

# New Silk Roads

EAST ASIA AND  
WORLD TEXTILE MARKETS



Edited by Kym Anderson

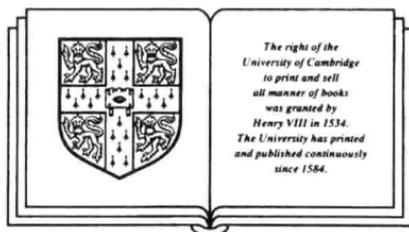
# NEW SILK ROADS

East Asia and World Textile Markets

Edited By

KYM ANDERSON

*Economic Research and Analysis Unit,  
General Agreement on Tariffs and Trade, Geneva.*



CAMBRIDGE UNIVERSITY PRESS

CAMBRIDGE

NEW YORK

PORT CHESTER

MELBOURNE

SYDNEY

CAMBRIDGE UNIVERSITY PRESS

Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo, Delhi

Cambridge University Press

The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press, New York

[www.cambridge.org](http://www.cambridge.org)

Information on this title: [www.cambridge.org/9780521110518](http://www.cambridge.org/9780521110518)

© Cambridge University Press 1992

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 1992

This digitally printed version 2009

*A catalogue record for this publication is available from the British Library*

*National Library of Australia Cataloguing in Publication data*

New silk roads.

Bibliography.

Includes index.

ISBN 0 521 39278 0.

1. Textile industry. 2. Textile industry — East Asia. I. Anderson, Kym. Series : Trade and development.

338.47677

*Library of Congress Cataloguing in Publication data*

New silk roads : East Asia and world textile markets / edited by  
Kym Anderson.

— (Trade and development)

Includes bibliographical references and index.

ISBN 0 521 39278 0.

1. Textile industry—East Asia. I. Anderson, Kym. II. Series:  
Trade and development (Cambridge, England)

HD9866.E18N49 1991

382'.45677'00951—dc20

91-3276

CIP

ISBN 978-0-521-39278-5 hardback

ISBN 978-0-521-11051-8 paperback

TRADE AND DEVELOPMENT

New Silk Roads

## TRADE AND DEVELOPMENT

A series of books on international economic relations and  
economic issues in development

Edited from the National Centre for Development Studies,  
Australian National University, by Helen Hughes

### Advisory editors

Juergen Donges, *Universität zu Köln, Wirtschaftspolitisches Seminar*  
Peter Lloyd, *Department of Economics, University of Melbourne*  
Gustav Ranis, *Department of Economics, Yale University*  
David Wall, *Department of Economics, University of Sussex*

### Titles in the series

Helen Hughes (ed.), *Achieving industrialization in East Asia*  
Yun-Wing Sung, *The China-Hong Kong connection*  
Kym Anderson (ed.), *New silk roads: East Asia and world textile  
markets*  
Rod Tyers and Kym Anderson, *Disarray in world food markets: a  
quantitative assessment*

# Figures

3.1	East Asia's shares of world exports of textiles and clothing, 1954 to 1987	39
3.2	East Asia's shares of world imports of natural fibres, 1954 to 1987	40
3.3	East Asia's shares of world exports of clothing, synthetic yarns and fabrics, and synthetic fibres, 1965 to 1987	47
4.1	Shares of agriculture and manufacturing in Thailand's GDP, 1956 to 1988	53
4.2	Effects of the MFA on the world market for clothing	63
4.3	A flow diagram of the model of the world market for clothing	65
7.1	Number of cotton spindles per thousand inhabitants, Belgium, Switzerland and the United Kingdom, 1834 to 1970	123
7.2	Number of cotton spindles per thousand inhabitants, Austria, Belgium, France and Germany, 1834 to 1970	124
7.3	Relationship between real GDP per capita and the share of clothing in manufacturing output, selected European countries and Korea, 1970 to 1985	125
9.1	Inter- and intra-industry trade in fibres, textiles and clothing for Australia, Canada, Japan, New Zealand and the United States, 1979	169

# Tables

1.1	Export specialization and net exports as a share of world trade in primary products, fibres, textiles and clothing, industrial and developing economies, 1965 to 1987	8
1.2	Index of intra-industry trade in textiles and clothing, various industrial market economies, 1965 to 1987	11
1.3	Importance of industrial, developing, centrally planned and East Asian economies in world trade in fibres, textiles and clothing, 1965 to 1987	12
1.4	Trade specialization in textiles and clothing, industrial market economies, 1970 to 1986	13
1.5	Import penetration into various industrial-country markets for textiles, clothing and other manufactures, 1970 to 1986	14
2.1	Importance of textiles, clothing and fibres in production, employment and trade, Japan, 1874 to 1987	18
2.2	The trade dependence of Japan's textile and clothing manufacturing industries, 1874 to 1988	20
2.3	Net exports as a ratio of exports plus imports in fibres, textiles and clothing, Japan, 1874 to 1987	21
2.4	Major industrial countries' shares in world exports of textiles and clothing, 1899 to 1988	23
2.5	Importance of textiles, clothing and fibres in trade, and wool self-sufficiency, United Kingdom, 1750 to 1988	23
2.6	Imports (and consumption) of cotton and wool by the United Kingdom, Japan, Northeast Asian NIEs and China, 1770 to 1988	25
2.7	Direction of exports of cotton from the United States and of wool from Australia, 1800 to 1987	26

2.8	Composition of Japan's trade in textiles and clothing, 1880 to 1985	27
2.9	Import penetration ratios for textiles, clothing and all manufactures from developing countries into Japan and other industrial countries, 1970 to 1986	29
3.1	China's shares of world production of natural fibres and textiles, 1976 to 1986	31
3.2	Importance of primary products and textiles and clothing in exports from East Asia, 1874 to 1987	34
3.3	Index of export specialization for various product groups, China, other East Asian economies and all developing economies, 1965 to 1987	36
3.4	Growth in production and exports of textiles and clothing in East Asia and the world, 1954 to 1984	38
3.5	Fibre composition of textile production in East Asia, 1959 to 1983	41
3.6	China's production, trade and self-sufficiency in raw cotton and raw wool, 1961 to 1986	43
3.7	Average and marginal prices received by farmers for agricultural products, China, 1978 to 1987	44
3.8	Apparent per capita use of raw cotton and raw wool in China and other Northeast Asian economies, 1961 to 1986	46
4.1	Real growth of GDP, Hong Kong, Korea, Singapore and Thailand, 1960 to 1988	53
4.2	Importance of primary products and textiles and clothing in exports from Thailand and all ASEAN countries, 1965 to 1988	54
4.3	Importance of Thailand and all ASEAN countries in world trade in fibres, textiles and clothing, 1965 to 1988	55
4.4	Thailand's seven most important export products, 1960 to 1988	56
4.5	Numbers of textile machines in Thailand, 1975 to 1985	58
4.6	Average tariffs on textiles and clothing in selected developing countries in the early 1980s	61
4.7	Effective rates of assistance for the textile and clothing industry, Thailand, 1985	61
4.8	Shares of clothing exports from selected developing countries to MFA-restricted markets, 1975 to 1986	63
4.9	The volume and value of Thai clothing exports to MFA-restricted markets, 1977 to 1988	64

4.10	Effects of the MFA on world clothing markets and on exporting countries' economic welfare, 1985	66
5.1	Real GDP growth rates, China and other Asian developing countries, 1960 to 1986	75
5.2	China's textile and clothing exports, by value and share of total exports, 1970 to 1986	75
5.3	Share of textile and clothing consumption in industrial countries supplied by imports from China and other developing economies, 1970 to 1986	79
5.4	United States imports of textiles and clothing from China and other major suppliers, 1982 to 1984	80
5.5	Average quota utilization rates for textile and clothing exports by China to four importing countries, 1981 to 1987	81
5.6	Estimated general equilibrium welfare effects of removing bilateral MFA quotas and tariffs on textiles and clothing in all industrial countries, 1986	84
6.1	Import penetration by newly industrializing Asia into advanced industrial country markets for textiles and clothing, 1970 to 1986	91
6.2	Trade orientation of textile and clothing industries, Japan and all advanced industrial countries, 1970 to 1986	93
6.3	Total size of Japan's textile and clothing industries, 1965 and 1983	95
6.4	Average plant size, capital intensity, and labour productivity of Japan's textile and clothing industries, 1965 and 1983	98
6.5	Research and development activity in Japan's textile and other manufacturing industries, 1965 to 1986	99
6.6	The textile products with the highest and lowest annual growth of output, Japan, 1967 to 1984	101
6.7	Simple correlation for Japan's four-digit textile industries between unit price in 1967 and real output growth, 1967 to 1984	103
6.8	Tariffs on textile and clothing imports, Japan, 1965 to 1980	103
6.9	Index of industrial countries' non-tariff barriers to textile imports from developing and industrial countries, 1983	104

6.10	Foreign direct investment by Japanese textile producers, by destination, 1965 to 1986	106
6.11	The extent of Japanese intra-firm trade and the distribution of sales of overseas subsidiaries by destination, 1984	107
6.12	Index of intra-industry trade by Japanese textile industries, 1965 and 1980	108
6A.1	Tests of causality between trade flows, industrial policy, and R and D efforts, Japan, 1965 to 1986	113
6A.2	2SLS estimation of labour productivity growth and import penetration growth in Japan's textile market, 1965 to 1980	117
7.1	Importance of textiles, clothing and other manufactures in exports from EC-12, EFTA, Italy and Portugal, 1965 to 1987	126
7.2	Importance of EC-12, EFTA, centrally-planned Europe, Italy and Portugal in world trade in fibres, textiles and clothing, 1965 to 1987	128
7.3	Value and sources of textile and clothing imports by the European Community (excluding intra-EC trade), the United States and Japan, 1985 to 1987	130
7.4	Shares of imports in apparent clothing consumption, by source, selected industrial countries, 1985	131
7.5	Import penetration from East Asia and elsewhere into markets for textiles and clothing in the European Community and EFTA, 1970 to 1986	132
7.6	Post-Tokyo Round average tariff levels for textiles and clothing, European Community and the United States	134
7.7	Share of restricted imports in total imports of textiles and clothing from developing countries (the trade coverage ratio), 1987	134
7.8	Import tariff equivalent of VERs and tariffs on clothing imported from Hong Kong, Korea and India to the EC and the US, 1980 to 1988	135
7.9	Indexes of estimated relative costs of clothing production, selected countries, 1982 to 1987	139
7.10	Conflicts of interests over EC external openness	144
7.11	Conflicts of interests over liberalization of EC clothing imports from non-preferential areas	144

7.12	Consequences of including EFTA members in the EC for conflicts of interests over external openness of an enlarged EC-16	145
8.1	Textile and clothing import quotas, United States, 1984 to 1988	152
8.2	Volume and share of US imports of textiles and clothing from Northeast Asia and the world, 1976 to 1988	157
8.3	Import penetration from East Asia and elsewhere into markets for textiles, clothing and all manufactures in the United States and all industrial market economies, 1970 to 1986	158
8.4	Tariffs and tariff equivalents of MFA quotas, United States, 1987	161
9.1	Fibre, textile and clothing trade sign patterns, selected industrial countries, 1979	170
9.2	Net imports of textiles and clothing as a share of apparent consumption, Australia, 1970, 1979 and 1986	172
9.3	Importance of natural fibres, textiles, clothing and all manufactures in exports of Australia, New Zealand and all industrial economies, 1965 to 1987	173
9.4	Import penetration from East Asia and elsewhere into markets for textiles, clothing and all manufactures in Australia and all industrial market economies, 1970 to 1986	175
9.5	Details of Australia's textile and clothing industries, 1973 to 1989	177
9.6	Net exports of textiles and clothing, New Zealand, 1970, 1979 and 1987	184
9.7	Effective rates of assistance for textile and clothing industries, New Zealand, 1981 to 1988	186
10.1	Population and population density, selected economies, 1986	195
10.2	Import penetration by China into various industrial-country markets for labour-intensive manufactures, 1970 to 1986	199
10.3	Import penetration by China and other economies into all industrial-country markets for manufactures, 1970 to 1986	200
A1	Import penetration from East Asia and elsewhere into markets for textiles, clothing and other manufactures in industrial market economies, 1970 to 1986	207-13

A2	Trade specialization in textiles and clothing, industrial market economies, 1970 to 1986	214
A3	Shares of world's natural fibre production, consumption, imports and exports, selected countries, 1961 to 1986	218
A4	Fibre self-sufficiency and per capita consumption, East Asian and other countries, 1961 to 1986	224

# Contributors to this volume

KYMANDERSON is Director, Centre for International Economic Studies, University of Adelaide, Adelaide, Australia (currently on leave at the GATT Secretariat, Geneva, Switzerland).

CARL HAMILTON is Research Fellow and former Acting Director, Institute for International Economic Studies, University of Stockholm, Stockholm, Sweden.

PETER LLOYD is Professor and Dean, Faculty of Commerce and Economics, University of Melbourne, Melbourne, Australia.

YOUNG-IL PARK is Associate Professor, Department of International Trade, Inha University, Inchon, Republic of Korea.

JOSEPH PELZMAN is Professor and Chairman, Department of Economics, George Washington University, Washington, DC, United States.

PRUE PHILLIPS is Director, International Economic Data Bank, Australian National University, Canberra, Australia.

SUPHAT SUPHACHALASAI is Lecturer, Department of Economics, Thammasat University, Bangkok, Thailand.

JOHN WHALLEY is Professor and Director, Centre for the Study of International Economic Relations, University of Western Ontario, London, Canada.

HIDEKI YAMAWAKI is Professor, Department of Economics, Catholic University of Louvain, Louvaine-la-Neuve, Belgium.

# Preface

For centuries East Asia has been home to an important part of the world's textile industry. Its role for most of that period has been as a supplier of natural fibres which were exported to Europe via the so-called Silk Road. During recent decades, however, East Asia's production and exports of textile products have expanded dramatically, transforming the region into a major net importer of natural fibres. Even by the first half of the 1960s its net imports of natural fibres represented one-sixth of world fibre trade, compared with Western Europe's two-fifths. But, by the first half of the 1980s, East Asia's share had doubled while Western Europe's had almost halved.

This dramatic redirection of world fibre trade was driven initially by the success of Japan and then Northeast Asia's newly industrialized economies in developing export-oriented textile and clothing industries and penetrating the markets of more advanced industrial economies. Then in the 1980s China joined its neighbours as a rapidly expanding producer and exporter of textiles and clothing. At the same time, however, China also began to expand its domestic production of fibres. This raised questions in the minds of traditional fibre exporters such as Australian wool producers and US cotton growers as to the net impact China would have on world fibre markets. As a result, the Australian Wool Research and Development Fund in 1987 commissioned a study to address those questions. The Australia-Japan Research Centre (AJRC) of the Australian National University, Canberra, coordinated the three-year project and provided additional funding to ensure its satisfactory completion.

The present volume is one of the products of that endeavour. The AJRC, in collaboration with the University of Adelaide's Centre for International Economic Studies and its Chinese Economy Research Unit, invited several economists to contribute specific papers to a conference in August 1989. A selection of these papers have since been revised substantially to provide an integrated picture of past, present and prospective developments in East Asia as they relate to world fibre, textile and clothing markets, and of the ways in which advanced industrial economies are responding to these developments. The latter papers, which form Part II of this volume, were commissioned by the AJRC, as was the August 1989 conference.

The editor and authors are grateful to the Australian Wool Research and Development Fund and the Australia–Japan Research Centre for financial support for the research on which the volume is based; to Peter Drysdale and Christopher Findlay for their untiring support throughout the project; to the people who kindly acted as discussants at the August 1989 conference at which earlier versions of the chapters were discussed, namely, Rod Falvey, Brian Fisher, Helen Hughes, Ji Hong Kim, John Lowe, John O'Connor, Yoko Sazanami, Ben Smith, Francis Teal, Rod Tyers, Peter Warr and Yongzheng Yang; to the publishers of the journals *Economic Development and Cultural Change* and *Weltwirtschaftliches Archiv* (Kiel Institute of World Economics) for permission to reprint, in Chapters 1 to 3, some material from two Anderson/Park papers which they published; to Cambridge University Press for including the volume in its Trade and Development Series; to Prue Phillips of ANU's International Economic Data Bank for providing data on which many tables are based; to Maree Tait at ANU's National Centre for Development Studies and Shirley Purchase for editorial assistance; and to Debbie Beckman at the University of Adelaide for coordinating the word processing of the manuscript. The editor would also like to express his gratitude not only to his employer, the University of Adelaide, but to the Institute for International Economic Studies at the University of Stockholm, where he was a Visiting Fellow during 1988 when early versions of Chapters 1–3 were drafted and when ideas for the volume were being shaped. After completing this volume the editor took leave from Adelaide to take up an assignment with the economic research division of the GATT Secretariat in Geneva. Needless to say, none of the views expressed in this volume are intended to reflect the views of the GATT Secretariat or GATT Contracting Parties.

Kym Anderson

# Abbreviations and acronyms

ASEAN	Association of South East Asian Nations, comprising Brunei, Indonesia, Malaysia, the Philippines, Singapore and Thailand
ASIC	Australian Standard Industrial Classification
China	People's Republic of China (excluding Taiwan)
Eastern Europe	The seven main centrally planned European economies (Bulgaria, Czechoslovakia, the former Democratic Republic of Germany, Hungary, Poland, Romania and the USSR)
EC	European Community of twelve member countries (Belgium, Denmark, Federal Republic of Germany, France, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain and the United Kingdom)
EFTA	European Free Trade Association of six member countries (Austria, Finland, Iceland, Norway, Sweden and Switzerland)
ERA	Effective rate of assistance
GATT	General Agreement on Tariffs and Trade
GDP	Gross domestic product
ISIC	International Standard Industrial Classification
Korea	Republic of Korea (or South Korea)
LTA	Long Term Agreement
MFA	Multi-fibre Arrangement
MFN	Most-favoured-nation
MITI	Ministry of International Trade and Industry of the Japanese Government
MTE	Import tariff equivalent
NIEs	Newly industrializing economies
NTBs	Non-tariff barriers to international trade
OECD	Organization for Economic Co-operation and Development

SIC	Standard Industrial Classification (Japan)
SITC	Standard International Trade Classification
Taiwan	Republic of China, Taiwan Province
VER	Voluntary export restraint

## Symbols

n.a.	not applicable
..	not available
—	zero or insignificant