rates in depressing the country's trade competitiveness in the pre-1990s.² The authors go a step forward and consider these policies as logically responsible for India's inward-looking trade negotiation stance in the Uruguay Round. There is also considerable merit in the argument that inadequate progress in economic reforms in the 1990s could have restrained India from approaching the Doha Round proactively. Where the authors could have been more forthcoming, is on the structural policy rigidities that have affected India's agricultural sector and compelled it to be a party to the "dirty tariffication" process that was adopted in the Uruguay Round. The refusal to open India's agricultural sector to the logic of land markets and the deep distrust towards innovative ideas such as contract farming for restructuring the supply chain of India's cash crop sector, have also been major reasons for India's reticence on agriculture liberalization in the Doha Round. Intriguingly, even while the 2004 national elections have propelled to power a national government in India led by proven reformers, India's stance on agricultural issues has tended to be more and more protectionist in the conventional trade theory sense. The reasons are not far to seek. The anger of India's rural constituency, which showed up in the recent national elections, clearly indicates the peril of signing onto an unqualified free trade regime for farm goods. However instead of taking refuge behind conventional tariff and nontariff walls to enforce protection, India has, in recent times, been harping on socioeconomic ideals such as livelihood security to defend its agriculture from predatory import competition. This is apparent from India's stance at the recently concluded framework agreement summit in Geneva in July 2004. These facts would, however, by no means diminish the persuasive logic of the economic arguments advanced in this book. (A. Damodaran)

Market Institutions in Sub-Saharan Africa: Theory and Evidence by Marcel Fafchamps, Comparative Institutional Analysis, Cambridge, Mass., MIT Press, 2004, xx + 521 pp.

The book is based on more than ten years of research by one of the most productive development economists of our times. Professor Marcel Fafchamps explains at the beginning of the book that its goal is to develop a better understanding of market institutions in sub-Saharan Africa and that the book is motivated by his observations from more than twenty years ago when he was an associate expert at the International Labour Organization. Throughout the book it is apparent that the author has made painstaking efforts to organize his earlier studies. The book, therefore, is not a mere collection of previously published papers by the author and his colleagues on African markets. Rather the book is organized under several theoretical themes which contain previously published and unpublished materials.

² See Vijay Joshi and I. M. D. Little, *India: Macroeconomics and Political Economy 1964–1991* (Washington, D.C.: World Bank, 1994).

Close linkages between theoretical and empirical contributions differentiate this book from other books which are either theoretical or empirical.

The book begins with characterizations of African markets. The author explains three mechanisms of resource allocation: gift exchange, market exchange, and hierarchies. Gift exchange, the author argues, constitutes a very important mechanism in developing economies, especially in Africa. Markets also play a significant role in Africa but not hierarchies which rely on command and control to allocate resources among their members. This is because African markets consist of many small traders and firms and not of large enterprises as found in developed economies. As a result, African economies are very much market-oriented, arguably more so than developed economies. Many small firms and traders in the African markets, however, do not guarantee efficient resource allocations because of high transaction costs. In African markets, firms and traders have to conduct exchanges based on a cash-and-carry basis and rely on trust-based personal exchanges rather than reputation-based exchanges. These observations are confirmed by empirical studies.

The empirical studies in the book are based on three data sets. The first data set comes from a series of panel surveys of manufacturing firms (in food processing, textile and garments, woodworking and furniture making, and metalworking) in nine countries in sub-Saharan Africa. The surveys were conducted by a variety of national teams coordinated by the Regional Program of Enterprise Development of the World Bank. Sampled manufacturing firms were visited three times in 1993, 1994, and 1995. Some of the sampled manufacturing firms in Ghana, Kenya, and Zimbabwe were selected for detailed follow-up surveys. These follow-up surveys form the second data set. The last and third data set comes from trader surveys of agricultural products in Benin, Malawi, and Madagascar. The surveys were jointly undertaken by IFPRI (the International Food Policy Research Institute), the World Bank, Oxford University, and local governments. The author was involved in all of the data collection.

Part II of the book describes contract enforcement among manufacturers and agricultural traders. Manufacturers rely on relationships and reputation rather than legal institutions to enforce contracts. African manufacturers expect supply contracts to be flexible for market exchanges to take place. Thus, clients and suppliers continuously negotiate to modify their contracts. Agricultural traders also rely on personal relationships. They involve little forward contracting, no brand recognition, and no returns to scale in distribution. Because of the heavy reliance on personal relationships, African manufacturing firms and traders tend to remain small.

The formulation of trust is explored in Part III. The gradual process of trust building is formulated by using a dynamic Bayesian game. In the process, agents screen out undesirable clients or suppliers over time. The cost of screening is high when there are multiple partners. These observations are supported by empirical evidence from manufacturers and agricultural traders. Manufacturing firms use a trial period to build up trust, and agricultural traders exchange information about suppliers.

Trust building, however, is a time-consuming exercise. A firm can save time by relying on recommendations from another firm with whom trust has already been established. Thus, Part IV investigates the role of information sharing. First, a dynamic model of relational contracting is formed. External contract enforcement is assumed inexistent, and two agents

are assumed to trade with each other until a breach of contract occurs. Three contract stages are considered: matching, contracting, and compliance. Under these assumptions and settings, conditions for a self-enforcing equilibrium are investigated. Empirical evidence, albeit limited, is presented on information sharing. The evidence supports information sharing but limited enforcement based on information sharing. Thus, breachers are not entirely excluded from future trading. Recommendations are not always accepted without some investigation. Only among the Kenyan-Asian communities could firms obtain credit from the first transaction with a recommendation. The Kenyan-Asian firms, therefore, are able to rely on well-organized information-sharing institutions, although the author suggests there is segmentation among various Asian subgroups.

How, then, do agents form networks in which they exchange information and develop trust? This is the main question in Part V. Graph theory is used to describe the characteristics of various types of trade patterns. The combination of nodes (individuals) and links (relationships) constitutes a graph or network. This is followed by a short discussion of business networks among African firms based on ethnic groups. Next, the importance of networks is estimated by using data from agricultural traders. Because agricultural products are traded by many small traders, transaction costs are expected to be high. As a result, this creates an environment where gains from network capital are expected to be large. Empirical studies from three African countries confirm this hypothesis. The network capital, represented by the number of traders known, has large positive impacts on the productivity of agricultural traders.

Finally, ethnicity and discrimination are considered in Part VI. First, the similarities and differences between statistical discrimination and network effects are discussed theoretically and investigated empirically in the first four chapters making up this part. Separating discrimination against certain ethnic groups from network effects is a difficult task since many business networks in Africa are based on ethnic groups. In fact, the empirical evidence indicates that there are differences between ethnic groups in access to credit among African manufacturers. Further investigations provide evidence that network effects are present in obtaining trade credit rather than discrimination. The same hypothesis is tested by using data from agricultural traders, but gender and religion are added. The results indicate that network effects have a stronger and more systematic effect on trust and information sharing than ethnicity, gender, and religion. Finally, the effects of networks on firm entry and growth are investigated.

The book ends with detailed policy implications that are well thought-out because the author has been involved in the present research topic for over ten years. For example, the section on policy implications starts with an episode where the author and his colleagues had to reconsider their policy implications as they accumulated knowledge on different countries. In the end, however, it is clear that the book is successful in delivering its underlying message that the "market," taken for granted by many economists, is a fragile institution that can benefit from careful nurturing by public authorities.

In this book the author tries to combine not only theoretical and empirical contributions but also studies from different disciplines. The book is ambitious and the result of the author's many years of research on the topic. The book is full of new ideas and untested hypotheses that deserve further investigation, and the author invites other researchers to join in the

effort. Indeed, the author has produced a book that sets a high standard for other economists to follow, especially for young development economists. (Takashi Yamano)

Birth Control in China, 1949–2000: Population Policy and Demographic Development by Thomas Scharping, London, RoutledgeCurzon, 2003, xvi + 406 pp.

This is a comprehensive study on the activities relating to family planning¹ in China, which was based on the author's three stays in China, in 1986, 1990, and 1992, for this project, two visits in the course of different projects during 1993 and 1994, and one visit for attending the IUSSP (International Union for the Scientific Study of Population) meeting held in China in 1997. The author collected a large amount of materials and documents, one of the important features of this book, including official documents, research papers and books, and empirical data dealing with Chinese family planning. In addition, the author has interviewed relevant leaders, scholars, and people from which first-hand information and direct impression of Chinese society could be obtained. Sometimes, it is not easy for a foreign scholar to collect official documents and data in China.

The book is comprehensive because it covers various aspects relating to family planning programs such as the history of population development in China, the processes of policy making and changes, the impact of the policies on gender role and fertility decline, and the problems that the implementation of the programs are facing. The crucial contribution and difference of this book from others are that the reasons why the Chinese government intended to control its population in such a harsh way are described in detail rather than superficially.

Contents of the Book

In the first chapter, the author indicated his understanding of family planning in China in terms of hardships of the family planning activities, the conflict between the liberalization of the economy and tight control of birth, and the limits of government intervention in family planning. The author attributed all the problems faced by the implementation of family planning in China to the changes in the values and concepts associated with social, economic, and political development. In Chapter 2, the author attempted to elucidate the contradiction between the human right issue and the need for action to limit the rapid increase of population by considering that family-size preferences that would be economically viable at the private level may conflict with the concerns of the society in general. The author mentioned that "it is not the individual but the institution of the family, in a broad sense also society at large, that opposes the government's birth-planning efforts" (p. 10).

¹ I noticed that the author preferred to use the terms "birth control," instead of "family planning." I used the terms "family planning" in this review because, to my understanding, the activities relating to family planning in China are far beyond those for birth control.