

Policy Reform and Adjustment in the Agricultural Sectors of Developed Countries

Edited by

David Blandford and Berkeley Hill

*The Pennsylvania State University, USA, and University of London,
Imperial College, UK*



CABI is a trading name of CAB International

CABI Head Office
Nosworthy Way
Wallingford
Oxfordshire OX10 8DE
UK

CABI North American Office
875 Massachusetts Avenue
7th Floor
Cambridge, MA 02139
USA

Tel: +44 (0)1491 832111
Fax: +44 (0)1491 833508
E-mail: cabi@cabi.org
Website: www.cabi.org

Tel: +1 617 395 4056
Fax: +1 617 354 6875
E-mail: cabi-nao@cabi.org

©CAB International 2006. All rights reserved. No part of this publication may be reproduced in any form or by any means, electronically, mechanically, by photocopying, recording or otherwise, without the prior permission of the copyright owners.

A catalogue record for this book is available from the British Library, London, UK.

Library of Congress Cataloging-in-Publication Data

Policy reform and adjustment in the agricultural sectors of developed countries / edited by David Blandford and Berkeley Hill.

p. cm.

Includes bibliographical references and index.

ISBN-13: 978-1-84593-033-2 (alk. paper)

ISBN-10: 1-84593-033-9 (alk. paper)

1. Agriculture and state—European Union countries. 2. Agriculture and state—North America. 3. Agriculture—Economic aspects—European Union countries. 4. Agriculture—Economic aspects—North America. 5. Economic stabilization—European Union countries. 6. Economic stabilization—North America. I. Blandford, David. II. Hill, Berkeley. III. Title.

HD1918.P63 2005

338.1'8091722--dc22

2005025840

ISBN 1 84593 033 9
978 1 84593 033 2

Printed and bound in the UK from copy supplied by the editors by Cromwell Press Ltd, Trowbridge.

Contents

About the Editors	vii
Contributors	ix
Acknowledgements	xiii
List of Abbreviations	xv
Foreword	xvii
1 Agricultural Adjustment and Policy Reform – Introduction <i>David Blandford and Berkeley Hill</i>	1
2 Structural Change in European Agriculture <i>Berkeley Hill</i>	5
3 Structural Change in US Agriculture <i>James M. MacDonald, Robert Hoppe and David Banker</i>	23
4 Pressures for Adjustment in the Agricultural Sectors of Developed Countries <i>David Blandford</i>	43
5 Policy Reform and Adjustment in the European Union: Changes in the Common Agricultural Policy and Enlargement <i>Pierre Bascou, Pierluigi Londero and Wolfgang Münch</i>	55
6 Policy Reform and US Agricultural Adjustment Capacity <i>Mary E. Burfisher, Kenneth Hanson, Jeffrey Hopkins and Agapi Somwaru</i>	69
7 Agricultural Policy Reform and Adjustment in Australia and New Zealand <i>David Harris and Allan Rae</i>	83
8 The Swedish Agricultural Policy Reform of 1990 <i>Ewa Rabinowicz</i>	105

9	Agricultural Policy Reform and Structural Adjustment in Korea and Japan <i>Hanho Kim and Yong-Kee Lee</i>	123
10	Policy Reform and Agricultural Adjustment in Transition Countries <i>Johan F.M. Swinnen</i>	141
11	The Reform of Grain Transportation Policy and Transformation in Western Canadian Agriculture <i>Darcie Doan, Brian Paddock and Jan Dyer</i>	163
12	The US Peanut Quota Buyout: Sectoral Adjustment to Policy Change Under the 2002 Farm Act <i>Erik Dohlman, Linwood Hoffman, Edwin Young and William McBride</i>	175
13	What Affects Farmers' Ability to Adjust: Evidence from the United States <i>Jeffrey Hopkins, Mitch Morehart and James Johnson</i>	189
14	Differences in Farm Performance and Adjustment to Change: A Perspective from The Netherlands <i>Krijn J. Poppe and Hans van Meijl</i>	201
15	Policies Affecting Resource Adjustment in Agriculture in the European Union <i>Carmel Cahill and Berkeley Hill</i>	219
16	Policy for Agricultural Adjustment in the United States <i>David Blandford and Richard N. Boisvert</i>	237
17	Adjustment Policy for Agriculture in Developed Countries <i>David Blandford and Berkeley Hill</i>	255
	Index	271

About the Editors

David Blandford is a professor of agricultural economics in the Department of Agricultural Economics and Rural Sociology at the Pennsylvania State University, where he was formerly the head of department. Born and educated in the United Kingdom, he was also a member of the faculty at Cornell University. Dr. Blandford spent a number of years at the Organisation for Economic Cooperation and Development (OECD) in Paris, where he was a head of division in the Directorate for Food, Agriculture and Fisheries. He has twice served as chair of the International Agricultural Trade Research Consortium. His contributions to public education on agricultural policy issues have been recognized by a Fellowship from the Kellogg Foundation and by a Quality of Communication Award from the American Association of Agricultural Economics. He teaches and conducts research on the economics of the food system, food and agricultural policy, and international trade.

Berkeley Hill is professor of policy analysis at London University, a chair held at the Wye campus of Imperial College London. A graduate of the universities of Nottingham (B.Sc.) and Reading (Ph.D.), he held successive posts at Wye College, University of London before being awarded a personal professorship in 1999 (Wye College merged with Imperial College in 2000). He was granted the title of Emeritus Professor in October 2005. In addition to teaching and research on agricultural policy, Dr. Hill has worked extensively with UK and international organizations on economic statistics for agriculture (especially income measurement) and rural development. He has served as an external expert to Eurostat (the statistical office of the European Commission) for the development of its Income of the Agricultural Households Sector (IAHS) statistics, has been a consultant to the OECD on agricultural incomes and taxation, and an evaluator of rural development policy for the UK government. Most recently he played a leading role in the preparation of a methodological handbook on Rural Development Statistics and Agriculture Household Income for the Inter-secretariat Working Group on Agriculture and Rural Indicators. At weekends he is a musician (choir director, conductor and organist).

Contributors

David E. Banker is an economist with the Economic Research Service, United States Department of Agriculture, Washington, DC, USA.

Pierre Bascou is an agricultural economist in the Directorate General for Agriculture and Rural Development of the European Commission, Brussels, Belgium.

Richard Boisvert is a professor in the Department of Applied Economics and Management at Cornell University, Ithaca, New York, USA.

Mary E. Burfisher is a visiting professor of economics at the US Naval Academy, Annapolis, Maryland, USA.

Carmel Cahill is Head of the Policies, Trade and Adjustment Division of OECD's Directorate for Food, Agriculture and Fisheries, Paris, France.

Darcie Doan is a Trade Policy Analyst with Agriculture and Agri-food Canada in Ottawa, Ontario, Canada.

Erik Dohlman is an economist at the Economic Research Service, United States Department of Agriculture, Washington, DC, USA.

Janice Dyer is Acting Director General for the Research and Analysis Directorate, Agriculture and Agri-food Canada, Ottawa, Ontario, Canada.

Kenneth Hanson is an economist at the Economic Research Service, United States Department of Agriculture, Washington, DC, USA.

David Harris is a freelance agricultural economist and the Managing Director of an economic consulting company, D. N. Harris & Associates, Melbourne, Australia.

Linwood Hoffman is an economist at the Economic Research Service, United States Department of Agriculture, Washington, DC, USA.

Jeffrey Hopkins is an analyst for agriculture and natural resources for the Budget Committee, U.S. House of Representatives, Washington, DC, USA.

Robert A. Hoppe is an economist with the Agricultural Structure and Productivity Branch of the Economic Research Service, United States Department of Agriculture, Washington, DC, USA.

James Johnson is an economist at the Economic Research Service, United States Department of Agriculture, Washington, DC, USA.

Hanho Kim is a professor of agricultural economics in the Department of Agricultural Economics and Rural Development at the Seoul National University, Seoul, Korea.

Yong-Kee Lee is a professor of agricultural economics in the Department of Food Industry Economics at the Yeungnam University, Daegu, Korea.

Pierluigi Lonero is an agricultural economist in the Directorate General for Agriculture and Rural Development of the European Commission, Brussels, Belgium.

William McBride is an economist at the Economic Research Service, United States Department of Agriculture, Washington, DC, USA.

James M. MacDonald is an economist and branch chief at the Economic Research Service, United States Department of Agriculture, Washington, DC, USA.

Hans van Meijl is an economist in the fields of international trade and technical change at the Agricultural Economics Research Institute (LEI), Wageningen-UR, The Hague, The Netherlands.

Mitchell Morehart is an economist at the Economic Research Service, United States Department of Agriculture, Washington, DC, USA.

Wolfgang Münch is an agricultural economist in the Directorate General for Agriculture and Rural Development of the European Commission, Brussels, Belgium.

Brian Paddock is the recently retired Executive Director of the Research and Analysis Directorate, Agriculture and Agri-food Canada in Ottawa, Ontario, Canada.

Krijn J. Poppe is a business economist and head of department at the Agricultural Economics Research Institute (LEI), Wageningen-UR, The Hague, The Netherlands.

Ewa Rabinowicz is a professor at Swedish University of Agricultural Sciences in Uppsala, Sweden and Research Director of the Swedish Institute for Food and Agricultural Economics in Lund, Sweden.

Allan Rae is a professor of agricultural economics in the Department of Applied and International Economics at Massey University, Palmerston North, New Zealand.

Agapi Somwaru is an economist at the Economic Research Service, United States Department of Agriculture, Washington, DC, USA.

Johan Swinnen is professor of development economics in the Department of Economics at the University of Leuven (KUL), Belgium.

Edwin Young is an economist at the Economic Research Service, United States Department of Agriculture, Washington, DC, USA.

ACKNOWLEDGEMENTS

This book is a product of a research project funded by the Economic Research Service (ERS) of the US Department of Agriculture entitled 'Policy Reform and Agricultural Adjustment' under a Cooperative Agreement with The Pennsylvania State University (No. 43-3AEK-3-80047). Additional funding was provided by the International Agricultural Trade Research Consortium (IATRC). Under the project, an international workshop was held at the Wye Campus of Imperial College in October 2003 and an IATRC symposium in Philadelphia in June 2004. The editors are indebted to the ERS and IATRC not only for the financial resources that made the project possible, but also for the active involvement of many ERS staff and IATRC members in the preparation of the chapters. A large number of stimulating papers were generated as part of the project. Regrettably it has not proved possible to include all of them in this volume but we would like to express our thanks and appreciation to all those who contributed.

We would like to acknowledge the assistance provided by several individuals in organizing and conducting the meetings upon which the book is based. Sara Harden was invaluable in helping to organize and run the initial workshop at Imperial College. Charli Hochsprung provided key organizational support for the Philadelphia symposium. Without their skills and dedication, it would have been impossible to handle the organizational complexities of these two international meetings.

Several people at The Pennsylvania State University provided valuable assistance in managing the project and its activities. We would particularly like to acknowledge the contributions of Rose Ann Alters, Sue Confer and Jane Mease in this regard.

The production of the book would not have been possible without the skill and efficiency of Linda Kline and Susan Thompson in preparing the camera-ready copy of the manuscript. We are also grateful to Krys Bottrill for preparing the index.

Thanks are due to The Pennsylvania State University for granting a sabbatical leave to David Blandford in the autumn of 2004 to work on the project, and for Imperial College for providing office facilities at the Wye Campus during that period.

Finally, we should like to stress that neither the US Department of Agriculture or its Economic Research Service, nor any of the other institutions for which the authors of the chapters work, bear any responsibility for the accuracy of the information, or views expressed in this text. Any errors or omissions are our responsibility.

David Blandford and Berkeley Hill
University Park, Pennsylvania, USA and Wye, Kent, UK, August 2005.

List of Abbreviations

AAFC	Agriculture and Agri-food Canada
ARMS	Agricultural Resource Management Survey (USA)
CAP	Common Agricultural Policy (EU)
CCPs	Counter-cyclical payments (USA)
CD	Consumer Delegation (Sweden)
CEEC	Central and East European Countries
CEH	Czech Republic, Estonia and Hungary
CIS	Commonwealth of Independent States
CMEA	Council of Mutual Economic Assistance
CPI	Consumer price index
CRP	Conservation Reserve Programme
CSE	Consumer Support Estimate
CWB	Canadian Wheat Board
DEFRA	Department of the Environment, Food and Rural Affairs (UK)
EAGGF	European Agricultural Guidance and Guarantee Fund
EC	European Community or Communities
EEC	European Economic Community
ERDF	European Regional Development Fund (EU)
ERS	Economic Research Service of the U.S. Department of Agriculture
ESF	European Social Fund (EU)
EU	European Union
EU12	EU of 12 members (Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, United Kingdom)
EU15	EU of 15 members (EU12 plus Austria, Finland, Sweden)
EU25	EU of 25 members (EU15 plus Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia)
EUROSTAT	Statistical Office of the European Communities
FAO	Food and Agriculture Organization of the United Nations
FADN	Farm Accountancy Data Network (EU)
FAPRI	The Food and Agricultural Policy Research Institute (Universities of Iowa and Missouri-Columbia, USA)
FCRS	Farm Cost and Returns Survey (USA)
FDA	Food and Drug Administration (USA)
FDI	Foreign Direct Investment
FEOGA	Fonds Européen d’Orientation et de Garantie Agriculture (EU): see EAGGF
FSA	Farm Service Agency (USA)

FSS	Farm Structure Survey (EU)
GATT	General Agreement on Tariffs and Trade
GCFI	Gross cash farm income
GDP	Gross domestic product
GHTS	Grain Handling and Transportation System (Canada)
IAHS	Income of the Agricultural Households Sector (EU)
ISP	Integrated Strategic Planning
LDP	Loan deficiency payment (USA)
LEI	Agricultural Economics Research Institute (The Netherlands)
LFA	Less favoured areas (EU)
LFR	Federation of Swedish Farmers
LRF	Limited resource farms (USA)
MINFL	Minimum Family Living Expenses
NAFTA	North American Free Trade Agreement
NCP	National Competition Policy (Australia)
NIS	Newly Independent States
NSW	State of New South Wales (Australia)
NZ	New Zealand
OECD	Organisation for Economic Cooperation and Development
OGA	Other gainful activity
OTA	Congressional Office of Technology Assessment (USA)
PPI	Producer price index
PSE	Producer support estimate
RDR	Rural Development Regulation (EU)
RDP	Rural Development Programme (EU)
RLL	Romania, Latvia and Lithuania
RMA	Risk Management Agency (USA)
SAFER	Sociétés pour l'aménagement foncier et l'établissement rural (France)
SFP	Single Farm Payment (EU)
SMI	Minimum settlement area (France)
SMP	Skim milk powder
TAA	Trade adjustment assistance
TFP	Total Factor Productivity
TRQ	Tariff-rate Quota
UK	United Kingdom
USA	United States of America
USDA	US Department of Agriculture
WGTA	Western Grain Transportation Act (Canada)
WGTAf	Western Grain Transportation Adjustment Fund (Canada)
WGTPP	Western Grain Transition Payments Programme (Canada)
WRP	Wetlands Reserve Programme (USA)
WTO	World Trade Organisation

Foreword

Susan Offutt, Administrator

Economic Research Service, US Department of Agriculture

Agriculture is one of the most resilient and adaptable sectors of developed country economies. Over decades and from one growing season to the next, farmers alter decisions about input and output use to match the market conditions they face. In the United States, the combination of technological advance and the availability of remunerative off-farm employment opportunities brought about significant reduction of labour on American farms, even as output and productivity soared. The scope of possibilities for output substitution – among grains, between grains and livestock, over fruit and vegetable choices – has been a source of prosperity for farmers, many of whom are among the most successful entrepreneurs. Not all such change has been voluntary or welcome, but the sector as a whole has managed well.

The notion of adjustment in agriculture, then, is not new. Adjustment occurs in response to economic events, in the near and longer term. One might ask, then, what is the role of agricultural policy in this adjustment process? In the United States, farm policy has never fundamentally altered the trajectory of change, but has in some cases affected the pace of change. The institutionalization of what began as emergency income support in the 1930s has likely slowed the movement of labour out of the farm sector. On the other hand, policies can accelerate change. For example, the risk-reducing effects of price supports and the planning rigidities imposed by supply controls encouraged specialization. Even if long run effects are small, in the here and now policy can affect the sector and so act as a determinant of the distribution of gains and losses from change.

Until fairly recently, farm policy analysts did not think of government intervention explicitly in terms of its role in retarding or facilitating adjustment to economic or policy change. However, the idea of adjustment assistance is not new. As Jagdish Bhagwati in his recent book *In Defense of Globalization*, (Oxford University Press, New York, 2004) has pointed out, the United States appears to have made a distinction between adjustment to domestic and foreign competition. The broad social safety net (e.g., unemployment compensation) seems to suffice as a response to shifts in economic opportunities occasioned by change in domestic firms' behaviour or policies that primarily affect domestic markets. But politics has differentiated that circumstance from the one in which explicit change in government policy will affect the degree to which Americans face foreign competition. Trade adjustment assistance programmes date to the

Kennedy Round, where they were instrumental in gaining the support of labour unions for opening American markets. With the inclusion of agriculture in multilateral trade negotiations, beginning with the Uruguay Round, the concept of adjustment assistance in response to subsequent policy reform became more relevant to agriculture.

The work of this book spans the globe, evaluating the experience of agriculture in countries that have faced significant change and adjustment. Australia and New Zealand are two very good and instructive examples. Ultimately the decision to provide adjustment is based on equity considerations – what is fair – and is properly made by the political system. Economists, however, can help policy makers assess the consequences of change, in understanding where the burden of adjustment is truly felt. Analysts can work through alternative designs for compensation and adjustment assistance that effectively address equity concerns without unduly compromising the efficiency gains arising from policy change, especially in the context of multilateral trade liberalization.

1

Agricultural Adjustment and Policy Reform – Introduction

David Blandford¹ and Berkeley Hill²

The Pennsylvania State University¹

Imperial College²

The Aim of This Book

In this book we focus on economic adjustment resulting from agricultural policy reform and ways of facilitating the adjustment process. The traditional emphasis of policy in OECD countries has been on price and income support for farmers. Annual costs of support for consumers and taxpayers averaged over \$320 billion between 2001 and 2003 (OECD 2004). Existing policies face mounting criticism because of inefficiency in achieving domestic policy aims and impacts on international trade. Despite such criticism it has been extremely difficult to change the fundamental orientation of agricultural policies.

The agricultural sectors of developed countries will face continuing pressure to adjust, regardless of whether current agricultural policies are reformed. However, policy reform would increase adjustment pressures and strengthen political imperatives to address the issues involved. Doubts about the ability of farmers to adapt may retard the process of reform. If concerns can be shown to be misplaced and cost-effective ways of dealing with adjustment issues can be identified, reform may be less difficult to achieve. This book develops the case for the reorientation of public policy for agriculture away from a largely defensive approach to change, to one that facilitates adjustment. That would result in a more efficient agricultural sector, lower public expenditures, and greater flexibility in achieving broader social aims.

The next 5 to 10 years are likely to witness a number of policy changes. In the European Union, where the primary means of supporting agricultural incomes has been shifting gradually from price support to direct payments, the future of such payments is under debate because of their high costs and the implications of further enlargement of the Union. From an expanded membership of 25 countries in 2004, further enlargement is likely in 2007 (Bulgaria and Romania) with the prospect of Turkey joining later. Many of the new members have agricultural sectors that will need to be restructured to be competitive. The EU's existing structural policy schemes are due to expire in 2006. A new set will be introduced for the period 2007 to 2013, which will have to accommodate the needs of an enlarged Union. Policy priorities are likely to shift from income support for farmers to environmental objectives and a broader focus on regional and rural development.

In the United States, where there was an expansion of financial support for agriculture under the 2002 Farm Act, growing budgetary pressures are likely to dominate debate over the 2007 Farm Bill. The high continuing costs of current programmes, recognition that they may not be effective in dealing with farm problems, and concerns about their effects on the competitive position of US agriculture will stimulate a reconsideration of the future direction of US policies.

At the international level, the Doha round of negotiations under the World Trade Organization (WTO) will likely require changes in the agricultural policies of developed countries. Major issues are increased access to markets, the elimination of export subsidies, and greater discipline on levels and forms of domestic support. While the negotiations may not be concluded quickly, adjustments resulting from a final agreement are likely to affect the future direction of agricultural policy in developed countries.

The Context of Agricultural Adjustment

Agriculture's declining role in modern industrialized economies and its causes (including slow growth in demand and rapid technological advance) are well established and seem likely to continue (Chapter 4). History shows that downward pressure on the income derived from farming is a permanent characteristic. The need for the industry to adjust is a continuing requirement. Adjustment comes in many forms, though at the aggregate level the most prominent indicators are changes in the number of farms and the size of the labour force.

At the level of the individual farm, a range of responses can be seen. Some operators choose to increase the scale of their business, typically by purchasing or renting land, in order to generate larger revenue and net income. Some opt to intensify production and generate higher output from the same land base. Many farmers or members of their households allocate a larger proportion of their resources (labour and capital) to non-agricultural activities or leave farming altogether. Those who do not adjust in these ways usually find that change is eventually brought about through the unwillingness of potential successors to tolerate the low level of rewards from farming. This has led to sustained net out-migration of labour from agriculture and a decline in the total number of farmers, in particular those who are devoted full-time to agricultural activities.

Structural change in the agricultural sector has economic, social and environmental implications that extend beyond farming. The balance between these elements varies between countries and over time. However, a common feature is that agriculture has a political prominence that greatly exceeds its role as a contributor to national income and employment. This is reflected in the extent to which governments of developed countries have intervened to support agriculture. The present shape of the sector has been conditioned not only by underlying technical and economic forces that affect the production of agricultural commodities, but also by past policy decisions.

Government policies for agriculture have generally attempted to blunt the impact of the economic forces driving change, but the principal forms of adjustment have continued to operate. When policy reform takes place, larger and more rapid changes can be expected. If impediments to factor reallocation can be addressed efficiently, the use of public resources to facilitate adjustment can be justified. Opposition to reform by those who incur private costs may also be overcome if those costs can be addressed.

In order to design future adjustment policies there is great value in examining recent examples of policy reform, their outcomes, and the approaches used to facilitate change. This is the contribution that we hope to make.

The Structure of the Book

The structure of the book is straightforward. Two chapters analyse recent adjustments in the agricultural sectors of the European Union and the United States (Chapters 2-3); Chapter 4 assesses the forces that are likely to generate further pressures for change. Policy reform is one such driver; Chapters 5 and 6 focus on the extent to which recent and prospective reforms may be expected to require further adjustment in the European Union and the United States.

Chapters 7-12 form a series of six case studies of policy reform and agricultural adjustment. Despite a limited number of recent examples of reform in developed countries, these provide valuable insights into adjustment issues and policies.

The ability of farmers and farm households to adjust to policy reform is a key concern. Chapter 13 and 14 examine evidence on the ability of farmers to adapt to changes in economic conditions, drawing on experience in The Netherlands and the United States.

The potential use of specific measures to promote adjustment in agriculture is a key issue. Chapters 15 and 16 provide perspectives on this issue for the European Union and the United States.

In the final chapter we bring together the lessons learned to identify future options for agricultural adjustment policy in developed countries.

References

Organization for Economic Cooperation and Development (2004) Producer and consumer support estimates. OECD Database 1986-2004. <http://www.oecd.org>