Grain Markets in Europe, 1500–1900

Karl Gunnar Persson surveys a broad sweep of economic history, examining one of the most crucial markets – grain. His analysis allows him to draw more general lessons – for example, that liberalisation of markets was linked to political authoritarianism. *Grain Markets in Europe, 1500–1900* traces early regulation to poor performance and frequent market failures. Price volatility caused by harvest shocks was of major concern for central and local government because of the unrest it caused. Regulation became obsolete when markets became more integrated and performed better through trade triggered by falling transport costs. Karl Gunnar Persson, a specialist in economic history, uses insights from development economics, explores contemporary economic thought on the advantages of free trade and measures the extent of market integration using state-of-the-art econometric methods. *Grain Markets in Europe, 1500–1900* will be of value to scholars and students in economic history, social history and agricultural and institutional economics.

KARL GUNNAR PERSSON is Reader at the Institute of Economics, the University of Copenhagen. A former President of the European Historical Economics Society, and current editor of the *European Review of Econonic History*, he has lectured widely on economic history. He is the author of *Pre-Industrial Economic Growth* (1988) and editor of *Economic Development of Denmark and Norway since 1870* (1993).

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Grain Markets in Europe, 1500–1900

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To my sons Mårten and Hannes

Grain Markets in Europe, 1500–1900

Integration and Deregulation

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Preface

This study began as an inquiry into the historical roots, causes and effects of individualism and economic liberalism. The motivating idea was simplistic, but instrumental in getting the project ahead. I believed that institutions thrive to the extent that they are useful and decay when a viable and better alternative emerges. This familiar idea has often been abused or trivialised, or both, so I decided to confront it by analysing an important case of institutional change: the demise of the system of grain market regulation that developed in medieval and early modern Europe. The uniformity of the European experience is striking, as is the subsequent integration *and* deregulation of grain markets during a century or so of reform, which began with the Enlightenment in continental Europe (though earlier in England). The logic was this: the integration of markets can do what regulated markets are supposed to accomplish and sometimes do accomplish – make markets perform better. Improved performance refers to the waning of market power and, more importantly, the suppression of price volatility. Prohibitively high transport costs ruled out market integration but when technological progress in the transport of goods and information lowered costs the integration of markets was stimulated. As a consequence, we should expect both market power and volatility to decline and centuries of price-stabilising regulation to come to an end.

In a previous book, *Pre-Industrial Economic Growth* (1988), I conjectured that the size of an economy – or, better perhaps, the number of people participating in an economy – fostered economic freedom. The reason for this presumption was that as the number of agents increased the opportunities for, and adverse effects of, collusion and market power dwindled. The alleged use or abuse of market power was a repeated complaint against markets and unrestrained individual economic freedom in the medieval and early modern periods. It also provided the motive and excuse for regulating markets, grain markets in particular. It was the specific *combination* of market power and self-seeking behaviour that was opposed because of its detrimental effects on the welfare of others. In this historical context, the connection between integration and deregulation became paramount. One important aspect of integration was that the size of the economy increased from a regional to a national and finally an international network. The number of agents therefore also increased and the impact of purely local events – such as a local harvest failure – on local outcomes – prices – was weakened. (If there are economies of scale internal to firms the size of the firms might increase when markets are integrated. Consequently the number of agents or firms might not change at all. The risks of market power will therefore remain a threat in the modern economy, and that is why there is still regulation out there.)

That market integration effectively halted collusion was one of the favoured themes of the eighteenth-century critique of the prevailing market regulation. This is the focus of chapter 1 of the present book. While contemporaries often identified *any* price increase as the result of monopolistic price-rigging, reformers vigorously asserted that an increase in the number of merchants was antithetical to market power. However, the evidence suggests the *combination* of harvest shocks and poor integration as the immediate and most important cause of price rises. The free trade which the eighteenth-century political economists favoured was a solution – provided transport costs fell – because harvest shocks were local and independent. Trade could therefore cancel out excess supply and demand between regions and nations and exploit the advantages of largeness. A good harvest in one region was usually matched by a shortage somewhere else, a poor harvest in one year was followed by bumper harvests in the near future. Free trade and arbitrage between high and low price regions consequently contributed to price stability and inventory adjustments, or carry-over, would stabilise prices over time.

The advantage of price and consumption stability – which was a permanent and important theme in pre-industrial political economy – has attracted renewed interest from the modern analysis of poverty and famines in underdeveloped nations. This line of thought is discussed in chapter 2, in which it is argued that the quest for price stability was a quest for consumption stability which had welfare-increasing effects. Consumption stability was a central theme in popular agitation as an integral part of the 'moral economy of the crowd'.

However, it is argued – we are now in chapter 3 – that local supply shocks were substantial and had a great impact on local prices when markets were poorly integrated and because grain storage was not great enough to smooth variations in harvests. The obvious question, then, is why markets could not do the job by means of inter-regional trade and intertemporal inventory adjustments. High transport costs, as has already been mentioned, prevented an adequate level of trade and the extremely risky nature of carry-over speculation made inventories of grain storage too low. Chapter 4 continues the argument by suggesting that *ancien régime* markets were performing inadequately because of the negative *externalities* generated by price instability. Price shocks threatened the entire fabric of early modern society, by leading to an increase in crime and contributing to the spread of epidemics when dearth triggered off waves of migrants. Although private trade and storage led to some price-stabilising effects, the private economic incentives and rewards for merchants were not incorporating the social gains from price and consumption stability. This discrepancy between private and social gains revealed an externality which provoked a market failure: the market outcome was not the desired outcome.

But market integration steadily improved over the centuries, as shown in chapter 5. Markets can be said to be integrated, it is argued, if there is some stable price ratio between the price of identical goods in different markets. If the price differential is stable it can be interpreted as the transport cost between the two markets, the market with the lower price being the net exporter. But it is also rewarding to analyse the *extent* of market integration by studying the speed of adjustment back to that stable price ratio between markets after a shock in one market experiencing, say, a harvest failure. It turns out that we can document increasing European market integration from the seventeenth century and a very dramatic transformation in the nineteenth century. The Enlightenment intuition suggesting the price-stabilising effects of market integration can also be corroborated.

Did the improved performance of integrated markets bring down regulation when markets could deliver price stability? In a way it did, though perhaps not in the straightforward way I had imagined when I embarked upon this project. Exactly how regulation was dismantled is discussed in chapter 6. The title of that chapter reveals an interesting paradox, and perhaps one with wider implications: liberalism needed authoritarian rule to get established and a long experience and acknowledgement of well behaved markets to become widely accepted.

Acknowledgements

It has been a real pleasure writing this book. It has taken me to the research centres and cities I like most: the British Library and Goldsmith Library in London, Bibliothèque Nationale and Archives Nationales in Paris and Biblioteca Nazionale in Florence. Again and again I had the privilege of being accommodated by Centre Culturel Suèdois while in Paris. The economic support from the Danish Social Science Research Foundation made the research for the book, the processing of vast amounts of data and the accompanying travel possible. The financial and moral support of the Institute of Economics, University of Copenhagen, has been of great help. I have enjoyed the hospitality of London School of Economics, Katholieke Universiteit in Leuven, European University Institute in Florence and the Research School of Social Science at the Australian National University. Bill Kennedy, Herman van der Wee, Albert Carreras and Graeme Snooks not only arranged these visits but had time for stimulating discussions.

An informal network of scholars working in the field of market integration has been exposed to my attempts to come to grips with the complexities of my subject over the years. If it had not been for the pleasant surroundings of Lerici and other conference spots life would have been harder. I have also learnt a lot from participants in economic history seminars at the universities of Aalborg, British Columbia, California–Davis, Copenhagen, Gothenburg, Leuven, Lund, Stockholm, Sydney, Utrecht, Australian National University in Canberra, Carlos III in Madrid, European University Institute in Florence, Harvard University and Northwestern University.

Early on in my research I was introduced to co-integration and equilibrium error-correction modelling by the best of guides, Katarina Juselius, who also helped my first assistant Karsten Strøbæk with the econometric software. Later Mette Ejrnæs took over as research assistant and has since become a researcher in her own right. She is the author of the technical appendix to chapter 5. Librarian Vibeke Ring has helped me in researching and organising the bibliography.

Paolo Malanima and Jan Tore Klovland have generously supplied me with their unpublished price data. The editors of *Economic History Review* and *Scandinavian Economic History Review* have permitted me to use previously published material.

Stanley Engerman, the late Lennart Jörberg and Cormac Ó Gráda read the entire manuscript. Giovanni Federico, Lars Herlitz, Betrand Roehner and Peter Skott read parts of it. I am indebted to all of them and to two anonymous referees for their comments and suggestions which have improved the quality of the product considerably.

Writing a book in your second language, Swedish being my mother tongue, gives the English an unmistakably Scandinavian accent which could be painful for the native reader. Friend and colleague Cormac Ó Gráda conveniently intervened, however, worked his way through the entire manuscript and suggested innumerable stylistic improvements.

This book has taken a long time to complete. I have sacrificed neither extended holidays on land and sea, nor the Sunday sauna by the Sound. My family has coped with my company and has probably felt relieved when I returned to work. My two sons Mårten and Hannes – now grown-ups and to whom this book is dedicated – even earned a buck when they helped me transfer the price data from Gutenberg to microchips, while I was cooking dinner.

Malmö and Copenhagen, October 1998.
Karl Gunnar Persson

List of Abbreviations

The abbreviations used in citations in footnotes are as follows (roman capitals, as in Ed C 1768: XI, refer to volume or '*tome*'):

EdC	*Ephémérides du citoyen ou Bibliothèque raisonnée des Sciences morales et politiques*
GdC	*Gazette du Commerce*
JdA	*Journal de l'Agriculture, du Commerce et des Finances*
JE	*Journal Economique*

TO Gustave Schelle (ed.), *Oeuvres de Turgot*, 5 vols., Paris: Felix Alcan, 1913–23