

学校编码：10384

学号：15520090153404

廈門大學

博士学位论文

财政政策的经济效应：基于动态随机一般均衡模
型的模拟研究

The Economic Effects of Fiscal Policy:
Based on the Simulation of DSGE Model

张扬

指导教师：张铭洪

专业名称：公共经济学

答辩日期：2012年6月

厦门大学学位论文原创性声明

本人呈交的学位论文是本人在导师指导下，独立完成的研究成果。本人在论文写作中参考其他个人或集体已经发表的研究成果，均在文中以适当方式明确标明，并符合法律规范和《厦门大学研究生学术活动规范(试行)》。

另外，该学位论文为()课题(组)的研究成果，获得()课题(组)经费或实验室的资助，在()实验室完成。(请在以上括号内填写课题或课题组负责人或实验室名称，未有此项声明内容的，可以不作特别声明。)

声明人(签名)：

年 月 日

厦门大学学位论文著作权使用声明

本人同意厦门大学根据《中华人民共和国学位条例暂行实施办法》等规定保留和使用此学位论文，并向主管部门或其指定机构送交学位论文(包括纸质版和电子版)，允许学位论文进入厦门大学图书馆及其数据库被查阅、借阅。本人同意厦门大学将学位论文加入全国博士、硕士学位论文共建单位数据库进行检索，将学位论文的标题和摘要汇编出版，采用影印、缩印或者其它方式合理复制学位论文。

本学位论文属于：

()1. 经厦门大学保密委员会审查核定的保密学位论文，于
年 月 日解密，解密后适用上述授权。

()2. 不保密，适用上述授权。

(请在以上相应括号内打“√”或填上相应内容。保密学位论文应是已经厦门大学保密委员会审定过的学位论文，未经厦门大学保密委员会审定的学位论文均为公开学位论文。此声明栏不填写的，默认为公开学位论文，均适用上述授权。)

声明人(签名)：

年 月 日

摘要

始于2007年的金融危机重创了世界经济。为摆脱经济衰退的风险，世界各主要国家纷纷推出了一揽子的财政刺激计划。我国政府也相应推出了四万亿的投资计划。但这一系列刺激性财政政策的真实经济效应如何却有待评估。

本文基于动态随机一般均衡的分析框架，通过建立一个包含家庭、厂商、企业家、银行以及货币政策和财政政策实施部门在内的动态随机一般均衡模型，对财政政策的经济效应进行评估。在理论模型设定的前提下，本文利用中国的数据对模型参数进行了校准及贝叶斯估计。同时，在对模型进行评估的基础上，结合校准及被估计参数对财政支出、消费税、工资税和利息税等财政政策工具的经济效应进行模拟分析。

研究表明：财政支出的冲击对产出、投资和就业等经济变量有较为显著的正面影响。但各种税收的经济效应较小，尤其是利息税对大多数经济变量的影响极小。

方差分解的结果说明了财政政策各冲击对经济变量的长期波动并无明显的解释作用。同时，对比财政支出冲击与货币政策冲击发现：财政支出冲击对总产出、通货膨胀等变量的影响无论在大小程度还是在持续性方面都明显强于货币政策冲击，而货币政策冲击对消费、投资、实际工资等变量的动态影响要强于财政政策冲击。

在上述模拟分析结论的基础上，本文认为：扩张性财政支出在应对金融危机和外部需求不足有重要作用。但考虑到财政支出冲击可能导致通货膨胀较大幅度地正向偏离稳态，因而财政刺激政策的实施有赖于对未来经济走势的审慎把握，与此同时，财政政策的实施还应与货币政策相互协调。

关键词：一般均衡；财政政策；贝叶斯估计

Abstract

The financial crisis which began in the 2007 hit the world economy. To get rid of the risk of a recession, the world's major countries have introduced lots of packages of fiscal stimulus plans. The Chinese government also introduced a four trillion investment plan. But the real economic effects of stimulative fiscal policy has to be assessed.

This article is based on the dynamic stochastic general equilibrium analytical framework. To assess the economic effects of fiscal policy, We build a DSGE (dynamic stochastic general equilibrium) model that contains the household, manufacturers, entrepreneurs, banks, fiscal policy authorities and Monetary authorities. Under the premise set in the theoretical model, we conduct calibration and bayesian estimation by using Chinese economic data. Meanwhile, The assessed model which is combined with the calibration and the estimated parameters was used to simulate and analyze the economic effects of the government expenditure, the consumption tax, the payroll tax and the interest tax .

The results show that: the fiscal spending has more significant positive impact on economic variables such as output, investment and employment. The tax has a smaller economic effects. Especially, the interest tax has minimal impact on most of economic variables. The variance decomposition results also indicate that there is no obvious explanatory power for the role of fiscal policy impact on long-term fluctuations in economic variables. Compared to the monetary policy shocks, The fiscal policy shocks has a greater impact on GDP and inflation. At the same time, The monetary policy shocks has a greater impact on consumption investment and real wage than fiscal policy shocks.

According to the result of simulation analysis, we believe that: Expansionary fiscal spending plays an important role in the response to financial crisis and lack of

external demand. But taking into account the impact of fiscal spending could lead to inflation, a relatively large positive deviation from the steady-state. The implementation of fiscal stimulus policy depends on the carefully consideration of the future economic trends. There should be a reasonable coordination of fiscal policy and monetary policy

Keywords: General equilibrium; fiscal policy; Bayesian estimation

厦门大学博硕士论文摘要库

参考资料

- [1] Chamley, C. P., Optimal Taxation of Capital Income in General Equilibrium with Infinite lives, *Econometrica*, 1986, 54(3):607-622.
- [2] Landau, Daniel, Government Expenditure and Economic Growth: A Cross-country Study [J], *Southern Economic Journal*, 1983, 49:783-792.
- [3] Kormendi, R. P. Meguire, Macroeconomic Determinants of Growth: Cross-country Evidence, *Journal of Monetary Economics*, 1985(16):141-164.
- [4] Barro, Robert J. , Government Spending in a Simple Model of Endogenous Growth[J], *Journal of Political Economy*, 1990, 98(5):103-126.
- [5] Aschauer, David, Is Public Expenditure Productive, *Journal of Monetary Economics* [J], 1989, 23(2):177-220.
- [6] Munnell, Alicia H., How Does Public Infrastructure Affect Regional Economic Performance, *New England Economic Review*, 1990, 11-33.
- [7] Rater J. B., Government Capital and Production Function for U.S. Private Output [J], *Economics*, 1993(32):484-512.
- [8] William Easterly, Sergio Rebelo, Fiscal Policy and Economic Growth: An Empirical Investigation [J], *Journal of Monetary Economics*, 1993, 32:417-458.
- [9] Miller, S. , Russek, F., Fiscal Structures and Economic Growth: International Evidence, Mimeo, University of Connecticut, 1993.
- [10] 藤田晴, 财政政策的理论[M], 劲草书房, 1996.
- [11] Devarajan, S., V. Swaroop, Heng-fu zou, The Composition of Public Expenditure and Economic Growth[J], *Journal of Monetary Economics* , 1996, 37(3):313-344.
- [12] Todd A. Knoop, Growth, Welfare, And the size of Government [J], *Economic Inquiry*, 1999, 37:103-118.
- [13] Bose Niloy, M. E. Haque, D. R. Osborn, Public Expenditure and Economic Growth: A Disaggregated Analysis for Developing Countries[J], *Centre for Growth and Business Cycle Research Discussion Paper Series*, University of Manchester, 2003.
- [14] Ramirez, M.D. , N. Nazmi, Public Investment and Economic Growth in Latin America: an empirical test, *Review of Development Economics*, 2003, 71(1):115-126.
- [15] Mahdavi Saeid, Shifts in The Composition of Government Spending in Response to External Debt Burden[J], *World Development*, 2004, 32(7):1139-1157.
- [16] Gupta S. , B. Clements, E. Baldacci, C. Mulas-Granados, Fiscal Policy, Expenditure composition and Growth in Low-income Countries, *Journal of International Money and Finance*, 2005, 24:441-463.
- [17] 庄子银, 邹薇, 公共支出能否促进经济增长: 中国的经验分析[J], *管理世界*, 2003(7) : 4-12.
- [18] 廖楚晖, 中国人力资本和物质资本的结构及政府教育投入[J], *中国社会科学*, 2006(1) : 23-33.
- [19] 郭庆旺, 贾俊雪, 政府公共资本投资的长期经济增长效应[J], *经济研究*, 2006(7) : 29-40.
- [20] Plosser C. I., Fiscal Policy and The Term Structure[J], *Journal of Monetary Economics*, 1987, 15(1):1-11.
- [21] Hoelscher V. , Theory and History Behind Business Cycle: Are the 1990s the Onset of a Golden Age[N], Working paper, 1991.
- [22] Swamy P. A., What Do Regressions of Interest Rates on Deficits Imply?[J], *Southern Economic Journal*, 1990(8):32-34.
- [23] Tanzi V. , Lutz M., Interest Rates and Government Debt: Are the Linkages Global Rather Than National?[J], *IMB Working Paper*, 1991(6).
- [24] Thorbecke Willem, Why Deficit News Affect Interest Rates [J], *Journal of Policy Modeling*, 1993, 15(1):1-11.
- [25] Robert J. Barro, Government Spending, Interest Rates, Prices, and Budget Deficits in The United Kingdom, 1701-1918[J], *NBER Working Paper*, 2005.

- [26] Aschauer D. A., Fiscal Policy and Aggregate Demand[J], *The American Economic Review*, 1985(75):117-127.
- [27] Kormendi, R. C. , Government Debt, Government Spending, and Private Sector Behavior[J], *American Economic Review*, 1983(73):994-1010.
- [28] Amano, R. A. , Wirjanto T. S., Intertemporal Substitution and Government Spending, *Review of Economics and Statistics*, 1997:605-609.
- [29] Tsung-wu Ho, The Government Spending and Private Consumption: a Panel Integration Analysis [J], *International Review of Economics and Finance*, 2001(95):108-124.
- [30] 曾令华,近年来的财政扩张是否具有挤出效应[J], *经济研究*, 2000(3) : 65-70.
- [31] 谢建国、陈漓高,政府支出与居民消费——一个基于跨期替代模型的中国经验分析[J], *经济科学*, 2002(6) : 5-12.
- [32] 孟祥仲,我国扩张性财政政策中的挤出效应问题[J], *山东经济*, 2003(11):29-30.
- [33] 石柱鲜、刘俊生、吴泰岳,我国政府支出对居民消费的挤出效应[J], *学习与探索*, 2005(6) : 249-252.
- [34] 王宏利,中国政府支出调控对居民消费的影响[J], *世界经济*, 2006(10) : 30-38.
- [35] Devereux M. B., Head A. C., Lapham B. J., Monopolistic Competition, Increasing Return, and Government Spending[J], *Journal of Money: Credit and Banking*, 1996(28) : 233-254.
- [36] Karras G. , Government Spending and Private Consumption: Some International Evidence, *Journal of Money, Credit and Banking*, 1994(26):9-22.
- [37] Gali, Lopez-Salido, Valles, Understanding the Effects of Government Spending on Consumption[J], *International Finance Discussion Paper*, 2004, NO. 805.
- [38] 刘溶沧、马拴友,赤字、国债与经济增长关系的实证分析——兼评积极财政政策是否具有挤出效应[J], *经济研究*, 2001(2) : 13-28.
- [39] 胡书东,中国财政支出和民间消费需求之间的关系[J], *中国社会科学*, 2002(6) : 26-32.
- [40] 刘宛晨,袁闯,我国财政支出的消费传导效应分析[J], *消费经济*, 2006(4) : 75-77.
- [41] 李广众,政府支出与居民消费:替代还是互补[J], *世界经济*, 2005(5) : 38-45.
- [42] 李永友、丛树海,居民消费与中国财政政策的有效性:基于居民最优消费决策行为的经验分析[J], 2006(5) : 54-64.
- [43] 张治觉、吴定玉,我国政府支出对居民消费产生引致还是挤出效应[J], *数量经济技术经济研究*, 2007(5) : 53-61.
- [44] 严成樑、龚六堂,我国税收的经济增长效应与社会福利损失分析[J], *经济科学*, 2010(2) : 69-79.
- [45] Helms, L., The Effect of State and Local Taxes On Economic Growth: A Time Series-Cross Section Approach[J], *The Review of Economic and Statistics*, 1985, 67(3):574-582.
- [46] Skinner, Jonathan, Taxation and Output Growth: Evidence from African Countries[J], *NBER Working Paper*, 1987.
- [47] Se-jik Kim, Growth Effect Of Taxes In An Endogenous Growth Model: To What Extent Do Taxes Affect Economic Growth?[J] *Journal of Economic Dynamics*, 1998(23):125-139.
- [48] Mofidi Alaeddin, Joe A. Stone, Do State and Local Taxes Affect Economic Growth? [J] *The Review of Economic and Statistics*, 1990, 72(4):686-691.
- [49] Lehmuusaari Deregulation and Consumption-Saving Dynamics In The Nordic Countries[R], *MF Staff Papers*, 1990(37) : 71-93.
- [50] Burgess Robin, Stern Nicholas, Taxation And Development[J], *Journal Of Economic Literature*, 1993, 31(2):762-830.
- [51] Zee H., Empirics of Cross-country Tax Revenue Comparisons[J], *World Development*, 1996(24):1659-1671.
- [52] Gober Jeral R. , Jane O. Burns , The Relationship Between Tax Structures and Economic Indicators[J], *Journal of International Accounting*, 1997, 6(1):1-24.
- [53] Mendoza, E., G. Milesi-Ferretti, P. Asea, On the Effectiveness of Tax Policy in an Altering Long-run Growth: Harberger ' s superneutrality Conjecture[J], *Journal of Public Economics*, 1997, 66(1):99-126.

- [54] Kneller Richard, Michael F. , Bleaney and Norman Gemmell, Fiscal Policy and Growth: Evidence From OECD Countries[J], Journal of Public Economics,1999,74:171-190.
- [55] Turnovsky, S. , Fiscal Policy, Elastic Labor Supply, and Endogenous Growth, Journal of Monetary Economics, 2000(45):185-210.
- [56] Widmalm Frida, Tax Structure and Growth: Are Some Taxes Better Than Others?[J]Public Choice,2001,107:199-219.
- [57] Zagler Martin, Dumecker Georg, Fiscal Policy And Economic Growth[J],Journal of Economic Surveys,2003,17(3):397-418.
- [58] Lee Young, R. H. Gordon, Tax Structure and Economic Growth[J],Journal of Public Economics,2005(89):1027-1043.
- [59] Guvenen Faith, Burhanettin Kuruscu, Serdar Ozkan, Taxation of Human Capital and Wage Inequality[J],NBER Working Paper,2009.
- [60] 刘溶沧、马拴友,论税收与经济增长——对中国劳动、资本和消费征税的效应分析[J],中国社会科学,2002(1) : 67-76.
- [61] 范广军,我国税收结构与经济增长的相关性分析[J],经济师,2004(2) : 213-260.
- [62] 王亮,我国流转税与所得税最优比例关系的实证分析[J],财贸研究,2004(5) : 118-126.
- [63] 李绍荣、耿莹,中国的税收结构、经济增长与收入分配[J],经济研究,2005(5) : 118-125.
- [64] 苑小丰,中国税收对经济增长的而影响——基于规模和结构视角[J]社会科学家,2009(4) : 67-74.
- [65] 严成樑、龚六堂,财政支出、税收与长期经济增长[J],经济研究,2009(6) : 4-51.
- [66] 何其春,税收、收入不平等和内生经济增长[J],经济研究,2012(2) : 4-14.
- [67] 安体富、林鲁宁,宏观税负实证分析与税收政策取向[J],经济理论与经济管理,2002(5) : 26-31.
- [68] 宋效中、赵利民,宏观税负与中国经济增长[J],探索,2005(3) : 100-104.
- [69] 刘军,我国税制结构、税收负担与经济增长的实证分析[J],财政研究,2006(2) : 59-62.
- [70] 武利华,我国地区税负差异的实证研究[J],财经研究,2000(10) : 40-46.
- [71] 郭庆旺、吕冰洋,税收增长对经济增长的负面冲击[J],经济理论与经济管理,2004(8):18-23.
- [72] 李永友、丛树海,我国地区税负差异与地区经济差异——一个横截面时间序列方法[J],财经问题研究,2005(9) : 78-86.
- [73] McGrattan, E. R., The Macroeconomic Effects of Distortionary Taxation[J],Journal of Monetary Economics,1994,33:573-601.
- [74] Jonsson, G., Klein, P. , Stochastic Fiscal Policy and The Swedish Business Cycle[J],Journal of Monetary Economics,1996,38:245-268.
- [75] Ambler, S., Paquet A., Fiscal Spending Shocking, Endogenous Government Spending, And Real Business Cycles[J], Journal of Economic Dynamics and Control,1996,20:237-256.
- [76] McGrattan, E. R., Rogerson R., Wright R., An Equilibrium Model of The Real Business Cycle With Household Production and Fiscal Policy[J], International Economic Review,1997,28(2):267-290.
- [77] Baxter M. , King R. G. , Fiscal Policy In General Equilibrium[J],American Economic Review,1993(83):315-334.
- [78] Gali J., Lopez-Salido J. D. , Valles J. , Understanding The Effects of Government Spending On Consumption[J], Journal of The European Economic Association,2007(5):227-270.
- [79] Linnemann L. , The Effect Of Government Spending on Private Consumption: A Puzzle?[J],Journal of Money,2006(38):1715-1736.
- [80] Edelberg W. , Eichenbaum M. ,Fisher J. , Understanding The Effect Of Shocks To Government Purchase[J], Review of Economic Dynamics,1999(2):166-206.
- [81] Burnside C., Eichenbaum M. , Fisher J. D.M. ,Fiscal Shocks And Their Consequences[J], Journal of Economic Theory,2004,115(1):89-117.
- [82] Lundvigson S. , The Macroeconomic Effects of Government Debt In A Stochastic Growth Model[J], Journal of Monetary Economics,1996(38):25-45.
- [83] Linnemann L.,Schabert A., Fiscal Policy In The New Neoclassical Synthesis[J],Journal of Money, Credit

and Banking,2006(38):1715-1736.

[84] Susan Yang, Quantifying Tax Effects Under Policy Foresight[J], Journal of Monetary Economics,2005(52):1557-1568.

[85] 李丽辉,2009 : 积极财政政策力挺中国经济,国务院新闻办公室网站www.scio.gov.cn,2010.

[86] 王丙乾,中国财政60年回顾与思考[M],中国财政经济出版社,2009:736-752.

[87] 古炳鸿、李红岗、叶欢,我国城乡居民边际消费倾向变化及政策含义[J],金融研究,2009(3)

[88] Finn E. Kydland, Edward C. Prescott., Time to Build and Aggregate Fluctuations [J]Econometrica, 1982(50),1345-1370.

[89] Dixit A.K., and Stiglitz J.E., Monopolistic Competition and Optimum Product Diversity[J] American Economic Review, Vol.67(3),1977

[90] Olivier Jean Blanchard and Charles M. Kahn, The Solution of Linear Difference Models under Rational Expectations [J]Econometrica, Vol. 48, No. 5 (Jul., 1980), pp. 1305-1311

[91] Fernandez-Villaverde, Jesus. 2010. " Measuring the Effects of Fiscal Policy in a Model With Financial Frictions. " Unpublished.

[92] Calvo, G. A. Staggered Prices in a Utility-Maximizing Framework. [J]Journal of Monetary Economics, 12(3), 1983,pp.383-398.

[93] Bernanke, B., Gertler, M., Simon, G.. The Financial Accelerator and the Flight to Quality.[J] Review of Economics and Statistics, (1996) 78(1), 1-15.

[94] 刘怡、聂海峰,中国工薪所得税有效税率研究[J]中国社会科学,2005(6)

[95] 刘初旺,我国消费、劳动和资本有效税率估计及其国际比较[J]财经论丛, 2004(4) 9-16.

[96] 李芝倩,资本、劳动收入、消费支出的有效税率测[J]税务研究, 2006(4)

[97] 龚六堂、谢丹阳,我国省份之间的要素流动和边际生产率的差异分析[J]经济研究,2004(01)

[98] 刘斌,我国 DSGE 模型的开发及在货币政策分析中的应用.[J]金融研究, 2008(10), 1-21.

[99] 孙天琦,储蓄资本化、金融企业和工商企业资本金增加与宏观经济增长[J]金融研究,2008(9):101-115

[100] 李成、马文涛、王彬,通货膨胀预期、货币政策工具选择与宏观经济稳定[J]经济学(季刊),2010 (10) :51-82

[101] 周扬. (2001). 信贷市场结构与中国1996-2000的经济波动. 北京大学硕士研究生学位论文.

[102] Christiano, L. J., Motto, R., Rostagno, M. (2007a). Financial Factors in Business Cycles. Unpublished Manuscript, Northwestern University.

[103] 全冰. (2010). 货币、利率与资产价格——基于DSGE模型的分析 and 预测. 北京大学硕士研究生学位论文

[104] Smets, F., Wouters, R, Shocks and Frictions in Us Business Cycles: A Bayesian DSGE Approach. [J]American Economic Review, 2007(97).3, 586-606.

[105] 崔光灿,资产价格、金融加速器与经济稳定[J]世界经济,2006 (11) :59-69

[106] Smets, F., Wouters, R. (2003). An Estimated Dynamic Stochastic General Equilibrium Model of the Euro Area. Journal of the European Economic Association, 1(5), 1123-1175.

Degree papers are in the "[Xiamen University Electronic Theses and Dissertations Database](#)". Full texts are available in the following ways:

1. If your library is a CALIS member libraries, please log on <http://etd.calis.edu.cn/> and submit requests online, or consult the interlibrary loan department in your library.
2. For users of non-CALIS member libraries, please mail to etd@xmu.edu.cn for delivery details.

厦门大学博硕士学位论文摘要库