A Review of Government Subsidy to Agricultural, Educational and Other Industries in Loan

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Abstract. This article is a review of loan subsidy and briefly introduces the developmental state of loan subsidy in different industries and countries. According to the references we search widely related to this area, we divide subsidy into three categories, respectively, education, agriculture and others. Finally, we find loan subsidy is efficient and effective in some country’s certain industry, but others are not.

Introduction

Loan subsidy is popular among the world from last century in order to support the development of certain industry, while as for the definition of loan subsidy, different authors may have different understanding, in this paper, we give the term a narrow definition, loan subsidy means the government provide certain subsidy for the banks or guarantee companies for their loan loss lent to some government appointing industries.

There are two aims to write this review, on the one hand we want to learn different countries’ development experience in this area so that to put forward some suggestion for our country’s development in this area, on the other hand we would like to provide some convenience for future researchers in this area.

According to the references we search widely related to this area, we find rarely papers sets up a decent theoretical model, most of papers pay more attention to test the effect and efficiency of this policy, therefore, in our paper we mainly introduce the effect and efficiency of this policy in different industries from countries to countries in chronological order. In addition, we find most papers focus their time and energy on education and agriculture subsidy, so for better understanding this area and our paper in an organized way, we divide subsidy into three categories, respective, education, agriculture and others. In the following section of this paper we will introduce these categories respectively.
Agricultural Industry

Yaron Jacob and Benjamin McDonald (1998)[1] point out according to the research of the Village Bank System of Bank Rakyat Indonesia financial services can be extended to millions of low-income rural clients without relying on government subsidies. Daly Anne and Fane George (2002)[2] found the introduction of the 'social safety net' raised anti-poverty spending to 1.4% of GDP in 1998/99 and changed its main focus from job creation schemes, financed mainly by loans and grants to small firms and community groups, to in-kind subsidies for rice, public health care, scholarships for children in poor families and grants to schools in poor areas and their conclusion was the education and health care programs were the most successful, and doubt that the rice subsidy, job creation and loans schemes were worthwhile. Dorward Andrew and Fan Shenggen (2004)[3] discuss how to reduce the rate of poverty, according to their investigation they found that it had obvious importance of agricultural growth for poverty reduction in poor rural areas, while also pointing to the need for complementary non-farm sector growth. Sisodia, N. S. and Rao, M. B. N (2005)[4] discuss rural finance in India around the following three aspects: a) the legacy of the banking system, b) the limitations of microfinance, and c) an assessment of the potential. The first aspect is closely connected to interest subsidies, and interfering with the commercial aspects of banking. Fan Shenggen and Gulati Ashok (2008)[5] review the trends in government subsidies and investments in and for Indian agriculture; develops a conceptual framework and a model to assess the impact of various subsidies and investments on agricultural growth and poverty reduction; and presents reform options with regard to re-prioritizing government spending. Rong-Gang Cong and Brady Mark (2012) [6] appraise current agricultural subsidy policy in the EU. They find it is inefficient for supporting farmers' incomes or guaranteeing food security, and irrational transfer payments decoupled from actual performance that may be negative for environmental protection, social cohesion, etc. Spiegel Samuel (2012)[7] combines a review of the importance of artisanal mining to the livelihoods of poor and vulnerable rural populations in Africa with critical reflections on the scope for supporting such livelihoods through microfinance services. The study examines constraints in accessing formal and informal financial services and argues for a more flexible, context-specific and goal-oriented institutional approach to supporting mineworkers. Davis John and Caskie Paul (2013) [8] examine the efficacy of incentives for new entrants to farming as an alternative to early retirement schemes for farmers. They find a more positive potential impact from these schemes, particularly the option of an interest rate subsidy on farm development loans. This is attributed to the dynamic effects of the farm investments associated with such schemes, a likely reflection of the long-term effects of differences in age related lifecycle goals. Younger farmers have a longer planning horizon and tend to invest more heavily in business growth than comparable older age groups.

Educational Industry

Jiangguo Wei and Rong Wang (2009) [9] compare the main features of the existing four types of student loan schemes. In particular, the providers of principal loan, borrower eligibility, loan size, loan origination, interest subsidy, risk-sharing, repayment conditions and loan collection are examined. Chapman Bruce and Lounkaew Kiatanantha (2010)[10] point Government student loan schemes typically have implicit interest rate subsidies which, while these are a cost to taxpayers, they have the benefit of diminishing repayment burdens for
graduates. The aim of this paper is to illustrate the extent of both interest rate subsidies and repayment burdens with respect to Thailand's Student Loans Fund (SLF), using methods pioneered in measurement terms by their conclusion is for graduates with very low income the burdens can be high. R. Scott (2011)[11] reports on the passage of the Budget Control Act of 2011 by President Barack Obama which has ended an incentive program for all students who make on-time loan payments in the U.S. The law will no longer subsidize the interest on student loans for graduate and professional students who are still in school. Higgins Tim and Sinning Mathias (2013) [12] study the importance of dynamic earnings modeling for the design of income contingent student loans (ICLs). Then they use Australian data to compare their simulated debt repayments to actual repayments under the Australian Higher Education Contribution Scheme (HECS). Their findings reveal that the complexity of earnings modeling has considerable implications for the calculation of loan subsidies. Johnston Alison and Barr Nicholas (2013) [13] consider lessons for other countries about the design of student loans with income-contingent repayments (i.e. repayments calculated as x percent of each borrower's subsequent income). Using a dataset of 20,000 simulated lifetime graduate earnings paths, they estimate the cost and distributional effects of reforms in England in 2012. They conclude with discussion of policy changes to offset the increased cost of student loans (roughly £4,400 per graduate) within the current austerity climate, namely significant reductions in the higher education block teaching grant and a cap on the number of students. Borck Rainald and Wimberson Martin (2014)[14] study voting over higher education finance in an economy with risk averse households who are heterogeneous in income. They compare four different systems and analyze voters’ preferences among them: a traditional subsidy scheme, a pure loan scheme, income contingent loans and graduate taxes.

Other Industry

Gold Ronald (1966) [15] presents a case study of plant loan subsidies as given by communities in Pennsylvania. Dunkelberg William C and Smiley Robert H (1975) [16] deals with the measurement of subsidies in the use of consumer retail revolving credit under current legal and institutional arrangements. Lurie Irene (1982)[17] reports that the U.S. government has provided a wide variety of subsidies to stimulate aggregate output, redistribute income, and encourage certain types of activity. Carmichael Calum M (1987)[18] examines how the sequence of firm and government actions can explain the origin of export credit subsidies and can affect the welfare consequences of international agreements using a two-stage Bertrand duopoly model. Melitz Jacques and Messerlin Patrick (1987)[19] investigate whether there is a valid macroeconomic case for export credit subsidies and find that temporary measures can be useful in reducing the recessionary costs of a disinflationary program by permitting a larger appreciation of the exchange rate during the initial stages of the program. They also present detailed evidence on the impact across different industries of export credits in France. Gale William G. (1991)[20] presents numerical estimates of the effects of federal lending. Existing credit subsidies appear to have important effects on the allocation of credit, but little effect on aggregate investment. Innes Robert (1991)[21] examines private investment choices and government credit policy in entrepreneurial financial markets and social welfare increase through subsidized debt contracts and outcomes of common credit subsidy policies in a competitive capital market. Corder J. Kevin (1998)[22] examines the quarterly distribution of Small Business Administration (SBA) credit subsidies across several industries in the United
States to test the link between loan guarantee activity and economic and political variables. Torregrosa David (2001)[23] focuses on the credit subsidy reestimates for the period 1993 to 1999 in the United States. Wenli Li (2002)[24] examines the effects of government credit subsidies on the allocation of credit to targeted entrepreneurs in the U.S. Craig Ben R. and Thomson James B (2003)[25] examine whether credit subsidy to community banks and thrifts will increase the amount of small-business loans made by community banks, they estimate static and dynamic models of small-business lending by community banks. The data reject the hypothesis. Hegedüüs József and Rogozhina Natalia (2004)[26] presents a detailed examination of the impact of two types of subsidy schemes—mortgage interest rate write-downs, both universal and income-targeted, and income-targeted down-payment subsidies—on the housing purchase capacity and the potential demand for mortgage loan volume in two very diverse markets: Budapest and Moscow. Chang Pao-Long and Chen Kwo-Liang (2004)[27] investigate the industrial supporting scheme and find the impact of government subsidies (interest-free loans and grants) did not have a direct effect on large-sized enterprises, but had a direct effect on small and medium enterprises (SMEs). Andersson Roland (2005)[28] evaluates the efficiency of Swedish regional policy and finds subsidies to companies in problematic regions have uncertain or even negative effects. The government could therefore eliminate these subsidies and replace them with venture capital loans. Hung-Jen Wang and Ching-Cheng Chang (2008)[29] investigate government-subsidised credit effects on participating financial institutions’ performance in terms of cost efficiency. Zelenika-Zovko I and Pearce J.M (2011)[30] compares current subsidization of the nuclear industry with providing equivalent support to manufacturing photovoltaic modules and they find not only does the indirect insurance liability subsidy play a significant factor for nuclear industry, but also how the transfer of such an indirect subsidy from the nuclear to photovoltaic industry would result in more energy over the life cycle of the technologies. Quentier Jean-Michel (2012)[31] finds start-up subsidies in the form of loans instead of grants might be a better solution to increase self-selection among founders and reduce the financial restrictions so that the quality of start-ups from unemployment will be enhanced. Gonzalez Asa O and Karali Berna (2012)[32] find government's role in providing credit subsidies has harmed the long-run development of renewable energy.

Conclusion

This article is a review of loan subsidy and briefly introduces the developmental state of loan subsidy in different industries and countries. According to the references we search widely related to this area, we find loan subsidy is efficient and effective in some country’s certain industry, but others are not. Why the same policy is efficient and effective to some industry in certain country while not in others? According to our clear and careful observation, maybe it is closely related to culture, mechanism, region and so on. Therefore on the one hand we should actively learn other countries’ experience in policy formulation, on the other hand, apart from on that basic experience, we should fully recognize our own features and characteristics so that to make a efficient and effective loan subsidy policy for ourselves.

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References


