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The Role of Planning in China's Market Economy

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Abstract This paper addresses issues raised in 'The Background of China's Planning Institutional Reform' circulated in advance of the International Conference on China's Planning System Reform, held on 24–25 March 2004 in Beijing. The discussion is structured around four topics: (1) the scope of planning; (2) the administration of the planning system; (3) methods of planning; and (4) the coordination of planning with market activities. A critical issue is whether the Chinese government is doing too much or too little in planning the broad range of activities in a market economy, and various policy options are examined in relation to this issue. A central conclusion is that as China's economic and political system evolves within the framework of the Five-Year Plan, the scope of planning will naturally reduce as the market sector replaces a number of activities formerly undertaken by government.

KEY WORDS: China, eonomic planning, policy options

Introduction

This conference continues the tradition that the Chinese government adopted since the early 1980s to invite international experts to contribute ideas to China's economic reform and development. As far as I know, no other national government has been so willing and open-minded in considering the ideas from outside for possible adoption in China. In these international conferences, the foreign participants have learned as much, if not more, from the Chinese hosts as they have contributed. This conference will not be an exception.

In this tradition of exchange of ideas with international participants, the conference organizers sent out a paper 'The Background of China's Planning Institutional Reform' (to be referred to as the Background paper below). Based on the questions raised in this Background paper I have chosen my topic 'The Role of Planning in China's Market Economy' in order to present my perspectives on the subject. I will discuss four topics in four sections: (1) the scope of planning; (2) the administration of the planning system that includes the assignment of responsibilities for plan formulation and plan implementation; (3) methods of planning; and (4) the coordination of planning with market activities. My discussion

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will touch upon all the five topics listed in Section V at the end of the Background paper. The fifth section of this paper presents my conclusions and summarizes my views on the seven problems stated in Section III of the Background paper. By presenting my perspectives on these topics I hope to solicit comments and advice from other participants.

Scope of Planning

The Outline of the 10th Five-Year Plan for Economic and Social Development of the People's Republic of China, passed by the National People's Congress on 15 March 2001, consists of ten Parts.

- Part I. Guiding Principles and Objectives.
- Part II. Economic Structure (Chapter 3 on agriculture, Chapter 4 on manufacturing, Chapter 5 on services, Chapter 6 on telecommunications, Chapter 7 on economic infrastructure, Chapter 8 on Western development, and Chapter 9 on urbanization of rural areas).
- Part III. Science, Education and Human Capital (Chapter 10 on technological innovation, Chapter 11 on development of education, Chapter 12 on development of human capital).
- Part IV. Population, Resources and Environment (Chapter 13 on population policy, Chapter 14 on protection of resources, Chapter 15 on environmental policy).
- Part V. Reform and Opening (Chapter 16 on reform of the market system, Chapter 17 on further opening).
- Part VI. People's Livelihood (Chapter 18 on employment and social insurance, Chapter 19 on people's income and living standards).
- Part VII. Spiritual Civilization (Chapter 20 on development of ethical ideals, Chapter 21 on promotion of a socialist civilization).
- Part VIII. Democracy and the Rule of Law (Chapter 22 on the promotion of democracy, Chapter 23 on the establishment of the rule of law).
- Part IX. National Defense.
- Part X. Plan Realization (Chapter 25 on improvement of macro control mechanism to promote economic stability and growth, Chapter 26 on devising means to carry out the plan).

The scope of this Plan is broad and comprehensive indeed. A foreign observer from a market economy will be impressed by the broad scope of planning in China, and the attention that the Chinese government pays to improve so many aspects of economic, social and political life of the people. In my recent book *Knowing China* (World Scientific, 2004, pp. 157–160) I discuss four major economic functions of the government in a market economy. These four functions are: (1) the building of economic and social infrastructure; (2) the provision of social welfare; (3) the promotion of economic stability and growth; and (4) the establishment or the fostering of selected enterprises or industries to compete in the international markets when the private sector does not have sufficient human or physical capital to do so. The fourth function belongs to what is called an industrial policy.

If we go through all the chapter headings of the 10th Five-Year Plan listed above, we can fit each of them into one of these four functions. In doing so we have to define 'social infrastructure' in function (2) to include the building of a spiritual civilization (Part VII) and the promotion of democracy and the rule of law (Part VIII). This means that, although the scope of the activities of the Chinese government included in the 10th Five-Year Plan is very broad, all activities are in principle within what a government should do in a market economy as one of its four functions. The main question is whether the Chinese government is doing too much or too little in planning each of these activities. I will try to answer this question in the fourth section of this paper.

The Administration of Plan Formulation and Plan Implementation

The Background paper points out that China has two basic plans, including the five-year plan and plans for urban and spatial developments, as well as a third plan which is a guidance plan. My discussion will cover all three by concentrating on the Five-Year Plan, which will include other two plans as parts of its components, as does the current 10th Five-Year Plan.

As an outsider I do not see the need for additional 'comprehensive laws or administrative regulations to define and govern the planning activities of government agencies.' I believe that the existing laws and regulations are by and large sufficient and that the current Chinese government institutions are adequate for the purpose of planning at all three levels if they are utilized effectively. The main problem is enforcement of existing laws and not the addition of more laws. (After presentation of this speech, a Chinese participant in the Conference pointed out to me that if the mandate of the central planning authority in its relation to the local government planning officials is not clearly stated, or even legislated into law, it would be more difficult to enforce the orders from the central government. The reader needs to consider this point. This is an example in which a participant from outside learns by coming to such conferences.) To support my point let me suggest how planning can be done under the current system, and who should be responsible for which aspects of the planning activities.

Plan Formulation

In terms of plan formulation it is the responsibility of the State Development and Reform Commission (SDRC) to draw up the Five-Year Plan, as it has done in practice. In drawing up the Plan it should receive inputs from all relevant ministries and organizations of the State Council. The latter can in turn solicit information from provincial and lower level governments if necessary. There should be two components in the proposal submitted by each ministry or organization, one requiring central government action and financing (to be included in its budget) and the remainder to be left to provincial governments (which in turn need to coordinate and direct local governments under their jurisdiction) or to market forces (as a part of guidance planning and requiring only limited government financing). Hence all three plans mentioned in the Background paper are included.

The Minister of SDRC and its staff will then draw up a proposed plan taking into account all the inputs from the different ministries. As is well known, different ministries, such as Agriculture and Education, have a tendency to promote the development of their own sector. The resolution of conflicts given the limitation of economic resources is done first by the SDRC based on its knowledge and understanding of national priorities, and ultimately by the Premier in consultation with the relevant Vice Premiers and State Councilors at appropriate meetings. The same principle applies to the coordination of economic development plans and urban related plans, and of national and local plans.

Plan Implementation

In terms of plan implementation, the ministries or organizations that submit inputs to the proposed plan have the responsibility of seeing through its realization or its revision as circumstances may require. If provincial governments also have planning agencies covering a similar area (such as agriculture or education) the ministries at the State Council should have the authority to coordinate and direct their activities. Some participants of the Conference may think that additional laws or regulations are required. Perhaps the main difficulty in coordinating the activities under the plan by the State Council as envisaged by the writer of the Background paper is not a matter that can be resolved simply by legislation or regulations. Much of the difficulty may lie in the existence of local power and vested interests that are difficult for the central government to control. Two well known examples in China are the difficulties for the central government to control certain provincial governments that have a tradition of behaving fairly independently and to control the local bureaucrats in extracting payments from, or in refusing to pay the wages to, local workers or to pay for farm products. There are sufficient laws and regulations to prohibit all these activities but the abuse of power continues.

As Article 3 of The Constitution of the People's Republic of China states, 'The division of functions and powers between the central and local state organs is guided by the principle of giving play to the initiative and enthusiasm of local authorities under the unified authorities of the central authorities.' Article 89 already provides the State Council all the necessary power to direct and coordinate all development and reform activities at all levels of government. I can appreciate the difficulty for ministries of the State Council in exercising its legitimate power, but would question whether additional laws or regulations can do much to improve the matter.

Plan Evaluation

Evaluation of the overall plan is the responsibility of SDRC. In the evaluation process it can draw from information provided by the various ministries. At the same time, the individual ministries have the responsibility for evaluating all projects and activities under its control. Evaluation is a part of any administrative actions. Methods for evaluation can vary according to the need and circumstances of each ministry. I will not propose a general design for evaluating the general plan and all its components, but will suggest in the fourth section ways to eliminate unnecessary activities under the general plan.

I would like to make three observations regarding the administrative process for planning as suggested above. First, this process for plan formulation and implementation is probably close to what is being practiced in China today and is similar to the planning process practiced before economic reform began in 1978. Much of the administrative process for plan formulation before 1978 is applicable today. Only the content of the plan is different. In a market economy, much of productive and distributive activities are no longer included in the plan. The number of industrial ministries in the State Council has been greatly reduced, but much of the administrative process for planning (for different kinds of activities) appears to me to be applicable today. Previously, the State Planning Commission had to coordinate outputs and inputs of state-owned enterprises, whereas in the current situation the inputs of plan formulation are targets from ministries on projects under their control. However, the need to coordinate the demands from different ministries or from different provincial governments, to determine priorities and to come up with a final consistent plan is the same as before. It is the responsibility of the SDRC to make sure that all parts of the plan are consistent, an issue raised in Paragraph 3 of Section III of the Background paper.

Second, there is no need for setting up new planning institutions. Many of the problems mentioned in Section III of the Background paper, for example in paragraphs 3, 4, 5 and 7, are not due to defects of institutions but can be solved by the people responsible for formulating and carrying out the plan under existing institutions. How the crucial decisions for the final plan are made by the Premier to resolve possible conflicts among ministries is an administrative matter that each premier has his own way to settle without further constraints by laws or regulations.

Third, the other two types of plans for urban and spatial developments and for guidance planning are already embedded in the Five-year Plan, as illustrated in the current 10th Five-Year Plan. Thus there is an integrated plan. Nevertheless, the administration for implementing different parts of the plan can be decentralized and left to different ministries of the State Council. Each can suggest or even make revisions based on changing circumstances, and at time intervals considered most desirable for the activities under its control. This integrated plan can be subject to annual or less frequent revisions as being practiced in China today.

Methods of Planning and of Plan Execution

Methods of planning and of plan execution are summarized in the last two chapters in Part X of the 10th Five-Year Plan. Chapter 25 deals with macroeconomic control mechanisms for stability and growth. Chapter 26 deals with mechanisms to achieve other plan objectives.

First, on the macroeconomic control mechanism, China has made much progress through the reform of its banking and financial system and of its fiscal system. The former reform enables the Chinese government to carry out monetary policy through the control of money supply, the interest rate and the foreign exchange rate. The latter reform provides larger revenue for the execution of fiscal policy. The Chinese government has tried to apply both monetary and fiscal policy to achieve price stability and economic growth. The 10th Five-Year Plan sets

targets for GDP growth at a 7% annual rate, for a stable price level, an urban unemployment rate of 5% and other targets. It is up to the State Council to achieve these objectives.

Macroeconomic planning objectives have to be consistent with economic reality. Economic reality determines whether a certain desired output growth rate, low inflation rate and unemployment rate are feasible. There are two related questions. (1) On what basis can such targets and not more or less ambitious targets be set? (2) What are the appropriate policies to be adopted to achieve these targets? The modern method of macroeconomic planning by the use of econometric models and dynamic optimization techniques provides answers to these questions. I will introduce the basic ideas of this method without going into technical details, which can be found in Chow (1975 and 1981)

To apply this method, one first needs a relevant econometric model to describe the working of the macro-economy. The model will specify how economic policy instruments such as the money supply, tax rate, and exchange rate affect the target variables of interest to the policy maker such as GDP growth rate, unemployment rate and the inflation rate. Second, one needs to specify the target values for these variables that are considered most desirable and a loss function that gives a bigger loss to society when the target variables deviate more from the specified target values. Using the mathematical technique of dynamic optimization or optimal control one can compute the values of the policy instruments that will minimize the loss function (or achieve the targets as closely as possible) given the specification of the econometric model. This method of macroeconomic planning yields the achievable targets and the policy options that should be used to achieve them simultaneously. Of course the usefulness of the method depends on having a reliable econometric model. Otherwise the policy recommended would not bring about the desired targets.

I understand that the Development Research Center of the State Council and other Chinese government researchers have built econometric and other quantitative models of China and use them to examine the outcome of different policy options. I do not know to what extent econometric models have been developed and used by the staff of the SDRC. Even if the econometric models available are rudimentary and not perfect, it would be useful to use them for a consistency check of the policy targets that are included in a Five-Year Plan. The model should be used to check whether a specified growth rate, unemployment rate, inflation rate and specified values of other target variables are achievable. If not, either some equations in the model are not an accurate description of the Chinese economic reality, or the targets have to be revised. As the planning staff gains experience in checking the planning targets with the econometric model a better econometric model and/or a more realistic set of targets will gradually emerge. In announcing an actual Five-Year Plan it may be desirable to state more conservative targets to ensure that they can be achieved. This objective can be met by announcing the target values that have a high probability of being achieved according to the prediction by the econometric model employed in an optimal control exercise. Of course, the use of econometric models in combination with optimization techniques is only an aid to economic planning alongside other methods that include judgment. It cannot be relied upon as the only tool for planning as the exercise of judgment is equally important, and more important if the models constructed are of low quality.

Second, on mechanisms to enforce other planning objectives, the Chinese government appears to use a combination of administrative orders carried out by the responsible ministries of the State Council, directions to provincial, city, county and local governments to fulfill certain parts of the plan, and soliciting support from the Chinese people to cooperate. As an example, to improve the education system in China as specified by the Plan, all three methods are employed. The last includes the encouragement and fostering of people-supported schools at all levels. The result is an increase of total government and non-government funding for education from 3.40% of GDP in 1997 to 4.77% in 2001 (See *China Statistical Yearbook 2003*, Table 20–35, p. 747). This is not much different from what I proposed for plan implementation in the second section of this paper.

One unsolved problem in carrying out projects that involve large sums of money is how to ensure that the money is effectively utilized. There are at least two sources of economic waste and inefficiency. One is the lack of rational planning. This aspect can be improved by applying the method of project evaluation, which provides a cost and benefit analysis to determine the economic worth of a project. Many projects are desirable if we consider only its benefits to society but the costs may be too large to make it worthwhile. The second is the possibility of corruption. Money is wasted when it goes illegitimately into the pockets of government bureaucrats. As an example, although many people think that the Three Gorges Projects and the Western Development Plan are good ideas, it is difficult to determine whether each component is worth the cost and how much waste due to corruption there is.

In the next section, I will discuss the simultaneous utilization of government projects and market forces to develop the economy. In areas where government involvement is questionable, the possibility of corruption should be considered a reason for reducing the levels of government economic activities. Reducing the levels of government economic activities is one way to reduce corruption. Another way is to narrow the scope of government authorities in regulating the market sector, such as the granting of licenses and permits to operate private businesses, which provide bureaucrats opportunities for corruption. When the Chinese government has to carry out a project to build infrastructure, it has often auctioned the project to private entrepreneurs. Well-known examples include the building of a superhighway connecting Guangzhou and Hong Kong, the building of power plants and the encouragement of foreign investors to participate in the Western Development project. To the extent that government bureaucrats have the authority to approve parts of each project, corruption can occur. Some local government officials may utilize every opportunity to extract payments from private investors. The central government has the legal authority to prevent them from doing so but in reality finds it difficult to exercise this authority.

The Coordination of Planning with Market Activities

Many officials in the Chinese government understand the coordination of government and market activities. There is no need to specify which economic

activities belong to the government and which to the market sector. One method used by the Chinese government to solve this problem is by competition. By allowing or even fostering the market sector to compete with government enterprises that are held financially accountable, the line between suitable government and market activities is naturally drawn. The non-state sectors of China's economy have grown rapidly to supply the needed output and to provide competition to Chinese state-owned enterprises to make them more efficient and to force them to adopt new technology. As another example, while the Chinese government operates schools it also encourages the establishment of people- or society-operated schools to provide more educational services to the population and to provide competition to government administered schools. The same principle has been, and can be, applied to other aspects of planning.

In developing any selected industry, such as a high-tech industry or in promoting state enterprises in that industry as a part of an industrial policy, the Chinese government leaves room for, and even subsidizes, the private sector to develop simultaneously. The success of the privately owned Legend in producing personal computers and of Gus Tsao in developing the software Evermore Integrated Office to compete with Microsoft are outstanding examples. This principle is consistent with the planning system that I described in the second section. The Ministry of Information Industry may have its own projects but may have a budget to subsidize research and development of private enterprises in the industry and provide forecasts of the industry as a part of a guidance plan.

What are the areas that the government should actively plan and what areas should be left to the private sector? In other words, how large should the scope of planning be in China? The answer depends partly on the level of China's economic and social development. As China becomes more developed and its market economy becomes more mature, the private sector becomes better informed and more resourceful to develop the economy and to discover new industries to go into and the less need there is for government involvement. We do not have to answer the above theoretical question in the abstract. The answer in practice is to enforce the principle that all state enterprises or projects that are subsidized under a planned industrial policy have to be disciplined by the market, being financially accountable and subject to competition from non-state enterprises on an equal footing. Any ministry requesting funds to be allocated from a plan to develop new industries and enterprises needs to make a convincing argument to the SDRC that such funding is justified. In approving funds for each project, the ministry should follow the principle that each enterprise only receives a fixed amount as a start-up cost for the project and has to be financially profitable afterwards, and that state-owned and non-state enterprises can compete for the initial subsidy to start the project on an equal footing. The past financial record of the enterprises, state and non-state, financed by any ministry can be used to determine the amount of funding it will receive in the next government budget and the next Five-Year Plan. Coordination of planned activities and market activities for economic and social development is achieved mainly by competition and by the limitation on the amount of subsidy provided to each enterprise in an industrial policy. Past records should be used as a guide for future appropriations under the plan.

Conclusions

In this paper I have discussed the role of planning in China's market economy. First, some of the problems mentioned in the Background paper are political and administrative in nature and cannot be solved by introducing more laws and regulations. Second, an effective planning system based on the existing Chinese institutions can be set up. From an administrative point of view it can borrow much from the work of the previous State Planning Commission, although the content of planning is now much different. All three kinds of planning mentioned in the Background paper can be integrated into one plan, with more flexibility given to some components of the plan at lower levels as circumstances require. Third, I have suggested methods of planning including the use of optimal control techniques and econometric models for macroeconomic planning and of project evaluation for project planning as a supplement to judgment and the existing procedures. In connection with government projects and government regulation two ways to reduce corruption have been suggested. Fourth, the coordination of planning and market forces does not require a specification of which areas belong to planning and which to the market, and can be solved by a practical principle of applying the force of market competition to government enterprises and projects and to limiting the amount of subsidy to each project. The future allocation of funds to each ministry should be based on the financial records of the projects that have received subsidies in the past. As the Chinese market economy becomes more developed, projects that require an industrial policy and the scope of planning in general will naturally be reduced.

In terms of the seven problems posted in Section III of the Background paper my answers are as follows. First, a solution to the problems of planning does not necessarily require having more laws or regulations. Second, conflicting regulations issued by different ministries of the State Council have to be resolved, with some to be revised or eliminated, but this is an administrative matter for the State Council. Other countries, like the United States, which do not have a comprehensive planning system also need to resolve, as an administrative matter, conflicts among different departments of the executive branch that have overlapping areas of responsibility. This applies to the coordination and regulation of provincial planning activities, which should be allowed as long as they are consistent with the central plan; conflicts between provincial plans can also be resolved by the State Council as an administrative matter. Third, I have discussed the coordination of different areas of planning in the second section, with all three kinds of plan integrated into one overall plan, but the implementation of different components of the plan can be decentralized when necessary. For example, an urban related plan should be included in the overall plan but its execution can be left to provincial or local governments, in the same way that an industrial policy is left to the responsible ministry.

Fourth, if the government is paying attention inappropriately to different areas of planning, or if some government agencies are interfering inappropriately with the market, it is up to the State Council to solve such problems. Fifth, the State Council has been given sufficient authority by the Constitution to carry out any appropriate planning activities in any appropriate manner as it sees fit. It is entitled to practice

any planning procedure that is deemed appropriate. The resolution of conflicts between the central and provincial governments and among provincial governments is an inherently difficult administrative problem but this problem is not confined to planning. Such administrative problems are difficult to solve because it is difficult to control a large bureaucracy with members having been accustomed to exercising authority in their own sphere of vested interest. Designing some formal scheme based on legislation will not solve these problems, as it would not solve the problem of corruption. Sixth, the length of the period for planning each activity should be determined in a flexible manner, and having a five-year plan does not preclude ministries in charge of any area from thinking in terms of planning for longer or shorter periods. Seventh, the attention to be paid to implementation and evaluation of the plan is also an administrative matter.

My reaction to the proposal to reform China's planning institutions presented in Section IV of the Background paper is similar. On Paragraph 1, I do not believe that there is a need to make a rigid division between a national plan, provincial plans and municipality and county level plans. The central government can do its planning in the way described in the second section of this paper. It is up to the provincial and lower level governments to do their own planning in the way they see fit, as long as they supply inputs necessary for the formulation of the central plan and their plans are consistent with the plan of the central government. There is no need for the central government to tell the provincial and local government how to do their planning as long as the targets specified by the central plan are met, just as there is no need for a ministry carrying out an industrial policy to tell an enterprise receiving its subsidy how to operate its own business. The suggested scheme would introduce too much uniformity, stifle initiatives from below and foster a bureaucracy that is required to supervise the lower level planning work.

On Paragraph 2, planning at the national level is not a democratic process but an administrative process of the central government. Democracy is exercised when the plan is approved by the National People's Congress which represents the people. It is useful and desirable to solicit opinions from the people and from lower level governments as inputs in formulating the plan as I described in the second section of this paper. At the county level, the opinion of people can serve as useful input but this should be a part of the democratic government at that level and not a special topic for planning. In other words, I am in favor of introducing democracy at the county and other levels of the Chinese government but the democratic institutions should be an overall system and not confined to planning alone in an ad hoc manner. Some of the topics in Paragraph 3 are already covered in my discussion of plan implementation in second section of this paper. Since the Chinese government has an annual budget, an annual plan exists to adjust the appropriation required for the implementation of each component of the plan. Again, I do not see any need for new legislation as the existing procedure in approving the government budget implicitly approves any changes to the plan required under changing circumstances. The frequency of planning other than the Five-Year Plan should not be made too rigid and should be made flexible based on the nature of the tasks of each ministry or each provincial and lower level government unit. To demand uniformity in solving all problems is undesirable.

I am confident that as China's economy evolves, its planning system will be improved in the future. This conclusion is based on my observation that when China's institutions have been changed to carry out the tasks of reform and modernization, there have been problems and obstacles due to inertia and political and economic vested interests, but such problems associated with many aspects of China's reform process have not prevented China's economic and political system from improving continuously (see my book China's Economic Transformation, chapters 3 and 4 – Chow, 2002). The institutions and administration for planning are not an exception. I believe that in the near future China should keep its Five-Year Plan but the scope of planning will naturally be reduced as the central government limits its appropriation for government projects when it observes that the market sector can take over many areas effectively. People in China familiar with and close to the situation have a stronger desire and a greater urgency to have the problems mentioned in the Background paper solved immediately. From the point of view of an outside observer, some of these problems are human problems natural in China's historical setting during the reform process and it takes time and resolve for the Chinese government to solve them step by step, but we can expect to see improvement when the 11th Five-Year Plan is formulated and implemented. Proposing any new scheme that requires additional bureaucracy, uniformity and regimentation will not be helpful.

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