EE

Exchange and Development

Peter A. Cornelisse
Erik Thorbecke

Exchange and Development

Peter A. Cornelisse

Professor of Public Finance, Emeritus, Erasmus University, Rotterdam, the Netherlands

Erik Thorbecke

Graduate School Professor, H.E. Babcock Professor of Economics, Emeritus, Cornell University, USA

Edward Elgar

Cheltenham, UK • Northampton, MA, USA

Published by
Edward Elgar Publishing Limited
The Lypiatts
15 Lansdown Road
Cheltenham
Glos GL50 2JA
UK

Edward Elgar Publishing, Inc.
William Pratt House
9 Dewey Court
Northampton
Massachusetts 01060
USA

A catalogue record for this book
is available from the British Library

Library of Congress Control Number: 2010922147

FSC
Mixed Sources
Product group from well-managed
forests and other controlled sources
www.fsc.org Cert no. SA-COC-1565
© 1996 Forest Stewardship Council

ISBN 978 1 84980 310 6 (cased)

Printed and bound by MPG Books Group, UK

Preface and acknowledgements

This volume has evolved and matured over an extended period of time. The motivation for writing this book was our feeling that the exchange process was not only fundamental to socio-economic development and progress but also influenced by it. Research involvement in, and empirical observations from a large number of developing countries made us aware of the enormous diversity of existing forms of exchange and transactions.

While some transactions occur within markets, others are barter or virtual exchanges within a family and still others take place within firms or organizations, we were particularly impressed by the variety of transactions within each of these categories. We asked ourselves why such a bewildering number of forms of exchange could be observed simultaneously in different settings of the developing world. What seemed even more surprising was the existence of multiple forms of exchange for essentially the same product, such as credit. We gradually realized that economic transactions evoke and reflect structural differences between developing and developed economies; they also help determine the nature, state and pace of development. It is somewhat surprising that most approaches to development economics and policy making do not place more emphasis on the importance of thorough, in-depth analyses of economic transactions.

Why are there so many exchange structures and why do some actors choose, or are contrived, to operate within a specific exchange structure? An answer to this question required us to explore and analyze and dig deeply into the physiology of the exchange process. Since transactions represent the roots and the culmination of any exchange activity, an analytical framework was needed to explain their formation. We realized that transactions occur within what we call exchange configurations. This conceptual framework allows the tracing back of the form and content of transactions to their building blocks or elements of exchange, that is, the *item* exchanged; the *actors* involved in decisions related to the exchange; and the *environment* – physical, social, technological, legal and political – within which the actors operate. Characteristics of these elements, in different combinations, determine distinct types of exchange relations and help explain their operation. We term an entire constellation – consisting of a particular combination of characteristics of elements of exchange, the decision process actors go through, and the resulting transactions – an exchange configuration. Exchange configurations can be thought of as channels through which specific transactions are effectuated. Actors, given their own attributes, the properties of the item transacted and the environment they face, will choose to operate in (or will design) that configuration and corresponding transaction that minimize perceived transaction costs.

In the course of writing this book we realized how much was taken for granted in the analysis of exchange. For example, we found well over a hundred different definitions of 'market' – perhaps the most fundamental concept underlying the exchange process. In studying the evolution of the process of exchange over the last couple of millennia, it became clear that the form taken by exchange configurations and their resulting transactions changed with economic development – gradually away from inter-personal, family or community-based transactions and increasingly towards impersonal market transactions. The dynamics of growth and development cannot be well understood without unveiling the link between exchange and development. We hope that the conceptual framework presented in this volume will encourage and assist further research attempting to bridge exchange and development.

As development economists – involved in research projects in Asia, Latin America and Africa – we had many opportunities to observe various forms of economic exchange in developing countries and the operation of a variety of local markets, such as for domestic food and cash crops in Indonesia, rice exchange in Taiwan, the multiple settings through which rural informal credit is channelled in sub-Saharan Africa, the dealings in black markets of foreign exchange in Turkey and Peru, dealings in a cotton market in Burkina Faso, a market for seasonal labour in Ivory Coast, in primary wheat markets and Islamic banking in Pakistan, to name only a few. It took a special effort to formulate a conceptual framework capable of explaining the bewildering number of distinct exchange configurations and transactions at the heart of the above specific forms of exchange. The same applied with particular force to a closely related matter, namely the behavioural routines of informal actors.

One reason it took a long time for this project to mature into a book is that for most of the time the two authors operated from their home bases, Cornell University and Erasmus University. Another reason is that our insights grew by leaps and bounds, sometimes with considerable time intervals in between. Other research projects in which we were separately engaged gained priority on several occasions. Still, while these projects caused immediate delay, they regularly also helped to improve and widen our understanding of exchange processes.

The list of individuals who inspired, influenced and helped us in the conception of this book is long. We can only mention a few. Erik Thorbecke is most grateful for the many enlightening discussions he has had with Alain de Janvry and Elisabeth Sadoulet on the present theme, starting with the conference they jointly organized at Cornell University in 1993 on 'State, Market, and Civil Organizations: New Theories and New Practices'. Also during the 1990s Erik Thorbecke wrote a couple of monographs with two of his graduate students, under the auspices of the Institute for Policy Reform in Washington DC on, respectively, 'The Evolution of Exchange' with Rimjhim Mehra (now Aggarwal), and 'Rural Informal Credit Configurations' with Stefano Paternostro. Both of these themes are rehearsed and elaborated upon in this volume. As is clearly revealed in the volume, we owe a debt of gratitude to the architects of the 'New Institutional Economics'. While drawing on their contributions we feel that we have added some key insights such as the concept of exchange configuration.

Peter Cornelisse wants to thank all those persons who, sometimes unknowingly, had an impact on the project by offering their insights. The first to be mentioned is Theo van Galen, close collaborator in the Pakistani wheat-marketing project referred to in the main text, who tragically died much too young. Commenting on the Exchange and Development project at a very early stage – when our ideas were only being formed – Theo insisted on the need for a full integration of the time dimension. Justus Veenman (Erasmus University) pointed out a certain degree of correspondence between the exchange-configuration approach and Boudon's theory of social change. On various occasions he also emphasized that economics is a social science and that economic behaviour cannot be understood without taking account of extra-economic aspects, such as cultural and sociological aspects. By the time Wouter Steffelaar and Peter Cornelisse had completed their study of 'Islamic banking in practice: the case of Pakistan', his point had been driven home. John Groenewegen (Technical University Delft) saved us time and energy by introducing us to the recent and most relevant literature on learning processes. And, last but not least, we are most grateful to Elma van de Mortel, who helped us in accessing the vast literature on institutional economics.

We thank all these individuals for their help and interest in our project. But they are not to be blamed if we took wrong turns.

Erik Thorbecke, Ithaca, NY
Peter Cornelisse, Rotterdam
April, 2010

Contents

Figures

Boxes

1. Introduction and overview

1.1 WHY CONSIDER EXCHANGE AND DEVELOPMENT?

Exchange is a fundamental component of economic behaviour. Moreover, exchange determines the state and pace of economic development. An exchange-free 'Robinson Crusoe economy' – where individual needs are only met through own production, and own consumption is the only outlet for an individual's production – cannot rise above subsistence level. Exchange allows (1) specialization and division of labour; (2) exploitation of economies of scale in production; (3) improved combination and allocation of factors of production; (4) the transmission of information and innovations; and (5) reaping the result of transactions, thereby providing incentives to economic actors. Each of these functions offers crucial opportunities for improving productivity. Thus, market and non-market exchange is of pivotal importance in the determination of income, the structure and organization of production, satisfaction of needs, income distribution and internal and external equilibrium in developing and developed countries alike.

But the impact of exchange relations extends beyond an interpretation of development in economic terms such as income per head and security and distribution of personal income. Also the wider concept of human development – incorporating additional aspects such as level and distribution of education and information, state of health, justice and freedom[1] – is influenced by exchange relations. Moreover, as will be argued in subsequent chapters, aspects of economic as well as human development in their turn impact on exchange, thereby creating dynamic loops of self-propelling development.

In light of the above, it is surprising that, for a long time, the literature on economic exchange has been rather sparse. In large parts of the economics literature there has been a tendency to treat markets as abstract, featureless phenomena. This neglect can be attributed mostly to the dominant position of the pure neoclassical theory during the greater part of the past century. In neoclassical theory, exchange is assumed to be essentially frictionless and, therefore, of little consequence. Under this assumption there is indeed little to be gained from in-depth analyses of economic exchange. But the perspective alters drastically when it is realized that economic exchange as it occurs in the real world is a laborious and costly process with uncertain and imperfect outcomes.

Of course, the situation has improved in recent years. A host of studies in the structure–conduct–performance and industrial organization tradition has contributed to a better understanding of the impact that market structure has on firms engaged in transactions. Game theory has unveiled the mechanism underlying the behaviour of economic actors under well-defined conditions, and experimental economics has pointed at unexpected attitudes and reactions of actors when taking economic decisions. Further, the transaction costs literature has demonstrated how various types of transaction costs impact on actors' preferences for one or another transactional framework, called governance structure. Contributions in these and other fields, such as institutional and evolutionary economics, have definitely deepened the profession's understanding of different aggregate forms of exchange and of decision processes followed by economic actors. As a result of the new insights, views of development processes and, with them, development policies have changed.

But some crucial aspects of exchange have still been largely overlooked. For even if we now have better insights as to why some transactions are concluded in a market and others within a firm; or, how industrial structures affect decision making by managers of firms; or, why economic actors sometimes prefer cooperation over competition; it is still mostly unclear why so many vastly different types of transactions can be observed in the real world and which factors determine their shape. In other words, important aspects of economic exchange have remained largely unexplored. So, keeping in mind the fact that exchange is of vital importance to development, there are good reasons for examining exchange in more detail and trying to come to grips with such questions as, how does exchange come about, and which are its underlying elements? First of all, transactions are the uncontested basic unit of analysis in economics.[2] Therefore, an improved understanding of the factors influencing the characteristics of transactions has analytical merit. Secondly, a better insight into the roots of transactions can clarify certain important aspects of the development process and thereby raise the effectiveness of development policies. Especially in a period where structural adjustment, market liberalization, privatization and globalization are receiving increased attention, a more systematic approach to the study of exchange is becoming necessary.

The above paragraphs describe in a nutshell what motivated us to write this book. The main objective of this volume is to provide an analytical framework within which the process of exchange can be investigated and clarified. Because of the strong relation between exchange and development, the great majority of the illustrative cases we present below refer to developing countries. But it should be emphasized at the outset that the framework we propose has a universal character applying to developing as well as to developed countries.

1.2 THE NEED FOR AN ANALYTICAL FRAMEWORK FOR THE STUDY OF EXCHANGE

Despite the centrality of exchange to economics, it is not easy to find a conceptual framework of exchange that is able to reflect the diversity of transactions that occur in the real world. Exchange that takes place within formal markets is best studied within the economics literature.[3] In fact, the literature includes a most impressive variety of theoretical and empirical studies of market transactions of varying degree of sophistication, relating to all sorts of commodities, services and factors of production and concluded under widely differing conditions. The best among them prove to be of great theoretical and practical value by contributing significantly to the understanding of the operation of prototypical, specific and individual markets.

But these studies tend to have limited coverage and applicability; an overarching framework is lacking. The origins of the differences in decision procedures, form and content of various market transactions remain largely unclear and the question remains to what extent conclusions derived in one market apply in another. An exception, of course, is the transaction costs literature which is expressly concerned with the causes underlying different transactional forms. It shows for certain well-known categories of transactions – market transactions, intra-firm and intra-family transactions – under which conditions economic actors prefer one category over another. But in real life there are untold numbers of different sub-categories of transactions within each of the three categories above, especially within market transactions. The ideal framework for the study of exchange should be able to explain this wide variation of transactions within the main modes. It should provide answers to such questions as: What can we say about the decision processes that lead up to categories of transactions at different levels of disaggregation? Which are the factors underlying the decisions, and are their numbers manageable? And, last but not least, which are the forces of change that propel the dynamics of exchange decisions, and, thereby, the process of economic development?

Moreover, insufficient attention is generally paid to exchange that takes place outside formal markets. In developing countries, in particular, forms of non-market exchange are both socially and economically important. These include non-monetary insurance arrangements, labour exchanges, reciprocal 'gift' exchanges, patronage relations, intra-family transactions, and a variety of other social and cultural mechanisms that work to distribute goods and services among members of a community. Such non-market or semi-market forms are often treated either as if they are insignificant or as if they are distinct from and unconnected to market institutions. As North (1990, p. 11) notes with reference to such organizational forms as the medieval manor and the suq (bazaar market) of the Middle East and North Africa, 'Not only does [neoclassical theory] not characterize these organizations' exchange process very well, it does not explain the persistence for millennia of what appear to be inefficient forms of exchange.'

The purpose of this book is to present a comprehensive analytical framework and to apply it in search for answers to the above questions. As indicated, special attention will be paid to exchange patterns in developing countries. So, with a view to the massive importance of family farms and family businesses in the developing world, we expressly consider non-market (intra-family and intra-firm) transactions next to market transactions. The need for such an approach can be illustrated by a relatively simple example, namely, the decisions typically taken within a family farm regarding various types of transactions. Virtual exchange takes place within the farm household, as household members are allocated tasks relating to farm production and household care. Production inputs like family labour, land, draft animals and machines may be employed entirely for own (family-organized) production, but may also be offered (rented out) to other users in separate markets. Similarly, food produced on the family farm may be consumed entirely by family members, but the family may also decide to sell at least part of it. The point here is, of course, that families often have a choice among different forms of exchange; to disregard one or more of the options would invalidate the analysis. Thus, our premise is that these matters can only be adequately addressed when market and non-market transactions are both included within a unified framework that considers them as being alternative modes of exchange, and that provides means of understanding why such alternative modes exist, how they are selected, how they operate and which relations exist between them. In particular, the main contribution of the analytical framework developed in this volume is to suggest a methodology capable of identifying typologies of exchange configurations within market and non-market settings.

In the following chapters we also examine the prevalence of 'segmented' pockets of exchange, with different price levels for similar goods and factors one finds so often in less-developed countries. From numerous case studies, it is clear that there is significantly less integration of exchange configurations in developing countries than in developed countries. Thus, attention will be paid to the differences between formal and informal, and legal and illegal (black) markets and between traditional and modern forms of exchange. An understanding of the functioning of developing economies and of the obstacles and opportunities for economic growth requires insight into the elements underlying the transactions occurring in the developing world.

1.3 THE CONCEPT OF 'EXCHANGE CONFIGURATIONS'

The conceptual framework developed here is that of 'exchange configurations'. It allows the tracing back of the form and content of transactions and of the preparatory decision processes to their building blocks. We call these building blocks 'elements of exchange'. They are (1) the *item* exchanged; (2) the *actors* engaged in decisions related to the exchange; and (3) the *environment* – physical, social, technological, legal and political – within which the actors operate. We postulate that the characteristics of these elements, in different combinations, shape distinct types of exchange relations and help explain their operation. We term an entire constellation – consisting of a particular combination of characteristics of elements of exchange, the decision process actors go through, and the resulting transactions – an exchange configuration. Exchange configurations can be thought of as channels through which specific transactions are effectuated (see Box 1.1 for an illustration). Actors, given their own attributes, the properties of the item transacted and the environment they face, will choose to operate in (or will design) that configuration and corresponding transaction that minimizes perceived transaction costs.

Each of the three elements needs to be broken down into an array of characteristics. The *item* at the heart of a transaction can be a commodity (intermediate or final), a service, a labour service, financial fund, land or foreign exchange. Differences in the nature of these items influence the corresponding transactions. In fact, a more detailed, disaggregated distinction is often necessary to capture and reflect real-life transactions and the corresponding exchange configurations within which they originated. For example, agricultural commodities differ in many respects – such as

BOX 1.1 AN EXAMPLE OF AN EXCHANGE CONFIGURATION

Now let us imagine a concrete situation. A small farmer's household in a Nigerian village has suffered a death in the family and desperately needs to borrow some funds for the funeral rites. In principle, different potential lenders could be approached. In this typical setting the potential lenders are likely to consist of the village branch of a rural bank or a micro-finance institution (both formal lenders) and a number of alternative informal lenders, i.e. professional moneylenders; Rotating Savings and Credit Associations (ROSCAs); traders, shopkeepers and merchants; friends and family.

How would this household decide which source of credit or which lender to approach? The farmer will realize quickly that he is essentially sealed off from formal credit institutions that require collateral and written contracts. This farmer possesses some land but no title. By customary law the land belongs to the village chief who allocates lifetime cultivating rights. Also, because the farmer is illiterate, the thought of a written binding contract is more than he can contemplate.

What about the informal lenders? The farmer has in the past received credit from a trader for a part of his crop to be delivered after harvest time. But the trader will not extend credit on different terms. Most ROSCAs operate in such a way that N members contribute at regular intervals a pre-specified sum S to a cash pool NS, which is then allocated to each member in turn until all have received the pool. Even if the farmer is a member of a ROSCA, he cannot count on receiving the pool prior to the funeral. The next alternative is the moneylender. But the interest rate quoted is unusually high even for this group of lenders, because the moneylender is not well acquainted with the farmer and cannot assess his reputation. This leaves the last alternative: 'friends and family'. Lenders from this group know him well and can assess his reputation; they can exercise a high degree of monitoring at virtually no extra costs and exert pressure on him if necessary. Moreover, as in the past the farmer has helped a neighbour and a relative with a loan under similar circumstances, he has a moral claim to reciprocity.

To the farmer a transaction in the latter configuration is the most attractive one among the feasible alternatives. The transaction he concludes is open-ended and has no explicit interest rate, repayment date and written contract.

perishability, uses and continuity of production – from other products. Often such more detailed properties appear to be of crucial importance for the shape of transactions.

Attributes of *actors* consist of preferences and objectives and other attributes, many of which can be used as instruments in pursuing the objectives. For individual actors such instruments include income, wealth, skills, education, social position and information. Other attributes – like age, gender, marital status – do not easily lend themselves for use as instruments, but they have a strong impact on the formation of intra-family transactions, especially in traditional societies. Other types of actors, such as firms and non-profit organizations, are characterized by attributes that differ partly from those of individual actors. Many producers, consumers, traders and investors are market actors; a branch manager of a vertically integrated firm and members of a farm household, operating within a firm and a family, respectively, are examples of non-market actors.

The *environment* is the third element of an exchange configuration. Some characteristics of the environment impose constraints on actors' decisions and their choice of transactions, others offer opportunities or provide protection, and still others combine these functions. Characteristics relating to the legal environment (such as property rights, laws and regulations), behavioural codes inspired by norms and values generally accepted in a given society, and characteristics of the physical environment (soil and climate characteristics as well as infrastructure) all have a direct and indirect impact on actions culminating in transactions. Further, the overall level of development of a region or country, as a determinant of purchasing power and the volumes exchanged, affects the degree of specialization that a market can support. Finally, the available technological shelf acts as a bound on the feasible range of market decisions.

Even this brief, provisional description already suggests that each of the three exchange elements has dozens, if not hundreds, of intrinsic characteristics that may conceivably be relevant for the formation of one or another type of transaction. These large numbers of characteristics and the even larger numbers of possible combinations of characteristics raise the question of whether exchange configurations are a manageable analytical instrument. Another problem to be faced is that many characteristics are not readily quantifiable as they are more qualitative in nature. This is particularly true of some of the dimensions of the environment, such as cultural aspects, the policy and legal framework, and the socio-economic structure. After analyzing both of these crucial issues in detail in this volume, we conclude that an operationally useful number of distinct and manageable exchange configurations can be identified and that the essentially qualitative nature of some of the characteristics of the elements does not present an insurmountable obstacle in defining them.

It must be emphasized at the outset that the exchange-configuration approach is an analytical framework rather than a full-scale theory. An economic theory aims to explain certain economic phenomena in a certain setting by specifying the relations expected to hold among a limited number of selected variables and data. The exchange-configuration approach helps in identifying the crucial characteristics of exchange elements underlying specific transactions and, in so doing, often suggests which theory is particularly appropriate for an explanation of the outcomes. But it is above all an invitation to take a novel look at transactions; to examine what causes transactions to be as they are and to note that the explanation of characteristics of transactions often lies in the details. The exchange-configuration approach offers clues for the identification of the factors that cause undesirable outcomes (be it from a private actor's or from a socio-economic point of view) and for the search for instruments to improve results. It assists in identifying the origins of forces that are capable of altering existing patterns of exchange and in locating the points of impact of these forces. It is also a constant reminder of the overwhelming importance of actors – as decision makers, learners, innovators – in shaping and changing patterns of exchange affecting thereby the state and pace of socio-economic development. It shows why governments, while essential in creating the basic conditions for development, cannot enforce development. Finally, it illustrates the importance of non-economic factors in an economic analysis and confirms once again that economics is a social science.

1.4 THE OBJECTIVES OF THIS BOOK

In an era when structural adjustment, privatization, globalization and the world-wide recession are receiving increased emphasis, a more systematic approach to the study of exchange and its impact on development is becoming necessary. This book is intended to provide the tools with which to better understand the nature and variety of the transactions that take place both within and outside of markets.