Important Lessons from Studying the Chinese Economy

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Outline

• 1. On economic science.
• 2. On economic policy advice.
• 3. On the characteristics of the Chinese economy.
1.1 The basic theories of economics apply to China.

- **Microeconomics**
- Theory of consumer demand: 1) estimation of total expenditure elasticity's of demand for four categories of consumption goods in Chow (1985, chapter 5; 2007, chapter 9), 2) studies of the demand for and supply of urban housing in China in Chow and Niu (2010), 3) of demand for education in Chow and Shen (2006), and 4) the demand and supply of healthcare in Chow (2009). All references in same website given on last page.
1.1 Continued

- The method of constrained maximization to explain behavior of state-owned enterprises in both the period of central economic planning and the period of the earlier years of economic reform.

- The prices of stocks traded in the Shanghai Stock Exchange can be explained by the present value theory of stock prices, as reported Chow (2007, chapter 14).

- **Macroeconomics:**
  1) A study of inflation with the ratio of money supply to real output as the major determinant and formulated as an error correction model.
  2) The proposition of Milton Friedman on the effect of a monetary shock on output and prices (the former effect is almost immediate but short-lived and the latter effect is delayed but long lasting) is supported by a VAR model. Chow (2007, chap 6, 7)
  3) A macroeconomic model for China consisting of a consumption function and an investment function works before and after economic reform, Chow (2009(c)).

1.2. Market economies of a variety of forms can all work.

- The different institutions include the extent to which a Western-style legal system is in place as compared with the use of moral codes and a system of social network and personal connections to guide business conduct in China, known as *guanxi*.

- Economically efficient town-ship and village enterprises flourishing in the 1980s and early 1990s.

1.3. Economic development can occur under different forms of government.

- The Chinese economy has experienced rapid growth in a political environment different from those in Western democratic countries.
- Taiwan also experienced rapid economic growth from the 1960s to the 1980s under a government controlled by only one party.
- Hong Kong’s market economy before 1997 performed beautifully while being ruled by a government in London and not a democratic government of its own.
1.4. Importance of human capital in economic development

- The quality of human capital (the thinking, habit and skill of the population) is a major factor determining whether a developing country can develop rapidly. The other two are the existence of a set of functioning (though possibly imperfect) market institutions and being in an early stage of development which allows the country to adopt the most advanced technology to catch up. Witness the rapid economic growth of Germany and Japan after World War II when the physical capital of both countries were destroyed by the war but both countries had an abundance of high-quality human capital.
- Human capital from cultural tradition manifests itself in family education which may be more important than schooling in determining the human capital.
- Different provinces in China have different potential for economic development mainly because of human capital differences.
1.5. Possible to do economic forecasts because of validity of econometric models and parameter stability.

- Forecast of the overheating of the Chinese macro-economy in 2004 and inflation in later years due to monetary shocks resulting from an inflow of foreign exchange as China had a large trade surplus, made in the Bank of China in Beijing in 2005.

- The accurate forecast of China’s inflation in 1985 when money supply increased by 50 percent in 1984 as described in Chow (1994, p. 94).

- Forecast of China’s economic growth given in Chow (2007, chapter 5).
1.6. Also possible to forecast institutional changes using a similar methodology

- Chow (2007, concluding chapter, sections 2 and 3): The methodology is qualitative but similar in nature. Similar steps are used as in performing econometric forecasts by capturing the most important factors and their interactions and employing judgment to determine whether these factors will continue to operate in the future.

- 1) the forecasting of economic reform to start after the disaster of the Cultural Revolution, 2) why economic reform would succeed and 3) why the Chinese economy would continue to grow for a long time.

- Forecasting unchanged institutions in Hong Kong after 1997 based on knowledge of Chinese political leaders (used to invest in Hong Kong stocks in 1989), just as possibility to predict future performance of graduate students based on knowledge of their abilities.
2. On economic policy and economic advice

2.1. A gap between academic knowledge and ability to apply it for solving practical problems. IMF recommendations during Asian financial crisis.

2.2. A gap between choosing the right economic knowledge for application and making a sound policy recommendation. Price reform of Econ Reform Commission.

2.3. Important points to note in giving economic advice. A. policy has to be feasible. B. government official has to be able. C. Timing of advice has to be appropriate. D. Adviser has to be open-minded. Mutual discussions desirable.

Discussions with “Working group of five” in Taiwan.

2.4. Using the **framework of dynamic optimization** to provide economic policy advice

- Econometric models useful for forecasting and hence also useful for choosing good policy variables.
- Lucas critique: Econometric model will change as government uses it to set policies because the public will react to policies, changing equations for its behavior.
- Lucas not correct because government does not follow a decision rule long enough for the public to react.
- Economists accepted Lucas critique because numerous large but poorly constructed models had failed to provide good forecast.
- Optimal control actually used in Taiwan.
- Optimal control is only a first step in providing policy recommendations. Need to have several good policies available for policy maker to choose. Better to arrive at policy by discussion with government officials.
2.5. Implementation of government policies

• Examples of Chinese government failing to implement policies to protect environment (target of 4% reduction in energy/GDP ratio achieved only 1.4% in 2006), to introduce healthcare insurance to the rural population.

• For protecting the rights of farmers, a recommendation to hold provincial governors responsible or losing the governorship.

• Implementation should be considered at the stage of designing policies. Policy not feasible if implementation is impossible.
3. On the characteristics of China’s economy

- Values of many parameters describing the Chinese economy can reveal its institution characteristics.
- Some of these parameters even remain constant before and after the economic reform initiated in 1978.
- In the early 1980s the total expenditure elasticity of demand for housing and fuel for farmers was high, equal to 1.78 as compared with the median of about 0.8 for the many countries studied by Houthakker (1957). The total expenditure elasticity of demand for clothing in the fashionable Shanghai was as high as 1.61 while that of Beijing was 1.33 in the early 1930s. See Chow (2007, p. 170).
3. On the characteristics of China’s economy- continued

• **Johnson and Chow (1997):** when the Mincer equation to explain log wage by log years of schooling, years of working experience, its square and dummy variables representing gender, minority ethnic group, and Communist Party membership using data for rural and urban population in China for the year 1987, the signs and magnitudes of all coefficients are correct and reasonable. The rate of returns to education for both urban and rural population were low, being 3.7 percent and 4.0 percent respectively. This result reflects the large fraction of the urban labor force working in state-owned enterprises and the income of farm families being only slightly affected by years of schooling in the period of study. Being female, being a member of a minority ethnic group (other than Han) and being a Communist Party member were found to have a significantly negative, negative and positive effect on wage respectively, except for Party membership for the rural sample which has a statistically insignificant effect.
3. On the characteristics of China’s economy- continued

- The random walk hypothesis of Hall (1978) explains aggregate consumption and the accelerations principle explains aggregate investment in China during both the period of central planning and after economic reform. A macro model based on these two equations was found to fit Chinese annual data in the period 1952-1982 and also in the period 1979-2006. See Chow (2009(c)).

- The same error-correction model with stable parameters can explain Chinese inflations before and after economic reform.

- Likewise for the same VAR model that confirms Friedman’s proposition on the effects of monetary shocks on aggregate output and the price level from 1952 to the 2000s. See Chow (2007, chapters 6 and 7).
3. On the characteristics of China’s economy- continued

- In a study of China’s economic growth using a Cobb-Douglas production function presented in Chow (1993) and updated in Chow (2007, chapter 5), the elasticity of output with respect to capital is found to be about 0.6 and with respect to labor to be about 0.4. These elasticity estimates agree with the estimate of 0.4 for the labor share of output for Chinese farm families given by Buck (1930) and with the estimate of 0.6 for output elasticity with respect to capital found in Mankiw, Romer and Weil (1992). These estimates remain unchanged before and after economic reform, but the increase in total factor productivity was found to be zero in the period 1952-1979 and to equal about 2.8 percent per year after 1979.
4. On China’s economic transformation process

• 4.1. Gradualism works

A. Reform in China required receiving support from the Communist Party members to carry it out.

B. Party leadership did not have a blueprint for reform because they simply did not know what market institutions to adopt although they had learned that the existing planning system did not work through years of experience. They require time and experimentation to find the workable market institutions.

C. There is the institutional inertia imbedded in entitlements provided to the state enterprises and the population. Urban population receiving housing subsidies in the form of very low rent of several yuan per month could not accept price reform that could raise the price by a substantial amount. Reform of prices had to proceed gradually.
4.2. Allowing both state sector and non-state sectors to co-exist and compete.

- A slow reform process means that many state run institutions would remain inefficient for a long time. To speed up economic growth, which is required to give reform momentum and support, the policy was to allow the non-state sectors to flourish and serve as an engine for growth. An example was the growth of the township and village enterprises. Even Deng did not expect the sudden appearance of these enterprises. Appropriate economic institutions would naturally appear and flourish, and they did in China, once opportunity was given.
4.3. Use of Dual price system

- An institution supporting the coexistence of state and non-state enterprises is the dual price system. The state enterprises could obtain raw material from the state distribution channels at a below-market price as before but only for a fixed amount. In the mean time they could obtain the material in the market at a higher price. Since this fixed subsidy does not affect the optimum input and output decisions, the state enterprises could still behave optimally. The same dual price system applied to urban housing when higher priced housing was available in the market, and to the supply of foreign exchange when a foreign exchange swap center enabled the importers and exporters to trade foreign exchange at a market price.
4.4. Economic liberalization through the open-door policy

• Foreign trade and foreign investment, as well as travel abroad, were allowed, enabling the free flows of goods, capital, technology and people. This increased efficiency in the allocation of resources and helped speeding economic growth. China also improved its management skill and technology in the process, while the state enterprises became more efficient from competition of imports and of foreign owned enterprises. China has for years had an export surplus and accumulated a large amount of foreign reserves, over 2 trillion as of April 2009. It has begun investing overseas as it emerges as an outward looking economy. In terms of its total output measured in purchasing power parity terms China is already a great economic power, second only to the US.
4.4. Economic liberalization—continued

- China’s economic liberalization process is gradual and cautious. In foreign trade, the exchange rate is not entirely market determined. Foreign investment has been subject to regulations. So are the banking and financial sectors. Derivative products in financial markets are introduced gradually. Consumers learn to use credit cards step by step. All these slow movements have protected China from much of the current financial crisis and economic slowdown in the rest of the world and enable China to play an important role in leading the world economy to recovery.

- Studying the Chinese economy can help one become a better economist and may even be useful for improving the economic institutions of the world.
• Thank you