

1. Introduction

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China has experienced rapid growth and development in the past two decades of economic reforms. Yet, it is still facing two historical transitions: an institutional transition from a centrally planned economic system to a market-oriented one, and an economic transition from an agrarian society to a modern industrialized one. In both areas, China still has a long way to go. The rapid growth and structural changes over the past two decades that have brought China closer to achieving these goals have also created new challenges and problems.

In recent years the Asian financial crisis has cast a shadow over China's long-term growth prospects. Since the Asian financial crisis, the growth rate of the Chinese economy has been declining from historically high levels. Deep-rooted problems, such as unemployment, surplus rural labour, non-performing debt in state enterprises and banks, and income inequality, have resurfaced, potentially undermining the sustainability of growth. With the dramatic change in the external environment following the Asian financial crisis, China's exports have confronted unprecedented competition in the world market and the inflow of foreign direct investment has fallen, further restraining the growth of the domestic economy. These new challenges and problems have triggered a new round of debate among economic researchers and policy-makers on the prospects of the Chinese economy and its role in the global economy in the new century.

The chapters in this volume contribute to the current debate on some of these challenging issues. They are selected from papers presented at the 11th annual conference of the Association of Chinese Economic Studies (Australia) (ACES), held at the University of Melbourne on 15–16 July 1999. ACES is an organisation of China scholars and students. It aims to stimulate studies on the Chinese economy in Australia and promote the Australia–China economic relationship. Each year, it organizes a conference on the Chinese economy at an Australian university. It provides an excellent venue for economic researchers, policy-makers and business people and has become an important event for the exchange of ideas and information on China. The 1999 conference was hosted by the Asian Economics Centre of the

Department of Economics at the University of Melbourne. In the aftermath of the Asian economic crisis, the importance of the globalization of the world economy for China has become more evident than ever before. How China responds to the external challenge will have a long-lasting impact on other countries, including Australia. The theme of the 11th ACES conference is therefore: 'China in the World Economy'. The book is divided into five parts.

THE MACROECONOMY

Part One examines China's macroeconomy. Macroeconomic stability has become a hotly debated issue. The focus of macroeconomic policy has undergone a fundamental shift in recent years as the economy turned from a high-growth inflation path onto a low-growth deflation path. In Chapter 2, Fureng Dong provides a comprehensive review of the adjustment of China's macroeconomic policies and the underlying debates among economists and policy-makers since 1993, together with his insights into the key issues involved. In 1992 and 1993, the Chinese economy expanded very rapidly, with investment and prices rising substantially. In July 1993, the Chinese government launched a rectification and adjustment programme. As a result, the economic growth rate decreased gradually and the inflation rate also fell. By 1997, the objectives of the contractionary policy had largely been fulfilled. However, new problems began to arise, such as insufficient effective demand, slack consumer markets, increasing inventories and rising unemployment. In the fourth quarter of 1997, the price level began to fall. Since then, the government has made a great effort to shift its macroeconomic policies from contractionary to expansionary fiscal and monetary policies. The chapter analyses several major policy measures and provides an insightful assessment of their effects on the economy.

China's 30-year long boom is an important event in world economic history. In recent years, however, the growth of the Chinese economy has slowed significantly. There has been a debate among economists on the potential for China's future growth. Chapter 3, by Thomas Rawski, discusses this issue from the political economy viewpoint. He traces the cause of China's current declining growth to the poor allocation of investment funds. He thinks it quite possible that the accumulated cost of massive investment misallocation has drained the momentum of Chinese growth. He emphasizes that long-term reforms should continue through a combination of official action and market response. Some recent reforms, such as the reorganization of China's central bank and continuing efforts to improve the quality and uniformity of enterprise accounts, directly address issues linked to the systematic mismanagement of investment funds, which has contributed to the decline in growth. Rawski

believes that, in the current environment of deflation and near-stagnation, the government cannot curtail funding to traditional beneficiaries of the largely unreformed investment planning system in the absence of a dynamic source of new investment demand. Private enterprise stands out as the only feasible source of such demand. He concludes that China's short-term prospects for the resumption of rapid growth are closely linked to the speed with which reform efforts can dismantle the formidable obstacles facing potential private business investment.

Chapter 4, by Mei Wen and Peter Lloyd, provides an empirical study of the savings behaviour of households, enterprises and the government, which could be used for modelling the Chinese economy. In the household sector, which increasingly accounts for China's exceptionally high savings rate, they find that the average propensity to save of rural households has converged to that of urban households. A higher dependence rate lowers the savings rate in urban households but raises it in rural households. Net saving in the government sector has declined rapidly as a share of national savings, while the saving of the corporate sector as one means of funding rapid growth in investment expenditures has steadily increased. Foreign borrowing is unimportant as a net source of saving, though it is important as a source of technology and capital imports.

STATE-OWNED ENTERPRISES

Part Two of the book discusses the reform of state-owned enterprises. In Chapter 5, Xiang Kong, Robert Marks and Guang-Hua Wan examine the productive performance of Chinese state-owned enterprises in the early 1990s, using a stochastic production frontier function and the Malmquist productivity index. They estimate the stochastic frontier production function for four Chinese industries: building materials, chemicals, machinery and textiles. The type of technological change is tested and total factor productivity (TFP) growth is calculated for each industry. They find that no technological change occurred in the building materials, chemicals and textiles industries and that there was neutral technological progress in the machinery industry during 1990–94. A significant reduction in technical efficiency occurred in the chemicals, machinery and textiles industries. As a result, chemicals and textiles experienced negative TFP growth, whereas building materials and machinery had negligible TFP change. Their results cast some doubt on the effectiveness of measures for Chinese industrial reform.

Compared with the leading economies in the world, has the fast-growing Chinese economy experienced any significant catch-up, or is it falling behind as suggested by some studies? This is obviously an important question for

China in its striving for economic development in the twenty-first century. In Chapter 6, Harry X. Wu applies a production purchasing-power-parity (PPP) approach to convert Chinese manufacturing output into US dollars in order to derive China–US comparative manufacturing output and labour productivity. Based on his recently reconstructed estimates of manufacturing gross value added and labour input at the industry branch level, the author provides a close examination of China's industrial growth performance over the past four decades, with the United States as a benchmark, and an assessment of China's development policies over both the central planning and reform periods.

One of the policies for reforming China's state-owned enterprises (SOEs) was to convert them into shareholding companies. It has been argued, however, that this strategy could create agency problems. One way to solve such problems is to set up an effective monitoring mechanism to oversee managers' performance. Another is to design appropriate incentive schemes to limit deviation between the agent's decision and the principal's benefit. In Chapter 7, Zhilan Chen and Shaogong Lin provide empirical evidence supporting the monitoring scheme and incentive mechanism design. They find that the shareholding of private institutions is closely related to firm performance, but the monitoring service is far from efficient. Their results show that the total emolument (ownership and cash income) of Chinese managers, chairpersons and CEOs is trifling compared with that in a developed market economy. Nevertheless, the existing emolument scheme in China has affected managers' incentives, as firm performance is positively related to the CEO's total emolument.

In recent years, the problem of serious financial risks has emerged in China. These risks come mainly from those SOEs that have high non-performing debts. As a result, the asset quality of bank and non-bank financial institutions is deteriorating. Based on a recent sample survey, Gangming Yuan presents a first-hand account of the non-performing debts of China's state-owned enterprises in Chapter 8. He finds that many government policies to help SOEs reduce their debt burden have generated negative results by encouraging the repudiation of debts, which further weakens the credit system and distorts the market mechanism. The legal and illegal evasion of debt has become increasingly serious recently. Faced with increasing financial risks, banks are reluctant to expand their lending business, which is a contributing factor to recent slow economic growth. More urgent reform measures are needed if the current situation is to be reversed.

INTERNATIONAL TRADE

Part Three of this volume is concerned with international trade. Trade linkage has been identified as an important channel in the transmission of regional financial crises. Xinpeng Xu and Ligang Song investigate trade linkages between East Asian economies, using export similarity indexes, in Chapter 9. They address such questions as ‘how similar are East Asian economies’ exports?’ and ‘how competitive are East Asian economies’ exports in third markets?’ They also address long-term questions such as ‘whether export similarity between East Asian economies tends to be divergent or convergent’ and ‘the driving forces behind these trends’. The trade similarity results indicate that there has been a distinct pattern of trade specialization among East Asian economies, which may be explained by fundamental differences in factor endowments and by intraregional flows of foreign direct investment. The chapter also discusses the competition effects in third-country markets of those economies whose exports are similar.

In Chapter 10, Lei Song examines the choice of exchange rate by the Chinese authorities in the post-reform period since 1980. This involves calculation of the real effective exchange rate and an empirical study of the effects of the real effective exchange rate on Chinese goods trade. The real exchange rate tracks the nominal rate quite closely. Using cointegration techniques, a change in the real exchange rate is found to have positive effects on real exports in the short run and in the long run. On the import side, the change has a negative effect on real imports in the short run and no measurable effect in the long run. Using policy reaction functions, econometric evidence indicates that exchange rate policy was formulated to promote net exports rather than to maintain domestic price stability.

The proliferation of the internet and world wide web as vehicles for business has made electronic commerce a hot topic in the business world. Despite e-commerce having grown rapidly in China, systematic examination of its development in China is still lacking. Ping Lan in Chapter 11 discusses the current applications of the internet to commerce and the barriers to e-commerce development in China. He finds that many Chinese businesses and the government have changed their attitude towards the internet from suspicion to cautious encouragement. Many industries have started doing business electronically. The financial, transportation, and hotel and tourism industries are pioneers. Compared with business-to-business transactions, individual online purchases have lagged behind. Most Chinese internet users seem to be very conservative and are not interested in shopping on the internet. The comparatively small credit card market in China is one reason for the unpopularity of online shopping. The author points out that, although there is no doubt that e-commerce will revolutionise China and the world in the new century, there is

still much resistance to the development of e-commerce in China. The government is particularly cautious about the internet, due to its 'embrace-all' nature.

AGRICULTURE

Part Four deals with issues concerning China's agriculture and the rural economy. Economic development is accompanied by many fundamental structural changes in the economy. One of the most important structural changes is the shift of economic activities from agricultural to modern industry, which is often associated with a large-scale migration of labour from agriculture. The success of the economic development of a nation can be measured, to a large extent, by the shift in employment structure. In Chapter 12, Xiao-guang Zhang reviews the experience of off-farm migration of labour in China's economic development over the past 40 years. The chapter quantifies the off-farm migration of labour and its contribution to China's overall economic growth over the past four decades. The magnitude of off-farm migration is found to be closely related to overall economic growth performance. The demand of non-agricultural sectors for rural labour is a crucial factor in attracting labour out of the agricultural sector. The author incorporates a dual labour market into a recursive-dynamic computable general equilibrium (CGE) model of the Chinese economy. A number of simulations are performed to generate quantitative forecasts for possible long-term structural changes in China's labour employment and off-farm migration into the early twenty-first century.

Chapter 13, by Zhang-Yue Zhou, Wei-Ming Tian and Guang-Hua Wan, looks into the supply response of the marketed surplus of grain in China. When grain production is partly subsistence and partly commercial in nature, information as to how farmers dispose of their grain is of great value for policy formulation. Of special importance is the amount of surplus grain that is actually marketed, because the availability of an adequate level of marketed surplus grain is crucial in promoting and sustaining the economic development of a country. Using farm-level survey data, the chapter examines factors affecting the level of marketed surplus grain in China. It is found that output price, crop output level, family net non-grain income, family size and local market development level are all important factors influencing the size of the marketed surplus of grains. It is also found that farm households tend to reduce grain sales over time and that there exist significant regional variations in farmers' grain disposal behaviour. Policy implications are explored.

Yongzheng Yang examines the issue of food security, which has been China's paramount concern in agricultural policy, in Chapter 14. China sees

international food embargoes as a major potential threat to food security, and this has caused it to be reluctant to liberalise its agricultural market. This study investigates the likelihood of food embargoes occurring against China and the potential damage they can inflict on the Chinese economy. The chapter first examines the historical record of economic sanctions, and of food embargoes in particular, in an attempt to shed some light on the political and economic forces driving food embargoes, and the factors that determine the success or failure of food embargoes as a weapon of economic sanction. A global general equilibrium model is then applied to gauge the likely magnitude of the impact of various food embargo scenarios. Policy implications are subsequently discussed, in the context both of China's food and agricultural policy and of the multilateral trade system, in dealing with food embargoes.

INCOME DISTRIBUTION AND THE ENVIRONMENT

Part Five concerns social issues, such as income distribution and the environment. Regional disparities in China have recently attracted much attention, both inside and outside China. In particular, researchers and policy-makers are concerned with how economic reforms have affected regional disparities in China. As a result, there has been a boom in literature on this topic. However, the literature has so far presented conflicting results. In Chapter 15, Yanrui Wu reviews the literature in this field and presents new evidence on income disparity and convergence in China's regional economies. His study is based on the application of regional GDP figures covering the period 1953–97. It assesses and consolidates the findings of previous studies and hence contributes to the current debate. Regional disparities have fluctuated over time and the measurement of them is sensitive to the choice of measure. China's regional economies experienced different rates of convergence during the reform period. In general, convergence was fast in the late 1970s and early 1980s. The two non-coastal regions converged faster than the coastal economies.

Economic reform has raised incomes, created considerable private wealth, and reduced the incidence of poverty in China. Rising incomes have improved the nutritional status of the Chinese, no better illustrated than in the rise in the average heights of school-aged children since the late 1970s. Stephen L. Morgan uses very different methods and data to analyse recent economic growth and income distribution in Chapter 16. In place of conventional economic and quality of life data (such as per capita income, productivity changes, life expectancy, literacy and so on), the chapter draws on anthropometric data (height and weight) collected from large-scale surveys of the

health of students conducted since 1975. The average height of a population is used as a measure of historical change in the net nutrition available for human growth to the time of measurement, while weight in the form of a body mass index is a measure of the current nutrition level. Higher real incomes make for more and better-quality food, and better health and education goods, which combine to produce a gain in net nutrition that allows the population to realise better their genetic potential for growth. Morgan's chapter develops a 'health production function' to examine the relationship between anthropometric change and economic change, and especially the regional disparities in nutrition and economic indicators of well-being. He finds that, although the Chinese today are taller than they have ever been, there is wide variation across provinces and between gender and urban–rural groups. Most of the variation in stature can be attributed to variations in economic endowment of the region in which children were born and brought up.

Rapid economic growth in China poses great environmental challenges. The increase in energy consumption, particularly the dominance of coal in China's fuel use, has resulted in severe environmental degradation. While the greatest source of damage is from local urban air pollution, the environmental impact goes beyond China's borders. Sulphur emissions from the combustion of coal, for example, cause acid rain, which falls in neighboring countries and harms the ecosystems in the region. At the global level, emissions of carbon dioxide from the burning of fossil fuels enhance the greenhouse effect and contribute to global warming. A wide range of abatement measures is available to tackle these environmental problems. Chao Yang Peng argues in Chapter 17 that policy responses targeting each problem in isolation make for a fragmented approach, with competing or inconsistent policies and attrition between agencies with different mandates. Local air pollution, for example, given its adverse health impact, should be given priority in China. But locally motivated air quality programmes will have limited benefit in terms of reducing acid rain and protecting the global climate. On the other hand, measures targeting the sources of pollution, such as improving energy efficiency to reduce the use of fossil fuels, can achieve synergy in reducing the emissions of particulates as well as sulphur dioxide and carbon dioxide emitted from fossil fuels. Peng's chapter attempts to integrate local, regional and global air pollution assessment in China in a consistent analytical framework. Three types of air pollution are jointly assessed: ambient concentration of small particulates in urban areas, sulphur emissions that result in regional acid deposition, and carbon dioxide emissions contributing to global warming. His study aims to identify optimal control strategies that are based on overall cost–benefit analysis of emission abatement across all three air pollutants.

We hope that the 16 chapters in this volume give the reader a fresh perspective on the Chinese economy. As the world economy moves into the

twenty-first century, the globalization of national economies will proceed even further. As the most populous country and now one of the largest traders in the world, China is bound to have an important role to play in this new global economy. This volume indicates, however, that China is still facing enormous challenges in its current transition from a planned to a market economy and from an agrarian to a modern industrialized society. The extent to which China meets these challenges will have a profound impact on the future of the world economy.

