

Sharing the cost of pre-school education in China

Guo Lei^{1,a,*}, Li Jinwei^{1,b}, and Tang Ziyue^{2,c}

¹*School of Public Finance and Taxation, Shandong University of Finance and Economics, Shungeng Road, Jinan, China*

²*School of Business Administration, Shandong University of Finance and Economics*

^a*guolei@sdufe.edu.cn*, ^b*807137348@qq.com*, ^c*tangzy@sdufe.edu.cn*

**corresponding author*

Keywords: cost-sharing; ECEC; early intervention; taxation

Abstract: Under the auspices of academic appeals, China has realized the importance of pre-school education, and has issued the capacity enhancement policy in the early childhood sector, trying to boost the birth rate in the future, uprooting poverty in China, and stimulating the enthusiasm of women labor participation are the core ideas underlying recent policies. Based on the survey of the public expenditure and enrolment rate recent years and the analyzing some of the sluggish reasons, the authors argue that the government should share more cost in pre-school service, and some more proactive policies and powerful measures such like tax credit should be issued.

1. Reasons for government to share more pre-school cost in China

There is a growing body of evidence that children starting strong in their learning and well-being will have better outcomes when they grow older (OECD, 2006). Such evidence has driven policy makers to design an early intervention and re-think their education spending patterns to gain “value for money”. China has realized the importance of ECEC under the auspices of academic appeals. The main reasons are as follows:

For one thing, the transition of “birth control policy” to “the universal two-child policy” has generated a range of new tensions between the direction of the deregulation on the “birth control policy” and the preference of childbearing couples’ in China. Some of the researchers in demographic field argue that the cost of ECEC is an invisible and hard curb on the desire of bearing a baby (Meng Guangyu, 2018). In fact, the birth rate in China is on the downgrade even after the population policy made a U-turn. 2018 got the lowest point — 10.94‰ — ever since the 1949, far below the policy makers’ expectation. A similar phenomenon can be seen in the united states, “Americans are having fewer kids because it's too expensive”, according to a survey released by The New York Times in July, 2018. Therefore, China’s central government has adopted the capacity enhancement policy in ECEC sector in order to harvest a higher birth rate. The policy issued recently really illustrate that ECEC improvement is really an urgent problem to be solved.

For another, improving education is now a long-term poverty alleviation instrument in China. Poverty alleviation through education is also an important part of Chairman Xij Jinping’s building an all-round moderately prosperous society through three tough battles (i.e. preventing and defusing financial risks, poverty alleviation, and pollution control). According to James J. Heckman’s

research, early childhood is the best period to break the poverty intergeneration cycle (Heckman, 2006) — the earlier intervention by the government or home, the better effectiveness and the lower cost burdened by all the stakeholders in a society. The World Bank’s special report (2011), “Early childhood development and education in China: Breaking the cycle of poverty and improving future competitiveness”, systematically analysis the situation in China.

What’s more, the rapidity of the population’s aging has made it more urgent for the adoption of countermeasures. Uplifting women’s labor participation is also among the instruments of the policies brackets. In fact, the Fertility Rate in China was lower compared with the average of the world after it issued the “Family Planning” policy (see Figure 1). Thanks for the good structure of demography in the late 20 centuries, i.e. owing to the demographic dividend, the trouble of an aged society was not outstanding in general. But in the nearest decades, when the ratio of the nonlabor population becomes higher and higher, the problem of a faster speed of nature growth of the population is imperative, and the higher percentage of labor population also becomes pressing. It is easy to see that the supply expanding of ECEC would serve a double purpose — improving the desire of bearing a baby and stimulating the enthusiasm of women labor participation. It is worth noting that the ECEC sector itself is also a huge market for women. When the supply is amplified, more women, especially women college students would be employed by various kinds of kindergartens.

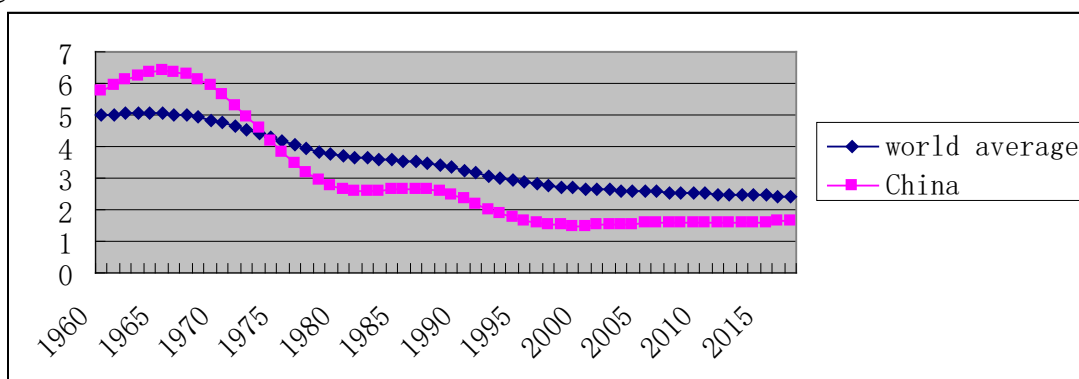


Figure 1: 1960-2017 Births per Woman (Annual, Not Seasonally Adjusted)

Sources: <https://data.worldbank.org/indicator/SP.DYN.TFRT.IN>

2. A brief history and the main barriers

China used to be a welfare state with highest level among the developing countries, especially in the child care and early education provision. Before 1980s. Almost all the business enterprises and the not-for-profit organizations affiliated with childcare settings, and this type of welfare system generated a higher female labor participation (also a stronger childbearing desire) than that of these days. But in the 1990s, may be influenced by the marketization ideological trend, a course of the market-oriented reform in the ECEC sector begin, and since then most of the public facilities had been privatized. According to a survey investigated 10 years ago, the national gross attendance rate of 3-6 years old children is only 50.86%, far below the OECD countries, also inferior to the average level of the world(The People’s Daily, 2010/06/22). Not only that, but 70 percent of the kindergarten children was in the private settings and this organizations hardly receive little government subsidies. In other words, if a child can’t entry the public kindergarten, the most probability is that the pre-school cost’s incidence is his/her family. Through a decade year of effort, we can find that our country’s investment in preschool education are increasing, the structure of public/private ratio has changed greatly. However, the private percentage was still 62.16% at the end of 2018.

The short-term goal of China is to lift up the attendance rate above 85% at the end of 2020, and the long-term goal is that universal access to at least three years of ECEC becomes the norm by 2035. The task of sharing more cost of the ECEC service by the government is no easy way. Firstly, because of the authorities announced at the end of 2018 that the percentage of the for-profit organization should not exceed 20%, private capital flow of the private sector into ECEC field became stagnated and the incentive lever cannot be used by the government to attract outside participants sharing the core goods and services cost. Without taxation measures such as credits, the governments at all levels should spend hard cash to achieve the goal. Secondly, the public funding system in ECEC sector is “county-based” nowadays. Usually speaking, there is large variations of the financial resources across counties in China. A “county-based” public services always means substantial quantity and quality gap across the whole nation, for a great deal of counties to make ends meet barely. There for, cost-sharing by the governments should solve the issue of the sharing ratio not only between central and local government, but also among each level of local governments. Thirdly, there is a trade-off between the investment in quantity and in quality of pre-school service. in fact, “Increased spending on early childhood education does not always translate into higher enrolment, as funds may be used to improve the quality of learning, through raising teachers’ salaries, investing more in school facilities or prioritising a smaller number of teachers per student”. However, it is worth noting that “Early childhood education and care can bring a wide range of benefits – for children, parents and society at large, but the magnitude of the benefits is conditional on ‘quality’”(OECD, 2012) From the experience we can see that most of the local government choose a quantity-growth path, and the minimum standards on structural indicators, such as staff-child ratios, indoor/outdoor space, and especially the qualification levels, was neglected. For example, figure 2 showed clearly that at the beginning of the enlarging period, the ratio of teacher who studied ECEC in college or technical secondary school fell sharply.

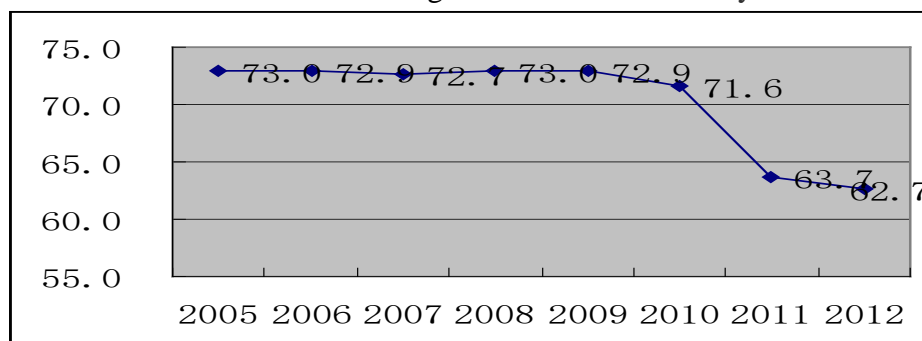


Figure 2: percentage of staff who studied ECEC in college or technical secondary school 2005-2012

Sources: Report Team, 2015.

3. Lessons learned from the OECD countries

Child care was essentially home care by mothers, with some marginal use of informal care through other family members or neighbors in OECD countries (Tizard, 1986), but in recent decades, economic development and rapid social change across the OECD countries have transformed traditional family and child-rearing patterns, and broader social and economic factors have generally directed government attention to ECEC issues.. “A central issue for OECD governments in relation to early childhood funding is not whether to invest, but how much and at what level.”(OECD, 2006) Therefor we should take good lessons from the measures of public funding and support providing to families with young children.

The most important thing we should learn is the high sharing percentage compared with GDP.

Although there were the Nordic, the liberal and the continental welfare state regimes in OECD countries (Hausermann & Palier, 2008), and the structure of public/private sharing is rich and varied, but the average ratio is nearly 0.8 percent. More cost shared by the government means higher attendance rate and higher per child expenditure (Table 1).

Table 1: OECD public Expenditure and enrolment rate 2014

| | Expenditure as a percentage of GDP(%) | Annual expenditure per student (in USD using PPPs) | Proportion of total expenditure from public sources(%) | enrolment rate at age 4(%) | enrolment rate at age 5(%) |
|-----------------|---------------------------------------|--|--|----------------------------|----------------------------|
| U.S. | 0.4 | 10427 | 74 | 68 | 90 |
| UK | 0.5 | 9586 | 48 | 99 | 99 |
| France | 0.8 | 7758 | 93 | 100 | 100 |
| OECD average | 0.8 | 8723 | 83 | 87 | 95 |
| Highest in OECD | 1.9 | 21210 | 100 | 100 | 100 |

Sources: OECD, 2016; 2017.

Another aspect worth learning is the high percentage of central government. In general, central governments have at their disposal powerful steering mechanisms, such as legislation and discretionary funding, to motivate and provide backing to local authorities to deliver agreed outcomes (OECD, 2006). In some instances, it may also be necessary for central government to assist local administrative divisions so that they can plan, fund and deliver basic services efficiently and effectively.

The third but not the last worth learning is the tax measures. Expenditures for early care and education services can be grouped into three broad categories – the family contribution, government assistance, and private sector support (including employers and philanthropy). The salient of the public cost-sharing is not the expenditure-based subsidies, but lies in the tax measures. For example, Robins (1990) calculated that the single largest government child care program in the United States is the child care tax credit, which accounted for 60% of all federal spending on child care by 1988 (\$3.8 billion). Some find that tax credits are better than subsidies in terms of increasing average hours worked and household income.

4. Conclusions

China has always been in a position that the governmental expenditure on investment in people below the world average level. When China achieved her legal target — 4% of its GDP on investment in education in 2012, 17 years had passed since the goal issued. The economically disadvantaged children, particularly in China's inner cities and impoverished rural areas, receive inadequate preschool education, leaving them unprepared for the primary and secondary education. Most of them cannot enter into colleges and universities, without adequate skills, usually earning low wages, and are thus forced to continue to live in poor areas, continuing the cycle of poverty. In our opinions three points are worth commenting.

The initial one is the suggestion for enlarging the percentage of GDP in the ECEC expenditure. The level of the government investment of the percentage of GDP should at least keep up with the average level of the OECD. Given the finance resources of the inner county, the central or the provincial government should play a constructive role.

A second related aspect deals with the taxation incentive. A scientific mechanism design of incentive will yield twice the result with half the effort, i.e. to achieve the goal of uplift birth rate, enhance women labor participation, and mitigate the budget constraint of local government, etc. Tax credit instrument satisfy all these objects. China reformed its income taxation system in 2018,

but the deduction only for the cost of at age 3-5, and there is no tax credit until now.

Last but not the least, there should be some incentives to enlarge the scale of private investment in order to accomplish a great task with little effort by clever maneuvers. A sustained and steady policy is conducive to shape consistent expectation of market player, and a deepen research should focus on the repeated game theory and signaling commitment.

References

- [1] Hausermann S., Palier B., (2008) *The politics of employment-friendly welfare reforms in post-industrial economies* Socio-Economic Review 6, 559-586.
- [2] Heckman J.J. (2006) *Skill formation and the economics of investing in disadvantaged children*. Science, 312, 1900-1902.
- [3] Meng Guangyu (2018) *On the early child care of 0-3 years old under the deregulation of "birth control policy"*, *Social Sciences In Heilongjiang*, 5, 98-103.
- [4] OECD. *Starting strong II [M]*. Paris, OECD Press, 2006, 20, 52, 216.
- [5] OECD (2012), *Starting Strong III: A Quality Toolbox for Early Childhood Education and Care*, OECD Publishing, Paris, 9.
- [6] OECD (2016), *Education at a Glance 2016: OECD Indicators*, OECD Publishing, Paris, 308.
- [7] OECD (2017), *Education at a Glance 2017: OECD Indicators*, OECD Publishing, Paris, 178.
- [8] Report Team. (2015) *Development Report 2013: Early Childhood Education and Care in China[M]*, Beijing: Educational Science Press,48.
- [9] Robins, Philip K. (1990) *Federal Financing of Child Care: Alternative Approaches and Economic Implications*. *Population Research and Policy Review*, 9: 65-90.
- [10] World Bank (2011) *Early childhood development and education in China: Breaking the cycle of poverty and improving future competitiveness*, World Bank Report No. 53746-CN.