school, account setup principles, handling of specific purpose funding, purchasing procedures, inventory, auditing, funds for student activities and community contributions. The guidelines also clearly indicated the periodic report of school
financial status to the provincial departments of education.

8. Discussion/Implication

The findings of this study generate certain interesting points worthy of discussion. In particular, some of these findings were not reported in previous literature of school finance studies in China.

First, the findings of the study indicate that the source of educational revenue in China is still heavily dependent on Central Government support. For sure, the percentage of dependence was even higher twenty years ago because of the tighter central controlled educational policy at that time. Since the Central Government has decided to let the local governments to share with the educational responsibilities, the portion of Central Government appropriation to support local education has been lowered. However, the present finding of 45.5% of Central Government participation is still comparatively higher than many western countries. The Central Government may want to consider continuing to invite local and private sectors of the community to participate in the development of education.

Second, the findings of this study indicate that the percentage of the revenue designated for teacher salaries and instructional expenditures were low (48.4% and 11.6% respectively). These are the most significant categories of the educational budget that have direct impact on student achievement. The researchers highly recommend that these two budget items be given priority consideration in the upcoming year of budget development.

Third, in the education budget development process, many countries start with student enrollment forecasting to assess the need quantity based on student population size by area, by grade and by program. However, the data provided in this study had no mention of student enrollment forecasting at all. This may be an oversight of the data collection instrument. On the other hand, most of the principals responded that they were using cost of living index as a basis in developing the new budget. Budget of the current year was modified to create the new budget of the next by simply multiplying the cost of living index into the current figures. This budget development approach was most conservative. Only two principals reported the use of zero-based budgeting as a budgeting approach to reflect more of the realities. Zero-based budgeting is based on the accumulated teacher needs, student needs and program needs by building the figures up from zero. Every item to be proposed in the budget is realistic and justifiable. This is the recommended budget approach to be used in China.

Fourth, the researchers are glad to see that a budget monitoring system is in place in schools involved in this study. The government requirements called for a mid-year budget status checking. It probably needs to be done more often. The real educational revenues and expenditures need to come close to the budgeted amount to be safe. More frequent monitoring of the budget implementation process is highly recommended. In the United States, most school systems have established a monthly follow-up procedure to check on the budget status during the year.

Fifth, local schools in the study are required to perform an annual self-audit to check on all the possible errors that could occur in the transactions of the school financial system. This type of self-audit was conducted internally by a small committee of teachers and staffs under the direction of the school principal. Independent audit of the school finance is not required. In an independent audit, an external accounting firm with no association with the school is employed to check on the school account accuracy and integrity. The provincial or local government is encouraged to consider adopting an independent auditing policy to make it a requirement for schools. This will certainly add to the accountability of the educators.
Sixth, even though additional revenues and special funding have been appropriated to schools in poor and remote districts, the financial discrepancy between wealthy and poor schools in China remains large. The Central Government and the provincial governments need to work hand in hand to develop a fair funding formula to appropriate educational resources to achieve better equity among wealthy and poor school districts.

9. Conclusion

The findings of this study indicated that the Central Government in China was still mainly responsible for the educational revenues in schools even though it has established policies on opening opportunities for local participation in educational development. The proportion of budget amount on teacher salaries and instructional expenditures were considerably low. Results also showed that school budget and audit processes are primitive. Disparity in per-pupil-expenditure is still great between wealthy and poor schools.

Responses from school principals and review of the submitted documents show that the Chinese schools are heading for the right direction in managing their financial matters even though much has yet to be done to improve the financial operation of schools. The findings of the study will help Chinese educators identify areas of school financial management that could be improved. The researchers highly recommend an educational accountability system be established to tighten up the loopholes on educational finance management. An accountability system consists of identification and designation of specific responsibilities and periodic evaluation of job performance. This may become a significant component of the anti-corruption movement in China today.

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Appendix


Demographic Information of Participant:

Gender: Male _____ Female _____
Age: 20–30 _____ 31–40 _____
        41–50 _____ 50+ _____

School Level: Primary _____ Junior Secondary _____ Senior Secondary _____

Years of Experience as an Administrator: __________

Education Level: Bachelor _____ Masters _____ Doctorate _____

Please provide your response to each of the following questions:

1. Do you perceive education as a responsibility of the Central Government, provincial government or local government?

2. What are the sources of educational revenues in China?
   Central Government _____
   Provincial Government _____
   Local Government _____
   Other sources _____

3. What taxes are employed in support of education in China? (Please check.)
   Sales Tax _____
   Property Tax _____
   Income Tax _____
   Other Taxes _____

4. Are bonds issued in support of education in China?

5. Do you perceive the spending on education as an investment for the future of the country?

6. How do you assess the effectiveness of investment in education?

7. Do you agree that more educational revenues will result in higher student achievement?

8. What is the largest educational expenditure in your school?

9. What is the most needed funding item in your school?

10. Are educational dollars annually budgeted in your school?

11. Do you use “zero-based” budgeting as an approach to developing your school budget?

12. How is the annual budget monitored during the fiscal year?

13. Is there an audit system of financial management in schools? How does the system work?

14. Is fiscal equity employed as a means to achieve equality of educational opportunities in China?

End of Survey