

# **Local Industry in Global Networks**

**Changing Competitiveness, Corporate Strategies and Pathways of  
Development in Singapore and Malaysia's Garment Industry**

## Lokale Industrie in Mondiale Netwerken

Veranderende Concurrentiekracht, Bedrijfsstrategieën en  
Ontwikkelingspaden in de Kledingindustrie van Singapore en Maleisië

(met een samenvatting in het Nederlands)

Proefschrift

ter verkrijging van de graad van doctor  
aan de Universiteit Utrecht  
op gezag van Rector Magnificus, Prof. Dr. W.H. Gispen,  
ingevolge het besluit van het College voor Promoties  
in het openbaar te verdedigen op  
vrijdag 16 januari 2004 des ochtends te 10:30 uur

Floortje Smakman

geboren op 30 april 1973 te Velsen

Promotor: Prof. Dr. O. Verkoren  
Co-promotor: Dr. L.M.J. van Grunsven

Faculteit Geowetenschappen - Universiteit Utrecht

ISBN 90 5170 768 1  
NUR 740

© Floor Smakman, 2003

Photo's cover courtesy of: Berghaus, the Netherlands, photographer JAN hELLWIG (PHOTO 1); Amsterdam Fashion Institute (AMFI), Amsterdam, the Netherlands (photo 2); the author (photos 3 and 4); and Intres, the Netherlands (photo 5)

Figures and layout: Margot Stoete and Gerrit van Omme – Kartlab, Faculty of Geosciences, Universiteit Utrecht

All rights reserved. Save exceptions stated by the law. no part of this publication may be reproduced, stored in a retrieval system of any nature, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, included a complete or partial transcription, without the prior written permission of the publishers, applications for which should be addressed to the publishers:

Rozenberg Publishers, Rozengracht 176A, 1016 NK Amsterdam, The Netherlands.  
Tel.: +31 20 625 54 29, Fax: + 31 20 620 33 95, E-mail: [info@rozenbergps.com](mailto:info@rozenbergps.com)  
[www.rozenbergps.com](http://www.rozenbergps.com)

## Contents

List of Boxes	viii
List of Figures	ix
List of Tables	xi
List of Abbreviations	xiv
Preface	xvii
<b>Introduction</b>	<b>1</b>
(i) Theme of the Research	1
(ii) Operating in Global Production Networks and Commodity Chains: Maintaining Roles and Advancing Positions	3
(iii) Scale Levels	4
(iv) The Current Study: Aims and Approach	5
(v) Why the Garment Industry?	5
(vi) The Cases of Singapore and Malaysia	7
(vii) Research Questions	8
(viii) Methodology and Timetable	9
(ix) Structure of the Study	10
<b>1 Developments in the Global Garment Industry and the Role of Asia</b>	<b>13</b>
<b>Introduction</b>	<b>13</b>
1.1 Globalisation of the Garment Industry: Global Shift and International Division of Labour	13
1.2 Structure and Organisation of the Global Garment Industry: The Global Apparel Commodity Chain	15
1.2.1 Garment Manufacturers and Garment Production Networks in the GACC	15
1.2.2 Lead-firms in the GACC	19
1.3 Global Geographies: Geographical Patterns of the GACC	24
1.3.1 Production Roles	24
1.3.2 Buyers	25
1.3.3 Textile and Fabric Producers	27
1.4 Evolution of the Garment Industry in Asia	27
1.4.1 The Shift Towards the East Asian NIEs	27
1.4.2 The Evolving Intra-regional Division of Labour in Asia	28
1.4.3 Globalisation of East Asian Garment Companies	29
1.5 Recent Developments and Changes in the Global Garment Industry, Markets and Buyer Strategies: Effects on LDC Producers and Locational Outcomes	30
1.5.1 Market Developments	30
1.5.2 Consumer Awareness, Codes of Conduct and Standard Setting	32
1.5.3 International Trade Regulations, Trade Blocs and Preferential Treatment	34
1.5.4 Labour Availability and Cost	37
<b>Conclusion</b>	<b>37</b>

2	Local Firms and Industries in Global Commodity Chains: Theoretical Notions	41
	Introduction	41
2.1	Global Production Networks and Commodity Chains	42
2.2	Global Networks and Chains, and Local Industry Development: a GCC Perspective	45
2.3	Sustaining Connections and Upgrading in a GCCs Perspective	48
2.4	LDC Firms within GCCs: Firm Strategies and Development Trajectories	51
2.4.1	Imperatives and Determinants of Competitive Adjustment Strategies	51
2.4.2	Firm Competitive Adjustment Strategies	53
2.4.3	Firm Development Trajectory Models	54
2.5	Industry Development Trajectories in a GCC Perspective	59
	Conclusion	60
3	Firm Strategies and Development Trajectories in the Garment Industry: Towards a Conceptual Framework	63
	Introduction	63
3.1	Competitive Adjustment Strategies in Garment Production	63
3.1.1	Production Cost	63
3.1.2	Technology and Technological Changes	64
3.1.3	Typology of Competitive Adjustment Strategies in Garment Production	65
3.2	The East Asian Antecedents	67
3.3	Typology of Firm Strategies and Development Trajectories in the GACC	68
3.4	Local Industry Development Trajectories from a GACC Perspective: Changes in the Profile of the Local Garment Industry	73
3.5	The Conceptual Framework: Local Firm Strategies and Firm and Industry Development Trajectories in the GACC	74
3.6	Determinants of firm and industry development trajectories	76
3.6.1	Determinants of Firm Competitive Adjustment Strategies and Development Trajectories	76
3.6.2	Determinants of Industry Development Trajectories	80
	Conclusion	81
4	Evolution of the Singapore Garment Industry in Local Context	83
	Introduction	83
4.1	Incorporation and Development of the Singapore Garment Industry	83
4.1.1	Growth and Development: The Statistics	83
4.1.2	International imperatives	85
4.1.3	Local imperatives	86
4.2	Review of the Literature	89
4.3	Decline and Disconnection from Global Chains?	91
4.4	Local Business Environment I: The Institutional Context	94
4.4.1	The Developmental, Corporatist State	94
4.4.2	Strong Economic Bureaucracy	95

4.4.3 Foreign Direct Investment	99
4.4.4 Economic Development Strategy: Inducing Industrial Restructuring and Upgrading	100
4.4.5 Government as an Entrepreneur and Investor	103
4.5 Local Business Environment II: The National Business System and Dominant Forms of Economic Organisation	104
4.6 Local Business Environment III: Industry Specific Context	105
4.6.1 Structure and Organisation of the Industry	105
4.6.2 Industry Specific Institutions and Policies	106
4.7 Effects and Implications of the Changing Local Business Environment for the Development of the Garment Industry	109
Conclusion	111
5 Evolution of the Malaysian Garment Industry in Local Context	115
Introduction	115
5.1 Incorporation and Development of the Malaysian Apparel Industry	115
5.1.1 Growth and Development: The Statistics	115
5.1.2 International Imperatives	118
5.1.3 Local Imperatives	120
5.2 Sustaining Connections to Global Chains, a Period of Transition?	123
5.3 Local Business Environment I: The Institutional Context	125
5.3.1 Political Economy of Malaysian Development Since Independence	125
5.3.2 Effects of Malaysia's Political Economy on Chinese Business Community	128
5.3.3 Economic Bureaucracy	129
5.3.4 Financial Institutions	130
5.3.5 Foreign Direct Investment	131
5.3.6 Industrial Development Policy	132
5.3.7 (Foreign) Labour Policies	135
5.3.8 Malaysia's Institutional Context: an Overview	136
5.4 Local Business Environment II: The National Business System and Dominant Forms of Economic Organisation	137
5.5 Local Business Environment III: Industry Specific Context	138
5.5.1 Structure and Organisation of the Industry	138
5.5.2 Industry Specific Institutions and Policies	140
5.6 Effects and Implications of the (Changing) National Business Environment for the Development of the Garment Industry	146
Conclusion	149
6 The Singapore Garment Industry: Competitive Adjustment Strategies and Development Trajectories	153
Introduction	153
6.1 Structure and Characteristics of Garment Companies in the Survey	153
6.1.1 Ownership, set-up and Size Distribution of Companies in the Survey	153
6.1.2 Markets, Buyers and Products	155
6.1.3 Production Organisation	157

6.1.4	Categorisation of Apparel Companies in the Survey	161
6.2	The Singapore Business Environment: Factors Impinging on Competitiveness and Major Problems Experienced by Singapore Apparel Companies	164
6.3	Competitive Adjustment Strategies and Main Outcomes	166
6.3.1	Defensive Strategies: Labour Intensification and Outsourcing	167
6.3.2	Offensive Strategies	168
6.3.3	Outcomes of Competitive Adjustment Strategies	172
6.4	Firm Level Development Trajectories	174
6.5	Singapore Apparel Industry Development Trajectories	191
6.5.1	Buyers as Local Actors	191
6.5.2	Development of a Local Fashion Industry	197
	Conclusion	198
Appendix I: Additional Figures and Tables Singapore Survey		201
7	The Malaysian Garment Industry: Competitive Adjustment Strategies and Development Trajectories	209
	Introduction	209
7.1	Structure and Characteristics of Garment Companies in the Survey	209
7.1.1	Ownership, Set-up and Size Distribution of Companies in the Survey	209
7.1.2	Markets, Buyers and Products	212
7.1.3	Production Process and Organisation	214
7.1.4	Categorisation of Garment Companies in the Survey	218
7.2	(Changes in) the Malaysian Business Environment as Experienced by Malaysian Garment Companies	221
7.2.1	Imperatives in the Business Environment: Factors Impinging on Competitiveness	221
7.2.2	The Local Institutional Context	223
7.2.3	Industry Association and Co-operation	223
7.3	Competitive Adjustment Strategies and Main Outcomes	224
7.3.1	Defensive Strategies: Labour Intensification and Outsourcing	225
7.3.2	Offensive Strategies	226
7.3.3	Outcomes of Competitive Adjustment Strategies	233
7.4	Firm Level Development Trajectories	235
7.5	Malaysian Garment Industry Development Trajectories	246
	Conclusion	249
Appendix II: Additional Figures and Tables Malaysia Survey		253
8	Interpreting Development Trajectories of Garment Firms and the Garment Industry in Singapore and Malaysia	265
	Introduction	265
8.1	Forces Behind Firm Strategies, Development Trajectories and Competitive	265

Positioning in the Malaysian and Singapore Garment Industry	
8.1.1 Explaining Processes and Outcomes in Singapore	266
8.1.2 Explaining Processes and Outcomes in Malaysia	269
8.1.3 Malaysia and Singapore: Explaining the Differences	272
8.2 Forces Behind Industry Development Trajectories: Local Linkages and New Sources of Growth and Diversification	275
8.2.1 Buying offices	275
8.2.2 Development of Local Brands and Fashion Industry	276
8.3 In Conclusion: Main Forces Behind Firm and Industry Development Trajectories	280
9 Discussion and Conclusions	285
Annex A Methodology	299
Annex B Main Concepts	307
Nederlandse Samenvatting	309
Bibliography	325

## List of Boxes

Box 1.1	Polo Ralph Lauren: Branded Marketer and International Buyers	22
Box 1.2	Global Codes of Conduct and Standard Setting: Protection or Protectionism?	33
Box 4.1	Garment Quota Allocation in Singapore	108
Box 5.1	Garment Quota Allocation in Malaysia	140
Box 6.1	Case Study: The Sing Lun Group	179
Box 6.2	Case Study: The Clothing Company Pte Ltd	182
Box 6.3	Case Study: Ocean Sky Textile Pte Ltd/Ocean Sky International Ltd	184
Box 6.4	Case Study: Bodywork Concepts Pte Ltd	187
Box 6.5	Case Study: Song & Kelly	189
Box 6.6	Case Study: Polo Ralph Lauren's Global Sourcing Office	193
Box 6.7	Case Study: Converse Incorporated Singapore Representative Office	196
Box 7.1	IT Applications in Garment Manufacturing: Enterprise Resource Planning (ERP) and Management Information Systems (MIS)	227
Box 7.2	Case Study: Hing Yiap Knitting Bhd	230
Box 7.3	Case Study: Tai Wah Bhd	236
Box 7.4	Case Study: PCCS Group Berhad	239
Box 7.5	Case Study: Pen Apparel Sdn Bhd	240
Box 7.6	Case Study: Padini Holdings Berhad	242
Box 7.7	Case Study: Gordon Apparel Sdn Bhd	245
Box 8.1	Development of Local Brands and a Local Fashion Industry in Singapore	276



## List of Figures and Maps

Map 1	Singapore And Malaysia in the Southeast Asian Region	7
Figure 1	Timeline Data Gathering and Analysis	9
Figure 2	Structure of the Book	10
Figure 1.1	The Apparel Commodity Chain	16
Figure 1.2	Stages of Production in Garment Production Process	17
Figure 1.3	Evolution of Sourcing and Distribution Networks of Buyers	26
Figure 1.4	Structure of Global Garment Production and Distribution Networks	31
Figure 2.1	Sources and Determinants of Competitive Adjustment Strategies	53
Figure 2.2	Latecomer Firms – Export-led Learning From Behind the Technology Frontier	55
Figure 2.3	Leverage Paths within Two Dimensions	56
Figure 2.4	Generic Technological Capability Development Strategies of Latecomer Firms from Late Industrialising Economies	58
Figure 3.1	Conceptual Framework I: Local Firm Strategies and Development Trajectories	75
Figure 3.2	Conceptual Framework II: Changing Profile of Local Industry and Industry Development Trajectories	76
Figure 3.3	External Sources & Determinants of Firm Competitive Adjustment Strategies	77
Figure 4.1	Index of Exchange Rate Movements in Selected East/Southeast Asian Economies 1973-1997 (national currency unit per US\$; 1973 = 100)	88
Figure 4.2	Exchange Rate of the Singapore dollar (1974-1998, S\$/US\$)	89
Figure 4.3	Singapore Clothing Exports (1983-2001)	93
Figure 5.1	Exchange Rate of the Malaysian Ringgit (1972-2000, RM/US\$)	122
Map 5.1	Peninsular Malaysia with Main Garment Production Regions	124
Figure 5.2	The Manufacturing ++ Concept	134
Figure 5.3	Input and Output Flows of the Malaysian Garment Industry	140
Figure 6.1	Sales Orientation of Singapore Garment Manufacturers (1998)	155
Figure 6.2	Activities Subcontracted Out by Companies in the Survey	160
Figure 6.3	Production and Distribution Networks of Singapore OEM I Suppliers	163
Figure 6.4	Company Development Trajectories in Singapore	177
Figure 6.5	Individual Company Trajectory I: OEM → OEM+	178
Figure 6.6	Individual Company Trajectory II: OBM → +OEM	178
Figure 6.7	Individual Company Trajectory I: OEM II → Local/Regional OBM	178
Figure 6.8	Individual Company Trajectory I: OEM II → Local label	178
Figure A	Establishment Size by Employment	201
Figure B	Company Size by Annual Turnover (S\$)	201
Figure C	Company Size by Total Employment	201
Figure D	Company categories: Share in total number of companies	204
Figure E	Company categories: Share in total employment	204
Figure F	Company categories: Share in total turnover	205

<del>Figure G</del>	<del>Production and Distribution Networks of Singapore OEM II Suppliers</del>	<del>205</del>
Figure H	Production and Distribution Networks of Singapore OBM Suppliers	206
Figure 7.1	Sales Orientation of Garment Producers per Region (1998-1999)	212
Figure 7.2	Main Activities Subcontracted by Garment Producers in Malaysia (1998-1999)	217
Figure 7.3	Production and Distribution Networks of Malaysian Owned OEM Suppliers	221
Figure 7.4	Company Development Trajectories in Malaysia	238
Figure 7.5	Individual Company Trajectory I: Subcon → OEM I	244
Figure 7.6	Individual Company Trajectory I: Local label → OEM/ODM & OBM	244
Figure A	Company Ownership by Region	253
Figure B	Company Size by Employment	253
Figure C	Company Size by Annual Turnover (RM)	253
Figure D	Number of Buyers Malaysian Garment Manufacturers Worked With	255
Figure E	Share Category in Total Number of Companies1 ('99)	258
Figure F	Share of Category in Total Turnover ('97)	258
Figure G	Share Category in Total Value Fixed Assets ('97)	258
Figure H	Share Category in Total Employment ('99)	258
Figure I	Average Profit Margin per Category ('97)	259
Figure J	Average Share Value Added per Category ('97)	259
Figure K	Average Turnover per Category ('97)	259
Figure L	Average Number of Employees per Category ('97)	259
Figure M	Production and Distribution Networks of Foreign owned OEM Suppliers	261
Figure N	Production and Distribution Networks of Malaysian Domestically/Regionally Oriented Suppliers (OEM II & Local label)	261
Figure 8.1	Interrelations Between Business Environment, Firm Business Approach, Strategic Intent and Strategic Choices	272
Figure 8.2	Buyer Involvement and Producer Initiative After Incorporation	282
Figure A1	Distribution of Malaysian Garment Industry by Region	303
Figure A2	Coverage by Main Region	303

## List of Tables

Table 1.1	Trade Balances in Clothing, 1995	14
Table 1.2	The World's Leading Clothing Exporting Countries, 1999	14
Table 1.3	Firm Roles and Functions in Garment Production Networks	18
Table 1.4	Categorisation of Garment Buyers	20
Table 1.5	Current Geographies of Export Producer Roles	25
Table 1.6	The World's Leading Textile Exporting Countries	27
Table 1.7	US Apparel Imports, Top Ten Suppliers	36
Table 2.1	Networks and Chains: Terminology and Definitions	43
Table 3.1	Example of Cost Breakdown for Men's Satin Jacket	64
Table 3.2	Typical Competitive Adjustment Strategies in Garment Production	66
Table 3.3a	Typology of Strategies of Garment Producers in the GACC	69
Table 3.3b	Typology of Development Trajectories of Garment Firms in the GACC	71
Table 3.3c	Outcomes of Firm Development Trajectories from a GACC Perspective	72
Table 3.4	Typology of Local Industry Development Trajectories in the GACC	73
Table 4.1	Key Indicators of the Singapore Garment Manufacturing Industry (1970-1998)	84
Table 4.2	Singapore Apparel Exports and Global Export Position 1980-1999	84
Table 4.3	Indices of Unit Business Cost and Unit Labour Cost (1980-1998)	86
Table 4.4	Change in Output Per Worker and Remuneration Per Worker for the Manufacturing Sector and Garment Industry in Singapore (1980-1995)	87
Table 4.5	Singapore: Percentage Growth Rate of Total Workforce (1970-2000)	87
Table 4.6	Inventory of Garment Firms in Singapore (1998)	92
Table 4.7	Buyers in Singapore	93
Table 4.8	Phases in Government Economic Planning & Development in Singapore	96
Table 4.9	Foreign Equity Investments in Singapore (1965-1998, S\$ million)	99
Table 4.10	Foreign Worker Policies in Singapore (1960s-1990s)	101
Table 4.11	Singapore's Institutional Context	103
Table 4.12	Singapore's Business System and Dominant Forms of Economic Organisation	104
Table 5.1	Number of Garment Manufacturing Establishments in Malaysia Based on Different Sources (1991-'99)	116
Table 5.2	Key Indicators of the Malaysian Apparel Manufacturing Industry, 1979-1999	117
Table 5.3	Malaysia Apparel Exports and Global Export Position 1980-1999	118
Table 5.4	Comparison of Labour Cost and Value Added per Worker in Malaysia, Thailand and Indonesia (US Dollars per Annum)	119
Table 5.5	Imports of Apparel into the USA	120
Table 5.6	Change (%) in Productivity and Wages in the Manufacturing Sector and Apparel Industry in Malaysia (1979-1997)	120
Table 5.7	Inventory of Apparel Firms by Source (excluding double counting) (1999)	124
Table 5.8	Political Economy of Malaysia's Industrial and Economic Development: Characteristics and Legacies	126
Table 5.9	Main Malaysian Economic and Industrial Development Institutions	130

Table 5.10	FDI Flows into Malaysia, 1981-2000 (US\$ billion)	131
Table 5.11	Economic and Industrial Planning and Development in Malaysia (1950 - ...)	132
Table 5.12	Cost of Renewing Temporary Workpasses and Average Income of Foreign Workers in 1998	135
Table 5.13	Malaysia's Institutional Context	136
Table 5.14	Malaysia's Business System and Dominant Forms of Economic Organisation	137
Table 5.15	Issues/Weaknesses, Strategic Directions and Strategies for the Apparel Industry Identified by MIER For IMP-2 (1996)	144
Table 6.1	Year of Establishment by Ownership	153
Table 6.2	Ownership, Set-up and Status of Companies in the Survey (1998)	154
Table 6.3	Type of Buyers of Singapore Manufacturers (1998)	156
Table 6.4	Production Organisation of Companies in the Survey (1998)	158
Table 6.5	Categorisation of Companies in the Survey	162
Table 6.6	Issues and Problems in the Singapore Business Environment (1985/'98)	164
Table 6.7	Competitive Adjustment Strategies by Singapore Garment Companies (10 years)	166
Table 6.8	Indication1 of Quantitative Changes in Singapore Establishment (1985-1998)	172
Table 6.9	Changes in Emphasis and Functions of Singapore Garment Companies (1988-1998)	173
Table 6.10	Competitive strengths of Singapore Garment Companies	174
Table 6.11	Company Development Trajectories in the Singapore Garment Industry	175
Table 6.12	Development Trajectories by Company Categories	175
Table 6.13	Contribution to Company Turnover and Sourcing of Singapore Office (1998)	192
Table A	Average Employment Numbers and Ratios (1998)	202
Table B	Export Destinations and Average Shares per Destination (1998)	202
Table C	Buyers and Export Destinations	202
Table D	Production Organisation and Location of Companies in the Survey (1998)	203
Table E	Production Locations Singapore Garment Manufacturers (1998)	203
Table F	Production Locations by Orientation	203
Table G	Fabric Sourcing Locations (1998)	204
Table H	Changes in Production (1988-1998)	206
Table I	Sourcing Regions and Locations Covered from Singapore	207
Table J	World Export Share of Singapore's Main Sourcing Base (1990-1999)	207
Table 7.1	Year of Establishment by Ownership	209
Table 7.2	Ownership, Set-up and Status of Companies in the Survey (1998-1999)	210
Table 7.3	Size Distribution Per Region	211
Table 7.4	Type of Buyers of Malaysian Manufacturers (1999)	213
Table 7.5	Buyer Combinations of Malaysian Manufacturers (1999)	213
Table 7.6	Characteristics of Technologically Advanced Companies	215
Table 7.7	Production Organisation of Companies in the Survey (1998)	216
Table 7.8	Share Local Inputs by Sales Orientation	218
Table 7.9	Main Reasons for Not Sourcing Inputs Locally	218
Table 7.10	Categorisation of Companies in the Survey	219

<del>Table 7.11</del>	<del>Issues and Problems in the Malaysian Business Environment (1988/1999)</del>	<del>222</del>
Table 7.12	Forms of Cooperation of Malaysian Garment Companies (1999)	224
Table 7.13	Competitive Adjustment Strategies in the Malaysian Garment Industry (1989-99)	225
Table 7.14	Increasing Productivity	229
Table 7.15	Indication of Quantitative Changes in Malaysian Establishment (1989-1999)	233
Table 7.16	Generic Company Development Trajectories	235
Table 7.17	Company Development Trajectories in the Malaysian Garment Industry	235
Table A	Average Employment Numbers and Ratios (1998)	254
Table B	Export Destinations and Average Shares per Destination (1998)	254
Table C	Main Products Manufactured by Malaysian Garment Producers (1999)	255
Table D	Level of Technology in Malaysian Garment Manufacturing Establishments (1999)	255
Table E	Production Locations Malaysian Garment Manufacturers (1998-1999)	256
Table F	Non-production Units of Companies in the Survey: Functions and Location	256
Table G	Input Sourcing Locations (1998)	257
Table H	Main Company Categories by Region (1999)	260
Table I	Government Incentives Programs Made Use of (1988-1999)	262
Table J	Changes in Production (1988-1998)	262
Table K	Expectations for the Future	262
Table 8.1	Organisations Involved in Development of Local Fashion-Garment Industry (2003)	279
Table A1	Inventory of Establishments and Coverage of Producer Survey in Singapore (1998)	299
Table A2	Coverage of Producer Survey by Size Category	300
Table A3	Inventory of Buyers in Singapore and Coverage of Buyer Survey (1998)	301
Table A4	Inventory of Establishments and Coverage of Survey in Malaysia by Source (1999)	305
Table A5	Inventory of Establishments and Coverage of Survey in Malaysia by Region (1999)	305
Table B1	Explanation of Main Concepts Used with Regards to Organisational Units	307

## List of Abbreviations

AFTA	ASEAN Free Trade Area
ASEAN	Association of Southeast Asian Nations
ATC	Agreement on Textiles and Clothing
BDCC	Buyer-Driven Commodity Chain
bln.	billion
CAD	Computer Aided Design
CAM	Computer Aided Manufacturing
CCC	Computer Controlled Cutting (also lasercutting)
CMT	Cut-Make-Trim
CPF	Central Provident Fund (Singapore)
CSC	Committee on Singapore's Competitiveness
DBS	Development Bank of Singapore
DOS	Department of Statistics
EDB	Economic Development Board (Singapore)
EOI	Export Oriented Industrialisation
EPZ	Export Processing Zone
FDI	Foreign Direct Investment
FTZ	Free Trade Zone
G(A)CC	Global (Apparel) Commodity Chain
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
HQ	Headquarters
HRDC	Human Resources Development Council (Malaysia)
HRDF	Human Resources Development Fund (Malaysia)
ILO	International Labour Organization
IMP	Industrial Master Plan (Malaysia)
ISI	Import Substitution Industrialization
IT	Information Technology
JB	Johor Baru
JTC	Jurong Town Corporation (Singapore)
KL	Kuala Lumpur
KLSE	Kuala Lumpur Stock Exchange
LDC	Lesser Developed Country
LMW	Licensed Manufacturing Warehouse
MATAC	Malaysian Textile and Apparel Centre
MEF	Malaysian Employment Federation
MFA	Multi Fibre Arrangement
MGMA	Malaysian Garment Manufacturers Association
MIDA	Malaysian Industrial Development Authority
MIER	Malaysian Institute for Economic Research
MITI	Ministry of International Trade and Industry (Malaysia)
MKMA	Malaysian Knitting Manufacturers Association
mln.	million
MTMA	Malaysian Textiles Manufacturers Association
MTI	Ministry of Trade and Industry (Singapore)
NEP	New Economic Plan (Malaysia)
NGO	Non Governmental Organization
NIC/NIE	Newly Industrialising Country/Economy

NIDL	New International Division of Labour
NPC	National Productivity Corporation (Malaysia)
OBM	Original Brand Manufacturing
ODM	Original Design Manufacturing
OEM	Original Equipment Manufacturing
OPP	Outline Perspective Plan (Malaysia)
OPT	Outward Processing Trade
PAP	People's Action Party (Singapore)
PDCC	Producer-Driven Commodity Chain
QC	Quality Control
R&D	Research and Development
RM	Malaysian Ringgit
S\$	Singapore Dollar
SEP	Strategic Economic Plan (Singapore)
SITC	Standard International Trade Classification
SME/SMI	Small and Medium Enterprises/Industries
SMIDEC	Small and Medium-Sized Industries Development Council (Malaysia)
TaFf	Textile and Fashion federation Singapore
TDB	Trade Development Board (Singapore)
TNC	Transnational Corporation
UPS	Unit Production System
UU	Utrecht University
WTO	World Trade Organization

## Preface

When starting this project in the spring of 1998, I don't think I had any idea of what I was getting myself into. Perhaps that was a good thing. Particularly in the last year, when life seemed to consist of four walls, a computer and lots of coffee, I have wondered on more than one occasion what I was doing. Still, I am grateful to Otto Verkoren and Leo van Grunsven for getting me involved in this project, because looking back it has been nothing short of an adventure that I wouldn't have wanted to miss for the world.

Living and working in Southeast Asia has undoubtedly been one of the most exciting parts of the project. Seeing first hand the contradictions of the clothing industry in Singapore, with large international buying offices, fancy boutiques selling Versace and DKNY and small subcontractors, with some 20 seamstresses tucked away on the fourth floor of an industrial estate all operating within the same five square miles. Driving my old beat up Mazda through seemingly endless palm plantations in Johore, arriving at remote industrial parks, only to realise the hardest part was to actually find my way around the park itself (roads were usually numbered, but somehow 2 never logically followed after 1). The many occasions I was asked to join the person I was interviewing and some of his business partners for lunch, usually resulting in a 20 minute drive to 'a famous local sea food restaurant' and a copious meal accompanied by at least a litre of Chinese tea (I so miss the food!). These are just a few of the great, weird and frustrating experiences in the field that have contributed to the love-hate relationship I developed for the region. A relationship I think is characteristic for every place you feel at home.

A great number of people have contributed directly or indirectly to the completion of this project. The list is long, but there are a few I would like to mention here in particular.

First of all, I owe gratitude to all the people - garment producers, representatives of buying offices and fashion companies, government officials and industry representatives - who took out (valuable) time, to share information and thoughts with me. Setting up the appointments was often not an easy task, demanding a great deal of tenacity. Just getting past the receptionist (phone-etiquette was somewhat different than what I was used to) and getting a hold of the right person could be difficult and frustrating; as was actually convincing the managers to set up an appointment with me. Understandably, particularly the smaller producers were somewhat suspicious of my intentions (why would a young woman from the Netherlands be so interested in their business?!). But all frustrations and suspicion usually disappeared the moment we sat down and talked. I was amazed at the openness and willingness of many of the interviewees to share information, views and ideas on their business, but also on more general issues. Not to mention the hospitality I often encountered. I have come to admire the dedication and stamina of many of the clothing producers I talked to. I started realising I was in a rather comfortable outsider's position, while they faced so many small and big decisions on a daily basis that they often lacked the time to contemplate and analyse developments as thoroughly as I could afford to. It was to me the most vivid illustration of the highly competitive and dynamic nature of the industry and the fact that just surviving in it is a feat that demands respect.

In Singapore, we received great support from the Textile and Fashion Federation and particularly from its President, Mr. Patrick Lee and its Secretary General Mr. Chris Koh. Their help in arranging meetings with producers and the sharing of their extensive knowledge of, and experience in, the industry have proven invaluable. Mr. Koh always seemed to be able to make time free for me and I have enjoyed our conversations, which ranged from actual



business issues to broader contemplations of (future) developments in the Singapore and global garment industry.

Special thanks to Ms. Doreen Tan, of Temasek Polytechnic School of Design, who was always willing to help out where she could and has shown a keen interest in my work ever since my first visit to Singapore. In addition, she was involved directly in the case study on the fashion industry in Singapore and has given me the opportunity to work as an adjunct lecturer at Temasek Polytechnic for one semester. Something I have greatly enjoyed and which in my view has deepened my understanding of Singapore society.

Thanks also to the Institute for Southeast Asian Studies for acting as our local counterpart.

In Malaysia the assistance and support of Mr. Choy Ming Bil and Mr. Soo Chung Futt of the Malaysian Textile Manufacturers Association, which agreed to be our official local counterpart, has proven instrumental in setting up the initial database and helping arrange meetings. In addition they provided us with a place to work from in KL and a research assistant, Ms. Har, who joined in some of the interviews and helped out with translations. Moreover, the thorough knowledge of the industry of Mr. Choy and Mr. Futt proved useful.

In Batu Pahat, the tireless efforts of Ms. Rebecca Chiang - friendly, always helpful and hospitable - of the Malaysian Knitting Manufacturers Association, was invaluable for the success of our survey in the Southwestern region.

I owe gratitude to a number of graduate students from Utrecht University's section of International Economics and Economic Geography, who assisted in the gathering of empirical data for the project: Christiaan Münch and Ralph van Wijck in Singapore; Annemieke Leusink and Gert van Veldhuisen in the Central region; and Pieter Liebrechts and Thomas Akveld in the Southwestern region in Malaysia.

A word of appreciation and admiration for fellow PhD Anja Rudnick, whom I met at the very start of the project. Her research, on female Bangladeshi migrant workers in the clothing and electronics industry in Malaysia, touched on mine, yet took a fundamentally different approach. Through my conversations with her I was confronted quite directly with the darker side of some of the developments in the industry and the human tragedies they often entail. On a more personal level she has also inspired me, while her offer to sell me her Malaysian car, saved me the hassle of buying a second hand car as a woman in a strange country (a sure recipe for a total rip-off).

If there is one person that has been of crucial importance to me throughout the entire project it is Leo van Grunsven. Not only was he the one who got me involved in this research in the first place, his enthusiasm and involvement in the project, both in Utrecht and in Singapore and Malaysia, where he visited on several occasions, have been inspiring. Our many conversations and discussions helped me structure and focus my - sometimes chaotic - thoughts and ideas.

During the last two years, I particularly need to thank him for his patience with my lengthy and detailed writing, which he meticulously and seemingly tirelessly read, re-read and helped edit. I must admit, there were occasions when returning from one of our meetings, with text that seemed to disappear under red ink, desperation was near. On the other hand it made me want to do better, and constantly forced me to focus on the important things and strive for consistency and coherence throughout every chapter and every section and subsection. His supervision has contributed greatly to the work that lies before you here today.

Otto Verkoren, who initially brought the project to my attention, only became directly involved in it at a late stage. However, his pragmatic approach, mental support and reassurance during these difficult final stages have greatly facilitated the project's completion. Many thanks also to Margot Stoete and Gerrit van Omme, of the Kartografisch Lab, at the Faculty of Geo-sciences, who turned my manuscript into this beautifully laid-out book.

Returning from an exciting period in Singapore and Malaysia, to the rather uninspiring Unnik building at the university in Utrecht, was not an easy transition, especially since it coincided with perhaps the least exciting period of the research: the writing stage. However, the many lunch and coffee breaks with my colleagues on the 10th floor, Robine, Leendert, Paul and Gery made this transition and the last two years in Utrecht a lot more bearable. And then there was always Christiaan next door, willing to share a cup of coffee or a couple of beers after work. I'm sure we will stay in touch, as we have become friends rather than just colleagues.

My parents deserve a statue. They have always been supportive of my decisions and choices, although I am sure at times they must have wondered...

My father and Ineke provided me with the quiet haven I so needed in the last stages of the project, while financially supporting me during this period as well. Conversations with Ineke about the industry, in which she is involved as well, often enabled me to compare practices in Southeast Asia to those in Holland and Europe and broadened my perspective. Mom and Bill were always willing to lend an understanding ear and wired 'emergency funds' on more than one occasion. Without this practical and particularly moral support, I doubt I could have ever completed the dissertation.

I'd like to thank the many friends I made during my time in Asia, many of whom have since moved elsewhere, resulting in a truly *global network* of friends. They made my time in Asia even more enjoyable and currently assure me of a place to stay on virtually every continent. My friends back home were always there, whether at long distance, or close-by. Always interested and supportive, but perhaps even more importantly providing necessary diversion, dragging me away from behind the computer. I'd particularly like to thank Esther, Roeland, Doede and Iemy. I hope you realise how much your friendship has meant/means.

Finally I want to thank Drew for his patience and support. Although we met at a rather 'unfortunate' time, just before I left Singapore to return to the Netherlands and just as I was starting the difficult writing stage, he has stuck by me, even at long distance. Paying surprise visits, encouraging me, but also being tough on me when I needed it, urging me to 'get on with it'. In addition he has encouraged and coached me to take the first steps towards life beyond the PhD (apparently it does exist). With him, I look forward to it even more.

## Introduction

### (i) Theme of the research

There is general agreement that in the second half of the 20th century the internationalisation of economic activities has taken a flight, in terms of increasing interdependence of nations through the flows of goods, services and financial capital. More recently these processes have taken on an added dimension through FDI, international sourcing and subcontracting and a functional integration of these internationally dispersed activities. This is commonly referred to as *economic globalisation* (Dicken, 1992, 1998).

A plethora of studies on this evolving process of economic globalisation, or, as some claim, their fiction, have resulted in a “miasma of conflicting viewpoints and alternative discourses” (Dicken et al, 2001, p.89) on a range of aspects (see also Ruigrok & van Tulder, 1993; Hirst & Thompson, 1996, 2000; Gordon, 1988; Cox, 1997; for a general overview see Dicken, 1998). The theoretical meaning and practical impact of economic globalisation obviously remain highly contested (Storper, 1997). One of the aspects of the debate concern the local development opportunities that insertion into the global economy may present for less developed countries (LDCs)<sup>1</sup>. Within this discourse both a positive and a negative view exist<sup>2</sup>.

In the positive view economic globalisation is seen as an important lever for local development as firms and industries can take advantage of the opportunities opened up by the global economy and in turn spread these gains to benefit local communities and national economies. Although this view often acknowledges that economic globalisation produces both winners and losers, arguments are made that the gains outweigh the losses and there are only ‘temporary losers’, suffering in the short run to make advances in the future (Bonacich et al, 1994)<sup>3</sup>. This positive view of globalisation (see e.g. Ohmae, 1990, 1995) is by far predominant and has been adopted by both developing and developed country governments (most notably the US), TNCs, international agencies and academics (most notably economists) working in the neoclassical, liberal tradition.

Contrasting this view of globalisation and local development in LDCs is a negative one, in which globalisation is associated with growing inequality, both between and within countries (Kaplinsky, 2000; Jones, 1997; Dunford, 1994; Khan 1999; Wallerstein, 2002) and ‘immiserising growth’ (Kaplinsky, 2000, p.7)<sup>4</sup> of large parts of the world population and communities due to (Western) capital’s relentless search for the lowest cost production factors and locations and the pitching of workers and countries against each other to achieve these lowest costs. The proponents and arguments of this view are gaining in strength.

Within this discourse, the question of the forces underlying success or failure of LDCs in the global economy (see e.g. Gereffi & Kaplinsky, 2001; Kaplinsky, 2000; Humphrey & Schmitz, 2000) has thus become a central issue. The debate surrounding this question centres around the idea, agreed upon in both academic and policy circles, that there is a need to manage the mode of insertion into the global economy. This is necessary to ensure that industries, firms and people in LDCs do not get caught in “a race to the bottom”(Kaplinsky, 2000, p.32; see also Gereffi et al, 2001; ILO, 1998b), leading to possible lock-in in marginal positions or even exclusion. In the debate, ideas on the importance of the local environment for local development in LDCs, compete with a view that considers global forces, or external linkages, as the main driving forces.

This study is concerned with the interrelation between economic globalisation and local development, although framed in a less broad perspective than indicated above. It is narrowed down in two ways: local development is specified as local *industry* development<sup>5</sup>, while it focuses on a specific mode of economic globalisation and insertion of LDCs in the

global economy: the global expansion of production networks and commodity chains, and incorporation of LDC firms and industry's within them. This mode differs from a second, often referred to, mode of economic globalisation, so-called TNC driven globalisation, although the difference between the two modes seems to have blurred in recent years.

Up until the late 1980's globalisation was seen as being driven by (vertically integrated) TNCs, through the expansion of their activities and organisation to LDCs to reap the benefits of lower costs and incentives. The range of complementary activities involved in designing, producing and marketing industrial outputs was spread across the globe, but remained integrated within one company. A significant number of the initial globalisation studies have therefore focused on LDC's as host economies of TNC branch plants. However, in recent economic globalisation processes, networks of independent, yet interconnected enterprises have assumed greater significance. This was already true for consumer goods such as garments, footwear and toys, but more recently also for consumer electronics, consumer durables, capital goods and intermediate goods. Therefore, next to the view of LDCs as branch plant economies, more recently a view focusing on *local firms in LDCs* and their capacity to become incorporated in global networks and chains based on capabilities and competencies has emerged. TNCs still feature prominently in the discourse, however, even in the case of TNC driven globalisation, local firms in LDCs have received more attention, in relation to local development issues, prompted by the increased inclination of TNC branches to develop local supply and subcontracting networks.

In accordance with the increasingly relevant network centred view of the world, this study considers local firm and industry development in LDCs in relation to global production networks and commodity chains driven by lead firms from the West that don't have direct ownership linkages to these firms.

Some problematic aspects with regards to how networks and local industry development are usually dealt with in the literature must be noted. It is generally argued that incorporation creates the conditions for upgrading (hence local firm and industry development), allowing international competitiveness and thus the reaping of gains from globalisation. Taking the argument further, by claiming that "(...) national development requires linking up with the most significant lead-firms in an industry" (Gereffi & Memedovic, 2003, p.4), it is postulated that incorporation into, and operating in, global networks and chains is the *only* way for LDCs to achieve national development, which is in turn often directly linked to the concept of industrial upgrading (see e.g. Gereffi, 1999).

Equally problematic is the fact that after incorporation, upgrading is almost seen as 'automatic' - with networks and chains as the lever, and upgrading as the outcome. However, the actual relationship between incorporation and local firm and industry development remains unclear and much of the discussion centres on the issue of *entry* into global production networks and commodity chains. As we shall explain in more detail below, the concept of upgrading - seen as such a crucial factor for entering into networks and chains, sustaining connections and improving positions - and especially *how* precisely it relates to incorporation in networks and chains and local industry development, is complex and raises many questions. What exactly is upgrading, how should it be defined? Is it a cause or an outcome, a condition or a process, externally induced or internally achieved? Or all of the above?

The discussion on the conditions under which gains from globalisation may be achieved has thus remained open-ended. Although there is recognition that incorporation alone is no guarantee for success in the longer term as the competitiveness of firms and countries constantly changes, there has been little consideration of global networks and local industry development in LDCs in the *longer term*. In other words, a consideration going beyond initial incorporation into global networks and chains and focusing instead on issues of changing

competitiveness and the implied questions of sustaining connections, improving positions within networks and chains and more general development paths.

The current study deals with these questions. Before focusing on our study in particular, we will first highlight and explain some of the main issues that are part of the debate.

## **(ii) Operating in Global Production Networks and Commodity Chains: Maintaining Roles and Advancing Positions**

Economic globalisation processes are increasingly conceptualised in terms of *global production networks (GPNs)* embedded in *global commodity chains (GCCs)*. Global production networks can be defined as “a set of inter-firm relationships that bind a group of firms into a larger economic unit” (Sturgeon, 2001, p.11) and in which actors co-ordinate activities across countries and even continents. A global commodity chains can be defined as ‘a set of networks (nodes) clustered around one final product or service and linking firms, industries and communities to one another across the world economy’ (Gereffi & Korzeniewicz, 1994; ILO 1998a, 1998b). It is formed by a set of complementary activities that may belong to different industries or be differentiated within one industry<sup>6</sup>.

These increasingly common organisational forms, in between markets and hierarchies, are often quasi-hierarchical in nature (Humphrey & Schmitz, 2000), and link together producers in developing countries and retailers, or other so-called buyers, in developed countries. Core or lead-firms are at the centre of the web, controlling critical information, skills and resources needed for the global network and chain to function (Reich, 1991). They command the most important strategic assets in the chains, through which access to sources of technology and markets is controlled (see also Hobday, 1995b; Gereffi & Korzeniewicz, 1994; Humphrey & Schmitz, 2000). Lead-firms consequently play a key role in the international expansion or transfer of production networks by orchestrating their geography, the selection of participant ‘dependent’ firms as well as their roles and the scope of their activities. Exercising *governance* throughout the chain has become a key source of competitive advantage, allowing for the use of networks as strategic assets (Gereffi, 1996). As these have been built up over years and with substantial investments, the activities or nodes that lead-firms are engaged in have high barriers to entry, allowing them to generate so-called rents (Kaplinsky, 1998, 2000) and operate in an environment where the relative intensity of competition is low<sup>7</sup>. The situation in lower tiers or segments of the chain is quite different. As more and more countries have developed capabilities in industrial activities, barriers to entry in – particularly lower-end - production have fallen and competitive pressures have increased. The primary economic rents in global chains increasingly are to be found outside production in areas such as design, R&D, branding and marketing and in controlling the actual organisation of the chain through for instance advanced information technology enabling so-called “systemic efficiency” (Kaplinsky, 2000. p.13). This further underscores the relevance of the issue of – opportunities for – *advancement* of firms and industries in LDCs in, or through, global networks and chains.

Some of the GCC literature therefore seems to point to the fact that incorporation into global networks and chains may be seen a *necessary* but not so much a *sufficient* condition for spreading the gains from globalisation - although this is rarely qualified more clearly or directly (Gereffi & Kaplinsky, 2001). It is at the entry positions, where competition is predominantly cost based, that the relative intensity of competition and subsequently the volatility (or ‘footlooseness’) of networks (e.g. Dicken & Hassler, 1999; Campbell & Parisotto, 1995), are highest. Labour and other cost advantages are relatively soon lost to new low-cost entrants in the chain (Campbell & Parisotto, 1995; Porter, 1990, 1998).

From the perspective of producers and industries in LDC, incorporation into global networks and chains means operating in a highly dynamic external environment, causing constant shifts in competitiveness of companies, countries and regions. Unless internal adjustments take place, changing competitiveness may lead to changes in selection (by lead firms) of producers and in *how* they are incorporated in the GCCs. For producers, the outcomes of this selection and mode of incorporation – whether an improvement or a deterioration of a firm or industries position and role – are thus in part dependent on the extent to which they manage to adjust to changing competitiveness by implementing successful adjustment strategies. The local business environment in which firms operate may form a source of support, or impediment for such successful strategies.

When *sustaining* connections and maintaining roles is already an issue, leveraging the opportunities offered by linkages to buyers for *advancing*, to more rewarding roles and positions, presents an even bigger challenge. However, it is precisely such advancement that defines to a large extent (longer-term) industry development. To qualify this advancement more clearly, the concept of governance is useful. Governance comes in degrees and lead firms in a chain are just those firms having *most* power and say. However, there are intermediate roles and positions possible (hence the quasi-hierarchical nature of chains), where firms may not be able to control all parts of the chain, but are capable of controlling certain parts of it (for instance regional production networks), often as a responsibility transferred to them by lead firms. The positions these intermediate firms fill are based on more complex capabilities and close working relationships with lead firms. Barriers to entry in these segments or nodes are therefore higher than in positions where firms have less or no discretionary power over other firms. Accordingly, advancing to more rewarding roles implies, inter alia, less competition, higher returns and less dependency.

Beyond the question of initial incorporation therefore lie the more important questions related to sustaining connections and advancing and repositioning within chains.

These issues are, however, still little understood. Moreover, they are further complicated by the matter of scale.

### **(iii) Scale levels**

Global production networks and commodity chains are manifested and operate at multiple geographical and organisational scales, that ideally should all be considered in an analysis of global-local developments. As Dicken et al argue:

“Too often a particular (for example local) or a bifurcated (for example global-local) scale of analysis is used in ways that, in effect, preclude alternatives and that obscure the subtle variations within, and interconnections between, different scale levels” (Dicken et al, 2001, p.90)

Local industry development under globalisation is best understood by considering actors and forces, and their ongoing relationships, at the global, regional and local levels. The industry context of local firms in LDCs includes multiple geographical levels. It consists of several governance systems, at different levels, not just the governance system within the networks and chains (exercised by lead firms), but also global systems such as international trade regulations and agreements, regional governance systems manifested in regional production networks and particularly local governance systems including local institutional arrangements, rules and regulations, government policies etc.

Local industry development under globalisation must also consider different organisational levels, in local, regional and global contexts. These are the firm and the industry level. An analysis at the firm level (i.e. of firm strategies) is essential for understanding the widespread and fundamental changes in the organisation of production. However, a purely micro level approach does not enable a clear understanding of what determines the competitiveness of a

firm, as competitiveness is inherently a relative measure – i.e. competitiveness compared to whom? Therefore the industry level of analysis is essential, for it is after all this level that defines the criteria for competitive success or failure (Campbell & Parisotto, 1995).

In addition, locally, firm level changes will have direct repercussions for changes at the industry level (i.e. changes in the profile and structure of a local industry). Obviously the different geographical and organisational levels of scale present complementary, interacting and often overlapping contexts that need to be integrated into studies dealing with local industry development under globalisation.

#### **(iv) The Current Study: Aims and Approach**

The current study takes up the issues identified in the above. It sets out to do two things in an attempt to unravel the relationship between (being incorporated in) global networks and commodity chains and local firm and industry development: First, to explore to which extent and under which conditions connections of firms and industries in LDCs to global networks and chains are sustained, and whether/how success in this respect contributes to industry development relative to other avenues. Second, to explore whether and how firms and industries in LDCs operating in global production networks and chains, as well as institutional actors, leverage the opportunities these linkages present, for advancing to more rewarding roles/positions relative to networks and chains.

To do this, the research is set in the context of (i) a specific industry branch: the garment industry; (ii) two Southeast Asian countries: Singapore and Malaysia; and, following the above made arguments, it (iii) explicitly considers both the firm and industry levels

The research is further conceptualised in terms of three elements, which are considered central to the issues of sustaining connections, advancing positions and industry development - defined broadly in terms of upgrading and diversification:

1. *Competitive adjustment strategies* implemented by local firms in LDCs
2. The outcomes of these strategies in terms of *development trajectories* and competitive positioning
3. Developments at the industry level as a result of development trajectories of existing firms and new entrants and outcomes in terms of *industry development trajectories*
4. Global, regional and local *determinants or sources* behind the strategies and trajectories, at the firm and industry levels with specific attention for lead-firm strategies and the local business environment.

These elements will be elaborated in detail in the theoretical and conceptual parts of this study. By identifying local firm and industry development trajectories in the garment industry in Singapore and Malaysia in the context of late industrialisation and uncovering the forces behind these trajectories, an attempt is made to shed light on the conditions under which connections to global networks and chains may have positive outcomes at the local level after incorporation. In doing so it hopes to contribute to the debate on 'gains from globalisation'<sup>8</sup>.

In the following, the rationale behind the specific choices for on the one hand the garment industry, and on the other hand Singapore and Malaysia, is briefly explained.

#### **(v) Why the Garment Industry?**

In order to shed light onto the local consequences of economic globalisation on firms and industries in LDCs, it is useful to take a closer look at the dynamics and structure of an industry (Gereffi & Bair, 2001), which operates globally, but has distinctly locally embedded structures.

Such analysis takes a significant but still manageable slice of the world economy as its object of study, revealing concrete actors in the global economy as well as the linkages that bind them into a larger whole (Sturgeon, 2001, p.9)<sup>9</sup>.

The choice in our case has been the (*global*) *garment industry*. This was motivated by a number of considerations. First, the industry has been at the forefront of globalisation processes and is an archetypical ‘network’ industry, in the sense that internationalisation and globalisation of the industry took place predominantly through the development of global production networks and the global expansion of commodity chains incorporating a large number of LDCs. These were driven by manufacturers and – increasingly – retailers (buyers) from the developed countries. FDI through TNCs play a minor role in the development of the global industry. The reason for the early global expansion of the industry lies in the fact that earlier than other industries, deverticalisation - i.e. the vertical disintegration of value chain activities – became one of its characteristic features, as design, making and distribution could easily be separated from one another. With ongoing developments in garment demand and markets, deverticalisation has become more pronounced and a large number of functionally specialized participants, such as designers, wholesalers, agents, manufacturers, jobbers, contractors and retailers are involved in the apparel commodity chain, each having their own specific (locational) requirements, making spatial segregation and internationalisation even more logical. As such, Bonacich et al (1994) argue that

“apparel production is the cutting edge industry in the globalization process; it is pioneering global processing (.....) and may be a portent of things to come” (Bonacich et al, 1994, p.13).

Second, being a ‘pioneering global industry’ has meant it has often been at the centre of the debate regarding the positive and negative sides of globalisation.

In the positive view, the industry is often seen as the starting industry for countries wishing to become inserted in the global economy. The labour intensive nature of production, the relatively low barriers to entry and the general divisibility of the value chain made the industry a favourite for initial stages of export-oriented industrialisation in LDCs. Although the industry initially merely makes use of cheap labour, the labour absorption capacity of the industry offers possibilities for income growth, while through garment exports foreign currencies are earned. Moreover, as economies grow and develop and workers and firms learn as a consequence, they may develop competencies in higher value added activities, or move onto more high-tech industries. Such positive (and somewhat mechanistic) views can be seen in for instance the literature on ‘Technology Ladders’ (Goh, 1996) and ‘Flying Geese’ (Kwan, 2002; Tung, 2002; Bernard & Ravenhill, 1995; Edgington & Hayter, 2000), where it concerns upgrading of industry structures within a location (with the garment industry being the ‘start-up’), or role succession models (from assembly to full-package to design and branding), where it concerns upgrading within the industry.

In the negative view however, the industry is illustrative of some of the worst forms of (labour) exploitation and subsequent immiserisation as a consequence of globalisation. Because global garment production can occur without ownership and relatively little commitment, the industry enjoys tremendous flexibility and buyers can shift production with relative ease to places and firms where they can get the best deals. As a result, the labour market for the industry truly is the world and all countries in the world are put into competition with one another to obtain work in clothing assembly (Bonacich et al, 1994).

An important characteristic of the garment industry is that it can command certain groups of the labour force that often cannot, or not so easily, be employed in other sectors (save other ‘garment-like’ industries such as footwear, toys etc.). These groups include (young) female workers, (illegal) migrant workers, home-workers, etc. In other words, groups that are willing to accept lower wages and lesser working conditions, no benefits, long hours and that are generally poorly organised. This makes for a relatively ‘exploitable’ labour force, both in



developing *and* in developed countries (labour in the latter often consist of (illegal) immigrants). As Appelbaum & Smith (2001) concede:

“We hold no illusions about the negative and exploitative aspects of “flexible production” at the lower levels of the garment commodity chains. “Flexible accumulation” is often equated with industrial upgrading through training, technological innovation, and reconfigured work organization and is seen as a key to global competitiveness in a “post-Fordist” world (.....) But flexibility can also have a dark underside: it frequently involves large amounts of subcontracting, temporary and casual workers, and aggressive anti-union practices ...” (Appelbaum & Smith, 2001, p.81)

In the political arena too, the industry has been a ‘hot’ issue. Global developments in the industry have been subject to political debate and trade conflicts between the developed and the developing nations in the world, as the ongoing restructuring processes in the developed economies entail displacement processes for individuals, communities and whole nations. Trade regulation has therefore been a major issue in the industry, and a strong influence on its global development over the past five decades.

Third, not only is this industry at the forefront of globalisation processes and at the centre of the local development under globalisation debate, it is also a highly dynamic and complex global industry with important, locally embedded structures in both developing and developed countries.

These notions and the supposed geographic volatility of the industry link directly to the theme and focus of this study.

### ***Map 1 Singapore and Malaysia in the Southeast Asian Region***

#### **(vi) The Cases of Singapore and Malaysia**

East and Southeast Asia have been among the most dynamic regions in the world, serving as an example of successful insertion into the global economy, through export oriented industrialisation and continuous adjustment and upgrading. In addition, the region is an important producer and exporter of apparel, being responsible for as much as 42.5% of world exports in 1999 (WTO, 2000).

The choice for the Southeast Asian region in particular was motivated by the fact that, while it has been one of the more successful late industrialising regions, it has generally been under-treated in comparison to East Asia in studies of local development and global networks and chains. The garment industry played an important role in the incorporation of most countries in this region in global production networks after the adoption of export-oriented industrialisation policies, yet has received a lot less attention than in East Asia.

The East Asian NIEs have been regarded as some of the more positive examples of LDCs managing incorporation into global production networks and chains to the extent that substantial upgrading and repositioning of their firms, industries and economies was achieved. This holds true for the garment industry in these countries as well. Starting at lower level entry positions as assemblers of imported inputs (often in export processing zones or EPZs), garment companies in the East Asian NIEs have shown remarkable resilience and have implemented a range of competitive strategies in order to survive and advance, enabling them to not just sustain connections to chains, but more importantly advance within them, despite mounting competitive pressures.

Although it is undeniable that there has been a shakeout in the industry in these countries - sometimes leading to a labelling as a so-called sunset industry - a still substantial part of the firms have restructured and upgraded their operations and have taken on an increasing range of responsibilities from lead-firms within the chains. Thus some have become orchestrators of extensive regional and even global production networks, have taken on responsibilities in

terms of quality control, product development or even design, or have even moved on to producing and marketing own brands. Others have specialised in high quality, specialised inputs, or have become global sourcing and trading agents for apparel. At the local level in these countries, the profile of the industry has changed markedly, due to the relocation of production activities elsewhere in the region, the changed functions of existing firms and the entry of new types of firms, both local and foreign, such as local design firms or regional headquarters of international buyers.

Not only are the East Asian NIEs good examples of successful upgrading and repositioning, they are also illustrative of the role of the local environment in these processes, with the government and other institutions playing an important supporting and encouraging role, both directly and indirectly and both via pressures and incentives.

All in all these East Asian cases paint a rather positive picture as to the longer-term prospects for local firm and industry development after incorporation. The question is of course, to which extent this positive example is emulated in other countries and regions, which indicates a need for comparative studies. For this reason we have chosen to focus on the garment industry in two different countries in a different region, viewing the East Asian experience as an antecedent.

The two specific countries chosen within this region have been at the forefront of developments in Southeast Asia and are two of the most successful exporters in the region.

In Singapore and Malaysia a number of manufacturing industries, including the garment industry, successfully achieved incorporation into GCCs in the 1960s and late 1970s respectively. However, more recently they have been confronted with major competitive pressures, raising questions as to whether and how firms have managed to sustain connections and improve positions.

The two cases were also selected because they are at distinctly different stages of development, which allows for dynamic comparisons, of not just their current positioning in chains but specifically the trajectories garment companies, and the garment industry in these two countries have followed, and the local industry environment in which they operate. Considering the different phases of development these two countries find themselves in, in the context of the garment industry a difference in terms of advancement is expected. More interesting though, is whether this difference is entirely attributable to the phases of general economic development of the countries, or whether other factors are at play as well and what this may mean for future developments.

## **(vii) Research Questions**

The study is guided by the following research questions:

- 1) What are the structure and characteristics of the garment industry in Singapore and Malaysia, in particular in terms of actors involved; the activities they perform; the composition of the global networks and chains they are part of and their position within these networks and chains; the national/local networks they have developed; and the employment patterns?
- 2) How have garment firms and the local garment industry community in Singapore and Malaysia responded (which strategies were implemented) to changing competitive conditions in the context of globalisation?
- 3) Which are the possible new sources of growth and diversification at the industry level, what has been their impact so far and to which extent will they be able to fundamentally change the profile of the industry locally?
- 4) Which are the firm and industry development trajectories that can be identified as outcomes of firm competitive adjustment strategies and industry level dynamics?

- 5) How does the local industry environment support or impede the capacity of local firms and industry communities to adjust to a changing competitive environment and advance their positions relative to global networks and chains?
- 6) What is the role of actors in the global commodity chain – specifically lead firms – shaping adjustment and development trajectories of local firms and industry communities?
- 7) Are there other factors promoting or impeding development trajectories at the firm and industry levels?
- 8) How do the Malaysian and Singapore cases compare? Which are the similarities and differences, and can they be explained in terms of the different phasing of the processes observed, or are other factors involved?

**(viii) Methodology and Timetable**

Given our research goal and the chosen analytical framework, the research required a firm level approach. Therefore the core of our research consists of empirical data gathered at the firm level through structured interviews with garment producers in both Singapore and Malaysia, over a period of 3 years.

In Singapore, these interviews were complemented with structured interviews with regional offices of lead firms and their agents and with a case study on the local fashion industry. In both countries these primary data were complemented with secondary data gathered at the industry and national level and with a closer look at programs and policies of government and other institutions. For a detailed description of the methodology, including an overview of the sources used for compiling an initial database of companies, coverage of the survey and organisation of the interviews, see annex A.

It must be noted that throughout the book both the terms ‘firm’ and ‘company’ will be used, which are in principle interchangeable. However, they are used differently. Thus, ‘firm’ denotes a certain organisational scale (firm level, firm level strategies, firm specific characteristics, etc.), while ‘company’ refers to the organisational unit that a business enterprise is. A company may consist of several units or establishments (for a detailed overview of all terms used in relation to this organisational scale level, see annex B). The terms ‘firm’ and ‘company’ are used to make a distinction between the analytical/ theoretical and the empirical.

**Figure 1** *Timeline Data Gathering and Analysis*

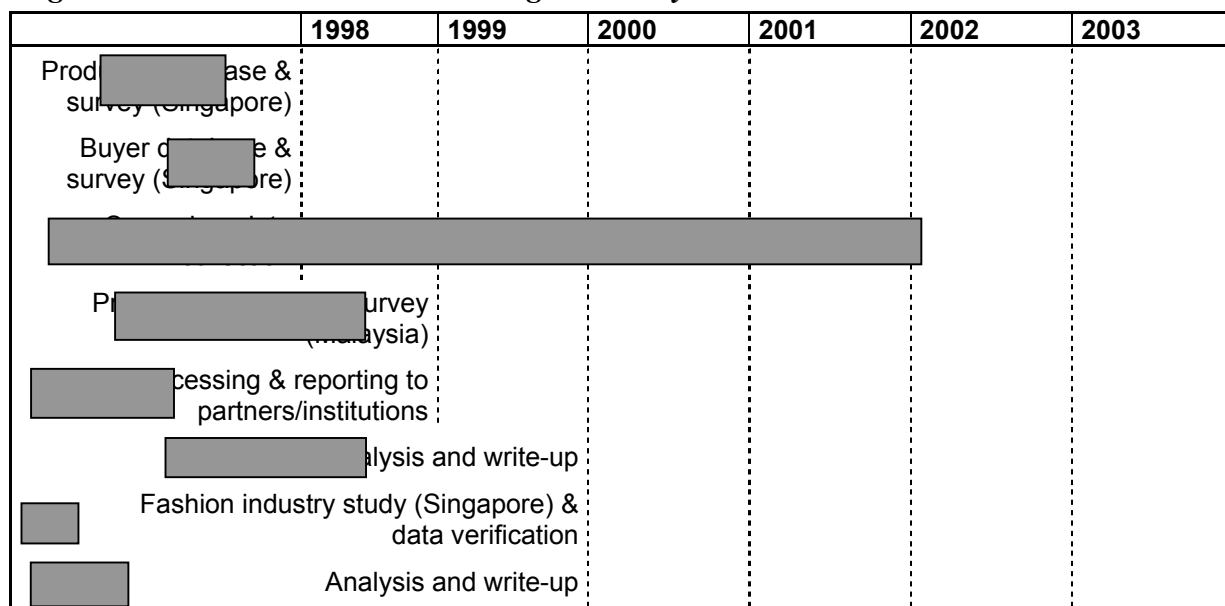
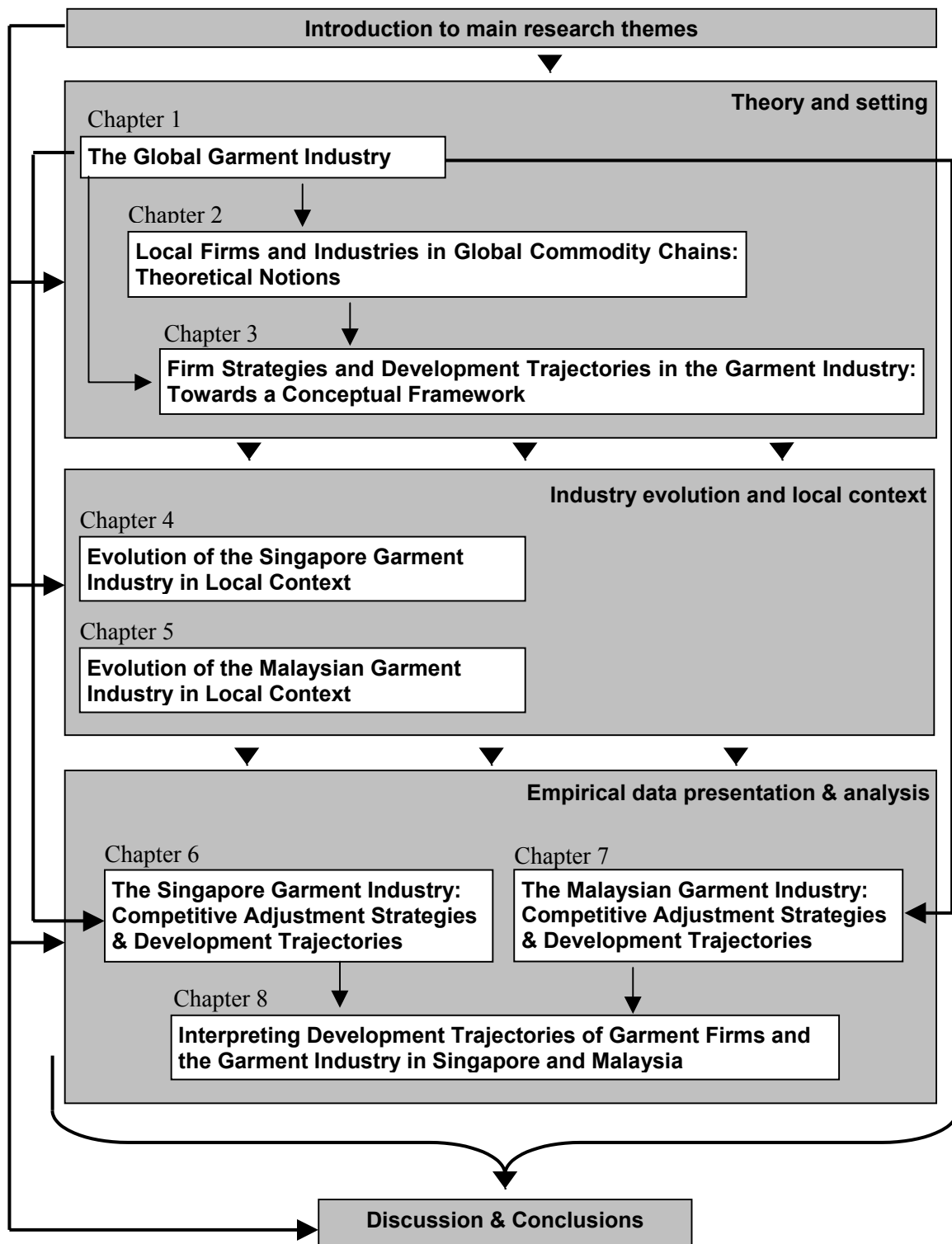


Figure 1 presents the time-table for the study, including both preparation time in the Netherlands, the field research, and analysis of data and writing of the book.

### (ix) Structure of the Study

The structuring of the book is illustrated graphically in figure 2

**Figure 2** *Structure of the Book*



The first part of this book consists of the setting and theoretical background for the study, culminating in the conceptual framework for the rest of the study. In the first chapter a comprehensive overview will be given of trends and developments in the global garment industry. This includes a closer look at the changing geography of trade and production over the past three decades, the configuration of production and distribution networks and the global apparel commodity chain (GACC), the different actors within this chain and shifts in power and control as a consequence of market changes and developments in the international institutional framework.

The second chapter gives an overview of the literature that has emerged on the main issues and themes dealt with in this study. Based on this literature, the general trends and characteristics of the industry as described in chapter one and the East Asian experiences, in chapter three a typology of firm strategies and firm and industry development trajectories is presented, which form the basis for the overall conceptual model presented in this chapter. This model incorporates strategies and trajectories as well as imperatives and determinants and forms the framework within which the remainder of the book is set.

The middle part, chapters 4 and 5, will introduce the two cases for this study: the Singapore and Malaysian garment industry respectively. In these chapters the general development of the garment industry in the two countries is considered, based on official statistics, our own initial inventory and existing literature. This development is explicitly considered within the local context, i.e. the local institutional context and national business system, as well as the industry specific context, so as to contextualise the development of the industry and demonstrate the impact of the local business environment. These chapters are followed by the analysis of strategies and development trajectories in chapters 6 and 7 and of determinants in chapter 8. They constitute the empirical core of this study and focus on the survey findings with regards to structure of the industry, implemented firm strategies, and firm and industry development trajectories in Singapore and Malaysia. Throughout the empirical chapters, case studies of individual garment companies are presented, to illustrate strategies and development trajectories at the firm level.

The concluding chapter finally reviews the main findings by answering the main research questions posed in this introduction and provides a reflection on the main theme of the study: (long term) local industry development in late industrialising countries under globalisation and whether/how gains from globalisation may be achieved.

## Notes

---

<sup>1</sup> LDCs is a rather generalised term for a fairly large and heterogeneous group of countries, which in our view includes three main categories: newly industrialised countries (NIE's), late industrialising countries (or second generation NIEs) and the least developed countries.

<sup>2</sup> For a brief overview of these opposing views of globalisation or 'international restructuring', see Bonacich et al, 1994, pp. 8-13.

<sup>3</sup> Some even see it as history repeating itself and point to the fact that workers and communities in the developed countries suffered as well (during the industrial revolution), in order to achieve the levels of development and wealth they enjoy today.

<sup>4</sup> Kaplinsky (2000) defines immiserising growth as a situation in which there is increased output and more employment, but returns are falling.

<sup>5</sup> Thus the wider development implications of globalisation - such as poverty alleviation, changes in household income, local community development, etc. - are beyond the scope of our research.

<sup>6</sup> Throughout the study, global production networks and GCCs are often referred to together; it must be stressed here though that they are *not synonyms*, as the given definitions make clear. However, as global production networks are embedded as nodes in GCCs, operating in one often implies operating in the other.

<sup>7</sup> Different types of rents (derived from different barriers to entry or different strategic/scarcely assets within the chain) can be identified, such as technology rents; organisational rents; relational rents; trade-policy; and brand-

---

name rents. For an explanation of these different types of rents see Gereffi, (2001); for a longer discussion of economic rents in general, see Kaplinsky (1998).

<sup>8</sup> The specific aims and approach taken for the current study have some important consequences for the theoretical and conceptual discourse within which the work is set, as will be explained in more detail in chapters 2 and 3. Other discourses abound and are by no means dismissed, yet are beyond the scope of our research. For instance, although an interesting body of literature exists on technological catch-up trajectories by latecomer economies, the current study explicitly does *not* deal with (latecomer) economies as a whole but takes on an explicit micro-analytical approach within a global networks and chains perspective.

<sup>9</sup> We must of course be cautious about trying to theorise about the global economy and local development processes as a whole, on the basis of an empirical study of a specific industry and conducted at particular times and in particular places, but such studies are indeed necessary to contribute to the body of work which is now emerging on the theme and which in its totality will be able to contribute to further theory development.

# 1 Developments in The Global Garment Industry and the Role of Asia

## Introduction

The garment industry<sup>1</sup> is one of the most globally dispersed of all industries across both developed and developing countries, with some garment companies having their goods produced simultaneously in as many as forty countries around the world (Bonacich, 1994). It is an organisationally complex industry, containing elements of both very new and very old organisational practices, and changing constantly in its organisation and geography (Dicken, 1998). As noted already garment manufacturing has been employed by many LDCs as an engine for export oriented industrialisation and employment creation. The sector has received more systematic and persistent protection than any other (Cline, 1987, Douglas, 1989) and has been the subject of trade tensions between developing and developed nations. Trade barriers continue to have a profound impact on the geography of production and distribution and the possibilities for incorporation and advancement of LDCs in global chains.

Given the relevance of the specific characteristics of the industry to our research problem, these will be discussed broadly in this chapter.

In the first section we will consider the global shift that has taken place since the 1950s leading to geographic dispersion of the industry as discernible today. Subsequently, in section two we take a look at the structure and organisation of the industry. The global apparel commodity chain (GACC) and the most important actors as well as their relationships within the chain are considered in particular. The following section (1.3) consider the global geographies of the different actors in the GACC in more detail, while section four gives an insight into the development and evolution of the garment industry in Asia in and into the intra-regional division of labour that has developed within this region.

Section five concludes the chapter with an overview of the most important developments in the industry over the past three decades and how these have affected producers in LDCs impinging on their competitiveness in global networks and chains after initial incorporation. In particular (the interplay between) changing consumer demand, market developments and buyer strategies, as well as technological developments, the international regulatory framework and socio-political developments are considered in more detail.

## 1.1 Globalisation of the Garment Industry: Global Shift and International Division of Labour

As part of restructuring processes in the industrialised countries, from the late 1950s onwards, an unprecedented shift of industrial production towards LDCs took place, most notably in labour intensive industries, such as the garment industry, which were in search of lower labour cost.

This shift dramatically changed the global economic landscape, and is clearly demonstrated by garment trade flows (see table 1.1), as the shift of production from the core to the periphery was accompanied by a massive rise in imports from LDCs into the core economies, competing with local manufacturers in the latter, often displacing companies and whole garment manufacturing industries in some regions. By the mid 1990 this had resulted in substantial trade deficits for most developed countries, with the exception of Italy.

What emerged was an international division of labour, as industrial restructuring processes in the core increased the subdivision of value chain activities into a number of partial operations at different sites throughout the world. While initially only garment assembly, the most labour intensive production activity in garment manufacturing, was shifted out (often to EPZs in LDCs), in later stages an increasing number of activities, including pre-assembly,

finishing, packing etc. were shifted out as well, eventually leading to a division of labour where production as a whole was relocated. Earlier than in other industries the vertical disintegration of value chain activities, became the norm (Dooren, 2003).

**Table 1.1 Trade Balances in Clothing, 1995**

<i>Developed Economies</i>	<i>millions US\$</i>	<i>Developing Economies</i>	<i>millions US\$</i>
Belgium-Luxembourg	-1.724	Hong Kong	+8.634
Canada	-1.674	South Korea	+3.884
France	-4.664	Malaysia	+2.118
Germany	-16.845	Taiwan	+2.374
Italy	+9.438	Portugal	+2.827
Japan	-18.228		
United Kingdom	-3.695		
United States	-34.716		

Source: Dicken, 1998

With ongoing developments in clothing demand and markets, this deverticalisation has only become more pronounced and a large number of functionally specialized participants, such as designers, wholesalers, agents, manufacturers, jobbers, contractors and retailers are currently involved in the apparel commodity chain, each having their own specific (locational) requirements.

With continuing internationalisation and globalisation of the industry, the geographical pattern became more complex, with different locations performing different functions or roles, instead of the initial almost dichotomous division of labour between the core and periphery as suggested in for instance the New International Division of Labour (NIDL) theory (Fröbel, Heinrichs & Kreye, 1980). What became clear was that a cheap labour hypothesis (Elson, 1988) alone could not account for these patterns. States and governments, distributors of garment (i.e. the lead-firms in the chain); international trade regulations and individual company strategies all played an important role in the geographical spread of the industry and its complex international division of labour.

Global shifts in production, but most notably in trade patterns, are reflected in the figures presented in table 1.2.

**Table 1.2 The World's Leading Clothing Exporting Countries, 1999**

<b>World leading exporters (15)</b>	1980	1990	1999	<b>World leading importers (10) (1999)</b>		<b>World leading producers (10) (1999)</b>	
				countries	share (%)	countries	share (%)
China <sup>1</sup>	4.0	9.0	16.2	USA	30.0	USA	24.7
Hong Kong	11.5	8.6	5.1	Germany	10.6	Japan	12.2
Italy	11.3	11.0	7.1	Japan	8.4	Italy	11.5
USA	3.1	2.4	4.4	UK	6.4	France	3.7
Mexico <sup>1</sup>	0.0	0.5	4.2	France	5.9	UK	3.6
Germany	7.1	7.3	4.0	Italy	3.0	Brazil	3.2
Turkey	0.3	3.1	3.5	Netherlands	2.6	Germany	3.2
France	5.6	4.3	3.1	Belgium	2.5	Spain	3.0
Korea, Rep. of	7.3	7.3	2.6	Mexico <sup>1</sup>	1.9	Canada	2.8
India <sup>2</sup>	1.5	2.3	2.6	Spain	1.8	China	2.7
Total	-	-	52.8		73.1		70.6

<sup>1</sup> Includes significant shipments through processing zones



*Sources: WTO annual report (1999), Table IV.80; UNIDO (2001)*

Global, regional and local dynamics (corporate and political) all contributed to the trade patterns as they are discernible today (see table 1.2). The actual organisation and global geography of the industry, can be best understood in terms of global production networks and the global apparel commodity chain (GACC), in which different functions and nodes can be identified, each with their own geography. These chains are driven by large retailers, manufacturers and marketers from the USA and Europe, commonly referred to as (global/international) buyers.

Before taking a closer look at the geographical patterns of the GACC, first the structure and organisation of the industry, and the configuration of the GACC, are considered.

## **1.2 Structure and Organisation of the Global Garment Industry: The Global Apparel Commodity Chain**

What had emerged by the mid 1990s in the garment industry was a detailed dis-aggregation of stages of production and consumption across national boundaries, under the organisational structure of densely networked firms or enterprises (Gereffi & Korzeniewicz, 1994), which in turn form (organisational) nodes in the GACC. The GACC connects synthetic and natural fibre production networks to textile and fabric production networks, then to garment production networks, export and distribution networks and finally marketing and retailing networks. Figure 1.1 gives a schematic illustration of the GACC.

Core nodes in a GCC are those in which the activities generating the principle surpluses take place (Gereffi & Korzeniewicz, 1994). As we shall explain in more detail, in the GACC these activities are design, marketing and retailing. Consequently lead-firms are found at the 'end' of the chain in the marketing and retailing networks, from where they exercise governance over almost all other parts of the chain. In the context of the garment industry lead-firms are often referred to as 'buyers', as most of them are not, or no longer directly involved in production. They buy or source their products from specialised garment producers/manufacturers, which in turn are not involved in marketing or retailing.

An intermediate or transition group is formed by the so-called 'brand-named garment companies'. Originally manufacturers, over the years many have substantially reduced their involvement in actual production, farming most of it out and concentrating instead on marketing and sometimes even directly on retailing through their own retail outlets. A good example is Levi Strauss Company. This group is shown in the upper right part of figure 1.1.

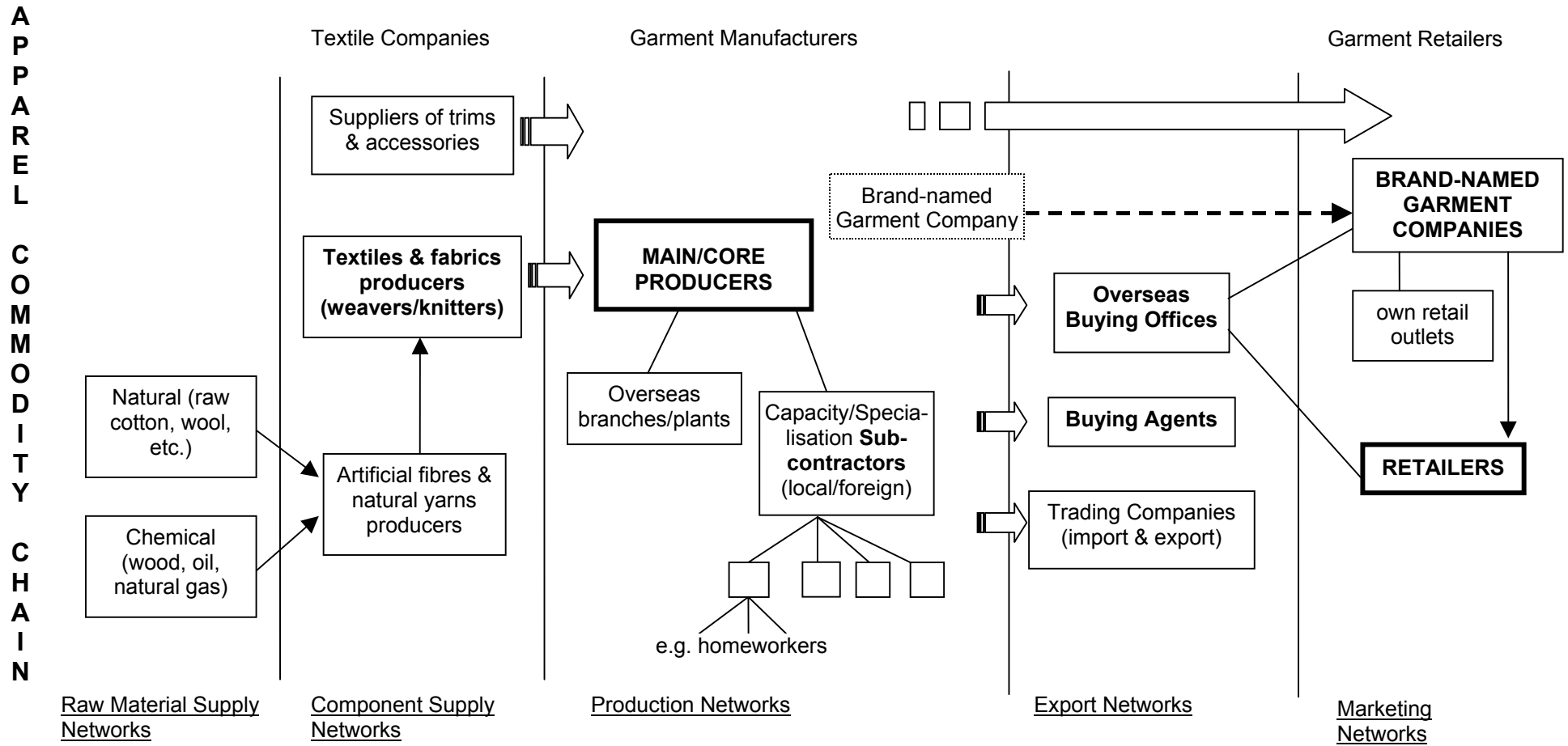
Both manufacturers and buyers form a heterogeneous group of companies, each with specific characteristics, roles and relationships within the GACC.

### *1.2.1 Garment Manufacturers and Garment Production Networks in the GACC*

The garment manufacturing industry is characterised by a fragmented structure - i.e. a large number of relatively small companies - and geographical dispersion.

As a group, garment manufacturers are heterogeneous, and the position and relationships in networks and the GACC of a garment producer are related to the range of production activities (stages of production and handlings) the company performs.

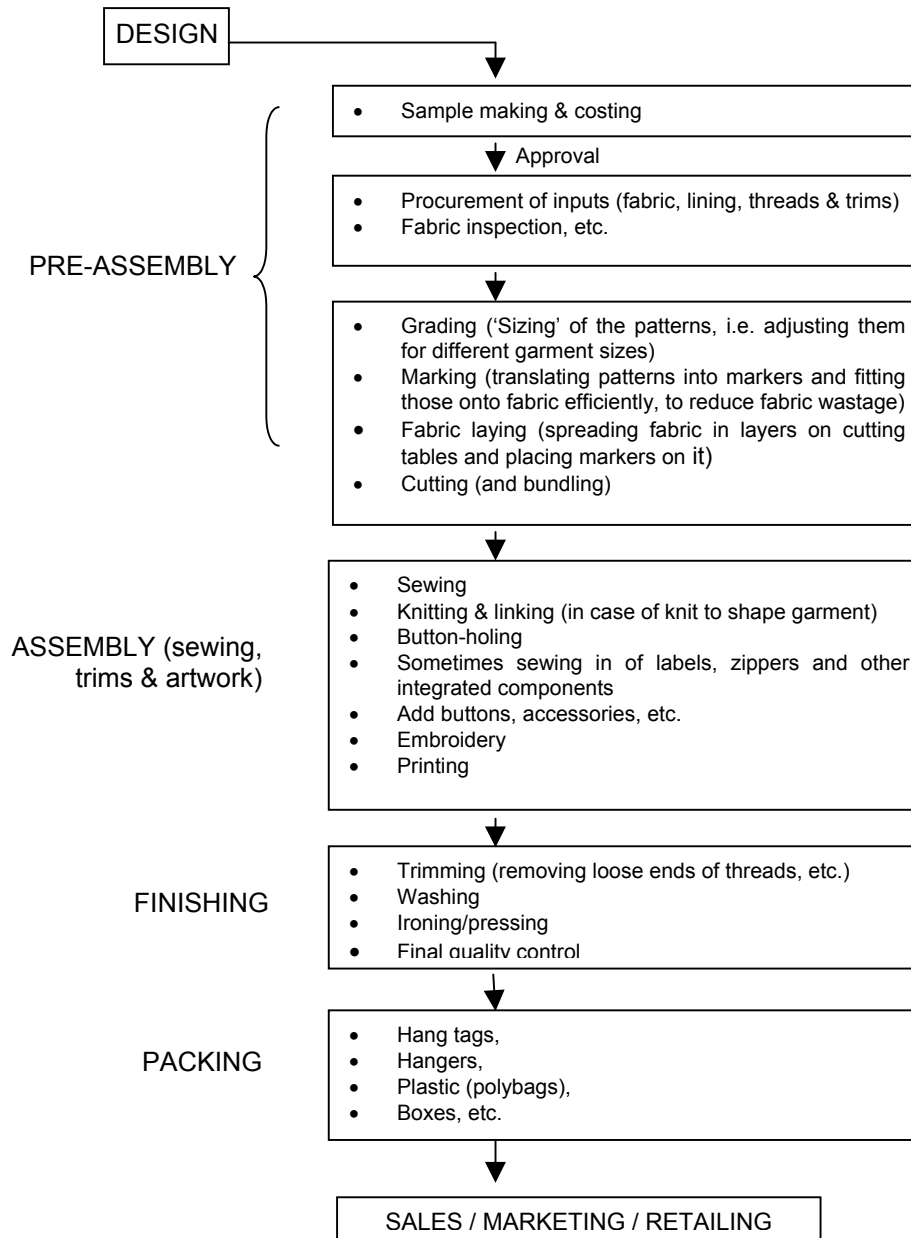
Figure 1.1: The Apparel Commodity Chain



Source: Modified after Appelbaum & Gereffi (1994); Dicken (1998)

Figure 1.2 gives a schematic illustration of the different stages in the process of garment manufacturing. Obviously this is a very general overview and activities may vary with type, complexity and quality of the garment.

**Figure 1.2 Stages of Production in Garment Production Process**



Although in principle the design stage is part of the production process, this stage is usually taken care of by the buyers, as it constitutes a main strategic asset within the chain. Thus, not all of the stages of the production process as depicted in figure 1.2 actually take part within the production networks, depicted in figure 1.1. A direct consequence of the deverticalisation process referred to earlier.

Although marketing and retailing of the final product (to the consumer) is taken care of by the buyer, producers will have to market themselves with buyers (finding and acquiring new buyers or negotiating with existing buyers) and therefore will often have a separate sales and marketing department. Based on the production stages and activities illustrated in figure 1.2,

it is possible to identify the different firm roles and functions of garment manufacturers within production and distribution networks<sup>2</sup>. These are considered in table 1.3.

**Table 1.3 Firm Roles and Functions in Garment Production Networks**

Firm Role	Function(s)/characteristics	Other names
<b>(Industrial) Subcontractor</b>	'Parts' production for use by other manufacturing companies. ( <i>process (assembly) specialisation</i> ) Two types: <b>Export-Platform Manufacturer</b> → foreign owned, labour intensive assembly of manufactured goods in export-processing zones also: Outward Processing Trade (OPT) <b>Component-Supplier</b> → production of component parts or entire garments for final assembly and/or finishing by the core manufacturing company. Inputs supplied by core manufacturing company. Two important sub-categories: (1) "capacity" or concurrent subcontracting (to increase flexibility) and (2) "specialisation" or complementary subcontracting (e.g. embroidery, washing, dyeing).	<ul style="list-style-type: none"> <li>• Second or lower tier supplier</li> <li>• Assembler</li> <li>• Sub-contractor/ Make &amp; Trim/ Jobber</li> <li>• Cut-Make-Trim (CMT) producer</li> </ul>
<b>Original Equipment Manufacturer (OEM)</b>	Production of finished garments by locally owned companies (full package deal), output is designed, distributed and marketed by large chain retailers and their agents. Some OEM, particularly in the East Asian NIEs, have increasingly outsourced production to overseas subsidiaries/subcontractors, concentrating on production co-ordination and planning, and have taken on more responsibilities in the chain, such as product development, sourcing, distribution and QC/follow-up. They have thus developed into important intermediaries or <b>OEM+</b> ( <i>process &amp; production organisation specialisation</i> )	<ul style="list-style-type: none"> <li>• Commercial (sub-) contractor</li> <li>• Full package supplier</li> <li>• Contractor</li> <li>• Turn-key supplier</li> </ul>
<b>Original Design Manufacturer (ODM)</b>	Independent supplier with full control over the development, design and fabrication of its product, but is willing to enter into a subcontracting arrangement to supply a dedicated or proprietary part to the purchasing [or parent] company (buyer only provides general product specifications, design details are left to ODM) ( <i>design, process &amp; production organisation specialisation</i> )	<ul style="list-style-type: none"> <li>• Supplier-Subcontractor</li> </ul>
<b>Original Idea Manufacturer (OIM)</b>	Manufacturer develops own product ideas, which is still sold under the brands of other established companies.	
<b>Original Brand Manufacturer (OBM)</b>	Finished-goods export industries in which there is no subcontracting relationship between the manufacturer and the distributor or retailer of the product. OBM designs, markets and sometimes even retails own brands, actual production often becomes less important or is even abandoned ( <i>product &amp; marketing specialisation</i> )	<ul style="list-style-type: none"> <li>• Independent Exporter</li> </ul>

Source: Modified after Gereffi (1992), Sturgeon (2001), Wong (1999) & Hobday (1995b)

A greater number of activities and responsibilities make a producer less dispensable as these more sophisticated roles require more capabilities and therefore entry barriers are higher.

Thus (industrial) subcontractors perform a limited number of core production activities, such as assembly and trimming and are dependent on other actors in the chain for procurement of inputs, design, marketing, etc. They have little leverage for independent decision making and perform the most volatile roles in a chain, being relatively easily replaced by newcomers, as their activities do not require a high degree of capabilities. Entry barriers to these roles are low.

Subcontractors are sometimes linked directly to manufacturers in developed countries, more often they form a second tier of producers and are dependent on other manufacturers (first tier) that are involved in contract manufacturing for retailers (OEM). OEM suppliers are capable of performing or organising a much broader range of production and value chain activities, including all procurement, pre-assembly, assembly and finishing activities (see figure 1.2) and distribution services. While still dependent on lead-firms for design and specifications, the dependency relationship is less one-sided. The added activities and responsibilities often involve investments and learning and aren't as easily copied as the basic

production activities performed by subcontractors. OEM producers are still more dependent on other actors in the chain (most notably buyers) and more easily replaced than OEM+/ODM/OIM producers. Finally, the producer role with the highest entry barriers and capability requirements is OBM. Essentially OBM suppliers have started assuming driving roles (lead-firm) in chains and may become buyers in their own right as they start concentrating more on non-production activities, or even completely phase out involvement in actual production.

It must be noted that next to these 'intra-chain' roles, 'extra-chain' positions may be identified as well. These include for instance producers for the domestic market, often also producing to the order of local buyers such as local department stores or brands, and producers with their own local or regional brands and labels sold to wholesalers, in local department stores, or even own outlets. Surprisingly such producers are often not, or hardly considered in studies of the clothing industry in LDCs, yet they may follow alternative routes to internationalisation, establish regional and even international production networks, and become like OBM suppliers (see e.g. Hassler, 2003). They are interesting from the perspective of development trajectories, as we will discuss in more detail later. In the current study, and particularly in the empirical chapters, these producers will be considered as well.

Producers' relationships with buyers are influenced by the segment for which they produce or the type of chains in which they are incorporated. Taking a closer look at buyers, the lead-firms in the GACC, will help clarify these relationships.

### 1.2.2 *Lead-firms in the GACC*

As a prototypical 'buyer driven commodity chain' (BDCC) (Gereffi & Korzeniewicz, 1994, Bonacich et al, 1994), the key strategic assets in the GACC lie outside production, in design, marketing, knowledge of global sourcing networks and systemic efficiency (Kaplinsky, 2000). With the exception of those that started out as manufacturers, buyers have little to no experience in manufacturing. Technological innovations are not as crucial as design innovations, and even these concern more the selling of a new image, than the introduction of radically new products. Buyers are aware that the activities they are directly responsible for account for only a small share in the total product cost (Kaplinsky, 2000), and that they are ultimately held responsible for the final product both in terms of its quality and the way in which it has been produced. Hence the need for governance and systemic integration of the entire chain. It is argued that herein lies the learning potential of incorporation into GCCs for companies in LDCs, as buyers actively engage in teaching and 'upgrading' their suppliers.

Buyer involvement in the chain ranges from production related issues to labour issues and often includes:

- selecting input suppliers and designating them as preferred suppliers, sometimes helping them with product development;
- selecting producers and providing them with designs and specifications;
- specifying which input suppliers producers must use for the principal inputs (most notably fabric and threads), or sometimes even supplying these themselves;
- imposing strict quality, environmental and labour standards for all participant companies in the chain (whether fabric suppliers, garment manufacturers, sub-contractors, etc.);
- providing information, technical assistance and/or even training programs to help dependent companies in the chain attain and maintain the required standards;

Buyers are not a homogenous group and their involvement in the chain differs per type of buyer and per market segment. Table 1.4 gives an overview of the different types of buyers.

**Table 1.4** *Categorisation of Garment Buyers*

Buyer (market)	Description	Synonyms/other	Examples
----------------	-------------	----------------	----------

segment)		names	
<b>1. Garment Merchandiser (4)</b>	Generally design and market clothing, but contract the actual production to manufacturers; sometimes own stores	* Branded Marketer	Nike, Adidas, Polo Ralph Lauren, Calvin Klein
<b>2. Buying Agent (N.A.)</b>	Locate, qualify and inspect foreign suppliers/ producers of garments, and negotiate orders with them, often monitor production for QC and compliance with other standards.	* Sourcing Agent * Global commission buying agent	Li & Fung, Swire & Maclain, Connor Group,
<b>3. Branded Manufacturer (3-4)</b>	Large, often integrated and/or diversified manufacturers, which do their own designs, production and marketing. Often contract out (parts of) production and/or have overseas facilities.	* Larger Manufacturer * Original Brand Manufacturer	Levi's, W.F. Company, Fruit of the Loom, Sara Lee
<b>4. Designer label (5)</b>	Companies centred around one or more specific designer(s), but having expanded into large companies outsourcing actual production heavily involved in marketing and retailing of their products, sometimes in their own stores.		Yves Saint Laurent, DKNY
<b>5. Retailers (1-4)</b>			
<b>a) Department store (3)</b>	Market and sell garment, along with other consumer goods such as cosmetics, soft-goods, upholstery, house-wares, etc. Next to sales of other brands usually also sell private labels, either from own designs or through merchandising department, which they source on OEM or ODM basis.		JC Penney, C&A, May Dept. Stores, Federated Dept. Stores, Marks & Spencer
<b>b) Mass Merchandiser (1-2)</b>	Retailers/supermarkets of garment and other consumer products, usually very large scale, which enables them to reap economies of scale and the lowest prices. Compete primarily on low prices, source for their private labels, either based on own designs or through merchandising department, on OEM or ODM basis.	* Discounter	Sears, Kmart, WalMart, Carrefour
<b>c) Retail Chain (3-4)</b>	Large retailers running own chains of stores, often internationally, selling only their own labels. Often source world-wide on an OEM basis (most will do all their own designs, but the lower end ones may also source on ODM basis through a merchandising department).	* Specialist clothing retailer * (Inter)national Chain	GAP, The Limited, Hennes&Mauritz, Liz Claiborne
<b>d) Speciality store (4)</b>	Retailer of specific products, e.g. sports-wear; sources/buys from garment merchandisers or their designated contractors; sometimes also own labels.	* Concept store	Footlocker, Royal Sporting House
<b>e) Mail-order company (2-3)</b>	Sell their products through catalogues, from which consumers can pick and order. Source products/ labels, either based on own designs or through merchandising department, on OEM or ODM basis	* Catalogue company	LandsEnd, Otto International, Littlewoods, Quelle, Wehkamp

Sources: Gereffi (1999); Dooren (2003); Gibbon (2000b)

The numbers between brackets in the first column denote market segments in which these buyers generally market their products, referring to quality, image and price. These range from low-end (1), low to middle-end (2), middle-end (3), middle to high-end (4), to high-end (5). Similar types of buyers may operate in different segments. For instance, Hennes & Mauritz and Liz Claiborne are both retail chains, yet the former positions itself in the low to medium quality and price range, targeting mostly teenagers and young adults, while the latter positions itself in higher quality and price segments and targets the 30+ age groups.

The extent and type of involvement as well as the power to exercise governance differ substantially per (type of) buyer. Some factors influencing the strategies and relative bargaining power of buyers, and their level of involvement in the chains are:

1. *Type of garment or market segment.*

It is possible to make a distinction between ‘basic’ garments and ‘fancy’ garments (Gereffi, 1999; Gibbon, 2000b), or rather between high-end and low-end garments (and subsequently high-end and low-end buyers). Initially the division between basic and fancy garments was seen to involve on the one hand standardised garments (e.g. jeans, plain shirts, some children’s wear etc.) and on the other hand products with a high fashion content, which are typically less standardised and for which production runs and lead-time are shorter. However, as Gibbon (2000b) argues, changes in the industry and lead-firm strategies with regards to branding, segmentation and differentiation<sup>3</sup>, have caused boundaries between the basics and fancy garment chains to become porous and shifting. Thus even basics such as jeans, t-shirts, etc., have been marketed as higher-end products, solely on the basis of the brand name and imaging. We therefore prefer to use the terms higher-end and lower-end products as market positioning seems to have gained in importance over product characteristics perse.

As buyers in the higher-end and even middle segments increasingly concentrate on branding, marketing and image creation, more and more pre-assembly and even design activities have been transferred to producers, while at the same time quality, social responsibility and timeliness requirements (compliance) have become more stringent.

On the contrary, lower-end buyers, such as mail order companies, discounters, wholesalers, etc., exercise considerably less control over their vendors. As long as basic standards are met, most decisions and choices are left to the individual producers. Manufacturers in these chains may operate in lower price point markets, but often also face lower compliance costs.

In this respect Schmitz & Knorringa (1999) make a distinction between ‘quality driven chains’ and ‘price driven chains’ and argue that producers in the former will often have closer relationships with buyers and be allowed more responsibilities in terms of quality control and perhaps even product development, than their counterparts producing lower-end products in price-driven chains.

## 2. *Origin of the buyer.*

There seems to be a difference in organisation between chains evolving around European buyers and those around US buyers. Because quota have been less important in gaining access to the EU market than to the USA, the geography of EU sourcing has been much more governed by price considerations. Consequently, until recently only lower-end EU buyers have been sourcing on a truly global basis (Gibbon, 2000b), including particularly specific types of buyers, such as mail order companies and the French ‘hypermarchés’.

As consumer movements appear to be less strong in the EU than in the USA and more focused on environmental issues, codes of conduct of EU buyers are generally less stringent with regards to labour standards, unless they carry a ‘global brand’ (e.g. Adidas).

EU and US buyers also organise their global sourcing differently. The latter frequently set up tiered networks of small representatives, quality control (QC) and support offices, and local sourcing offices, in strategic locations world-wide, depending on total volume of sourcing (Gibbon, 2000b). Thus US buyers exercise relatively tight and direct control over suppliers.

European buyers on the contrary usually only have one sourcing office outside Europe usually located in Hong Kong. They are less likely to set up a global network of local/regional sourcing offices, but prefer contracting out certification and QC to independent local agents or local branches of global companies providing QC services (Gibbon, 2000b). European buyers thus seem to ‘drive’ their LDC producers in a more hands off way and leave more up to the producers.

Finally the European market is much more fragmented, especially in terms of private labels, which means that especially private label buyers (a substantial share of buyers) have considerably less bargaining power than US ones.

## 3. *Size*

Buyer size influences bargaining power and the ability to exercise control over other segments in the chain. Sometimes this even implies that smaller buyers cannot be as selective about their manufacturers, or that they do not have the means to exercise tight control or educate their producers. For instance if a large buyer places an order with a specific producer, this may take up a producer's full capacity. Should a smaller buyer at that point want to place an order the producer will most likely turn him down. In addition, large size also offers scale advantages so that producers are willing to offer lower unit prices.

Box 1.1 gives an example of the set-up and operation of a large, American branded marketer.

### **Box 1.1 Polo Ralph Lauren: Branded Marketer and International Buyer**

#### **Company background**

The American Polo Ralph Lauren Corporation, a company specialised in the design, marketing and distribution of lifestyle products, established its first brand 'Polo' in 1967 when Mr. Ralph Lauren - the owner and main designer - introduced a collection of men's ties. In 1968, Polo was established as an independent menswear company offering a line of premium men's clothing and sportswear. The company logo (a polo player astride a horse) and Ralph Lauren womenswear were introduced in 1971. In that same year the first shop-in-shop boutique dedicated to Polo Ralph Lauren products was opened in Bloomingdale's flagship store in New York City and the first Polo store was opened by an independent third party. Starting in 1973, womenswear products were produced and distributed by a third party under the company's first licensing alliance.

From these beginnings the company further developed its brand (brand stretching), both through diversification into related products such as fragrances, accessories, footwear and home collections, and through internal brand differentiation (development of different sub-brands for different target groups, e.g. Polo Sport, Ralph Lauren/Purple Label Collection, Polo Golf, RALP/Ralph Lauren, etc.).

The company's net revenues, which were comprised of wholesale and retail sales net revenues and licensing revenue, amounted to US\$1.2 billion in FY 1997, while income from operations totalled US\$157.4 million in FY 1997. As of end of March 1997, Polo had approximately 4000 employees, including approximately 3760 in the United States and 240 in foreign countries.

In 1998 Polo Ralph Lauren launched its IPO on the New York Stock Exchange and became a publicly listed company.

#### **Current company structure, marketing and production organisation**

Polo Ralph Lauren is a design driven company, which has outsourced all production and part of the distribution and retailing of its products, so it can focus on this core business of design, product development and marketing, all of which are centralised. The Polo trademark can be defined as a higher-end lifestyle brand (though not really high-fashion) with a distinctly American style or character, covering a range of products (under different sub-brands) from sportswear to men's and women's casual wear, corporate wear and even childrenswear.

Polo's business presently consists of four integrated operations: wholesale, Home Collection, direct retail and licensing alliance. As part of these licensing alliances, Polo conceptualises, designs and develops the marketing for a broad range of products under its various brands for which the company receives royalties from the (international) licensing partners. The licensing partners generally contribute the majority of product development costs, provide the operational infrastructure required to support the business and own the inventory. International licences typically grant the licensing partner the right to distribute broad range of Polo Ralph Lauren products within a defined international market. While product licenses may employ their own designers, Polo oversees the design of all products and licensing partners will visit the sample shows of the main company design team in the United States, which develop new products in co-operation with the sales and marketing department and based on customer feedback. International licensing partners may adjust designs for regional preferences, but approval from the Polo headquarters in New York is always required.

The company has offices/facilities in New York City (headquarters, design offices, showroom and direct retail department), New Jersey (administrative offices and support), North Carolina (distribution), Hong Kong (QC and sourcing) and Singapore (main sourcing and QC).

The company's garment products are produced by approximately 160 different manufacturers worldwide. In 1997, roughly 30 percent (by dollar volume) of men's and women's products was produced in the United States, and 70 percent in Asia (e.g. Hong Kong, Saipan, Malaysia) Latin America (predominantly Mexico under NAFTA) and the Caribbean Basin countries, Europe (Italy and



England) and some other foreign countries. The majority of product sourced outside the United States is produced in Asia.

Sourcing is divided between purchase of finished products (full-package) and purchase on a CMT basis. Working relationships with vendors have become closer in recent years, so as to reduce lead times and permit re-orders of successful programs. Thus the company has been able to increase the number of deliveries within certain brands each season. For instance, for the 'Polo Sport' and 'Polo by Ralph Lauren' brands in 1997 there were eight and ten annual deliveries respectively. Suppliers operate under close supervision of the product management department in the United States and in the Far East (South, Southeast and East Asia) under that of a wholly owned subsidiary, which performs buying agent functions for the company as well as for third parties.

As the company generally sources less product from Europe and South America (Central America is managed from the United States), it retains independent buying agents in these regions to assist the company in selecting and overseeing independent third-party manufacturers, sourcing fabrics and other products and materials, monitoring quota and other trade regulation as well as performing some quality control functions.

All garments are produced to Polo's specifications, while production and quality control staff in the United States and the Far East monitor manufacturing at supplier facilities. Quality assurance is further achieved through strict vendor certification programs, which also includes requirements regarding labour standards and -rights.

Concern about human rights issues and possible repercussions of being linked to human right abuses, has meant the company will only source from 'reliable' countries, avoiding politically instable countries and countries with a bad track record regarding human rights (e.g. Myanmar).

Although the largest share of products is still sold in the United States, the company has decided to shift its focus towards a global philosophy, at least at the management level, as most of its products are manufactured outside the United states. Thus, for instance, it centralised the management of all (global) sourcing operations in its Far East subsidiary.

The development and general operation of the Polo Ralph Lauren Corporation reflects many of the industry developments described in this chapter. As a branded marketer, high quality levels, shorter lead times as well as flexibility in more regular product changes (6 to 10 deliveries each season) have become ever more important for the company.

Over the years the production base has shifted out of the United States towards Asia and more recently towards Latin America due to favourable agreements such as NAFTA and the Caribbean Basin Initiative. Sourcing requirements have also become increasingly strict and although the Company is still expanding its product base, it is selective of its vendor and vendor locations and prefers close working relationships with vendors so as to assure quality, timely delivery and adequate labours standards. As the company operates in the higher end retail markets, it can also command premium prices for its products. As such, working with a company like Polo will put tremendous pressures on quality and other production standards, but may also offer good learning potential and higher price-points for producers.

*Source: Polo Ralph Lauren, International Prospectus for Initial Public Offering (1997); Interview (1999)*

Gibbon argues that there is a broad development underway in the GCC for garments, for outright 'buyer-drivenness' to be somewhat diluted by (i) a trend toward longer-term strategic partnerships between buyers and a selected number of core suppliers (Gibbon, 2000b, p.8); and (ii) the transfer of more strategic activities to these so-called first-tier suppliers, such as certain parts of system integration in the chain and the provision of production services and inputs to other, less key suppliers in the chain. This transfer, and subsequently the decreased control of buyers, however, concerns a relatively small share of all suppliers and most of them are from Hong Kong.

However, it could also be argued that buyer drivenness has increased for the less key suppliers, as certification systems and compliance rules have become a lot more stringent and all encompassing. From the point of view of these companies, whether execution of buyer set standards and requirements is taken care of by intermediate or first tier companies, agents, or by the buyers themselves makes little difference.

### *Buying Agents*

Buying agents may operate on a local, regional or global scale. Quite often big (usually US) buyers will work with only a few such agents on a global scale. Global sourcing agents sometimes originate from the USA or Europe and simply follow their customers in the internationalisation drive (e.g. Swire & Maclain from the U.K. and Halmode from the USA), or they are first tier suppliers, from LDCs, which do not manufacture at all, but are commission agents. The leading companies in the latter group (e.g. Li & Fung and the Connor Group) originate from Hong Kong (Gibbon, 2000b). Agents occupy a position in between producers and buyers, which enables them to exercise some extent of governance over other segments in the chain, through selection, inspection and, sometimes, even education of producers.

Besides forward linkages, garment producers have backward linkages with input suppliers such as textiles and fabric producers, accessories suppliers, etc. These are at the centre of the component supply networks within the GACC (see figure 1.1).

### *Textiles and fabrics producers*

Although the textile and garment industries have often been amalgamated in analyses and statistics, they have little in common, both in nature of final products and nature of production processes, even if both industries are linked via transactions and ownership relations (Scheffer, 1992).

Compared to the garment industry, the textile industry is more automated and capital intensive and less fragmented, consists of relatively large production units, operating sophisticated technology and employing relatively few workers<sup>4</sup> (Dicken, 1998). Production is often large scale (although this holds true more for weaving mills than for knitting factories). Profitability is driven to a much greater extent by product innovations. Many product innovations in garments in fact are based on new types of textiles and fabrics<sup>5</sup>.

Due to these characteristics their relative bargaining position within the chain is often stronger than that of garment producers. Although many garment producers have forged closer relationships with their textiles suppliers in order to jointly cut back lead-times, very few garment producers have managed to forge closer relationships in terms of product development and innovation. Besides technological and product innovations, textile manufacturers' competitiveness strategies have included forming alliances with buyers rather than garment producers for joint product development and acquiring nomination (preferred supplier status); developing and patenting new products and/or specialisation in small quantity, high quality/high price production for niche markets.

For garment producers the image that has often been portrayed is of being sandwiched between textile producers on the one hand and buyers on the other.

## **1.3 Global Geographies: Geographical Patterns of the GACC**

### *1.3.1 Production Roles*

The current geography of the global garment industry reveals the different phases of the global shift that has taken place since the 1960s in terms of production roles and locations. The most advanced production roles, are occupied by companies in the old core, such as Italy, the UK, France and Japan, and by a few companies in the East Asian NIEs, whereas later entrants occupy roles further down the hierarchy (see table 1.5)

**Table 1.5 Current Geographies of Export Producer Roles**

Firm Role	Geography
-----------	-----------

<b>(Industrial) Subcontractor Role</b> <ul style="list-style-type: none"> <li>• Export-Platform Manufacturer (OPT)</li> <li>• Component-Supplier</li> <li>• CMT Manufacturer</li> </ul>	<u>Newly entered</u> : Southern Africa and least developed Eastern Europe <sup>1</sup> , Central America <sup>2</sup> & South/Southeast Asia <sup>3</sup> ; <u>Established</u> : China, Mexico, Central America <sup>4</sup> , Central/Eastern Europe <sup>5</sup> , North Africa <sup>6</sup> , Turkey & South Asia <sup>7</sup> ; Caribbean
<b>OEM Role</b>	<u>Evolving</u> : China, Mexico, Latin America, Turkey & South Asia, Eastern Europe <u>Established</u> : Southeast Asia, Central Europe;
<b>OEM+/ODM/OIM Role</b>	<u>Evolving</u> : Southeast Asia; <u>Established</u> : East Asia (excluding China),
<b>OBM Role</b>	<u>Evolving</u> : East Asia (excluding China) <u>Established</u> : Italy, France, UK, Japan, USA.

<sup>1</sup> includes: Belarus, Ukraine, Baltic States

<sup>2</sup> includes: Guatemala, El Salvador, Costa Rica,

<sup>3</sup> includes: Pakistan, Bangladesh (South Asia), Vietnam, Cambodia, Laos, Myanmar (Southeast Asia)

<sup>4</sup> includes: Dominican Republic, Honduras, Caribbean basin countries

<sup>5</sup> includes: Poland, Hungary, Slovak Republic, Czech Republic, Slovenia, Croatia (Central Europe);

Romania, Bulgaria, Albania (Eastern Europe)

<sup>6</sup> includes: Egypt, Tunisia and Morocco

<sup>7</sup> includes: Sri Lanka and India

Established and evolving exporters in the first and second categories of production roles, account for the bulk of clothing imports in the USA and Europe. It must be noted that this categorisation only presents an aggregate picture at the national scale level and thus doesn't reflect internal variations (i.e. variations at the firm level) per country, which are of course always present.

### 1.3.2 Buyers

The geography of buyers is less dispersed as they continue to be closely tied to markets and the main markets are still the USA and Europe. However, a few trends should be noted.

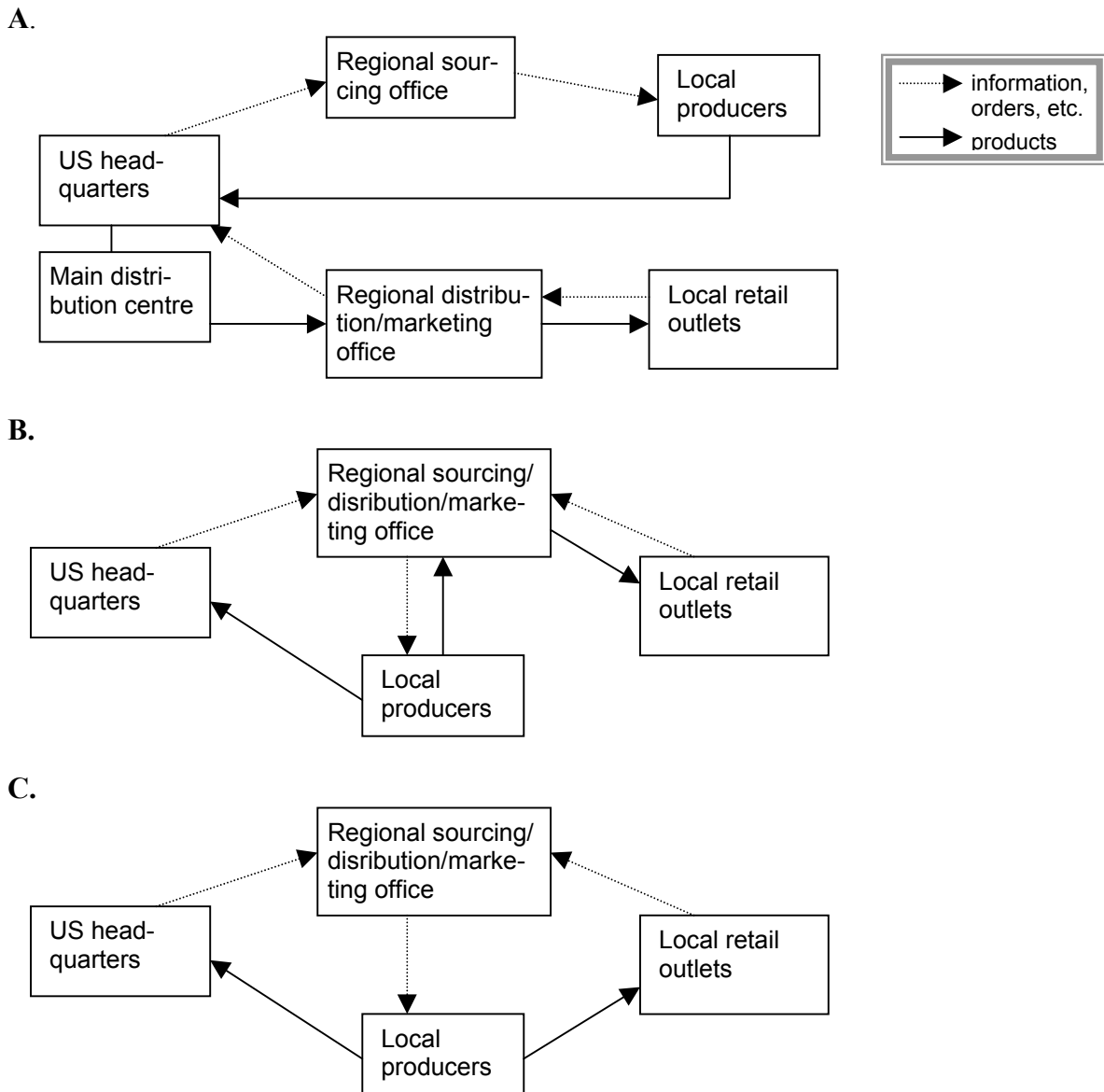
1. Starting as early as the 1970s, many, especially US, buyers have set up (regional) buying offices in their main sourcing regions or even in individual countries (see above). These form the most direct link to their suppliers. Prior to the formation of such offices, importers were the main link between US retailers and foreign factories. Regional buying offices function as extensions of the main office and have little scope for strategic decision making in the organisation. As explained above, European buyers have been less inclined to set up regional sourcing offices.

2. Many US and European brands have expanded globally, with distribution and marketing facilities in virtually all corners of the world. A general trend for the internationalisation of retailing is observable, as more recently even non-branded apparel companies such as department stores and mass merchandisers are moving into new markets such as Latin America and even Asia, setting up stores and outlets there. In most of these cases production sourcing and distribution is still organised globally (i.e. through the head offices in the USA and Europe) though and the local functions of such retailers do not include sourcing. However, Gereffi (1997b) has suggested that in the case of for instance Mexico, these retailers could drive a regionalisation of value chains, as they may establish local supplier networks. These may become more pronounced with the development of markets in the late industrialising countries of Asia and Latin America. Already some buyers have integrated their production sourcing and distribution operations in for instance Asia, where these were previously separate units.

Figures 1.3A-C give a schematic illustration of how this could eventually lead to a situation where the buyer function actually becomes 'localised', i.e. the regional buying office (also)

serves local markets, instead of merely supporting the buying process for distant markets. The current situation is probably a transition between figure 1.3A and B.

**Figure 1.3 Evolution of Sourcing and Distribution Networks of Buyers**



3. In Asia, several large Japanese department stores have achieved a considerable presence in the region (e.g. Sogo, Isetan and Takashimaya). Often these department stores source locally for their private labels and will assign space to local brands in their stores as well. In addition several regional brands, mostly Hong Kong owned, have set up retail outlets in the rest of the region. They often source locally/regionally for products. For instance Giordano, a branded manufacturer from Hong Kong, sources part of its products intended for the Malaysian market in Malaysia. The rest of the products come from other countries in the region, while part of the production of Giordano's Malaysian contractors goes to stores in e.g. Singapore. Many (smaller) producers in Asia are thus also producing to the order of regional buyers, although the volume of these orders are often considerably less than those of US or European buyers and regional buyers will generally only account for a portion of total orders.

4. Finally, as mentioned in the previous section, several buying agents are expanding globally as well, commanding some of the key strategic assets in the chain, most notably the actual knowledge of global production sourcing networks.

### 1.3.3 Textile and fabric producers

As a consequence of the relatively higher capital intensity and automation of textile and fabric production, the global shift in this industry has been less dramatic and several developed country producers (e.g. Italian producers) have been able to more or less maintain positions as competitive producers of higher end products (see table 1.6).

**Table 1.6 The World's Leading Textile Exporting Countries**

Country	Value bln. US\$	Share in world exports (in %)			Change in position
	1999	1980	1990	1999	1980 → 1999
1. China	13.04	4.6	6.9	8.8	8 → 1
2. Hong Kong domestic exports	1.22	1.7	2.1	0.8	-
re-exports	11.05	-	-	-	-
3. Germany	11.89	11.4	13.5	8.0	1 → 3
4. Italy	11.78	7.6	9.1	8.0	3 → 4
5. Korea	11.62	4.0	5.8	7.9	10 → 5
6. Taiwan	10.99	3.2	5.9	7.4	11 → 6
7. USA	9.51	6.8	4.8	6.4	4 → 7
8. France	7.03	6.2	5.8	4.8	6 → 8
9. Japan	6.59	9.3	5.6	4.5	2 → 9
10. Belgium-Luxembourg <sup>1</sup>	6.59	6.5	-	4.5	5 → 1
11. Pakistan	4.51	1.6	2.6	3.1	13 → 0
12. India <sup>2</sup>	4.56	2.1	2.1	3.0	12 → 1
13. United Kingdom	4.48	5.7	4.2	3.0	7 → 1
14. The Netherlands	3.86	4.1	2.8	2.6	9 → 1
15. Turkey	3.48	0.6	1.4	2.4	- 2
					1
					3
					1
					4

<sup>1</sup> For 1999 Belgium only    <sup>2</sup> 1998 instead of 1999

Source: WTO annual report (1996) table IV.51 & WTO annual report (2000) Table IV.72

In addition, the shift that has taken place is mostly towards the more advanced new industrialisers in Asia (the NIE's) and the shift to the lesser developed countries or second generation NIEs is not as obvious as in garment (yet), with the exception of China.

The Asian region has played and continues to play an important role in the internationalisation and globalisation of the garment industry. Although the region's position has been declining in the last decade, it still occupies the most dominant position in the global garment industry, both in terms of production, employment and trade (Dicken, 1998). Within Asia the picture has changed dramatically though and we will therefore take a brief look at these changes.

## 1.4 Evolution of the Garment Industry in Asia

### 1.4.1 The Shift Towards the East Asian NIEs

Hong Kong, South Korea and Taiwan were the first Asian countries outside Japan to which a noticeable shift of garment production took place. Not only were labour cost here low at the

time, but governments in these countries also offered incentives and kept their labour force subordinated (Bonacich, 1994). In the first phase the Asian NIEs served mostly as low cost assembly sites. Contract manufacturing often took place in EPZs and involved outward processing trade (OPT)<sup>6</sup>.

Many East Asian garment manufacturers managed to develop the required competencies and capabilities for such contract manufacturing (on a CMT basis) at an early stage, which put them in a favoured position as to the sourcing by garment companies from the USA and Europe, that included not just garment manufacturers, but more and more non-manufacturing companies, such as retailers, branded marketers, merchandisers and discounters. The key to success of the Asian NIE producers in capturing and producing for non-manufacturing buyers as well, lay in their capacity to move from mere assembly to full-package or OEM supply. Non-manufacturing buyers were more prone to outsource other value chain activities as well in the areas of design and product development. In general producers were required to take on more responsibilities and Asian producers managed to adequately full-fill these. Some – more recently – even managed to move beyond the OEM export role towards OEM+ and ODM roles, whereby they were actively involved in the design and development of garment collections for their buyers or had started developing and marketing their own brands (OBM) (Gereffi, 1999).

Key in these processes of moving to more rewarding export roles was the ability to establish close linkages with a diverse array of lead-firms in the evolving global apparel commodity chain, as they constituted the primary sources of material inputs, technology transfer and knowledge in these organisational networks (Gereffi, 1999).

Doing so provided producers in the NIEs with extensive knowledge of buyers' requirements and standards, which turned out to be a valuable asset, as became clear in the 1980's, when the East Asian producers saw their initial comparative advantage (i.e. cost advantage) rapidly decline and their exports limited by restrictive trade measures in the West.

#### *1.4.2 The Evolving Intra-regional Division of Labour in Asia*

With economic development and consequent rises in wages and currency appreciation, the cost of garments produced in the NIEs rose substantially. Simultaneously the Asian NIEs faced increasing quota restrictions for their exports to the USA and Europe (see section 1.5 below), while many producers in other countries in East and Southeast Asia managed to develop the required competencies for CMT or even OEM production as well (at a substantially lower price) and weren't hindered by quota restrictions. However, these developments haven't implied an en masse exit of Asian NIE producers from the industry. Company closures and diversification have occurred, but many companies have also shown a range of responses to adjust (Simon, 1995). We will take a more in-depth look at these strategies in chapter 3, but should mention here briefly one of the most commonly applied strategies by NIE garment producers, as it profoundly affected the geography of production within Asia: the shifting of (the most labour intensive) production processes overseas – either through overseas investments or subcontracting in lower cost locations. Thus NIE garment producers became managers of intricate regional production networks within Asia, a position they managed to obtain because of their established (trust) relations with buyers, largely through the process of 'triangle manufacturing'. The essence of 'triangle manufacturing' is that overseas buyers place their orders with the NIE producers they have sourced from in the past, which in turn shift some or all of the requested production to affiliated offshore factories in one or more low-wage countries. These offshore factories may or may not have equity investments by the East-Asia NIC producers: they can be wholly owned subsidiaries, joint-venture partners, or simply independent overseas contractors. The triangle is completed when

the finished goods are shipped directly to the overseas buyer, under the import quotas issued to the exporting nation (Gereffi & Korzeniewicz, 1994).

Initially production was outsourced to e.g. Singapore (quota advantage) and other countries in Southeast Asia, most notably Malaysia and Thailand. In addition an increasing number of local producers in these countries became incorporated directly into the networks and chains of buyers.

The process didn't end here though. As costs increased in these late industrialising countries (or second generation NIEs) as well, quota regulations and restrictions included more and more countries in Asia and a new group of producers in countries in Southeast and South Asia acquired export production capabilities, (low-end) production migrated further into the region, to India, Bangladesh, Vietnam, Cambodia, etc. Economic reform in China and the imminent accession of the country into the WTO, caused an enormous boom in its garment production and exports, making it the world's dominant garment exporter by the late 1990s.

This further migration took place in several ways. Firstly the garment companies from the Asian NIEs expanded their production networks to these new countries; secondly, buyers started sourcing from the new locations directly, bypassing the East Asian NIEs. This was often done through regional sourcing offices set up in for instance Hong Kong or Singapore; thirdly, garment companies from the second generation NIEs started relocating (low-end) production to lower cost locations as well, either through FDI or subcontracting arrangements.

What had thus emerged by the late 1990s was an intricate and multi-tiered regional division of labour or hierarchy of production (Bonacich, 1994). Japan has developed into a final market for the region's garment production and has emerged as an important supplier of textiles and fabrics to the rest of the region. The NIE's and in particular Hong Kong and more recently Singapore have become hubs in the regional production and distribution networks, from where production co-ordination and marketing and distribution often take place. In addition Hong Kong is distinguishing itself as a regional (and possibly international) fashion and design centre. Taiwan has developed into a specialised supplier of inputs such as fabrics, accessories and machinery. It distinguishes itself through a very competitive price quality ratio. Coupled with close proximity to the major producers in Asia this has given the country a distinct competitive edge, rapidly replacing many suppliers from the developed countries. Many buyers have designated Taiwanese textile, fabrics and accessories suppliers as the preferred inputs suppliers for their Asian contractors. The late industrialisers have established themselves as high quality, relatively cheap producers, developing from simple CMT suppliers to OEM. Recently, producers in these countries too are developing (sub)regional production networks through outsourcing and FDI. Finally, Indonesia, the Philippines, Vietnam, South Asia and China in particular are important low cost producers to the region.

#### *1.4.3 Globalisation of East Asian Garment Companies*

Despite the internal dynamics within Asia, the region has experienced increased competition from other (new) production regions in the world, most notably Central and South America, Eastern Europe and Northern and Southern Africa. Several factors have made these new regions increasingly attractive for buyers as sourcing locations and have caused a shift away from Asia. Such factors include: (i) continued and increased quota limitations for East and Southeast Asian countries; (ii) trade agreements and preferential treatment arrangements between the USA and Central America (especially Mexico and the Caribbean basin) and to a lesser extent the rest of Latin America, between the EU and Eastern Europe and between both the EU and the USA and Africa; (iii) the development of full-package capabilities in these new regions (especially Mexico and Eastern Europe), enabling the sourcing of products by non-manufacturing garment companies; and (iv) trends towards shorter lead-time requirements for certain (fashion sensitive) garment items (see also section 1.5)

As a response to these developments, garment manufacturers from South Korea, Taiwan and Hong Kong have set up lower-cost production facilities and subcontracting activities in Latin America, the Pacific Rim and Eastern Europe to gain better access to European and US markets (Chan, 1998). More recently, East Asian and even some Southeast Asian producers have also set up production facilities or subcontracting arrangements in Africa, in for instance Mauritius (Gibbon, 2000b), South Africa and Lesotho.

Finally, several Asian commission or buying agents have extended their activities to these regions as well, providing global reach and services to their buyers.

By the late 1990s a truly global production hierarchy and a highly complex set of production networks (nodes) had evolved, in which Asian producers, in a variety of different roles and locations, play an important part.

Figure 1.4 illustrates how production networks have taken on global, multi-tiered dimensions with a host of different actors in different locations performing production, intermediary and buyer roles, connected and interacting through both ownership and contracting linkages. In the last section of this chapter some the main driving forces behind the development of these global production networks and chains are briefly considered

## **1.5 Recent Developments and Changes in the Global Garment Industry, Markets and Buyer Strategies: Effects on LDC Producers and Locational Outcomes**

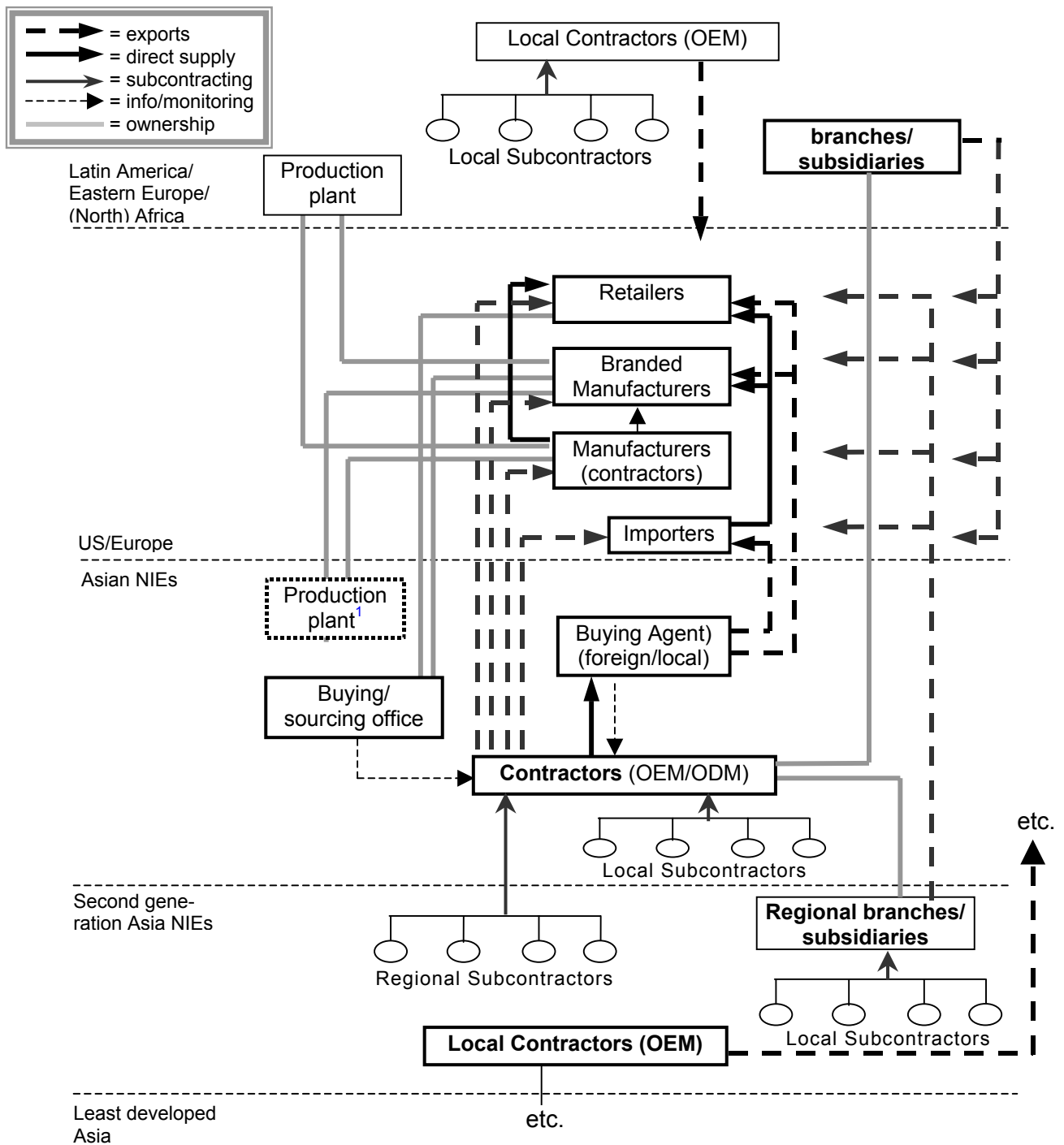
Garment producers are faced with continuous changes in their production environment, most notably changing consumer demand, market developments and consequent changing buyer strategies, technological developments, changes in the international regulatory framework and socio-political developments. All these factors impinge on their competitiveness in global networks and chains after their initial incorporation, although effects differ per country or region. Generally changes in these areas have affected the *competitiveness* of producers in LDCs in terms of their *profitability* (increased cost incurred, pressure on prices, etc.), their *capabilities* (increased production, product and organisational capabilities required to stay in the network) and the general *attractiveness of their location*. The next section presents a brief consideration of the most important developments producers in the industry have been confronted with, and their (sometimes differential) effects.

### *1.5.1 Market Developments*

Since the late 1960s, the market for garments in the USA and Europe has changed substantially, due mainly to the qualitative and quantitative changes in consumer demand and the reactions to these changes by the main marketers and retailers. Retail prices have been stagnant or even decreasing over the past few years. This has been attributed mostly to market saturation (Piore & Sabel, 1984) and increased production.. On the other hand consumer demand has changed and is increasingly for higher quality, more differentiated, fashion and branded garment, which explains the rise of specialist clothing retailers such as The GAP, Hennes & Mauritz and Liz Claiborne and brands and designer labels such as DKNY and Yves Saint Laurent. Some have argued that fashion and differentiation was supply rather than demand/consumer driven, as a reaction to market saturation and stagnating prices (Harvey, 1989). In any case, what has taken place is a shift in value added from the product to the image (thus to the marketing end of the commodity chain), hence a shift in power from producers to buyers/retailers, also referred to as the 'Retail Revolution' (Scheffer, 1992).



**Figure 1.4: Structure of Global Garment Production and Distribution Networks**



<sup>1</sup> Not very common

Source: Modified after DOL/ILAB (1996)

LDC producers have been affected by these market developments both directly and indirectly, through the strategies of buyers and the attractiveness of their location, impacting their competitiveness within the chain.

- As a consequence of stagnant prices and fiercer competition, a consolidation and concentration in the retail segment has taken place (Gereffi, 1997b ; Scheffer, 1995). This has substantially diminished the bargaining power of producers and most have become

price-takers. Subsequently, as Appelbaum & Gereffi (1994) note, a ‘downward profit squeeze’ in the GACC has taken place, where market pressures on retailers’ profits are diverted to manufacturers by reducing prices or holding them at ‘price point’. The manufacturer reduces the margin paid to his contractors and these are then forced to reduce cost, often through squeezing labour, achieved through (further) subcontracting to lower wage countries. This has stimulated a further tiering of production networks and deepening of the international division of labour.

- In order to cut cost, buyers have placed greater emphasis on inventory control. The major implication has been that retailers no longer want to hold large stocks and either expect their producers to take care of this (hence shifting the cost and risk to the producers) or force them to deliver on a ‘just-in-time’ basis. The latter requires the development of new capabilities by producers, in order to produce smaller batches, be flexible in mid-season re-orders or adjust rapidly to orders, etc. Again, the burden of this cost cutting by buyers is shifted to the producers.
- Quality control has become increasingly strict, to reduce rejects and increase efficiency. Buyers have placed a larger part of the responsibility for this control with their producers, according to standards and rules set by them. One of the common measures in this respect is the nomination of input suppliers<sup>7</sup>
- To capture niches and new markets, buyers have placed more emphasis on segmentation, which usually means an increased emphasis on fashion and design, demands for smaller batch sizes and more frequent style changes (see box 1.1). This has implied increased demands for quality and flexibility from the producers, thus the development of new and enhanced capabilities.
- With increasing emphasis on rapid fashion and style changes, lead-time considerations are becoming ever more important. On the one hand this has led to an increased importance of producers’ proximity to markets for certain (fashion sensitive) market segments. On the other hand buyers prefer to source from locations where material inputs are readily available, hence where large parts of the apparel commodity chain are present. Thus countries/regions, which are relatively far from the main markets but have a strong and flexible material supply base, can still retain an advantage.
- Many buyers have pushed for capability enhancement of producers world wide (i.e. regardless of their location), through upgrading and teaching. This has led to an ever greater number of producers (no longer solely Asian ones) being able to supply on a “full-package” basis and meet buyer’s more stringent quality and delivery times requirements. Competition among core (OEM) producers has therefore increased substantially, as is reflected in the shifts of sourcing from Asia to countries in Latin America.

A number of non-market developments have guided consumer behaviour and thus the strategies of buyers as well and these have particularly affected producers in developing countries.

### *1.5.2 Consumer Awareness, Codes of Conduct and Standard Setting*

In recent years consumer awareness in the area of human rights, working conditions and environmental issues with regards to production (sourcing) from LDC’s has increased. Many buyers have experienced the consequences as through the actions of NGOs mal-practices in factories of their contractors in LDCs received extensive media publicity. This directly affects their image and sales, and many buyers have therefore become mindful of where and how their goods are produced. Many have implemented ‘corporate codes of conduct’, which deal with production circumstances and environment (William, 2000).

The main consequences for LDC producers have been on the one hand further pressure on cost (compliance cost) and on the other hand organisational and locational limitations:

- buyers are no longer willing to source from countries with a ‘bad reputation’ in terms of human rights violations and labour standards. This is reinforced by Governments imposing trade restrictions on these grounds, often pressured by special interest groups (see box 1.2)
- Buyers limit further outsourcing of production by main producers, as further subcontracting by main producers may cause the lead-firm to lose sight of what is going on in factories, while they are the ones held responsible for labour standards and human rights issues throughout the chain.

#### **Box 1.2 Global Codes of Conduct and Standard Setting: Protection or Protectionism?**

Although codes of conduct have been heralded as private sector attempts at improving labour conditions in LDC factories, some scepticism about these codes and similar attempts at labour conditions improvement has also been vented, most notably by LDC producers and governments, but also by human rights movements.

Some (producers in) LDCs claim industry codes of conduct are in reality a form of trade barriers, whereby developed countries can exclude the imports from certain countries which threaten to flood their markets by setting standards, not (yet) achievable by producers in the least developed countries. In some cases protectionist lobbies in the US and Europe have indeed had a say in the formulation of these codes of conduct, even if only indirectly.

Others claim the standards set in these codes of conduct are unrealistic for LDC producers, as they are based on Western industrial relations regimes, which differ substantially from the industrial relations regimes present in LDCs. They claim the industries in the West did not abide by such stringent standards when they first industrialised their economies. If the codes of conduct set standards above the national standards in the LDC concerned, this may pose too high a compliance cost for producers, especially since buyers generally do not increase the prices paid for products when they increase requirements.

Finally, the effectiveness of such codes of conduct in terms of solving human rights abuses in LDCs are questionable considering their relatively limited scope. Although supposedly aimed at improvement of worker conditions and human rights in LDCs, the motivation for producers in LDCs to actively engage in promoting human rights is often more related to gaining a reliable reputation with their buyers. This has meant that the human rights considerations often stop at the factory door and do not so much concern a society wide pre-occupation with human rights. As human rights abuses in LDCs are hardly ever confined to one industry, solving the problems in one, may just lead to a shifting of the problem to others (for instance children ending up in other sectors, possibly the informal one, where labour conditions are often worse). A seemingly positive example of a socially responsive program aimed at improving the working conditions of LDC workers, illustrates this issue.

In 1995 a Memorandum of Understanding (MoU) was signed between the Bangladesh Garment Manufacturers and Exporters Association (BGMEA), the ILO, Unicef and the government of Bangladesh, on elimination of child labour from the garment sector in Bangladesh. It was prolonged in 2000. The main objective of the program was to establish the basic right of the children by rehabilitating and providing elementary schools for the under age workers eliminated from the garment factories.

The program thus recognises that viable alternatives need to be offered to children (in terms of education) and families (in terms of compensation for much needed lost income). Second, it recognises that such more comprehensive programs necessitate the involvement of not just lead companies setting standards, but also of local institutions, governments and even international organisations.

The results of this program are said to be positive, by all signatories and participants in the program, however, human rights lobby groups have pointed to the fact that although the program may in principal be well intended, it has some serious shortcomings in practice. As one organisation claimed:

“The vast majority of child workers (in the industry) were sacked prior to the signing of the MoU and have been deprived of any kind of rehabilitation measures as mentioned in the agreement. Nothing

has been said about the potential entrants who would have come every year to work in the garment sector. (.....) Most of the dismissed children moved on to even worse and more dangerous jobs. (.....). The elimination of child labour did not automatically result in the enrolment of children in schools. The MoU would have been doing more justice if the children could keep their work in the garment factories half-time, while being provided with education the other half. The children need a job as much as they need education. But consumer groups and trade unions from the industrialised countries only accept the complete removal of children from the garment industry. Bangladeshi employers, fearing a boycott, could do nothing but obey.” (*Clean Clothes Campaign*, 2002)

The latter point suggests that the MoU, at least on the part of the BGMEA and the Bangladeshi government, was as much, if not more, motivated by foreign pressures (the threat of a boycott) and the wish to retain their export market, as it was motivated by a genuine wish to eradicate child labour. Their commitment to the eradication of child labour in itself may therefore not be that strong at all.

*Sources: DOL/ILAB (1996); BGMEA (2002); Clean Clothes Campaign (2002)*

Finally, in part due to issues dealt with above, and in part to reduce the cost of co-ordinating networks, sourcing for new vendors and ‘educating’ new producers, there is a tendency for lead-firms to work closely with a smaller number of established, core producers, i.e. to consolidate their sourcing networks. Instead of taking the risk and cost of looking for new suppliers themselves, in many cases buyers prefer to press, encourage and help their existing suppliers adjust and upgrade e.g. through relocation, automation and quick response systems, training and standard setting, etc. Thus lead-firms invest in the relationships within the networks and these ‘sunk costs’ increasingly prevent them from switching to new producers.

The international, regional and local institutional context in which garment producers in LDCs operate, have also had a profound impact on the competitiveness of companies, countries and in turn on the global geography of production and distribution.

### *1.5.3 International Trade Regulations, Trade Blocs and Preferential Treatment*

Textiles and garments are unique in that they are the only industries to which special international trade regulations apply (for a detailed overview of global textile and garment trade policies see Dickerson, 1991, chapter 10).

Under the General Agreement on Tariffs and Trade (GATT), a series of protective measures were taken for the clothing industry, which today cover the majority of all world trade in textile and clothing (Dicken, 1998).

Faced with increasing low price garment imports from Japan, Hong Kong and some other Asian countries, both the United States and the United Kingdom negotiated separate agreements with the Asian exporters for voluntary reduction of exports to their markets, for a limited period. By 1962, these had become broadened into the Long-Term Arrangement (LTA) within GATT, which regulated international trade in cotton textiles. The LTA remained in place for eleven years. As the world picture became more complex, in 1973 a much broader trade agreement, which also included the European countries, and synthetic fibres, was negotiated: the first *Multi Fibre Arrangement (MFA)*. Initially negotiated for a limited period of four years, it aimed to create an orderly development of trade in textiles and garments, through the imposition of individual quotas, which set precise limits on the quantity of textile and garment products to be exported from one country to the other. For every single product a quota was specified in these agreements (Dicken, 1998).

Since 1974 the MFA has been renegotiated or extended four times (in 1977, 1982, 1986 and 1991) and the lists of products and countries included under the system have become longer. In general the MFA became more restrictive rather than more liberal.

This continued regulation on a global scale has limited trade and expansion of production in developing countries, but it has not prevented the latter from increasing their share of world trade *vis à vis* the developed nations. It has, however, profoundly impacted the geography of production and distribution networks within the GACC, as buyers have been limited in the amount of products they could source from specific locations. Thus buyers have had to spread orders over a larger number of locations than might have been the case without these restrictions.

It has been argued that the quota system has actually made some developing countries more competitive, as it had the unanticipated effect of stimulating the substituting of high value added for low value added activities (quota go by volume and not value) and diversification into other product categories (O'Connor, 1993). However, generally speaking it provided the industry with a less competitive international environment.

Yet from a trade perspective, the LDCs as a group were not happy with the MFA. Despite outwardly presenting a unified position, in reality divisions occurred, as countries varied in their competitive position. Those that had become proficient in production and already had large quotas for United States and European markets could retain these, whereas other countries would have little access to the major markets based on their prior exporting records. In a sense, earlier quotas provide guaranteed market access in an intensely competitive market with an overabundance of producers.

The irreconcilability of the MFA with the core principles of GATT eventually led to a series of negotiations in the late 1980s and early 1990s in the so-called Uruguay Round, in an attempt to integrate the MFA into the GATT. This resulted in 1995 in the Agreement on Textiles and Garment (ATC), which was incorporated into the WTO - the successor of the GATT - and contained provisions for trade liberalisation, and the abolishment of the quota system over a ten-year period (1995-2004). The planned, gradual, removal of trade barriers and the general trade liberalisation will again have a profound impact on world textiles and clothing production and trade. One can expect low cost countries that are currently restricted by binding quotas to gain from trade liberalisation.

With the accession of China into the WTO there is fear, especially among the smaller Asian countries, that most production and sourcing will end up in China. Others have argued that Pakistan and India will profit from trade liberalisation, as both countries not only have abundant labour resources, but also important local material inputs, most notably cotton and supplying industries (Hiebert, 2003).

Despite the planned phasing out of the quota system, there is some skepticism as to how free garment trade will really be. The most difficult liberalisation within the ATC is left to the very end of the transition period and although tariffs will also be lowered, some will remain, even after completion of the ATC. Generally it remains to be seen, whether claims of domestic industries suffering damage will serve as a reason to place new or other restrictions on import. There is a possibility that developed countries will use other, non-tariff and non-quota barriers (quality and phytosanitary requirements, labour issues, environmental standards etc.), to stem the inflow of garment imports from LDCs.

Next to the international regulatory framework, the establishment of free trade agreements and preferential treatment of certain countries and/or regions in terms of their access to developed countries markets, have profoundly affected producers in LDCs in recent years. Examples of such agreements are the North American Free Trade Agreement (NAFTA) between Canada, the United States and Mexico, the Caribbean Basin Trade Partnership Act (CBTPA) and the Africa Growth and Opportunity Act (AGOA) for Sub-Sahara Africa.

These agreements have all given the involved countries trade advantages over non-included countries, of which the Asian NIEs and late industrialisers were the major affected group.

NAFTA gives Mexico a considerable advantage in export of garment to the United States (see box 1.2), as there are no quota and hardly any tariffs imposed on Mexican imports into the United States (see also Dooren, 2003). The CBTPA provided Caribbean Basin countries such as the Dominican Republic with lowered tariffs, which weren't as favourable as the NAFTA provisions, but definitely more favourable than what most of the Asian countries had to work with. Coupled with the proximity of these production countries to the United States market, and the fact that producers in this region have developed OEM capabilities as well, this has given the region a considerable advantage over specifically the Asian countries. This is reflected in trade flows, which clearly show that imports into the United States from these countries have increased substantially, with Mexico now being the number one source of US clothing imports (see table 1.7)

To prevent non-NAFTA and non-CBTPA (i.e. Asian) producers from taking the back-route – by re-exporting goods via Mexico, or assembling Asian cut fabrics in Mexico for export to the US market – strict rules of origin were introduced under the so-called yarn-forward clause. This implied that 'textile and garment goods (with certain exceptions) must be produced from yarn that is made in a NAFTA country in order to have access to the full benefits of the NAFTA Agreement' ([www.strtrade.com](http://www.strtrade.com), 2002). It has, however, further encouraged the globalisation of Asian garment as well as textile producers, as several have opted for the setting up of vertically integrated operations in Central America.

**Table 1.7 US Apparel Imports, Top Ten Suppliers**

Rank	1993		1996		1999	
	Countries	%	Countries	%	Countries	%
1	China	18.4	China	15.3	<b>Mexico</b>	13.5
2	Hong Kong, China	12.0	Hong Kong, China	9.7	China	13.2
3	Taipei, Chinese	6.9	<b>Mexico</b>	9.0	Hong Kong, China	7.7
4	Korea, Rep. of	7.4	European Union (15)	5.2	European Union (15)	4.2
5	European Union (15)	4.4	Taipei, Chinese	5.0	<b>Dominican Republic</b>	4.1
	<i>First 5</i>	49.1	<i>First 5</i>	44.2	<i>First 5</i>	42.7
6	<b>Dominican Republic</b>	4.2	<b>Dominican Republic</b>	4.2	Korea, Rep. of	4.1
7	<b>Mexico</b>	4.0	Philippines	3.7	<b>Honduras</b>	3.8
8	Philippines	3.9	Korea, Rep. of	3.7	Taipei, Chinese	3.7
9	India	3.4	Indonesia	3.5	Indonesia	3.3
10	Indonesia	3.2	India	3.4	Philippines	3.3

Source: WTO, Textile Monitoring Board (1997, table 16), WTO, (1999, table IV.79)

Under the Africa Growth and Opportunities Act effective from 2000, some 35 countries from SSA are given preferential access to the US market. It allows qualifying textiles and garment articles from a beneficiary SSA *duty-free* and *quota-free* entry into the United States. If the fabrics used originate from outside the eligible SSA countries and the US, quota and tariffs do apply, except for the lesser developed SSA, defined as having a per capita GNP below US\$1500,- per year ([www.strtrade.com](http://www.strtrade.com), 2002).

The European Union has extended similar preferential treatment to North African and Central/Eastern European countries. The former because of old colonial ties, the latter as a prelude to entry of a number of countries in this region into the European Union. Thus by 1999, five out of the top ten suppliers of apparel inputs into the EU were from these regions. Particularly countries such as Tunisia (5th supplier of apparel inputs into the EU in 1999) and Romania (6th supplier) benefited from these trends (WTO, 1999)

The most recent development in this respect has been the signing of a Free Trade Agreement between the United States and Singapore, which is seen by some as a test-case that, if proven

successful, may clear the way for more such FTAs between the USA and other Asian countries. Understandably, there is a strong lobby in favour of such FTAs within Asia, yet there is probably an even stronger lobby against within the USA.

Overall, preferential trade agreements have differential effects on the export competitiveness of different countries and regions as buyers have started sourcing more products from countries and regions included under such agreements. This has also involved encouragement of local producers in these countries and regions to develop full-package capabilities.

#### 1.5.4 *Labour Availability and Cost*

The labour intensive nature of garment assembly makes it sensitive to both labour availability and cost, and changes in these factors profoundly affect the competitiveness of companies. Although the two – availability and cost – are obviously related, this relation is not always as simple as might be assumed.

As countries achieve success in economic development, several factors contribute to both shortages and increased cost of labour in the garment industry.

First, economic development tends to push up wage levels, making labour more expensive relative to new entrants in less developed countries to the industry.

Secondly, with economic development education levels usually increase, often leading to people being less inclined to want to work in such industries as the garment industry. As other industries emerge and develop, people seem to prefer working in such new industries. This problem is especially pronounced in countries with a relatively small population base. Usually garment producers cannot afford to follow the general trend of wage increases and pay in the industry is often amongst the lowest of all manufacturing industries and mostly based on piece rates. Competing for labour with other industries such as electronics or services, becomes increasingly hard. Labour turnover also tends to increase as a consequence, as workers ‘shop around’ for jobs, looking for the producer offering the best benefits and because producers may ‘poach away’ (Dooren, 2003) workers from each other. Labour shortages may therefore pose a big problem for producers and drive up the cost of labour even more because of recruitment cost and increased cost of training (due to higher labour turnover).

Thirdly, paradoxically economic development tends to increase especially the shortage of *skilled* labour. Although the industry is generally defined as commanding relatively unskilled labour, the actual sewing process does require a certain level of dexterity and skill, mostly obtained through on the job experience. In addition certain more ‘artisanal skills’ are required in pre-assembly processes such as patterning, marking and grading (if this is still done manually). As economic development and education levels in a country rise, and labour turnover increases, experienced and skilled workers become scarce.

Governments too may put pressure on labour markets for the industry due to specific labour policies.

### **Conclusion**

In this first chapter a detailed overview was given of the developments in the global garment industry and particularly of the globalisation of the industry and the complex international production and distribution networks that have evolved in the past four decades. These are a consequence of the specific characteristics of the industry (most notably its vertical disintegration and high labour intensity), market and technological developments, trade related issues and dynamics within late industrializing countries, particularly in Asia. The consequent international division of labour patterns in the industry are best captured in the

global apparel commodity chain, which illustrates how actors in different countries and regions, operate in distinct networks and perform specialised operations and services, and are linked together through a variety of sourcing, contracting and ownership arrangements. The specific geographies of the different elements of the GACC revealed distinct locational patterns tied to specific export roles, ranging from simple assembly to brand manufacturing.

Regional dynamics within Asia, driven to a large extent by (companies in) the Asian NIEs, have led to a distinct regional division of labour and production hierarchy, that buy now span virtually all of East, Southeast and South Asia. Such dynamics have in fact enabled the region as a whole to maintain a dominant export role within the GACC, despite increasing pressures from other countries and regions entering this chain.

As argued, the industry is a very relevant case for the study of globalisation and local industry development in LDCs. In the next chapter we will first turn to the some of the main theoretical notions on the broader issue of the relation between firms and industries in LDCs operating in global networks and chains, and local industry development. Subsequently, in chapter three these theoretical considerations will be linked more specifically to the case of the global garment industry and its specific dynamics and characteristics - as presented in this chapter - and to developments in the East Asian NIEs. This results in the presentation of a framework for analysis in chapter 3, which forms the conceptual basis for the empirical part of the study.

## Notes

---

<sup>1</sup> The words garment and apparel have roughly similar meanings and it is therefore highly common to use them as synonyms. However, while they overlap greatly in subject matter, it is important to note that the term apparel is broader and that the apparel industry produces a wider range of sewn products, encompassing not just wearing apparel, but also household and industrial apparel, two types of non-clothing products not part of the garment industry (Dooren, 2003) and excluded from this study.

<sup>2</sup> Export and marketing networks are together referred to as distribution networks

<sup>3</sup> Such strategies have included 'brand stretching' (Gibbon, 2000b, p.7), internal brand diversification; clothing specific diversification, i.e. extending the product range to include for instance children's wear; diversification into new market segments, etc. For an extensive overview, see Gibbon (2000b)

<sup>4</sup> This is even more true for the next industry upstream, the synthetic fibres industry, which serves as a supplier to the textiles industry

<sup>5</sup> Such innovations involve for instance the use of new, or blending of different, types of yarns and fibres to develop 'new varieties' of fabric such as cotton-blend fabrics (mixing natural cotton yarn with synthetic fibres, thus combining the advantages of both), wrinkle free fabrics, water proof but 'breathing' fabrics such as Goretex, etc

<sup>6</sup> Under such arrangements, products assembled in free trade zones in specific countries from (sometimes cut) fabrics supplied by the US company, could be imported into the USA paying duty only over the value added in the EPZ. Similar arrangements existed in Europe.

<sup>7</sup> This so-called supplier nomination or designation by buyers cuts the cost of quality control and ensures world-wide quality levels. It enables buyers to spread an order over different producers, or have tops and bottoms of sets made in different locations. In addition it gives them a stronger bargaining position vis-à-vis input suppliers, as they can buy in bulk allowing them to command better prices.



## **2 Local Firms and Industries in Global Commodity Chains: Theoretical Notions**

### **Introduction**

The actuality of the global production networks and commodity chains perspective of economic globalisation is demonstrated by the number of recent publications and research projects dealing with it (e.g. the UNIDO Industrial Development Report 2002/2003, (UNIDO, 2002); the UNCTAD World Investment Report 2003 (UNCTAD, 2003); the joint research project on Global and Local Governance and Industrial Development undertaken by the IDS and INEF<sup>1</sup>; and work by the ILO/International Institute for Labour Studies (ILO, 1998a, 1998b)). Studies seem to agree that opportunities for development for LDC firms and industries are related to incorporation into global production networks and commodity chains and lie in the possibilities to leverage access to markets and information through the linkages with lead firms. Such successful leverage was demonstrated by the achievement of export competitiveness by manufacturing firms and industries in a number of LDCs over the past 20 years. The dangers after incorporation, are seen to lie in the possibility to get locked into a race to the bottom where competitiveness is maintained by further exploiting production factors, particularly labour and non-renewable ones. This would at best lead to immiserising growth, where there is increased output and more employment, but returns are falling (Kaplinsky, 1998). To achieve sustainable income growth, rather than just export growth, it is argued that developing country producers can capitalise on the opportunities presented by economic globalisation for the upgrading of their activities (Schmitz, 2000; Gereffi, 1999; UNIDO, 2002) and the achievement of local (industry) development. Industry development is often associated with ‘upgrading’ at the firm and industry levels. However, given the numerous views and approaches to this concept, this raises more fundamental questions as to what upgrading really means and how, following which routes it may be achieved. Only after dealing with these complex issues can we move on to the central question concerning the longer term development prospects of continued incorporated in networks and chains, given the necessity for firms and industries to adjust to changing competitive advantage factors and competitiveness of firms/industries in specific locations.

In the approach taken in this study these aspects are considered by (i) identifying firm competitive adjustment strategies in response to competitive pressures and opportunities; (ii) identifying the outcomes of these adjustments in terms of firm development trajectories and changing roles/positioning of firms relative to networks and chains (iii) identifying whether changes at the industry level have taken place, how they are produced and what their implications are in terms of industry development trajectories; and (iv) determinants or forces behind these strategies, adjustments and trajectories.

Before dealing with these elements specifically in the context of the garment industry, in this chapter the first three elements are explored in a more general, theoretical way. The fourth will be discussed in detail in the next chapter.

The discussion starts with a consideration of the most important aspects of GCC analysis in section 2.1, after which, in section 2.2, we will take a brief look at how, within the GCC discourse, firm and industry development in relation to economic globalisation is generally conceptualised. Here a definition of firm and industry development is offered, to which the - rather problematic - concept of upgrading in the context of global networks and chains is linked. In section 2.3 the discussion therefore continues with a more detailed consideration of the upgrading discourse, and specifically an explicit problematisation and definition of upgrading, as this is often omitted or only superficially considered in existing literature (see e.g. Meyer-stamer, 2002). This allows for a more comprehensive approach to the notion of

upgrading in relation to sustaining connections, and advancing roles and positions relative to global production networks and chains.

Next, section 2.4 turns to firm competitive adjustment strategies and introduces the idea of firm development trajectories, reviewing existing literature and studies that have modelled local firm development under globalisation based on concepts of learning, upgrading and improving competitiveness. Section 2.5, takes the analysis to the industry level, exploring the effects of both existing segments and new entrants into an industry in terms of changing industry profiles.

## 2.1 Global Production Networks and Commodity Chains

Global trade and production is increasingly organised in networks of independent, yet interconnected enterprises, and globalisation is no longer driven predominantly by TNCs, but increasingly by global lead firms. In the debate on globalisation and local industry development attention has accordingly shifted to the capabilities of *local firms in LDCs* and their capacity to become incorporated in global networks and chains driven by lead-firms from the West. The Global Commodity Chains discourse, and related literature, argues that incorporation into global production networks and GCCs forms a possible option for creating the conditions for upgrading (hence local firm and industry development), allowing for the achievement of international competitiveness and gains from globalisation. Before taking a closer look at this discourse, we will first give a brief overview of the most important aspects and dimensions of GCC analysis.

The commodity chain, as employed and popularised in the GCC literature, was first described by Hopkins and Wallerstein (1986) as “a network of labour and production processes whose end result is a finished commodity”. It was later extended by Gereffi, who broadly defined a global commodity chain as ‘a set of networks (nodes) clustered around one final product or service and linking firms, industries and communities to one another across the world economy’ (Gereffi, 1992; Gereffi & Korzeniewicz, 1994; ILO 1998a, 1998b). Commodity chains have four main dimensions:

- 1) An *input-output structure*, or sequence of interrelated value-adding activities including product design and engineering, manufacturing, logistics, marketing and sales,
- 2) A *governance structure*, or power relations that determine how economic surplus is distributed within the chain,
- 3) A *geographical configuration*, referring to the spatial dispersion or concentration of activities within and across locations,
- 4) A *social and institutional context*, formed by the norms, values, and regulatory frameworks of the various communities (at different scale levels) within which firms operate.

Before elaborating on the different aspects of GCCs analysis, we should first try to create some order in the terminological jungle that has characterised the literature related to the GCC concept. Table 2.1 gives an overview of the different terms and definitions found. It demonstrates that the different concepts and their definitions all to some extent overlap. For the current study we have chosen to use the terms (global) production networks and (global) commodity chains.

According to Gereffi, what makes the GCC useful as an analytical device is that it focuses on how international trade and production networks confer advantages to the leading group of firms that co-ordinate them and he continues to argue that the GCC differs in at least four respects from related concepts such as ‘production’ or ‘supply chain’ in that it:

- i. incorporates an explicit international dimension into the analysis;
- ii. focuses on the power exercised by the lead firms (i.e. governance) in different segments of the commodity chain and it illustrates how power shifts over time;

**Table 2.1 Networks and Chains: Terminology and Definitions**

<b>Concept/term (synonyms)</b>	<b>Definition</b>	<b>Focus/what it highlights</b>	<b>Reference</b>
<b>Supply Chain</b>	Generic label for input-output structure of value-adding activities, beginning with raw materials and ending with finished product	➤ input-output structure	Gereffi et al, 2001
<b>Porter's Value Chain</b>	The different stages of the process of supply (inbound logistics, operations, out-bound logistics, marketing & sales, and after-sales) and the support services the firm marshals to accomplish this task	➤ draws away attention from the physical transformation to where value is added in the process of bringing a product or service to the end-user ➤ gaining competitiveness through management of the value chain as a system	Porter, 1990
<b>Value System</b> (Commodity/Production Value Chain, (French) Filière <sup>1</sup> )	A sequence of productive (i.e. value-adding) activities across industries (inter-industry linkages) leading to/supporting, end use		Porter, 1990
<b>Production Chain</b> (Commodity Chain Value System/Chain (French) Filière)	A transactionally linked sequence of functions in which each stage adds value to the process of production of goods or services	➤ input-output structure ➤ co-ordination and regulation of chains ➤ geographical configuration	Dicken, 1998
<b>Commodity Chain</b> (Value System/Chain, (French) Filière, Production Chain)	A network of labour and production processes whose end result is a finished commodity	➤ input-output structure; ➤ governance structure;	Hopkins & Wallerstein, 1986
<b>Value Chain</b> (Commodity/Production Chain, Value System (French) Filière)	A sequence of productive (i.e. value added) activities often across industries (inter-industry linkages) leading to, and supporting, an end use (product or service)	➤ relative value of activities required to bring a product or service from conception through phases of production to end use & disposal ➤ value chains as repositories for rent ➤ governance/systemic efficiency required for effective functioning of chain	Gereffi et al, 2001; Sturgeon, 2001 Kaplinsky, 2000
<b>International/Global Production Network</b> (Supply Base)	A set of inter-firm relationships that bind a group of firms into a larger economic unit and in which actors co-ordinate activities across countries and even continents.		Sturgeon, 2001
<b>Global Commodity Chain</b> (Global Value Chain)	A set of networks (nodes) clustered around one final product or service, linking firms, industries and communities to one another across the world economy	➤ geographical configuration, international dimension ➤ territorial embeddedness/social & institutional context ➤ networks as strategic assets ➤ distribution of wealth within chain is outcome of relative intensity of competition within different nodes; nodes rather than national economies are locus where surplus accrues	Gereffi & Korzeniewicz, 1994; Gereffi, 1997; Gereffi et al, 2001; Kaplinsky, 2000;

<sup>1</sup> The French Filière approach is not so much centred around a distinct school of thought or a unified theoretical framework. Instead it is a loosely-knit set of studies with the common characteristics that they use the filière or chain of activities and exchanges as a tool and to delimit the scope of their analysis. It thus less a theory than a 'meso-level' of analysis (Raikes et al, 2000, p.14).

- iii. views the co-ordination of the entire chain as the key source of competitive advantage that requires using networks as a strategic asset;
- iv. looks at flows of information as one of the critical mechanisms by which firms try to improve or consolidate their positions within the chain (Gereffi, 1997a).

Dicken et al, argue that “Networks are neither purely organisational forms, nor structures. They are essentially *relational processes*, which, when realised empirically within distinct time- and space specific contexts, produce observable patterns in the global economy” (Dicken et al, 2001, p.91, original italics). Seeing networks as relational processes allows us to identify the actors in the networks, their ongoing relations and the structural outcomes of these. The shifts and changes taking place in networks are what shape the economic globalisation process. Looking at networks as relational processes thus stresses the importance of governance systems, relationships within the networks and information flows. In addition they argue that networks encompass a ‘multiplicity of spatial and organisational scale levels’ (Dicken et al, 2001, p.92) - stressing the international dimensions as well as the fact that networks are shaped by (f)actors at different levels - and have a distinct and ‘complex territorial embeddedness’ (ibid, p.92) - stressing the role of the social and institutional environment.

According to Kaplinsky (2000) the analytical power of GCCs<sup>2</sup> lies in the concepts of rents, governance and systemic efficiency, which again are closely related to the concepts introduced by Gereffi and Dicken et al.

Governance constitutes one of the factors determining the nature of the insertion of producers into the global division of labour. For, it is not just a matter of whether producers participate in the global economy, which determines their returns to production, but *how* and *on what terms* they do (Kaplinsky, 2000). Improving competitiveness within a GCC perspective would imply increasing ones capacity to exercise governance over other parts of the chain and thus create rents. This capacity or power (to exercise governance) exists in gradations and governance within a chain perspective may take on different forms (Raikes et al, 2000). Although lead firms may take on the critical governing roles, there are often intermediary governing roles, which may be performed by core producers (e.g. co-ordination of production in regional production networks by NIE producers), or specialist service providers in the chain. By positioning themselves strategically in the chains, firms can increase their capacity to exercise some form of governance over parts of the chain, enhancing their power, raising entry barriers and increasing economic rents, thus diminishing the relative intensity of competition in the nodes in which they operate. Often the rents thus generated are in part ‘relational rents’ (Gereffi, 2001), derived from trust relationships and strategic alliances with the main lead firms in the chains.

In terms of governance, a distinction is often made between *buyer-driven commodity chains (BDCC)* and *producer-driven commodity chain (PDCC)*. In the former, governance is exercised by large retailers or branded marketers and relationships between the different actors in the chain are horizontal and trade-based. These types of chains and networks are typical for consumer non-durable industries such as garment, footwear and toys. In PDCCs on the other hand governance is exercised by large producers and relationships between the different actors in the chain are vertical and investment-based. They are typical of consumer durable industries such as automobiles, computers and aircrafts (Gereffi & Korzeniewicz, 1994)<sup>3</sup>. Economic rents are derived from different types of barriers to entry in these two chains: in BDCCs rents are often relational, trade policy and brand name and derived from

economies of scope barriers to entry, whereas in PDCCs they are usually technology and organisational, derived from economies of scale barriers to entry<sup>4</sup>.

Given the nature of global production networks and chains, lead firms will have to put significant resources into trying to improve the efficiency throughout the chain, as they realise that the activities that they are directly responsible for in their internal operations account for only a small share of total production cost. Also, lead firms are often held responsible by end-users (consumers) for the quality and production circumstances of the products they market and sell, even if they are not involved directly in actual production. Lead firms therefore need to promote systemic integration by forging closer links within the chain, involving enhanced responsibilities for them as well as the growth of greater levels of trust between the different links. As value chains increasingly span national boundaries, governors are also forced to learn how to upgrade producers in low-income countries. It is in part due to this need for systemic integration that incorporation within global production networks and chains presents LDC producers with possibilities and sources for learning and upgrading.

It is these dimensions and concepts that provide the basis for the way GCC analysis has tended to conceptualise the link between incorporation into global networks and chains and local industry development and competitiveness, stressing particularly the possibilities for upgrading that such incorporation entails.

## **2.2 Global Networks and Chains, and Local Industry Development: a GCC Perspective**

The GCC (-related) literature suggests that one of the most viable roads to local industrial upgrading and development in LDCs is incorporation into GCCs through export-oriented industrialisation in the form of contract manufacturing for foreign lead firms or acting as host to TNC branches (ILO, 1998a, 1998b; Dicken et al, 2001; Gereffi & Kaplinsky, 2001). Contract manufacturing in BDCCs is seen to enable latecomer firms in LDCs to overcome the disadvantages of being far removed from lead-user markets and sources of technology as well as their relative shortage of specialised input resources (Wong, 1999). Achieving participation in global networks and chains, requires local firms and industries to engage in some form of initial upgrading of quality to meet the minimum conditions (international standards and minimum requirements) of lead firms. Meyer-stamer (2002) compares this to 'appearing on the radar screen' of those who co-ordinate the chains and argues that "In the pre-radar screen constellation upgrading means learning within local markets or elsewhere to improve competitiveness in order to appear on the radar screen of value chain scouts" (Meyer-stamer, 2002, p.15). Incorporation into GCCs is subsequently seen as putting firms in LDCs on a fast track to growth, upgrading and improvement of competitiveness as it provides access to resources, thus speeding up, and bringing down the cost of, learning processes.

Gereffi refers to industrial upgrading as involving "organizational learning to improve the position of firms or nations in international trade networks" (Gereffi, 1999, p.39) and even argues that, "participation in global commodity chains is a necessary step for industrial upgrading because it puts firms and economies on potentially dynamic learning curves" (ibid, p.39), although there is no standard learning curve for all enterprises to travel down. Upgrading is thus seen as requiring a conscious effort on the part of local firms in terms of 'linking, leveraging and learning' (UNIDO, 2002, p.95). Lead-firm producer links provide LDC producers, once incorporated, with the information sources and knowledge to engage in 'organizational succession' (Gereffi, 1999)

trajectories. Thus firms move to nodes and positions in the chains where they are capable of exercising some form of governance over other parts of the chain, i.e. a position where entry barriers are higher and the intensity of competition is less, allowing for the creation of new rents. Gereffi's view on the upgrading potential of GCCs is a rather optimistic one, stressing that opportunities are driven by the needs of lead firms. More recently, however, several authors have questioned the role of lead firms arguing that in some cases they may even limit upgrading (Schmitz & Knorringa, 1999; Humphrey & Schmitz, 2001).

The actual process of industrial upgrading is defined by Gereffi (1999) as an improvement of the ability of a firm or an economy to move to more profitable and/or technologically sophisticated capital- and skill-intensive economic niches.

At the local industry level Gereffi views upgrading mostly in terms of an increase of value chain activities performed locally and increased local forward and backward linkages, which he essentially extends to the regional level, where he views upgrading as a 'regionalisation of commodity chains' (Gereffi, 1997a).

Humphrey and Schmitz' (2001) definition of upgrading within factories (firms) or groups of firms, revolves around four different shifts: (1) *process upgrading*, transforming inputs to outputs more efficiently by re-organising the production system or introducing superior technology; (2) *product upgrading*, implying firms move into more sophisticated, higher unit value, product lines; (3) *functional upgrading*, implying firms acquire new functions or abandon existing functions so that they increase the overall skill content of their activities (e.g. complement production with design or marketing, or move out of low-value production activities altogether); and (4) *intersectoral upgrading*, where firms apply the competence acquired in a particular function of a chain to move into a new sector. Particularly functional and intersectoral upgrading are seen to possibly lead to a repositioning of firms and groups of firms in global markets (Humphrey & Schmitz, 2001, p.4). It has also been suggested that a fifth level of upgrading should be added, that is the *upgrading of marketing linkages*, or a shift to higher value added chains and lead firms (Gereffi, 1999).

Participation in GCCs is thus seen as a necessary, but not sufficient, condition for subordinate agents to upgrade. It provides LDC firms and industries the potential for learning. To actually profit from this potential, however, requires active steps of LDC firms in terms of meeting buyer requirements (a capability lead firms will take into account when selecting firms to participate in their production networks) and shifting to higher-end lead firms and segments. However, acceptance of terms defined by key agents is a condition for participating in the chain, and even more so for progressing to higher (technology, value-added) positions in the chain.

Therefore the GCC literature initially focused on the governance structure; the influence and power of lead firms were seen as the dominant drivers of local upgrading and development<sup>5</sup>. It remained somewhat one-dimensional and vague in providing an explanation of how exactly incorporation into global networks and chains would lead to local industry development or upgrading, i.e. the determinants of local firms and industries actually achieving upgrading and positive development. As Meyer-stamer argues, Gereffi's representation of industrial upgrading "is not a very useful typology since it says nothing about causalities: Did the firms upgrade because locational factors improved, or despite the fact that they stayed dismal?

What was more relevant: intra-firm effort, inter-firm collaboration, locational policy efforts, or overall macro-economic conditions?” (Meyer-stamer, 2002, p.8).

This issue has been addressed through attempts to further elaborate other key dimensions of the GCC framework, most notably the social and institutional environment<sup>6</sup>. This refers to the conditions under which control over market access and information are exercised on a global plane (Gibbon, 2000a) and includes the international regulatory environment (international trade agreements), the regional political economy (as in the case of trade blocs or regional free trade agreements), and the local industry environment. While the latter initially received limited attention, more recently several authors and bodies of literature that link to GCC analysis have tried to expand this aspect more explicitly, arguing that national institutional differences continue to exert a significant influence on the international structure of economic activities (Dicken et al, 2001; Appelbaum & Smith, 2001). The work of Whitley (1992, 1996, 1999) specifically has pointed to the importance of ‘national business systems’ that firms within a chain (both lead firms and dependent firms) operate in. Whitley defines these business systems as “distinctive configurations of hierarchy-market relations which become institutionalised as relatively successful ways of organising economic activities in different institutional contexts” (Whitley, 1992, p.10). He has argued for instance that “the sorts of firms that dominate GCCs often follow different strategies and develop different roles within them because of their idiosyncratic histories and institutional contexts” (Whitley, 1996, p.419). With respect to dependent firms (in LDCs) within the chain, the national business system is seen as a factor hindering or stimulating the acquisition of capabilities and competencies, through learning. This involves the role of supporting institutional arrangements, both government and private. Whether and how firms and industries in LDCs will participate in GCCs and how they develop will thus depend to a large extent on the national business system in which they operate. As Smith et al argue “Economic actors such as firms are always embedded in dense social and institutional networks of relations (...) at both national and local scale levels, and these relations impinge in important ways upon the variability of economic development outcomes across space” (Smith et al, 2002, p. 48). The fact that similar global processes have produced differential outcomes at the local level serves to underscore the importance of placing commodity chains in the wider context of the institutional environment and regional economy in which they are embedded (Dolan & Tewari, 2001).

In addition the national innovation systems literature (Freeman & Soete, 2000; Freeman, 1990; Nelson, 1993; Lundvall, 1992; Wong 1999), the work on organisational and institutional learning (see e.g. Malecki & Oinas, 1999) and the literature on small and medium local firm and institutional actor ensembles – often labelled as clusters - (Porter, 1990, 1998) explicitly stress the local environment as an important factor in local firm and industry development in a global economy. The cluster literature has more recently been extended to developing country industries looking to enter into the global economy, i.e. the possibilities for industry clusters in developing countries for collective incorporation into networks and chains (see e.g. Helmsing, 2000; Schmitz & Nadvi; 1999; Bell & Albu, 1999; Vargas, 2001; Dolan et al, 1999).

Linked to the bodies of literature referred to above, is the body of work emphasising the importance of policy networks (ILO, 1998a, 1998b). All these contributions have pointed in one way or another to the fact that there are forms of governance exercised by actors outside the chain, in the form of local governments, NGO’s, international regulatory bodies, etc. (Humphrey & Schmitz, 2000; Raikes et al, 2000; Dicken et al, 2001; Appelbaum & Smith, 2001). They have added to our understanding of local development under globalisation, stressing the *global-local* interaction, not just merely the global forces at work. Recognising the important role of the national business environment, the institutional context and national

business system as determinants for firm and industry development, they are explicitly incorporated in our conceptual framework, presented in the next chapter<sup>7</sup>.

All in all an impressive body of work has emerged, trying to analyse and explain the effects of incorporation into GCCs for LDC firms and industries and the learning and upgrading potential such incorporation presents. Equally important as the question of initial incorporation are the interrelated issues of longer-term development paths, sustaining connections to chains and networks, how the latter is achieved and what it means for local industry development. The literature suggests that for firms to stay connected to chains, they must engage in learning and upgrading (Gereffi, 1999; Kaplinsky, 2000), for which external linkages and the local business environment (and their interaction) may provide the incentives and opportunities. While local industry development under globalisation, usually revolves around the concept of (industrial) upgrading, a great deal of the literature fails to clearly explain or problematise this issue. There is some notion that upgrading is about ‘moving up’, that it involves learning – which in itself remains a vague and hard to measure concept – that it is induced by external linkages and that both firms, industries and locations/countries can upgrade. But this still doesn’t help much in explaining the meaning of operating in global chains for local industry development.

What exactly is upgrading, how should it be defined? Is it a cause or an outcome, a condition or a process? How is it achieved, is it externally driven or internally induced?

Once incorporated into global networks and chains, firms and industries in LDCs will have to operate in a highly dynamic external environment. Competitive threats, shifts in competitiveness of companies, countries and regions, and resultant changes in lead-firm strategies/selections necessitate constant competitive adjustment by firms and industries in LDCs. Such adjustments may take different forms and while some may lead to advancing of roles and positions in networks and chains, others will achieve mainly the sustaining of connections, while yet other may establish alternatives positions relative to chains.

These considerations warrant an approach to operating in global chains in relation to local industry development, that considers competitive adjustment strategies and the idea of *development paths*, rather than ‘upgrading’.

To clarify these matters further we will therefore take a brief look at the issue of sustaining connections and upgrading, followed by a discussion of firms competitive adjustment strategies. Together they will subsequently permit a conceptualisation of local firm and industry development trajectories after incorporation.

### **2.3 Sustaining Connections and Upgrading in a GCCs Perspective**

As was explained in the above, several problems stand out with regards to inter-firm networks in GCCs and upgrading. First, there seems to be an implicitly assumed automatic link between incorporation in global networks and chains and industrial upgrading. Yet, a great deal of the literature is limited to issues concerning meeting the conditions for entry into global network and chains, and alignment with the ‘right’ type of lead firms. The equally important questions of longer-term local firm and industry development related to sustaining connections to networks and chains, how this is achieved and what the implications are and particularly the opportunities for advancing to more rewarding roles within networks and chains, have thus remained poorly understood.

Second, more fundamentally there is the issue that upgrading is rarely well defined and, although the literature is reasonably clear on upgrading as a condition for entry into networks



and chains, no clear distinction seems to be made between the *process* of upgrading and upgrading as an *outcome*. For instance Humphrey and Schmitz' (2001) typology presented earlier is not entirely satisfying, as it defines *processes* of upgrading, which may not always lead to upgrading as an *outcome*. To understand its weaknesses, it is useful to refer to the argument developed by Porter (1996) that for many companies it has been extremely difficult to translate dramatic operational improvements into sustainable profitability gains. Behind this, Porter argues, is the problem that firms confuse operational effectiveness (performing similar activities *better* than rivals perform them) and strategy (p.62). "OE competition shifts the productivity frontier outward, effectively raising the bar for everyone. But although such competition produces absolute improvement in operational effectiveness, it leads to relative improvement for no one. (...) major productivity gains are captured by customers and equipment suppliers, not retained in superior profitability" (ibid, p.63). "The more benchmarking companies do, the more they look alike. The more rivals outsource activities to efficient third parties, often the same ones, the more generic those activities become. As rivals imitate one another's improvements in quality, cycle times, or supplier partnerships, strategies converge and competition becomes a series of races down identical paths that no one can win" (ibid, 64). The way out of this trap, according to Porter, is *strategy* - "choosing to perform activities differently or to perform different activities than rivals" (ibid.).

According to Meyer-stamer (2002) the principle of competition in globalised markets is "Running to stand still". A company, which is standing still, i.e. does not pursue some kind of upgrading all the time, has little chance of survival. A company which puts a lot of effort into upgrading does not necessarily improve its competitive position. For this reason *increasing skills content* is not adequate, as it is something firms have to do all the time to *maintain* their competitive position. This is, in the words of Porter, about operational effectiveness. It is about performing activities differently than they themselves did in the past, but not necessarily about performing activities differently than rivals. *Moving into market niches which have entry barriers* is more likely to be what Porter would recommend in terms of strategy, though it does not create a strategic difference vis-à-vis competitors if it just implies copying the activities of more sophisticated rivals. It is not rare to observe that several competitors try to move into the same market niches (Meyer-stamer, 2002). This also implies that upgrading is not a priori about a direction, such as 'moving up', as much of the literature seems to suggest. It is rather about productive rent-seeking (Kaplinsky 1998), which may be achieved in more than just one way. "Upgrading means to do things differently, and/or to do different things - not different compared to yesterday's practice in the same company, but compared to competitors" (Meyer-stamer, 2002, p.7).

The key to upgrading within a chain perspective is thus that of *competitive positioning* within networks and chains. Fleury & Fleury (2001) make a similar argument: one can speak of upgrading only if the development

of capabilities and competencies lead to a new situation where the firm has improved its position relative to its previous position, vis-à-vis other firms, is catching up to the best performers in the field and there is increased power regarding other firms in the chain - i.e. some capacity to exercise governance (Fleury & Fleury, 2001). They introduce the term 'routinised upgrading', which applies when "changes in the operational conditions of the firm are more a consequence of external pressures than of the efforts of the firm to improve their competitive position and by building their own competencies" (Fleury & Fleury, 2001, p.118). An example would be if a firm acquires new competencies, but does so just by following the requirements set by lead firms (thus the decision making processes are mainly in the hands of external parties). What appears to be upgrading at the surface will in fact do little to improve the firm's position vis-à-vis its competitors or its bargaining power vis-à-vis lead firms. The opposite of such 'routinised upgrading' (comparable to Porter's 'operational effectiveness') is what Fleury & Fleury call 'continuous and sustainable upgrading' (Fleury & Fleury, 2001,p.118).

In summary, gauging a firm, industry or region's success in the global economy requires looking beyond the processes of learning, capability development and improvement of competencies, at the *outcome* of these processes in terms of competitive positioning in GCCs. For the purpose of the current study upgrading in a chain perspective is defined as the improvement of a firm's competitive strength and positioning within networks and chains as a consequence of conscious competitive adjustment strategies and learning processes aimed at improving and broadening the firm's capabilities and competencies.

Without dismissing the definitions of upgrading given by e.g. Humphrey & Schmitz (2001), we should be aware of the different meanings of the concept in different context and at different scale levels. The process, product and functional upgrading that Humphrey and Schmitz describe, are in essence intra-firm upgrading processes, in which most firms will to some extent engage. Upgrading as an outcome, i.e. in terms of a development path, will usually involve one or more of these processes, yet the processes do not necessarily lead to an upgrading development trajectory as it is defined above.

Third, there often seems to be an implicit assumption that managing to 'sustain connections' can be equated with 'upgrading'. Having illustrated in the above that upgrading as an outcome is but one possible development path for firms and industries, this assumption is obviously too simplistic.

Fourth and qualifying the entire argument, in this thinking inclusion in chains is seen as the only viable route to (rapid) local industrial development, thus perhaps overemphasising the link between connections to global networks and possibilities for local development. In any case extra chain processes have been viewed mostly in a negative way and *extra-chain* possibilities for development have been neglected. The literature usually only points to the risk of exclusion from chains and consequently not having access to resources, markets and sources for upgrading (Gibbon, 2000a; Dolan & Tewari, 2001), as well as to the competencies gap between firms incorporated in global chains and those not (Keesing & Lall, 1992). Although such arguments are very legitimate and applicable to the cases studied in the work of these authors, it need not be the case that companies can only be successful if and when they become incorporated in GCCs and produce for exports. Examples can also be found of local and regional (brand) producers/retailers, which have been highly successful through developing competencies and capabilities for their domestic markets, providing the basis for subsequent expansion into international markets. To the extent that these types of firms have been considered, it is mostly in the idea of 'organisational succession' (Gereffi, 1999; Dolan & Tewari, 2001), where suppliers initially gain access to chains with less

demanding characteristics (domestic markets), prior to engaging in ‘more sophisticated’ export markets and becoming incorporated in GCCs as OEM suppliers. Although brand manufacturing and moving into marketing and retailing as a form of upgrading is often referred to in the GCC literature, it has been poorly conceptualised or studied outside the examples of a handful of Asian companies which followed the OEM-ODM-OBM route<sup>8</sup>.

#### *Upgrading at the industry level*

Although Gereffi (1999) also distinguishes upgrading at the industry level, in much of his work he subsequently fails to make a clear distinction between the firm and industry levels in particular when discussing upgrading. In fact, although Dicken et al (2001) point to the importance of distinguishing different scale levels, as with Gereffi’s work, a substantial amount of the literature fails to do so. This has resulted in the concept of upgrading at the industry level in particular being ill-defined, often merely as an extension of firm level upgrading. Although the two levels are obviously linked, they are not the same and for an analysis of incorporation into GCCs and specifically upgrading, a clear distinction is therefore necessary.

At the industry level Gereffi essentially views upgrading as a ‘regionalisation of commodity chains’ (Gereffi, 1997a) and the development of local/national clusters with horizontal and vertical linkages. This definition deserves some elaboration. At the local/national industry level upgrading essentially would imply that the outcomes of a number of different developments and processes (e.g. firm level upgrading, entry of new players in higher-value added activities, government policies) would lead to a changed situation where the location fulfils a different role and becomes a more crucial node. This new role need not be in production or be achieved by existing players. In general the activities performed locally should be higher value-added and could well be non-production. In addition the new role assumed by a national industry must be harder to copy by others, thus setting it apart from industries in other locations. Often in such cases synergy and clustering are indeed involved, although it appears vertical integration is not always necessary, rather the right kind of supportive activities need to be in place. A good example is Silicon Valley, where through clustering and synergy, a unique and highly competitive computer industry developed, focused primarily on product development and R&D, which functions as a crucial node and driver within the GCC.

The above discussion of the main aspects of GCC analysis, and most important issue surrounding upgrading in relation to connections to global networks and chains, provides important insights for the development of a more comprehensive approach to incorporation into global networks and chains and longer-term prospects for local industry development and global-local dynamics, by considering firm competitive adjustment strategies in LDCs, and development trajectories at both the firm and industry levels.

#### **2.4 LDC Firms within GCCs: Firm Strategies and Development Trajectories**

As initial conditions for incorporation into global networks and chains are in fact fairly easy to meet, and entry is usually at the lowest levels of the chain - the assembly and manufacturing of basic consumer goods - many LDCs, even some of the least developed ones, have by now become incorporated. However, this is no guarantee for longer-term development and, although "It makes sense for latecomers to become incorporated into GCCs and thus use all the resources they can acquire from the advanced world, in return for providing such services as low-cost manufacturing (...) the trade-off can be exploited to the advantage of the latecomer only if there is a strategic choice to gain knowledge – to learn”

(UNIDO, 2002, p.107). This remark points to the important notion of strategic choice on the part of firms in LDCs as an important factor in firm and industry development after incorporation. Therefore the approach in this study focuses on the range of *competitive adjustment strategies* firms may implement after incorporation in response to factors impinging on competitiveness, and considers whether and how they allow firms to benefit from the opportunities offered by linkages to lead-firms. As this concerns dynamic processes, which may result in different development paths and lead to different outcomes in terms of the competitive positioning of firms, the approach takes on a broader perspective than the usual focus on (industrial) upgrading alone, as this represents just one outcome. Instead the study considers different *firm development trajectories* as a result of competitive adjustment strategies and their outcomes in terms of firm roles and positioning within or relative to global networks and chains.

In this section we consider some of the existing theoretical notions and studies on these issues.

#### 2.4.1 *Imperatives and Determinants of Competitive Adjustment Strategies*

Firms that managed to get on the radar screen of global lead firms and thus have become incorporated in global networks and chains, often at some stage start to face increasing pressures on their initial low cost competitive advantage. These derive from rising local cost levels (as rapid growth of an export manufacturing sector puts upward pressures on wages and causes labour shortages) and from the entry of new low cost producer countries into the networks and chains. They are often exacerbated by macro-economic developments and policies, such as currency appreciation and national restructuring policies, as well as international developments such as trade regulations and market developments. After LDC firms and industries have become incorporated into global networks and chains, their changing competitiveness may lead to changes in selection (by lead firms) of producers included in the networks as well as their mode of incorporation. The outcomes of this selection and mode of incorporation – whether an improvement or a deterioration of a firm or industries position and role – are in part dependent on local firm behaviour in terms of capability development, competitive adjustment, the kind of strategies implemented, as well as on the support or impediment of the local business environment in which they operate. The responsibility for further firm and industry development after incorporation thus also lies with local producers and Governments, and doesn't solely depend on lead-firms.

By now a substantial literature has emerged on the subject of competitive adjustment and restructuring, both at the firm and industry levels. There is the literature on changing comparative advantage and the changing competitiveness of firms, industries and locations, ranging from Vernon's Product-Life-Cycle theory (Vernon, 1966) to Porter's work on competitive advantage (Porter, 1990, 1998). Linked to this is the work on international and national industrial restructuring (see e.g. Ruigrok & van Tulder, 1995; Dosi et al, 1988; Piore & Sable, 1984; Nelson & Winter, 1982), and firm level restructuring in specific sectors or industries (Taplin & Winterton, 1997). Although this work initially focused on restructuring in the old industrial cores in the West, more recently a rich literature has emerged on restructuring at the macro and micro levels in the Asian NIEs. This focuses on the important role of both firm strategies and industrial policies in encouraging such processes (see e.g. Kim, 1993; Chiu, Ho & Lui, 1997; Clark & Kim, 1995; Grunsvén, 1998; Masuyama et al, 2001; Rodan, 1989; Castells, 1992).

The restructuring literature often analyses industrial change in terms of the sources for restructuring strategies, the responses to these sources (i.e. the actual restructuring strategies) and their outcomes<sup>9</sup>. This literature is in many respects informative to our framework for competitive adjustment and advancement in GCCs, to be presented later. However, a major

limitation is its local orientation, not *explicitly* taking into account the role of transnational networks and firm and industry positioning in global chains (especially the governance exercised by lead firms in these chains). Heuristic models of restructuring like the one presented by Taplin and Winterton (1997, p.9) distinguish between so-called imperatives to restructure, factors that obligatory to take into account, and so-called options, factors that are discretionary. However, determinants of responses - i.e. factors influencing which strategies a firm will opt for given the options and imperatives<sup>10</sup> - are not (explicitly) identified. For the purpose of our research we have expanded the concept of the sources for restructuring by including international (or external) sources and adding the concept of determinants.

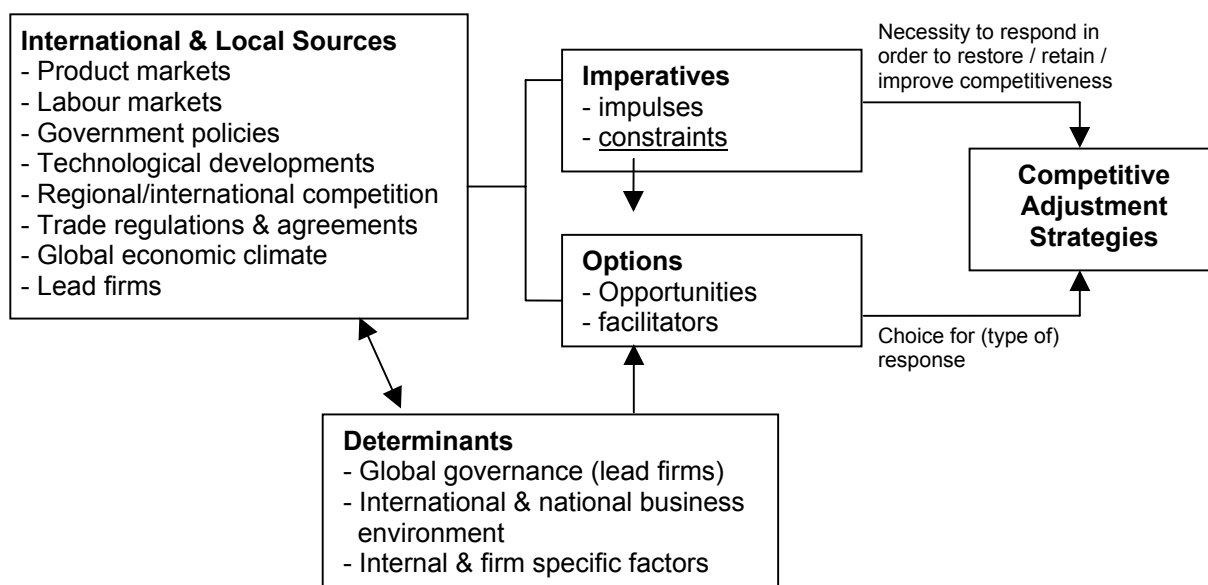
Imperatives may include rising production cost due to the rising price of production factors (labour, material inputs, land, etc.), taxes, cost of capital, transportation cost, etc.; entry of new (cheaper) competitors; increased demands of buyers with regards to quality, speed and reliability of delivery, etc.; changed international regulations (e.g. quota limitations or higher import duties for major markets) and changing macro-economic conditions (currency appreciation or exchange rate volatility). Certain sources take the form of options, which represent opportunities for change, favourable situations of which the parties may take advantage, and facilitators, the adoption of which make some aspects of restructuring easier or which enable certain strategies. For instance trade agreements could actually open up new business opportunities, and buyer requirements may also offer learning opportunities.

Determinants are what influence the actual strategy choices. We will elaborate on these in more detail in the next chapter. It is important to note, however, that imperatives, options and determinants often overlap or interact. Separation is done purely for analytical purposes.

Figure 2.1 gives a graphic illustration of the sources and determinants of competitive adjustment strategies.

Besides the changes to the restructuring model presented by Taplin & Winterton (1997), the concept of restructuring strategies has been broadened to competitive adjustment strategies. These will briefly be considered in the next section. The term restructuring strategy suffers from a reference to the area of the production process only. The term competitive adjustment strategies will therefore be used instead, as it better captures the idea that strategies are aimed at restoring, retaining or shifting the basis of competitiveness (or improving vis-à-vis competitors and/or other actors in the chains), may also be in anticipation of such factors and involve the entire spectrum of corporate activities.

**Figure 2.1 Sources and Determinants of Competitive Adjustment Strategies**



Source: Modified after Taplin & Winterton (1997)

#### 2.4.2 Firm Competitive Adjustment Strategies

In considerations of the interrelationship between competitive adjustment processes, strategies and connections to, as well as positions in, networks and chains, many of the existing analyses emphasise upgrading (product, process, functional) at the firm level. The literature suggests, however, that not all intra-firm processes lead to upgrading of a firm or location's positioning in chains.

Broadening the scope, two types of competitive adjustment strategies may be identified. These are defined by Porter as 'low-road' and 'high-road' (Porter, 1990) equivalent to what Freeman (1974) terms 'defensive' and 'offensive'. The former have a strong cost focus and are thus more retentive, while high-road or offensive strategies tend to have a capabilities and competencies focus and are thus more pro-active. A firm may apply both types of strategies simultaneously.

Secondly, and related to the concepts of retention and pro-active strategies, a distinction can be made between carefully chosen and *planned strategies* and *emergent strategies*. The former are often based on the identification of a corporate goal ('mission statement' in business literature) and a (set of) core competence(s) a firm wishes to further strengthen or develop. The latter are often re-active and ad-hoc responses to sudden changes in a firm's business environment and consequent increases in competitive pressures (e.g. sudden cost increases, the entry of a new competitor in the market, etc.). The already existing literature, dealing with restructuring at the firm and national levels (see e.g. Simon, 1995; Taplin & Winterton, 1997; Chiu, Ho & Lui, 1995; Clark & Kim, 1995), illustrates that firms show an array of responses in order to adjust to changing circumstances. Actions, both re-active and pro-active and including ad-hoc responses to immediate crises, may include decisions on new capital issues, mergers and acquisitions, product diversification, relocation and closures, investments in new technologies and measures to raise productivity, flexibility and quality (Taplin & Winterton, 1997). From the GCC perspective they also involve strategic choices regarding relationships within the chain, i.e. both with lead firms and other actors in the chain. These strategic choices and the implementation of different strategies will ultimately determine the capability and competencies development a firm will achieve and thus the development trajectory it may follow over time.

### 2.4.3 Firm Development Trajectory Models

In recent years there has been an impressive number of studies, all within the general framework of global networks and chains, giving a greater insight into the issue of technological catch-up by latecomer firms in late industrialising countries<sup>11</sup>. This work has tended to take a bottom-up approach in trying to understand local development implications of incorporation into global networks and chains, conceptualising such development in terms of firm strategies, local learning dynamics, and firm development trajectories over time. A large amount of this work has focused on examples of the East Asian NIEs.

#### *Gereffi's organisational succession model*

By far the simplest, and therefore perhaps also least satisfying, model is Gereffi's organisational succession model that suggests a trajectory of moving from assembly and CMT to OEM and eventually OBM. The model only implicitly deals with (producer) firm strategies by suggesting LDC firms use the expertise initially gained from links to, and alignments with, different types of lead firms to upgrade to full package and eventually OBM supply (Gereffi & Korzeniewicz, 1994; Gereffi, 1999). Actual dynamics remain vague though and no real insight is given into specific strategies of firms and governments in achieving such shifts.

Several other contributions have attempted a more comprehensive approach to firm strategies and development trajectories within a GCC perspective, by focusing on specific cases (sectors, industries and locations).

#### *Hobday's export-led learning model*

Similar to Gereffi's organisational succession model, but more elaborate in its dealing with the underlying dynamics of such trajectories, is Hobday's export-led learning model (see figure 2.2).

Based on his research on the development of the micro-electronics/IT industry in the Asian NIEs, he developed a model<sup>12</sup> illustrating the learning process and development path of latecomer firms in late industrialising countries catching up with the technology frontier (Hobday, 1995a, 1995b)

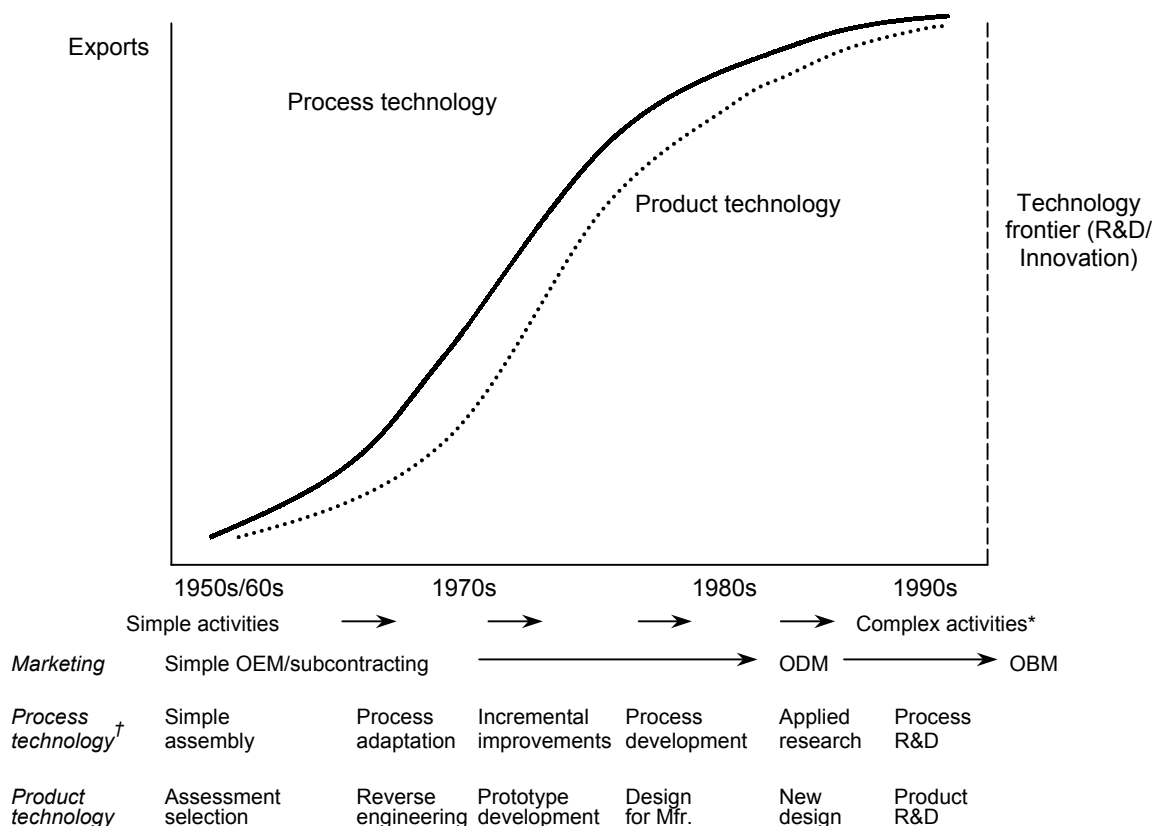
Firms start by mastering simple component subcontracting or contract assembly operations, typically on an OEM basis. They then move up to acquire product design capabilities and become ODM suppliers to end buyers. Some will subsequently attempt to enter into developing own product ideas (OIM) and/or selling under their own brand name (OBM). In essence this technology capability development trajectory involves starting with first developing process capabilities, followed by product design and finally new product creation/branding capabilities.

Depicting a reversal of the 'normal' sequence of value chain activities pursued by large, established high-tech firms in advanced countries (see e.g. Wong, 1999), Hobday's model provides a logic behind the organizational succession model presented by Gereffi and gives a better insight into how succession actually takes place.

Hobday stresses several points of his model vis-à-vis 'traditional' innovation or development models<sup>13</sup>. First although R&D may not be central to latecomer firm strategies, innovation is essential for catching up to occur. This is incremental and needs to be continuous and relatively fast so as to achieve catching up instead of just keeping up (compare to Meyerstamer's 'running to stand still'). Second latecomer innovation is triggered by profit opportunities provided by fast growing export markets. Channels such as OEM and subcontracting relay export market requirements directly to the latecomer firm (Hobday,

1995b). In other words, incorporation into GCCs is a necessary first step for innovation and catching up to occur.

**Figure 2.2 Latecomer firms – export-led learning from behind the technology frontier**



\* No stages or linearity implied, but a general tendency to catch up cumulatively, through time with capabilities building systematically upon each other.

† Although it is useful to distinguish between process and product technology for analytical purposes, in practice the two are often inextricably entwined

Source: Hobday (1995b)

Third, “as the absorptive capacity of the economy increases new start-ups may by-pass earlier phases. Spin-offs from older firms, diversifications from other sectors, and new experimental start-ups will constitute the growing industrial base” (Hobday, 1995b, p.1186). This implies that changes at the industry level are not necessarily an aggregate of *existing* firms’ development trajectories, but also involve new entrants, a point we will return to in more detail when discussing industry development trajectories.

Finally Hobday stresses that there is “no automatic process by which technology accumulation occurs. On the contrary, firms learn to innovate by their own efforts and investments in technology. Purposeful learning efforts are needed to assimilate foreign technology, build up new competencies and catch up with market leaders” (Hobday, 1995b, p.1186).

#### *Mathews and Cho’s leverage path*

According to Mathews and Cho (2000) innovation within global value chains moves along two dimensions of leverage strategies: market expansion and technological capabilities. OBM, usually the most profitable segment of a global value chain, requires both market and

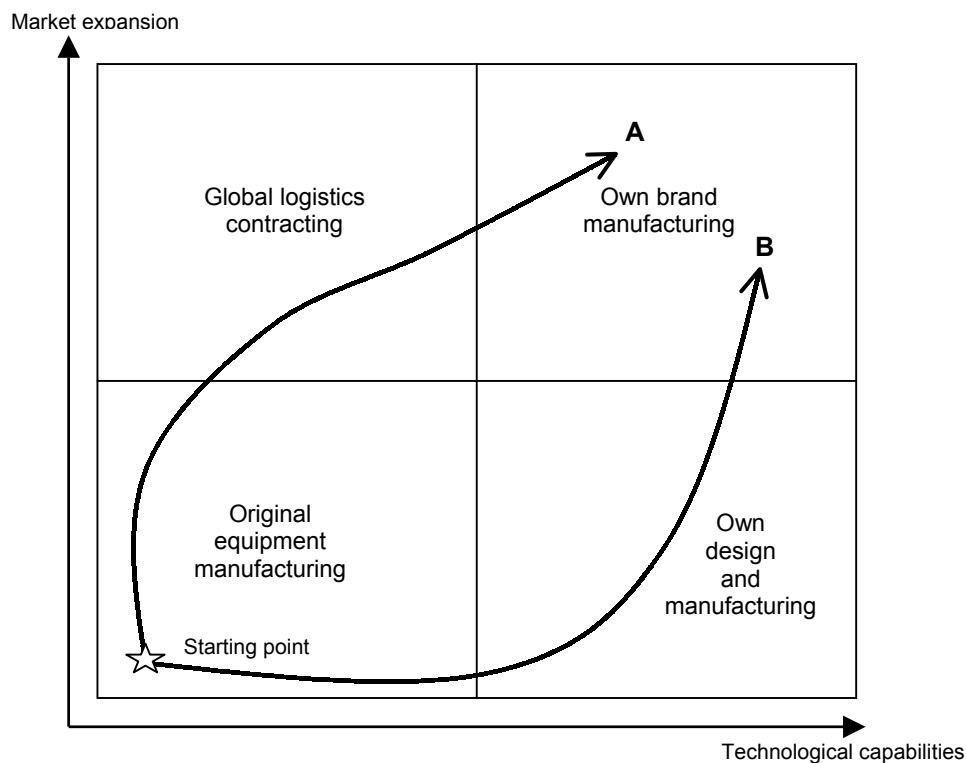


technological competencies. These two dimensions are illustrated in figure 2.3 in terms of trajectories or paths. Both paths start out from OEM supply roles. The model is based on a study of the apparel industry.

Path A represents a trajectory whereby from an initial OEM position capability enhancement revolves around mastering the complex of logistical functions required when sourcing and combining inputs from a number of different producers and locations. Implicitly assumed in this model is thus the outsourcing or relocation of actual production.

Path B, by contrast focuses on capability enhancement through expanding functional responsibilities from OEM to including some responsibilities for design, leading the firm to then market its own design under its own brand (UNIDO, 2002). Although in essence also suggesting a form of the OEM-ODM-OBM trajectory, it is presented in a less linear way, and discerns different possible paths or trajectories.

**Figure 2.3 Leverage Paths within Two Dimensions**



Source: Mathews & Cho (2000); UNIDO (2002)

*UNIDO Industrial Development Report 2002/2003*

The work of Gereffi, Hobday and Mathews & Cho has been incorporated into the UNIDO Industrial Development Report 2002/2003, along with other models dealing with enterprise innovation and learning, and the different features of these processes (UNIDO, 2002, p.98). Although impressive in bringing together and consolidation of much of the work on industrial development in LDCs under globalisation, it is essentially a summary of the mainstream discourse with some inherent weaknesses. All models suggest that local firm and industry evolution follows an almost linear path *upwards*, equating development with upgrading (and equating upgrading with a move towards OBM). For instance, although Mathews recognises a path towards global logistics management, he still sees this as ultimately leading to OBM. The problematic nature of this has already been discussed, suggesting the need to recognise a

range of development trajectories and define upgrading as just one of these. By focusing only on upgrading trajectories, too little attention is given to alternative development trajectories after incorporation, such as steady trajectories, *failure* to capitalise on insertion into the global economy, or moving out of networks tied to global lead-firms and following an independent course.

The work of both Wong (1999) and Meyer-stamer (2002) does take such trajectories in consideration and form important contributions to a more comprehensive framework.

#### *Meyer-stamer's types of product upgrading*

Criticising the general conceptualisation of upgrading in the literature, Meyer-stamer (2002) presents several types of product upgrading, the essence of which is that upgrading may take *different* directions and is not a priori about a single direction such as moving up, which is the conventional view of upgrading. There are alternative views, however, such as upgrading through 'lateral differentiation', implying the creation of a whole new segment in the market, or 'polarisation', whereby a firm simultaneously upgrades and downgrades (i.e. moves into higher markets, but also produces for lower-end markets) (Meyer-stamer, 2002, p.6-7). The confusing part of Meyer-stamer's discussion and typology is that he uses the term 'upgrading' for all trajectories, while it might be more appropriate to reserve the term for only specific trajectories. However, his work is interesting in the sense that it actually identifies alternative trajectories that do not always fit the logic of conventional 'upgrading' thinking.

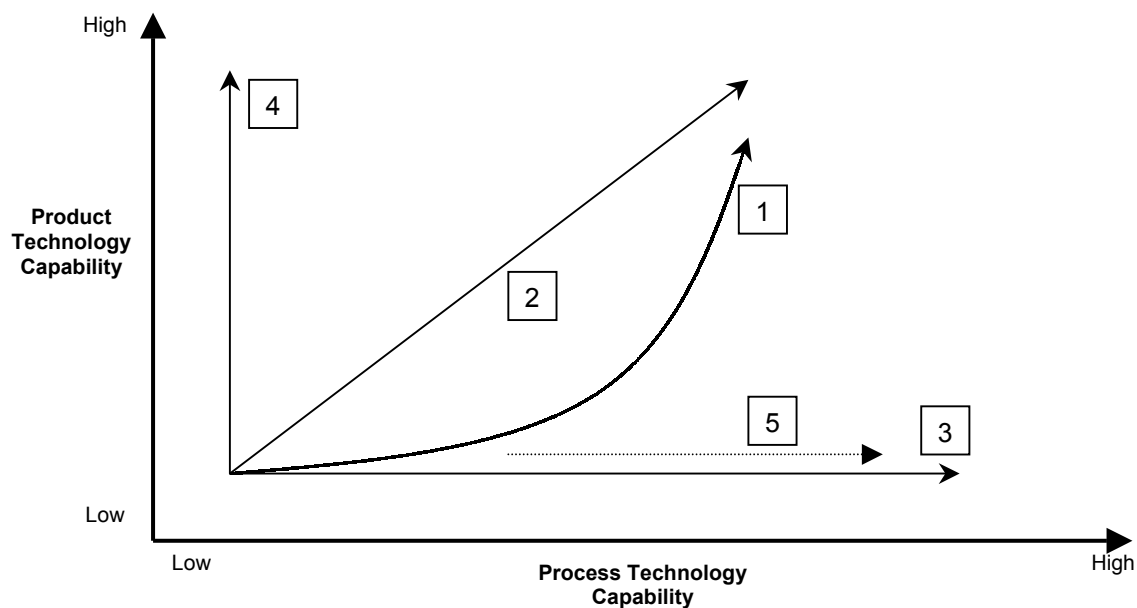
#### *Wong's generic evolutionary paths framework for rapid technological catch up by late-industrialising countries*

Wong (1999) has developed perhaps the most insightful framework for the analysis of local firm strategies and consequent development trajectories. He arrives at his model through careful consideration of the technological catch-up strategies in three Asian NIEs (South Korea, Taiwan and Singapore) while integrating several theoretical perspectives: the resource based view of the firm, the network interaction perspective on the technological learning process and the institutional economics perspective on the contexts of late industrialisation (Wong, 1999, p.1). He argues that different national innovation systems<sup>14</sup> in the three countries have produced distinctly different industrial development trajectories, as they have shaped the strategic choices of firms from these countries. He emphasises that the key to a firm's achievement of superior performance is its choice to pursue a strategy that best exploits its unique resource position. A strategic choice will take this resource position into account and focus on either of two strategic dimensions: product technological capabilities or process technological capabilities, although a choice for one often involves learning more about the other as well. He then proceeds to conceptualise the strategic focus of technological capability development as either enhancing an existing core competence or an attempt to build new core competence.

He finally identifies 5 different strategic choices and their consequent routes for technological catch-up. These are (1) the "Reverse Value Chain" route (from OEM to ODM to OIM or OBM); (2) the "Reverse Product Life-Cycle" innovation route (from late follower to fast follower); (3) the Process Capability Specialist route (dedicated manufacturing specialist in the service of product developers); (4) the Product Technology Pioneering route (product innovator in the global market) and (5) the Applications Pioneering route (innovator in the application of existing technologies in new innovative ways). Figure 2.4 illustrates these five generic routes for rapid technological catch up by latecomer firms from late industrialising countries.

The model is rather uni-dimensional in that it only illustrates technological capability development, which – as Wong indicates himself – merely represents one competing use of a firm resources versus others such as investment in marketing, distribution channels, production capacities or diversification away from the core business. However, it could be extended to include such strategic choices and consequent development trajectories. Strengths of Wong’s model are a dynamic view of firm strategies and their outcomes, recognition that a number of alternative trajectories may be identified, while stressing that these need not be smooth, but may take the form of ‘punctuated equilibria’ of consolidating particular core competencies versus significant leaps into new competencies (Wong, 1999, p.7).

**Figure 2.4 Generic Technological Capability Development Strategies of Latecomer Firms from Late Industrialising Economies**



Source: Wong (1999)

The model incorporates the models presented by Gereffi and Hobday, but presents these as just one possible trajectory.

The models presented in the previous all provide useful insights for our own framework. They draw attention to firm strategies and present dynamic pictures of firm and industry development within a network and GCC perspective. All seem to stress that both external linkages and local dynamics (purposeful strategies of local firms, national innovation systems, etc.) play an important role in the choices for strategies and the ensuing trajectories. The more elaborate ones, such as Meyer-stamer’s and Wong’s models, moreover illustrate the idea of alternative development trajectories, thus recognising implicitly the limited applicability of the concept of upgrading that is so prominent in many existing analyses.

## 2.5 Industry Development Trajectories in a GCC Perspective

A large part of the conceptualisations referred to above, claim to deal with the firm level but are implicitly - and sometimes even explicitly - extended to the industry level. Although firm level dynamics are obviously at the base of industry level changes, simply extrapolating the

firm level to the industry level provides a limited insight into the dynamics at both these levels.

In the current study a clear distinction has been made between these two organisational levels to include both explicitly in our analysis, without dismissing the obvious connections that do exist.

Industry development trajectories should be seen as a result of how the profile of an industry locally changes over time. This change essentially results from the development of *new sources of growth and diversification*, often related to new/other activities in the value chain, performed either by existing firms or (more often) by new entrants.

A range of trajectories can in principle be identified including ones that cause a change in the mix of value chain activities being performed locally and consequent changes of a location's overall role (within the specific industry's context) in regional and/or global production networks and chains. A changing mix of value chain activities performed locally is essentially a sum of development trajectories of existing firms, and the possible insertion of new entrants performing activities in different segments of the value chain. Government and other local institutions may play an important role in determining the actual direction of the local industry trajectory, both in terms of strategies of existing firms and entry of new firms (see e.g. Wong, 1999; Hobday, 1995b).

As local firms restructure their operations in response to competitive pressures, they may change the function of their organisation locally, leading to a different set of value chain activities being performed locally by these firms. This could either be because they have changed the functioning of their organisation as a whole (and thus have repositioned in the GCC), or because they have shifted lower value added activities abroad to cheaper cost locations, while still performing higher value added activities locally. Often it is a combination of both.

Local industries may also change and upgrade through the entry of new players and segments involved in different value chain activities (higher value added) (Hobday, 1995b), often encouraged, or even envisioned by local governments (Grunsven & Smakman, 2002). This effect is even more pronounced when existing producers fail to upgrade to the extent of becoming locked-in or even opt for exiting the local industry.

It has also been argued that "industrial clustering" may enhance the competitiveness of local industries through innovation diffusion (see e.g. Porter, 1990, 1998; Maskell & Malmberg, 1999; Bell & Albu, 1999; Schmitz & Nadvi, 1999). Such clustering is achieved through the development of linkages (both horizontal and vertical) and strengthened by the quantity and quality of a set of local factors, which enhance the competitiveness of the local industry. By enhancing domestic linkages between firms down- and upstream in the production chain, the advantage of industrial clustering is seen to be twofold. On the one hand the increased competitiveness of local industries resulting from it makes these firms and industries more capable of competing on a global scale (something firms individually may not be able to achieve) and more attractive to lead firms in chains. On the other hand, the advantages of connections to GCCs (access to markets, information, technology etc.) are likely to reach a larger number of firms locally, not just the (core) producers directly linked to global buyers<sup>15</sup>. Recognition of these advantages has led a number of governments in LDCs to actively promote and become involved in industrial clustering, offering support, promoting co-operation and developing and improving the linkage potential.

## Conclusion

In this chapter the main issues surrounding upgrading and the central question of the longer-term development prospects of being incorporated in networks and chains, were considered. An overview of existing literature and models revealed both useful insights and perspectives,

as well as some distinct conceptual gaps, which are mostly due to the fact that focus seems to be on specific organisational or geographical scale levels, while a comprehensive framework for analysis linking these different levels and relevant to a specific industry like the garment industry, is lacking. In addition key concepts, most notably the concept of upgrading, are rarely problematised or clearly defined.

The insights gained from the literature in this chapter, will be integrated with some of the findings from chapter 1 and additional literature, providing the basis for the conceptualisation and analytical framework of the research, with specific reference to the garment industry, to be presented in the following chapter.

## Notes

<sup>1</sup> The Institute for Development Studies (IDS) at the University of Sussex, and the Institute for Development and Peace (INEP) in Germany.

<sup>2</sup> The global commodity chain concept as elaborated by Gereffi & Korzeniewicz (1994), is in fact seen by Kaplinsky (2000) to 'suffer' from the word 'commodity' as it is argued it presents an inherent contradiction in that GCCs explicitly *do not* deal with *commodities*, which are probably the only goods still traded on markets in the traditional sense of the word and *not* through production networks and chains. However, the term global value chain gives the impression of focusing solely on the adding of value. As our study does explicitly deal with a physical product, we use the term GCC to stress this

<sup>3</sup> In more recent work, however, Gereffi argues that a third type of chain may be emerging, based on the internet as a main source and channel of information (see Gereffi, 2001)

<sup>4</sup> For a further elaboration of the different characteristics of these two types of chains, see Gereffi, 2001, p.1622

<sup>5</sup> Cramer (1999) even goes so far as to state that "GCC analysis ('reflecting intellectual roots in structuralist development economics') is especially 'fatalistic' concerning the limits of economic activity in LDCs, considering these to be determined in their entirety by 'economic structures and behaviour in OECD countries' on the one hand and the 'rigidly exploitative terms' set by multinational companies (MNCs) on the other" (op. cit., p. 1248, 1252, 1260).

<sup>6</sup> The other dimensions have been somewhat neglected and poorly conceptualised in favour of the governance structure. Thus the input-output dimension is perceived as an essentially linear process (Dicken et al, 2001) and as such remains rather descriptive (Gibbon, 2000a, Raikes et al 2000), while the geographical dimension of GCCs is dealt with at a very high level of spatial aggregation. Moreover, much of the GCC and GCC related literature seems to switch continuously between geographical as well as organisational scale levels (firm level, industry level and country level), without making a clear distinction between these very different levels of analysis. This often makes for a rather confusing analysis.

<sup>7</sup> Although these bodies of literature are all in some way connected to the current study, they aren't all explicitly incorporated into our analytical framework, due to the choice of specific focus and approach taken for this research (explained briefly in the introduction and in more detail in chapter 3).

<sup>8</sup> Gereffi (1997a) does argue that 'production and trade networks in the apparel commodity chain are becoming increasingly concentrated in Asia' and that 'a general restructuring that is leading to parallel processes of regionalization of the apparel commodity chain within Asia, North America and Europe'. These processes suggest developments of separate chains in these different regions, possibly led by regional buyers (regional commodity chains). This observation is, however, not really further explored in his subsequent work, which has tended to focus on *global* commodity chains, with the exception perhaps of his work on the Mexican garment industry. Whether this is because such regionalised chains haven't emerged (yet), or because it was a conscious choice to focus primarily on global chains is not clear.

<sup>9</sup> For a general overview of garment industry restructuring in high-wage countries see Taplin & Winterton (1997)

<sup>10</sup> In addition, while the restructuring literature analyses the outcomes of restructuring processes in terms of the changed organisation and functions of firms and industries, it doesn't evaluate outcomes in terms of a (changed) positioning of firms and industries in networks and chains as a consequence of changed organisation and functions, as a network centred analysis would.

<sup>11</sup> Besides the literature and models treated in this section, see also Ernst, Ganiatsos & Mytelka (1998) and Choung et al (2000).

<sup>12</sup> Wong (1999) argues that because of the sector specific focus of Hobday's work there is a tendency to prescribe too much commonality than exists (the OEM-ODM-OBM migration route as a common route for most Asian firms). However, as Hobday himself points out "The model (...) should not be seen as a generalizable

---

model of innovation, but rather a specific model which attempts to capture the historical catching up of East Asian latecomer firms in electronics” (Hobday, 1995b, p.1186)

<sup>13</sup> Often industry development trajectories are related to technological innovations (moving from low tech to high tech), which is why the terms innovation, innovation models or innovation systems are often used (see e.g. Hobday, 1995a, 1995b; Mathews and Cho, 2000; Wong, 1999)

<sup>14</sup> A national innovation system is seen to involve a (location specific) mix of firm strategies, innovation network structure and state intervention roles (Wong, 1999, p.3)

<sup>15</sup> For a detailed overview of industrial clusters in LDCs and their incorporation into GCCs (or the interaction between local and global governance systems) see Bell & Albu (1999), Schmitz & Nadvi (1999) and Vargas (2001)