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公有制宏观经济理论大纲

THE OUTLINE OF MACROECONOMIC THEORY ON PUBLIC OWNERSHIP

樊纲（主笔） 张曙光（副主笔） 杨仲伟 张燕生 袁刚明／著

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建院以来,我院广大科研人员坚持以马克思主义为指导,在中国特色社会主义理论和实践的双重探索中做出了重要贡献,在推进马克思主义理论创新、为建设中国特色社会主义提供智力支持和各学科基础建设方面,推出了大量的研究成果,其中每年完成的专著类成果就有三四百种之多。从现在起,我们经过一定的鉴定、结项、评审程序,逐年从中选出一批通过各类别课题研究工作而完成的具有较高学术水平和一定代表性的著作,编入《中国社会科学院文库》集中出版。我们希望这能够从一个侧面展示我院整体科研状况和学术成就,同时为优秀学术成果的面世创造更好的条件。

《中国社会科学院文库》分设马克思主义研究、文学语言研究、历史考古研究、哲学宗教研究、经济研究、法学社会学研究、国际问题研究七个系列,选收范围包括专著、研究报告集、学术资料、古籍整理、译著、工具书等。

为迎接中国社会科学院建院三十周年,我们将历届院优秀科研成果奖中的部分获奖著作重印出版,作为《中国社会科学院文库》的首批图书向建院三十周年献礼。

中国社会科学院科研局

2006 年 11 月

写作说明

本书是《中国宏观经济问题研究》课题的研究成果之一。该课题是国家社会科学“七五”规划重点项目，由中国社会科学院副院长刘国光主持。下分三个子课题小组，参加的主要是中国社会科学院经济研究所的部分研究人员。本书子课题小组的研究活动由杨仲伟负责组织。在前期研究的基础上，本书写作前后历时一年多。对于我们的理论探索，刘国光同志给予了很大的关注，但书中一切可能出现的观点错误，自当完全由笔者自己负责。

本书合作写作的方式是：在我提出主题和大纲的基础上，经集体讨论，形成详细写作提纲，然后由大家分工起草各章初稿，由我在此基础上改写或修改，其后又经过一次集体讨论，再由我和张曙光对一些章节进行修改或改写（有的章节前后修改或改写过2—3次），最后由我统一改定。书中包含着大量的集体智慧，而作为主笔，我要对一切可能存在的理论和观点的错误，负主要的责任。

作为副主笔，张曙光在本书理论思想和概念的形成、结构的设计和对书稿的加工、修改过程中，倾注了大量心血，作出了重要的贡献。

杨仲伟在本书写作提纲的形成过程中作出了重要贡献。

初稿起草的分工情况是，樊纲，导论、第一、二、八、九、十八、十九、二十四、二十六、二十七章；张曙光，第四、五、六、七、十一、十二、十三、十四、二十二、二十三章；杨仲伟，第三、二十一、二十五章；张燕生，第十、十五、二十章；袁刚明，第十六、十七章。

最后，我们要感谢王燕坊、卢卫华、王晓跃等在文稿的打字、整理方面所做的耐心、细致的工作。

樊　纲

1990年2月24日

序

这本《公有制宏观经济理论大纲》，是中国社会科学院樊纲、张曙光、杨仲伟等五位中青年学者独立思考、潜心钻研的成果。作者提出了一些新的概念和假说，试图为分析公有制宏观经济运行过程，构造一个新的理论框架。尽管这一理论构造不尽成熟和完善，但它毕竟体现了这几位中青年学者勇于探索、勇于创新的精神。既然是理论探索，就不仅会有新的发现，也难免会出现这样那样的失误和偏差。该书的功过成败及其对经济问题的解释能力和应用价值，都需要经过科学的批判和实践的检验，也请读者作出自己的分析和评判。

《公有制宏观经济理论大纲》是国家社会科学“七五”规划重点项目《中国宏观经济问题研究》课题的三项成果之一。其他两项成果是:《体制变革中的经济稳定增长》(由中国计划出版社出版),《不宽松的现实和宽松的实现》(将由上海人民出版社出版)。三项成果的总的研究对象相同，都是宏观经济问题，但具体分析角度各有侧重。《体制变革中的经济稳定增长》一书以体制变革中的经济稳定增长为主题，分析了经济不稳定和低效增长的体制原因和政策原因，提出了改革协调和政策配套相结合的一系列政策主张。《不宽松的现实和宽松的实现》一书则着重考察了双重体制阶段中国宏观经济的运行及实现持续稳定协调发展的政策设计和选择。这两本书在分析方法上都是既有实证分析，又有政策研究。而《公有制宏观经济理论大纲》则侧重于宏观经济基本理论问题的研究，采用逻辑实证的分析方法，说明公有制宏观经济本身是如何运行的，各种宏观经济变量是怎样决定的。三项成果的理论观点在许多地方并不一致，这体现了百家争鸣的精神。它对进一步推动学术探讨的深入是有益的。

目前，我国的经济实践和经济理论都处在一个重要的发展时期，宏观经济理论研究也开始呈现出活跃的局面。在马克思主义的指导下，大胆进行理论创新，努力开拓新的研究领域，创造出既能解释中国经济现实，又能应用于中国经济改革与发展的新的宏观经济理论，丰富马克思主义的经济科学，是我国广大经济理论工作者的共同责任。借本书出版之际，我祝愿我国经济学界能有更多更好的新作问世。

刘国光

1990 年 5 月 10 日

ABSTRACT

This book represents a new effort in building a theoretical framework for the positive and coherent analysis of macroeconomic phenomena of the Public Ownership Economy (*POE*) , which composes the major sector of the socialist economy.

Part Ⅰ Setup of the Model: Public Ownership Economy

The analyses of determination of aggregate variables and their relations of these variables are based on the carefully chosen special assumptions about behavioral patterns of all economic agents in the specific institutional arrangements, for either the book as a whole or any of its particular parts.

Basic Relations of POE. Distinctive from the private ownership which is basically defined by a set of *external* relations, the public ownership must first be defined by a set of *internal* relations. It is these internal relations that constitute the basic assumptions on which the model employed in this book is built. They are: (1) The equal and undifferentiated "custody" or "possession" rights of all or each piece of the means of production (non-labor factors of production or material *productive assets*, such as capital goods and natural resources) for all individuals who compose the economy; (2) Equal shares of non-labor income for all individuals, while any income differences are or are supposed to be attributed to and only to the labor contributions; (3) Sharing, by the whole economy, the

loss or risk of capital used in any single production unit; (4) Institutionally endowed right for all the owners to work or to be "employed".

The main form of POE studied in this book is "whole-people ownership" (vs. "collective ownership") and an analytic model is built under the assumption of "pure POE" in which all material productive assets are owned by whole people and no other forms of ownership exist.

The Fundamental Contradiction of Public-ownership. In the POE, every individual (or sub-group of individuals) is an owner and has the property rights—the "public" consists of individuals and if no one of individuals were the owner then there would have existed no public ownership; but meanwhile, every individual is not the owner and has no property right—everyone is not in the position to claim his exclusive possession of all or any piece of productive assets and has no legal rights to use (or do anything on) them on his own and for his own interests. It is that every individual *is* and at the same time *is not* the owner that constitutes the fundamental contradiction of the public-ownership. And it is this fundamental contradiction that underlies the causes of all economic phenomena in the POE.

The Agent of Public-ownership. As the consequence of the fundamental contradiction of property right, it is required (consciously or not) that there exists some kind of social agency to serve as the unique representative of the public ownership and to exercise unitively the functions of owner on behalf of all undifferentiated owners. Whatever it is named—theoretically, it is termed as "the Agent of Public-ownership" in the theory—and however it comes into being (by election or by somebody's self-nomination), the logical necessity of the existence of such an agency lies in the basic needs of the POE to maintain efficient operation and reduce the costs of coordination of the public in the decision-making processes over matters concerning the property rights. When the agent of public-ownership unitively taking care of all individuals' property rights, however, the individuals, as the individual, in the economy now do not function as the owner, but only as worker, manager, or consumer. That is, from the viewpoint of economic functions, only the agent of public-ownership is in the position of owner and all individuals are in the non-owner position. Then the fundamental contradiction of property right of public-ownership manifests itself in the *contradiction of public-ownership Economy* that the public performs the non-owner functions in the public-ownership economy.

In the reality, the economic functions of the agent of public-ownership in a whole-people ownership economy are naturally carried out by the State. Since it is also a "political machine", the State in the model is divided into two distinctive agents accroding to the different economic functions: the "government" and the "social planner" ("planner" in short) which is an equivalent for the agent of public-ownership though stressing more on managerial functions instead of on the "rights". In a simple way, the relations among these concepts can be written as: *The Agent of Public ownership = Planner = The State-Government.*

Planner's Objective and Economic Functions. As the representative of the public without his own interests, the planner's objective function cannot but identify the social welfare function (from the viewpoint of economic interests, the planner is no more than the embodiment of the social welfare in the model). In maximizing social welfare, the planner performs the following functions: (1) Protecting the public properties; (2) Selecting and appointing managers at various levels to utilize the productive assets efficiently; (3) Making social production plans to allocate properly the productive resources to meet various demands; (4) Accumulating capital and for this purpose taking part in the distribution of national income; (5) Maintaining full employment of labor force. In fact, it is these functions that verifies our identification of the agent of public-ownership with the planner.

Other Kinds of Economic Agents and their objectives. Besides the planner, the economic agents in the POE are:

Government, which is a political body being capable of interfering the economic process according to its special objective function of political interests. And the Government purchases (consumption) counts a component of the aggregate demand (we assume government consumption is given in the book for simplification).

Individuals, who are workers as *taking part in production process* while providing labor factors of production, as well as consumers when spending their income on consumer goods. The individuals' objective is assumed as utility maximization.

Sub-units of the economy, including both *the locals* and *the enterprises*. In the model, the local is an interest group which, *especially in the relation with the (central) planner*, represents the common interests of individuals and enterprises within certain regional segment; and the concept of enterprise stresses more on the functions of a producer which may pursue their special interests through production activities as well as through non-productive activities such as contract bargaining. The objective of sub-units is generalized as maximization of its "net benefits" the contents of which should be specified in specific institutional contexts.

All agents, including the planner, are subject to certain constraints in pursuing their objectives. The *economic constraints* are generalized into two categories: *Budget Constraint* which is defined generally by the limitation of *sources of income*; and *Institutional Constraint* which indicates the "restrictions on actions" set by the specific operational mechanisms given the public ownership. All constraints should be carefully and concretely specified for each agent in the context of special economic mechanisms.

Operational Mechanisms. The operational mechanism of an economy is generally defined as the mode in which economic resources are allocated and the way economic variables, *either real or nominal*, are determined. The economic mechanism is viewed in the book as one of two "coordinate axes" of *economic system*, taking the *ownership* as another. Given the ownership, the economic system varies with the changes of operational mechanism.

With pointing out the weaknesses and inaccuracy of other approaches of classification of operational mechanisms (or systems) *of POE* (such as Planning vs. Market, or Command vs. Market, and Centralized vs. Decentralized), we put more weight on the "*Sovereignty character*" of the mechanism (vs. "decision making character", or "coordination character"), that is, the trait of the economic mechanisms in terms of which kinds of agents in the POE can exert actual influences on resource allocation and play direct roles in the determination of economic variables. Thereby, two types of mechanisms of POE are classified: *Planner's Sovereignty Mechanism*, under which only the planner in a position to determine the resource allocation and economic variables; and *Multi-sovereignty Mechanism*, under which some other agents (government, sub-units, and individuals, but not necessary all of them at the same time) are also able to play direct roles in the determination of economic variables, such as primary income distribution, investment, output level, enterprises' expenditure, etc.

Basic Conflicts of interest. Taking actions under the special institutional arrangements of POE, economic agents are confronting each other in pursuing their own interests and thereby various conflicts of interests take place. The followings are basic conflicts of interests which feature the POE:

(1) The conflict between the planner and individuals over the income distribution between the *public income*, which is collected and controlled by the planner and mainly used for capital accumulation, and *personal income* which is mainly used for consumption;

(2) The conflict among sub-units which all face the "soft budget constraint" while the economy as a whole faces the "hard budget constraint";

(3) The conflict between the managers who are not the owner of the enterprises and the workers who are the "masters" of the enterprises;

(4) The conflict between the personal interests and public interests in economic decision-making processes which are all supposed to be of "public choice", except those concerning merely consumers' expenditures and labor supply.

All of these conflicts of interests outlined above have their roots in the fundamental contradiction of public ownership and will play direct roles in explanation of economic variables and economic phenomena in the POE.

Part Ⅱ Aggregate Demand

This part of the theory describes the special manner the composition and magnitude of aggregate demand (AD) is determined in the POE.

Special Approach: Different from the private economy in which the national income primarily consists of total personal income, the national income in the POE must be distributed into two proportions, i. e. , the public income and personal income. Thereby, while the theory of aggregate demand for private ownership can start directly from the *expenditures of income*, the analysis of aggregate demand for public ownership must start from the *distribution of income*. Furthermore, because of the "soft budget constraint" of the sub-units, the theory of aggregate demand for public ownership should be also based on the analysis of *distribution of the sources of income*.

The income distribution firstly determines the *composition* of aggregate demand since the public income mainly goes to the investment and the personal income mainly goes to the consumption. Secondly, the income distribution determines the *magnitude* of the aggregate demand through the "*monetary augment of nominal income*" which is caused by the conflicts of interests in the income distribution and the distribution of the sources of income.

A "$-45°$ *Line Diagram*" is introduced and extensively used as the basic tool for the analysis of relations among macroeconomic variables.

The Income Illusion Theory of Consumption Demand. Economics assumes that people, either a single person like Robinson Crusoe or the whole people making up the society, chose the *optimal proportion* of saving to consumption, or more general, the proportion of capital accumulation to consumption, by comparison of labor income with expected capital returns, given other factors like "life-cycle" utility functions. This is still effective in principle for the POE in which the decisions about how to allocate the public-owned material assets and the national income are at first the public choice. But in the POE, different agents gets different *perceptions* about what are counted as the "labor income" and what the "capital returns". As the owners, the individuals earn, in some way, capital returns (so-called by some economists the "social dividend") as well as wages. However, all income earned by individuals takes unitary form of "labor income", institutionally because that any individual, as the individual, in the economy dose not function as capital owner or "investor" but only worker or laborer. Thus the capital return actually included in the personal income *is perceived by* *individuals* as labor income as well. We terms this as the "*income illusion*". On the other hand, the planner, who functions as the agent of public-ownership, has no such income illusion since he is in full charge of capital accumulation and knows well, if not over emphasize, how much of the increase of national income should be attributed to the productivity of capital factors.

The different perceptions generate different "parameters" on which the "optimal choices" are made. As the result, the individuals and the planner differ with each other *in opinion* on how to allocate the national income to investment and consumption. We call the preferred (by different agent) proportion of investment to consumption of the national income as the agents' "*desire to accumulate*". With the different perceptions about the sources of income, the individuals' desire to accumulate differs from the planner's in the way the former is lower than the latter.

Given this unavoidable difference, the two agents conflict with each other in the income distribution which will determine the actual allocations of resources. Under the planner's sovereignty mechanism, income distribution is solely decided by the planner according to his preference, i. e., planner's desire to accumulate. Under the multi-sovereignty mechanism, individuals, as the individuals, have no direct decision-making power, but they can exert their influence on the primary income distribution in enterprises by exerting pressures more directly on decision-making bodies to increase "bonus" income which comes from the "retained profits" or the income in kind which is financed by "public funds" and counted as enterprises expenditures. We measure the extent to which the individuals can influence the income distribution as the "*degree of individuals' sovereignty*" under the multi-sovereignty mechanism.

The personal income is the first determinant of the consumption demand. After and only after this determinant has been explained, the prevailing theory of consumption demand comes into effect which explains how individuals decide the expenditures of their income on purchase of consumer goods and personal savings. As far as the personal (voluntary) saving concerned, the "public pension schemes" must be taken into account which is a must in the POE and is significant in explanation of individuals' low "propensity to save".

Planned Investment. The investment demand can be divided into two parts: planned investment by planner (or the State) and "autonomous investment" by sub-units.

The planned investment can be first considered as the investment plan made solely by the planner whose duty, by our definition, is maximizing social welfare. Mainly because of the *incompleteness of information* about economic data (including the information about other agents' behaviors), planner's desire to accumulate can not conform to the true "optimal proportion" of investment to consumption. This leads to errors of investment plans and fluctuations of planned investment as planner dose "trial and error".

Although planner's trial and error can explain the investment fluctuations, it can not explain the *long-wave* divergences of the planned investment from the "optimal investment", the divergences which has been observed in reality. Here the government's preference and roles in the planning process should be taken into account. The government evaluates the economic variables such as growth rate, consumption, or capital accumulation by its special preference scale which involves political and ideological considerations. Therefore, when the government's objective function is different from the planner's, the *central plan* (not "planner's plan"), made with the government's participation (*government's sovereignty*) in the planning process, must diverge from the economically optimal point and the divergences can not be "corrected" by trial and error, since it is not considered as error in terms of government's preference. Then, under *the State's sovereignty mechanism*, which is a special type of multi-sovereignty mechanism, we will have long-wave divergence of investment (over-investment or under-investment) from the social welfare maximizing levels.

To finance the planned investment, the planner (or the State) have to collect certain amount of public income (consisting of the State budget revenue and enterprise production funds). Under the planner's sovereignty mechanism, the income distribution is under planner's control and it is relatively easy for the planner to achieve his investment targets. When the primary income distribution is out of the planner's control under multi-sovereignty mechanism, the planner will resort to monetary tools, i. e., increasing money supply through granting more loans to finance the projects, to get the investment plan to be implemented. This results in the monetary augment of nominal income and the expansion of aggregate demand.

Autonomous Investment. Under multi-sovereignty mechanism, sub-units are authorized the autonomy to decide their own investment projects. All capital assets built by subunits are still publicly owned and the sub-units do turn over part of capital returns to the planner (or the State). But meanwhile, under the financial system of "fixed quota turn-over", the investment also benefits the subunits themselves, since the more capital used in the production, the higher the labor productivity and the higher the wage income and the more the retained profits.

The material productive resources are regarded as *the source of income* and the "softness of budget constraint" of subunits is redefined more generally as the *indefiniteness of the source of income of the subunits in the POE.* Thus the subunits' investment is viewed first as the action *to enlarge the sources of income* of the investors. Based on these concepts, we define the "subunits' *aspiration to invest*" by the amount of investment the subunits want to have in maximizing their own benefits, subject to certain constraints.

As the budget constraint is "hard" for the economy as a whole but is "soft" for an individual subunit, it is possible for any subunit to increase its income, or more general, its benefits, by enlarging its source of income through getting more investment goods under its control. But the more the sources of income a subunit gets, the less left for others. This rationalizes the *competition between subunits* for scarce resources on which the investment funds spend and is underlying causes of the expansion of the total investment demand.

Under the planner's sovereignty mechanism, subunits compete with each other through the planner. Under the multi-sovereignty mechanism, they can do it directly by various means. A particular kind of competition gains more attention called the "*monetary competition*" —the subunits compete with each other by increasing money supply (granting more loans) to themselves (the enterprises or other units in the local) to extend their purchase power and to finance their investment projects. The institutional condition for this kind of competition is local authorities' "*effective right of money supply*". Officially, no one other than the central bank has the right to increase money supply; but, under multi-sovereignty mechanism, local banks (branches of central bank) can extend credit on their own (subject to some restrictions set by the central bank). In a financial system in which the monetary base is not the fiat currency but the checkable deposit money, the autonomy of making loans is actually the right to increase money supply simply through extension of credit line. On the other hand, in a system in which the local authorities are one of supervisors of the local banks in the region, the local banks must grant loans to meet to some extent the requirements from their local bosses to accommodate local authorities' production and investment plans. On these grounds, we say that the subunits have the effective right of money supply. It is effective in dual meanings of that the local authority has actual right to command the local bank and that the local banks are capable to increase money supply on their own.

The "monetary competition" between subunits is a major explanation to the expansion of investment demand under multi-sovereignty mechanism.

The Personal Interests in Determination of Public Investment. Another argument of investment demand function is the personal interests "intermixed" in the decision-making process of public investment. In the POE, all investment decisions are required to be made in accordance with the public interests. However, if the persons who are authorized to make decisions on behalf of the public evaluate the investment projects by their private interests, the investment must differ from the social welfare maximizing level. A hypothesis is that the personal interests normally cause investment higher than the socially efficient level, since the public investment itself costs the private nothing.

Interest Rate. In the standard macroeconomics, the interest rate is an important factor in determination of investment demand. It is argued, however, that in the POE, *investment is inelastic to interest rate* because that the interest rate, as the cost of investment, only play secondary role in the determination of investment demand under the condition of soft budget constraints. Based on the interest rate inelasticity of investment, it is also argued that the role of interest rate in equilibrating supply and demand of financial resources (we are reluctant to use