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**The political economy of manufacturing protection
in Indonesia, 1975-1995**

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A thesis submitted for the degree of
Doctor of Philosophy
of The Australian National University

July, 2001

Declaration

Unless otherwise indicated this
thesis is my own work



Muhammad Chatib Basri

July, 2001

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Abstract

This study attempts to elucidate the determinants of trade protection over time together with the inter-industry variations of protection in the Indonesian manufacturing sector.

This study draws on the political economy of protection literature which has so far only focused on the developed countries, and has included some modifications to portray a model specification more suitable for the Indonesian institutional context. For the determinants of trade protection over time a political economy model for Indonesia is established and its inferences tested with empirical analysis using a Vector Autoregression. This model elaborates the relationship between average tariff and some economic variables, such as the real oil price and real exchange rate. As for inter-industry variations of protection in the Indonesian manufacturing sector, three principal models are employed i.e. the interest group variant model, the national policy model and the Grossman and Helpman model. Furthermore, to supplement and enrich the understanding of the determinants of trade protection in the manufacturing sector, this thesis has delved into two case studies i.e. the Indonesian automotive and textiles industries.

This study results in several key findings. First, there is positive relationship between trade protection and the real oil price, suggesting that pressure for import protection tended to increase during the oil boom. As for the real exchange rate, the econometric results show that depreciation of the real exchange rate indirectly protects domestic goods from imports, leading to less pressure for import protection.

Second, there were at least six major groups influencing economic policy in Indonesia, i.e. technocrats, economic nationalists, interest groups (business associations), foreign firms, external institutions and the liberal epistemic community. Economic nationalists played a dominant role in the oil boom period of 1973-1981. However, following the collapse of the oil price, the role of the technocrats became increasingly important,

particularly during 1985-1990. They tended to place more emphasis on the market approach. At the same time, the role of crony capitalists around Soeharto also became increasingly important, and interest groups began to emerge.

Third, the econometric results show that the inter-industry variations in protection in the Indonesian manufacturing sector, were not simply random in nature. The trade protection was influenced by national policy preferences for social concerns and for developing the Indonesian manufacturing sector in 1975. Whereas, for 1986, 1987 and 1995, trade protection was influenced by Soeharto's crony capitalists and interest groups.

Fourth, as for the Indonesian automotive industry, there is evidence that the causality between rent-seekers and trade protection worked both ways, meaning that rent-seekers caused trade protection and vice versa. These results imply that both the interest group variant model and the national policy model are quite relevant in explaining the pattern of protection in the automotive industry in 1975-95. In contrast to the popular political economy studies on rent-seeking in Indonesia, which argue that economic policy (including trade policy) was very much State-centred, the case studies indicate that the role of major local business players, business associations, foreign principals and multilateral institutions was relatively strong in determining the policy of trade protection in the automotive industry.

Fifth, the case study in the textiles industry shows that the relatively low level of trade protection after the mid 1980s was a result of bargaining and conflict between interest groups in up-stream and downstream industry. As a result, when the government liberalised the trade regime, there was no strong and coherent pressure for trade protection. In addition, there is evidence that the allocation of exports quotas attracted rent-seeking activities. This chapter also argues that the role of interest groups was relatively strong in influencing the policy of trade protection after the mid 1980s.

Table of contents

Declaration	i
Acknowledgements	ii
Abstract	iv
Table of contents	vi
List of Tables	xiv
List of Figures	xvii
Glossary	xviii
1. Introduction	1
1.1 Background	1
1.2 Methodology	4
1.3 Organisation of the thesis	9
2. Theoretical framework	12
2.1 Introduction	12
2.2 General framework of theories of protection	13
2.3 Typology of the political economy models	20
2.3.1 The political support function	20
2.3.2 The tariff-formation approach	21
2.3.3 Direct democracy or median voter	22
2.3.4 Electoral competition	22
2.3.5 Influence-driven contribution	24
2.4 Protection over time and trade liberalisation: an analytical framework	26
2.4.1 Distributive consequences among interests groups	26

2.4.2 "Crisis hypothesis"	28
2.4.3 The cycle of trade protection	30
2.5 Empirical survey	31
2.5.1 Cross-section analysis	31
2.5.2 Time series analysis	37
2.6 A theoretical framework for Indonesia's political economy	40
2.6.1 State <i>qua</i> state	41
2.6.2 The Patrimonial approach	41
2.6.3 Bureaucratic pluralism	43
2.6.4 Bureaucratic authoritarianism	44
2.6.5 The Structuralist approach	44
2.6.6 Restricted pluralism	45
2.6.7 Business and political relationships	46
2.7 Summary	48
3. Trade policy and structural change in the Indonesian manufacturing sector	50
3.1 Introduction	50
3.2 Structural transformation of the Indonesian economy	51
3.3 Structural change in the manufacturing sector and the international dimension	54
3.3.1 The manufacturing sector	54
3.3.2 International orientation	57
3.4 Review of trade policy instruments	60
3.4.1 Trade policy instruments affecting imports	62
3.4.2 Instruments and restrictions affecting exports	69
3.5 Review of trade policy 1966-95	72
3.5.1 The period 1966-72	72
3.5.2 The period 1973-82	73
3.5.3 The period 1982-85	74
3.5.4 The period 1985-90	75
3.5.5 The period 1990-95	79

3.6 Summary	79
Appendix 1	82
4. The struggle over economic and trade policy in Indonesia	85
4.1 Introduction	85
4.2. Review of the political setting	86
4.2.1 The period 1966-73	86
4.2.2 The period 1974-82	88
4.2.3 The period 1982-95	89
4.3. The contending groups over economic policy	90
4.3.1 The technocrats	92
4.3.2. The economic nationalist group	93
4.3.2.1 The structuralist group	94
4.3.2.2 The pro- <i>pribumi</i> group	95
4.3.2.3 The pro-high tech technologists	95
4.3.2.4 The pro-patronage patrimonialists or rent seekers (crony capitalists)	96
4.3.3 The interest groups	98
4.3.4. The role of external institutions and foreign investors	99
4.3.4.1 The International Monetary Fund (IMF) and The World Bank	100
4.3.4.2 Free trade agreements	101
4.3.4.3. The role of foreign investors	102
4.4. The dynamic role of the liberal epistemic community	102
4.5 Soeharto's family business and crony capitalists	104
4.6 Some implications of trade policies	113
4.6.1 The period 1966-72	115
4.6.2 The period 1973-82	115
4.6.3 The period 1982-85	116
4.6.4 The period 1985-90	117
4.6.5 The period 1990-95	118

4.7 Summary	120
Appendix 2	122
Appendix 3	124
Appendix 4	125
5. Trends in trade protection in Indonesia	127
5.1 Introduction	127
5.2 ER, NRP and NTB in Indonesia: a methodology review	128
5.2.1 NRP and ERP: a conceptual framework	129
5.2.2 NRP and ERP measurement methods for Indonesia	131
5.2.3 Non-tariff barriers measurement	136
5.2.4 Some limitations of the Fane and Phillips (Fane and Condon) method	137
5.3 The trend in trade protection 1975-95	139
5.4 Summary	146
6. The determinants of trade protection over time	148
6.1 Introduction	148
6.2 Theoretical framework and hypothesis	149
6.2.1 The real effect of Dutch disease on specific factors in non-oil tradables	149
6.2.2 Depreciation and trade liberalisation	152
6.2.3 Hypotheses in the case of Indonesia	154
6.2.3.1 Change in real oil price and change in average tariff	154
6.2.3.2 Change in RER and change in average tariff	155
6.3 Econometrics techniques and data	156
6.3.1 Unit root tests	158
6.3.2 The Granger causality test	158
6.3.4 The IRF	159
6.3.5 Data and period of estimation	160
6.4 Econometric results	162
6.4.1 Unit root tests	162

6.4.2 Determining the lag order	162
6.4.3 Unrestricted VAR model	162
6.4.4 Granger causality tests	163
6.4.5 Restricted VAR and Impulse Response Function	164
6.4.5.1 Restricted VAR	164
6.4.5.2 The IRF results	165
6.5 The determinants of trade protection over time: a qualitative analysis	168
6.6 Why Indonesia liberalised the trade regime during the 1980's crisis?	172
6.6.1 More greater reliance on market forces	173
6.6.2 "Crisis" hypothesis	175
6.6.3 The distributive consequences of the reform	176
6.6.3.1 The government agencies	177
6.6.3.2 Exporters, import competing sectors and crony capitalists	178
6.7 Summary	180
7. The determinants of trade protection in the Indonesian manufacturing sector	182
7.1 Introduction	182
7.2 Theoretical framework	183
7.2.1 The interest group variant model	183
7.2.2 The national policy model	185
7.2.3 The G-H model	185
7.2.3.1 Formal framework	186
7.2.3.2 Modification for the case of Indonesia	195
7.3 Econometric model formulation, hypotheses and data	196
7.3.1 The interest group variant model	198
7.3.2 The national policy model	201
7.3.3 The G-H model	203
7.3.4 Data and variable measurement	206
7.3.4.1 Data	206
7.3.4.2 Variable measurement	207

7.4 Econometric results	215
7.4.1 The interest group variant model	216
7.4.2 The national policy model	220
7.4.3 The G-H model	221
7.5 Summary	231
Appendix 5	233
Appendix 6	234
Appendix 7	236
Appendix 8	238
8. Case study 1: the Indonesian automotive industry	239
8.1 Introduction	239
8.2 The general characteristics of the automotive industry	240
8.3 The development of the Indonesian automotive industry	241
8.3.1 Policies and regulations of the automotive industry, 1966-1996	241
8.3.2 Structure of production	245
8.3.2.1 Commercial and passenger cars (assembly)	245
8.3.2.2 Components	246
8.3.3 Trade protection	248
8.3.4 Factor proportions and the concentration ratio	252
8.3.5 Market fragmentation	253
8.3.6 International dimensions	255
8.4 Major players and ownership in the automotive industry	255
8.4.1. Government agencies	255
8.4.1. Patrimonialists owners and professionals	257
8.4.1.1 Ownership in the 1970's and 1980s	257
8.4.1.2 Ownership in the 1990's and the professionals	250
8.4.3 The MNCs or principals	262
8.4.4 The business associations	263
8.4.5 The multilateral institutions	264
8.5 The determinants of trade protection in the automotive industry	265

8.5.1 Inter-industry comparison	265
8.5.2 Causality between rent seekers and trade protection	267
8.5.3 The dynamics of trade protection in the 1990s	271
8.5.4 The case of the national car policy	273
8.6 Summary	276
9. Case study 2: the Indonesian textile and garment industries	278
9.1 Introduction	278
9.2 The Indonesian textile industry in comparative Asian perspective	279
9.2.1 The general characteristics of the textile industry	279
9.2.2 The Indonesian textile industry from an Asian perspective	280
9.3 The development of the Indonesian textiles industry	282
9.3.1 An overview of developments	282
9.3.2 Production, factor proportions and exports	284
9.3.2.1 Production	284
9.3.2.2 Value added, employment and factor proportions	285
9.3.2.3 Exports	287
9.4 Trade protection	290
9.5 The political economy of trade protection	294
9.5.1 Inter-industry comparison: the case of garments	294
9.5.2 The conflict between upstream and downstream industries, and between group producers	296
9.5.2.1 The case of dyestuffs	297
9.5.2.2 The case of polyester fibres	299
9.5.2.3 The case of cotton	301
9.5.3 The allocation of export quotas	302
9.5 Summary	305
10. Summary and conclusions	307
10.1 Introduction	307
10.2 Main findings	307

10.3 Policy implications	315
10.4 Implications for future research	316
Appendix 9	319
Bibliography	322

List of Tables

Table 2.1: Determinants of levels of manufacturing industry protection in some industrial countries	33
Table 2.2: Determinants of levels of protection in some Asian countries	35
Table 2.3: Relationship between protection and macroeconomic variables, some comparative studies	39
Table 3.1: Structural change and rate of growth in the Indonesian economy	54
Table 3.2: Change in the manufacturing sector, 1975-1995	55
Table 3.3: Structural change in the manufacturing sector based on factor intensity	57
Table 3.4: List of major policy instruments in trade which have a protective effect on Indonesia's manufacturing	61
Table 3.5: Major deregulation packages 1983-1995	77
Table 4.1: Three phases of evolution of the new order power structure	87
Table 4.2: Major contending groups over economic and trade policy in Indonesia, 1966-1995	91
Table 4.3: Soeharto's family in business	106
Table 4.4: Business persons who were well connected to Soeharto's family	107
Table 4.4: Major contending groups over economic and trade policy and trade policy outcomes in Indonesia, 1966-1995	114
Table 5.1: Example of NRP estimates, based on Fane and Phillips' method	135
Table 5.2: Example of ERP calculations	136

Table 5.3: Hypothetical estimates for % NTB coverage of gross output	137
Table 5.4: ERP estimates, 1975-1980	139
Table 5.5: ERP, 1975-1978	140
Table 5.6: Aggregated estimates of ERP, 1975-1987	142
Table 5.7: Change in RERP 1987-1995	144
Table 5.8: Coverage of non-tariff barriers, 1986-1995	146
Table 6.1: Unit root tests for various variables	162
Table 6.2: Calculation of AIC and SBC value	162
Table 6.3: Summary of the results: Chi-square statistics for various hypotheses	164
Table 6.4: Restricted VAR results	165
Table 6.5: Cumulative Impulse –Response-Function (IRF) response to one unit standard deviation shocks	166
Table 6.6 Expected winners and losers in trade reform during the 1980s crisis	177
Table 7.1: Summary for the interest group variant and the national policy model hypotheses	203
Table 7.2: Summary of the standard G-H model hypothesis	205
Table 7.3: Summary of the extended G-H model hypothesis	205
Table 7.4: The interest group variant model: ERP and NRP as dependent variables	215
Table 7.5: The national policy model: ERP and NRP as dependent variables	219
Table 7.6: Grossman and Helpman model: ERP and NRP as dependent variables	225
Table 7.7: Grossman and Helpman model: NTB as dependent variable	229
Table 8.1: Comparative indicators for the Asian auto industry, 1995	241
Table 8.2: Major regulations in the Indonesian automotive industry, 1969-1996	243
Table 8.3: Production of selected components 1978/9–1996/7	247
Table 8.4: Local content ratios, 1994-1995	247
Table 8.5: Trade protection in the automotive industry, 1975-1995	249

Table 8.7: NRP for the automotive industry, 1987 and 1995	250
Table 8.7: Cost comparison between local components and import components, 1981	252
Table 8.8: Factor proportions in the automotive industry, 1975-95	253
Table 8.9: Concentration in the automotive industry	253
Table 8.10: Share of imported intermediate inputs	255
Table 8.11: The structure of ownership, 1970s-1980s	259
Table 8.12: Major automobile manufacturers in Indonesia in the 1990s	262
Table 8.13: Trade protection and the automotive industry's characteristics	267
Table 9.1: Comparison of textiles industries in some Asian countries	281
Table 9.2: Key features of textiles and garments in Indonesia	283
Table 9.3: Production of selected textile products, 1968-1994/95	284
Table 9.4: Value added and employment in textiles and garments	286
Table 9.5: Textile exports, 1989-1994	289
Table 9.6: Estimates of ERP for textiles and garments, 1971-1995	290
Table 9.7: ERP for textile and garment producers by sales destination in 1989	291
Table 9.8: Major trade protection and trade reform measures in the textile industry, 1970-1995	293
Table 9.9 : Trade protection and garment industry characteristics	296

List of Figures

Figure 2.1: Principles of a political economy model	18
Figure 3.1: Structural change in the manufacturing sector	53
Figure 3.2: Composition of Indonesian exports, 1970-98	58
Figure 3.3: Composition of Indonesian imports, 1970-98	58
Figure 3.4: Factor intensity composition of Indonesian non-oil manufacturing exports, 1970-98	59
Figure 3.5: Factor intensity composition of Indonesian non-oil manufacturing imports, 1970-98	60
Figure 4.1: The Soeharto group	108
Figure 6.1: Effects of the oil boom on the labour market	151
Figure 6.2: Indonesia: the tradable/non-tradable price ratio	169
Figure 6.3: Indonesia real effective exchange rate, 1990-95	172
Figure 8.1: Production by category, 1976-2000	246
Figure 9.1: Exports of textiles and garments, 1976-1998	288

Glossary

ADF	:	Augmented Dickey Fuller test
AFTA	:	ASEAN Free Trade Area
AIC	:	Akaike Information Criterion
AICO	:	ASEAN Industrial Co-operation
ANU	:	Australian National University
APDYESI	:	<i>Asosiasi Produsen Dyestuffs Indonesia</i> , the Indonesia dyestuffs producers association
APEC	:	Asia Pacific Economic Cooperation
API	:	<i>Angka Pengenal Impor</i> , Importer identification number
API	:	<i>Asosiasi Pertekstilan Indonesia</i> , the Indonesian textiles association
APIS	:	<i>Angka Pengenal Impor Sementara</i> , provisional importer identification number
APIT	:	<i>Angka Pengenal Impor Terbatas</i> , limited importer identification Number
APINDO	:	<i>Asosiasi Plastik Indonesia</i> , Indonesia's plastic associations
APSYFI	:	<i>Asosiasi Produsen Synthetic Fibre Indonesia</i> , the Indonesian synthetic fibre makers association
ARI	:	Agriculture Resources Intensive
ASEAN	:	Association of Southeast Asian Nations
AT	:	<i>Agen Tunggal</i> , Agent Trader or sole agent
ATC	:	Agreement on Textiles and Clothing
BAPPENAS	:	<i>Badan Perencanaan Pembangunan Nasional</i> , National Planning Agency
Bapeksta	:	<i>Badan pelayanan kemudahan ekspor dan pengolahan data</i> , (Agency for Export Facility Services and Financial Data)

		Processing)
BBC	:	Brand-to-Brand Complementation
BKPM	:	<i>Badan Kordinasi Penanaman Modal</i> , Investment Coordination Board
BPPC	:	<i>Badan Penyangga dan Pemasaran Cengkeh</i> , Clove Marketing Board
BPPT	:	<i>Badan Pengkajian dan Penerapan Teknologi</i> , Agency for Assessment and Application of Technology
BPS	:	<i>Badan Pusat Statistik</i> , Central Bureau of Statistics
BULOG	:	<i>Badan Urusan Logistik</i> , The Government's Food Procurement Agency
CBTI	:	Cerat Bina Tekstil Indonesia, The Indonesian Textile Fibre Development Company
CBU	:	Complete built-up
CCCN	:	Customs Co-operation Council Nomenclature
CGI	:	Consultative Group for Indonesia
CKD	:	Complete Knock Down
<i>Cukong</i>	:	Chinese businessmen, often in partnership with senior military officer or bureaucrats
DAI	:	<i>Dewan Asuransi Indonesia</i> , The Insurance Council of Indonesia
<i>Deregulasi</i>	:	Deregulation
<i>devisa umum</i>	:	market foreign exchange rate
<i>devisa kredit</i>	:	non market foreign exchange rate
EPTE	:	Entrepots for Export-Destined Production
EPZ	:	export processing zones
<i>era reformasi</i>	:	political and economic reform era
ERP	:	effective rate of protection
FEUI	:	The Faculty of Economics, University of Indonesia
FITI	:	<i>Federasi Industri Tekstil Indonesia</i> , the Indonesian Textile Industry Federation

GAAKINDO	:	<i>Gabungan Agen tunggal dan Asembler Kendaraan</i> , Association of Indonesian Automobile Assemblers
GAIKINDO	:	<i>Gabungan Industri Kendaraan Bermotor</i> , the Indonesia Automotive Industry Association
GATT	:	General Agreement of Tariffs and Trade
GDP	:	gross domestic product
G-H	:	Grossman and Helpman
GIAMM	:	<i>Gabungan Industri Alat-alat Mobil and Motor</i> , Association of automotive components manufacturer
GNP	:	gross national product,
GOLKAR	:	<i>Golongan Karya</i> , the State ruling party in the Soeharto era
GPF	:	<i>Gabungan Pengusaha Farmasi</i> , the pharmaceutical association
HCI	:	human capital intensive
HOS	:	Heckscher –Ohlin-Samuleson
HS	:	Harmonized Systems
IEDB	:	International Economic Data Bank
IGGI	:	Inter-Governmental Group for Indonesia, the international donor consortium
<i>Ikat</i>	:	traditional textile, using a method of patterning cloth by tying bunches of thread together in certain places before the thread is dyed.
IMF	:	The International Monetary Fund
INPRES	:	Presidential Instruction
I-O	:	input-output
IP	:	<i>Importir Produsen</i> , Importer Producer
IPTN	:	<i>Industri Pesawat Terbang Nasional</i> , National Aircraft Industry.
IRF	:	Impulse Response Function
ISIC	:	International Standard Industrial Classification
IT	:	<i>Importir Terdaftar</i> , Specific importer
IU	:	<i>Importir Umum</i> , General importer
KADIN	:	Kamar Dagang Indonesia, Indonesian chambers of commerce

<i>Kepres</i>	:	<i>Keputusan Presiden</i> , Presidential Decree
<i>Lampiran Pidato</i>		
<i>Kenegaraan</i>	:	Appendix of the Presidential speech
LPEM	:	<i>Lembaga Penyelidikan Ekonomi dan Masyarakat</i> , Institute for Economic and Social Research
<i>Lurik</i>	:	a (finely striped) textile.
<i>Malari</i>	:	<i>Malapetaka Lima Belas Januari</i> , refers to a riot in Jakarta on 15 th 1974
MFA	:	Multi-Fibre Arrangement
<i>Mobnas</i>	:	<i>Mobil nasional</i> , national car
MPO	:	<i>Menghitung Pajak Orang</i> , withholding tax
MRI	:	Mineral Resources Intensive
New Order	:	refers to the period since the commencement of President Soeharto's rule, generally taken from March 1966
NRP	:	nominal rate of protection
NTB	:	non-tariff barriers
OPEC	:	Organisation of the Petroleum Exporting Countries
P4BM	:	<i>Pusat Pengelolaan Pembebasan dan Pengembalian Bea Masuk</i> , The Centre for the Management of Import Duty Exemption and Restitution
PDI	:	<i>Partai Demokrasi Indonesia</i> , Indonesian Democratic Party
PELITA	:	<i>Pembangunan Lima Tahun</i> , Five years development
<i>Peningkatan</i>		
<i>Pendayagunaan</i>		
<i>Produksi</i>		
<i>Dalam Negeri</i>	:	the promotion of the use of domestically produced goods
Pertamina	:	the state owned oil company
PI	:	<i>Produsen Importir</i> , producer importer
PN	:	<i>Perseroan Negara</i> , state owned company
<i>politik benteng</i>	:	A policy which gave import licences to particular indigenous

		Indonesian importers.
PPP	:	<i>Partai Persatuan Pembangunan</i> , Development Unity Party
<i>Pribumi</i>	:	Indigenous Indonesian
PT	:	<i>Perseroan Terbatas</i> , limited liability
REPELITA	:	<i>Recana Pembangunan Lima Tahun</i> , five year development plan
RER	:	real exchange rate
RERP	:	Real effective rate of protection
<i>Rp</i>	:	rupiah
SBC	:	Schwartz Bayesian Criterion
SE	:	<i>Sertifikat Ekspor</i> , export certificate
SEKBERTAL	:	<i>Sekretariat Bersama Pemintalan</i> , The Joint Secretary of Spinning Industry
SGS	:	<i>Societe Generale de Surveillance</i> , the Swiss surveillance company
SITC	:	Standard International Trade Classification
TI	:	technological intensive
TFP	:	total factor productivity
TFPG	:	total factor productivity growth
TNC	:	trans national company
TNI	:	<i>Tata niaga impor</i> , approved importers system
TPN	:	<i>Timor Putra Nasional</i> , company's car owned by Tommy Soeharto
TRIMS	:	Trade Related Investment Measure
ULI	:	Unskilled Labour Intensive
UNIDO	:	United Nation Industrial Development Organisation
VAR	:	Vector Autoregression Model
VAT	:	Value Added Tax
WTA	:	World Trade Agreement
WTO	:	World Trade Organisation

Notes: unless otherwise indicated specified, all \$ refer to US\$.

Chapter 1

Introduction

1.1 Background

There are large inter-industry variations in protection in many countries. This phenomenon leads to questions of why some industries receive more protection than others, and why trends in protection change over time? International economists mostly point to "politics" as the cause, arguing that governments form trade policy in response not only to concerns regarding social welfare, but also to pressure from special interest groups. Protection can create higher-than necessary profits, or "rents", for interest groups or businesspersons, who are able to gain special treatment from governments and are known as rent seekers (Gillis, Perkins, Roemer, Snodgrass, 1996).

While there is no simple explanation for the inter-industry variations in protection, it is worth asking whether they are simply random in nature or whether they are systematic?

These questions have attracted significant attention in the area of the theory of trade protection. Various studies have looked at the political economy of protection in developed countries. However, developing countries, which have a different political context, have been given less attention. The reasons for this are obvious. For developed countries, institutions are well established and a comprehensive database is available. For developing countries, power is more personalised, the decision-making processes less transparent and there is usually only a limited database.

This thesis focuses on the political economy of protection in developing countries using Indonesia as a case study. A time series analysis will be used to look at the changing

levels of protection over time during the period 1974 to 1994. A cross-section analysis of the large inter-industry variations in protection within the Indonesian manufacturing sector will also be undertaken. In line with the cycle of economic policy in Indonesia, and considering the availability of data, the cross section analysis will look at the manufacturing sector in the years 1975, 1986, 1987 and 1995. These years correspond to the early phase of the oil-boom (1975), the early post oil-boom (1986 and 1987) and the economic reform of 1995.

The motivation for studying the political economy of manufacturing protection in Indonesia are threefold. First, while there are some studies of the political economy of economic policy making in Indonesia, such as Robison (1986), MacIntyre (1991) and Chalmers (1996), they do not focus on trade policy. Specifically, they do not examine how trade protection was shaped through bargaining and coalitions between the government, interest groups, rent-seekers and multilateral institutions. The three studies which do attempt to examine trade policy systematically: Pangestu and Boediono (1986), Pack (1994) and Basri and Hill (1996), all focus on the determinants of inter-industry variations in protection, but none considers the trends over time. In addition, while there are a vast number of empirical studies in the literature that investigate the political-economy determination of trade protection, most only take the reduced-form or ad-hoc approach, in the sense of not being guided by a consistent rigorous theoretical model. This thesis will analyse the political economy of trade protection, applying both a rigorous theoretical model, which provides the basis for empirical analysis (i.e. the Grossman and Helpman model), and a reduced form approach.

Second, Indonesia provides a valuable case study from 1975 to 1995 of the political economy of trade protection where there were high, but declining, levels of protection. In addition, levels of protection were widely dispersed amongst Indonesian manufacturing industries, even after the implementation of the significant trade policy reforms that commenced in 1985. The level of the real effective rate of protection (RERP) for manufacturing, excluding oil refining, declined substantially from 59% in 1987 and to 16% in 1995, while the standard deviation of the RERP between those years fell from

102% to 39% for manufacturing, excluding oil refining (Fane and Condon, 1996). In 1986, the coverage of non-tariff barriers (NTB) in gross output of non-oil manufacturing was 80%, declining to 24% in 1995 (Fane and Condon, 1996). Nevertheless, NTBs continued to exist in many products, particularly agriculture.

Third, although protection can create rents for rent seekers, most of the studies available for Indonesia do not incorporate political economy aspects, such as the existence of rent-seekers or crony capitalists, or dynamic conflicts over the direction of trade policy involving both domestic and external factors. Pack (1994) argues that political influence did not appear to significantly affect the granting of protection. This is considered unlikely, considering that the political system in Indonesia is a most volatile variable, due to a high degree of nepotism and a non-transparent decision making processes. Basri and Hill (1996) make a limited attempt to incorporate the patrimonialist patronage pattern of the Indonesian political system, while suggesting this is a topic for more extensive research. Therefore, any thorough analysis of the political economy of trade protection in Indonesia has to take into account these specific political features. At the risk of oversimplifying, these can be summarised into four main points. First, after the early 1980s, political power became highly centralised and personalised around former President Soeharto, with all major economic decisions requiring his approval. Second, independent political institutions were limited both in number and influence. Third, although policy formation in general was still very much State centred, at least six major groups probably had a significant influence on economic policy. These groups were technocrats, economic nationalists, interest group or business associations, foreign capitalists, external institutions and the group of the intellectual community that supported economic liberalisation. The link between State and society existed mainly via a patrimonial and corporatist framework. Fourth, reflecting its economic, political and social history, Indonesia's modern business sector demonstrates distinct ownership features. Practically all-large business which emerged from the mid 1980s was owned either by Sino-Indonesians - well-connected indigenous business interests (extending most prominently to Soeharto's family) - or by an extensive State enterprise network.

1.2 Methodology

Two empirical methods are employed in the methodology. The political economy model for the determinants of trade protection provides the basic framework for the econometric analysis in the first part of this thesis. There are limitations in using this framework to draw the whole picture of the determinants of trade protection. In particular, the ability of econometric analysis to explain the political influences in Indonesian trade policy is limited, and it is unlikely this can ever be fully explained. This is the motivation for the second research methodology of industry case studies focused on the automotive and textiles industries.

The time series analysis focuses on the historical period 1974-1994 and the cross section analysis considers the years 1975, 1986, 1987 and 1995. Understanding the economic and political forces underlying manufacturing protection in Indonesia during 1975-1995 is particularly important, because it assists understanding of the obstacles to trade liberalisation in Indonesia.

In Chapters 4 to 7 of the study, the political economy of trade protection provides the basic framework for the analysis. In Chapters 8 and 9 the research methodology uses two industry case studies.

The political economy of trade protection

The theory of the political economy of trade protection attempts to explain the "equilibrium" level of protection as an outcome of the political process. With regard to pure trade theory, economists have devoted much effort to studying the impact of protection on an economy and treating it as an exogenous variable. This suggests a feedback effect from trade protection to some economic variables, such as industry structure, income, price levels, unemployment, and the trade balance. Instead, the political economy of protection employs protection as an endogenous variable, suggesting some economic variables or industry characteristics and/or political variables influence the structure of trade protection. This relationship is known as endogenous

protection. Although this is not a new subject in trade theory, there exists no coherent theory to satisfactorily explain it.

Protection over time

This study looks at how the levels of protection in Indonesia changed over time, and at the factors influencing these changes. As noted, this is of particular interest because trade protection levels were relatively high from the 1970s up to the mid 1980s, before being reduced substantially as a result of the various trade reforms.

International trade theory suggests protection is strongest when a country's economic position is relatively weak. Therefore, it would seem logical for liberalisation of the trade sector to occur when a country is experiencing strong economic performance. This did not happen in Indonesia. In examining the reasons why, this thesis looks at both the trade reform process and the institutional aspects of trade reform, involving bargaining and conflict between protectionist forces and pro trade reform groups. A hypothesis is developed that the trade reform process in Indonesia can be attributed to the distributive consequences amongst various economic groups, the increasing influence of pro trade reform groups, the growing global belief that reliance on market forces produces a better economic performance than intervention, and the response to the oil price crisis of the mid 1980s.

The interrelationship between import tariffs and some macroeconomic variables, such as real oil prices and real exchange rates, is examined, by employing the Vector Auto regression model (VAR). Furthermore, simulation of the VAR, and the impulse response function calculation (IRF) can give more insight into the sign of the causality effects. Hence, the VAR not only allows examination of causality between tariffs, the real oil prices and the real exchange rate, but also gives some insight regarding the direction of change, as well as allowing observation of the dynamic effects in the change on tariffs.

This approach has been widely used in time series analysis of the political economy of protection in the cases of the United States, Japan and Thailand.¹ However, there have been no previous studies available on the determinants of trade protection over time in Indonesia.

The determinants of inter-industry variations in protection

The literature has been well surveyed in this area, including Caves (1976), Hillman (1989), Magee, Brock and Young (1989), and Grossman and Helpman (1994). While some of these findings are complementary, some are not (see the review by Rodrik, 1995). This study will focus on the principal models: the interest group variant model, the national policy model, and the Grossman and Helpman (G-H).

The interest group variant model is actually an extended interest group model which incorporates the patrimonialist patronage pattern. This interest group variant model argues that industry tariff rates can be viewed as the result of interaction between interest groups, patrimonialist patronage and policy makers in determining the equilibrium level of protection. Following Anderson (1980), this model perceives the analysis of protection as a political market comprising demand and supply. The demand originates from industries seeking protection and supply is granted by the government (Anderson, 1980). From the demand side - similar to the original interest group model - this model argues that interests groups will spend money until the marginal cost of lobbying equals the expected marginal gain from these activities. In addition, demand can also come from particular industries which are 'well-connected' to policy makers. On the other hand, from the supply side, it is assumed that politicians are motivated by self-interest, i.e., maximising their personal wealth.

The national policy/social concern model argues that governments have a particular policy preference, stemming from some ideological or analytical framework, which may go beyond personal interest. Baldwin (1989) argues that this approach stems from

¹ See, for example Bohara and Kaempfer, 1991; Terdudomtham, 1994; Krol, 1996.

government concern to improve the welfare of particular socio-economic groups, as well as from national objectives, such as technology transfer and infant industry arguments.

The Grossman and Helpman model (G-H) has become state of the art in the recent literature on the political economy of trade protection, because it provides an empirical parameter based upon a coherent theoretical foundation (Goldberg and Maggi, 1999; Mitra, 1999 and Gawande and Bandyopadhyay, 2000).

The G-H model argues specific factors in an industry form an effective lobby (representing that industry's interests) that manages to raise the domestic price for the goods from which they make a profit, while politicians use trade policy as a source of income to finance election campaigns. The lobby groups usually offer future election campaign contributions in exchange for trade policy favourable to their interests. In response, government sets trade policy to maximise a weighted sum of aggregate social welfare and anticipated contributions, so that trade protection becomes subjected to bargaining between government and the various lobby groups. G-H predict trade protection will be higher in industries with low import penetration, low demand elasticity and an effective lobby, and lower in industry sectors where no effective lobby has been organised. Where there is no effective lobby group, protection is only likely to increase when, or if, import penetration increases.

This model has been used extensively, not only as a starting point in developing the theory of the political economy of trade protection but also for the empirical test for the case of the United States. Bearing in mind that there has been no previous empirical test using the G-H model for Indonesia, it is important to observe how well the model predicts protection in Indonesia.

This thesis examines a number of variables relevant to these three models in elucidating inter-industry variations in manufacturing protection, and each of the industry levels of protection will be regressed against them. The dependent variables that will be examined are the ERP, the NRP, and the NTB coverage of gross output for selected years. An

ordinary least square method is employed with heterocedasticity-consistent standard error, to avoid the possible problem of heterocedasticity that commonly occurs in cross-section analysis.

The cross-section analysis will focus on trade protection estimates employing a comparable set of ERP, NRP to those estimated by Fane and Phillips (1991) for 1987 and Fane and Condon (1996a) for 1995, as well as The World Bank's (1981) estimates for 1975. In addition, this study employs a comparable set of NTB to those estimated by Fane and Condon (1996) for 1986 and 1995.

Industry case studies

The econometric analysis is limited in its ability to explain and quantify all of the political influences in Indonesian trade policy. It is also important to emphasise that, in assessing the quantitative model, no single model is likely to tell the whole story. It would be dangerously heroic to attempt to explain the motives for protection based on only the three quantitative models listed above.

In order to supplement and enrich understanding about the determinants of protection in the Indonesian manufacturing sector, this thesis delves into case studies that provide qualitative analysis for two specific industries i.e. the Indonesian automotive and textiles industries. As in many countries, the automotive industry is a good example how protection is shaped through bargaining between interest groups and government. The Indonesian automotive industry is notorious as a highly protected, with powerful rent seekers lobbying for protection. In contrast, the Indonesian textiles industry is recognised as having had relatively low levels of protection, particularly after the mid 1980s, and as comprising many conflicting interest groups.

In seeking a comprehensive explanation of inter-industry rates of protection and the change over time, this study goes further in the depth of its qualitative description, by using firm level information and interviews with leading decision makers in the Indonesian business sector.

1.3 Organisation of the thesis

The organisation of the thesis is as follows. Chapters 1 to 5 provide the theoretical and empirical framework for the substantive analysis in Chapters 6 to 9.

Chapter 2 reviews the existing political economy of trade protection literature and the theoretical framework of Indonesia's political economy. Two broad theories are outlined, namely the self-interest model and the social concern approach or national policy model. In addition, several political economy approaches to explain the relationship between government and business are examined, including patrimonialism, bureaucratic pluralism, and bureaucratic authoritarianism. This chapter aims to derive a framework from previous political economy analysis which will be relevant for the political economy of protection in Indonesia's manufacturing industry.

Chapter 3 provides an overview of the structural transformation of the Indonesian economy, particularly in the manufacturing sector. This is important because as the economy transformed there were changes in the interests and strengths of various actors, including the government. In addition, this chapter reviews Indonesian trade policy.

Chapter 4 critically examines the institutional aspects of both the Indonesian economy in general and trade policy in particular. The purpose is to set the scene for the further analysis of the political economy of trade protection in the following chapters. The chapter begins with a discussion of Indonesia's political features, and provides a description of the role of crony capitalists in influencing economic policy, including trade policy.

Chapter 5 focuses on the changes in trade protection in Indonesia over time, and highlights the methodology of measuring ERP, NRP and NTBs, as well as providing an overview of the trend of trade protection from 1975-1995. This chapter also shows that the level of protection substantially declined from 1975-1995.

Chapter 6 develops a time series analysis (econometric model) by employing a VAR to assess the determinants of import protection during the period 1974 to 1994. This chapter also employs impulse response function (IRF), to observe the dynamic effects on tariffs change. In light of the determinants of trade protection over time, the results support the hypothesis that pressure for import protection tended to increase during the oil boom period, and decreases as a result of the depreciation of the real effective exchange rate. The chapter argues against the cycle of trade protection prediction that protection is strongest when a country's economic condition is weak. This chapter also argues that liberalisation of the trade regime cannot be entirely attributed to the popular view in the Indonesian political economy literature that liberalisation took place due to the economic crisis and the increasing role of technocrats. This chapter demonstrates that any analysis of trade liberalisation in Indonesia should also take into account various factors, including the distributive consequences of reform amongst various economic groups, and a growing global belief in market forces.

Chapter 7 assesses the determinants of trade protection in the Indonesian manufacturing sector for 1975, 1986, 1987, and 1995, by employing econometric analyses based on the interest group variant model, the national policy model, and the G-H model. This chapter shows that the econometric results for both the interest group variant model and the G-H model provide evidence that the role of interest groups became increasingly important in influencing trade policy in both 1987 and 1995, while the national policy model provides a better result for 1975 than those of the other models. Specifically, in contrast to Pack's (1994) conclusions, the findings from application of the G-H model show that crony capitalists continued to influence trade protection up until 1995.

Chapter 8 analyses the political economy of trade protection in the automotive industry. This chapter provides evidence that the causality between rent-seekers and trade protection worked both ways. While rent-seekers influenced the levels of trade protection, the levels of trade protection were important for creating rent-seeking behaviour. These results imply that both the interest group variant model and the national policy model are relevant in explaining the pattern of protection in the automotive

industry in 1975-95. Furthermore, this study demonstrates that trade protection was shaped through bargaining and various shifting coalitions between the government, automotive companies (local major players), foreign principals, business associations and multilateral institutions.

Chapter 9 discusses the political economy of trade protection in the Indonesian textiles industry during 1975-95. This chapter demonstrates that the relatively low level of trade protection in this industry after the mid 1980s was a result of bargaining and conflict between interest groups in the up-stream and downstream industry. There is evidence that the allocation of exports quotas attracted rent-seeking activities. This chapter also argues that the role of interest groups was relatively strong in influencing the policy of trade protection after the mid 1980s.

Chapter 10 summarises the major findings and discusses the future direction of the political economy of trade protection in Indonesia with reference to the current economic crisis and political change. Implications for future research are discussed.

Chapter 2

Theoretical framework

2.1 Introduction

Commencing from the 1970s, studies on the political economy of trade have paid increasing attention to the determinants of trade policies. They attempt to explain the "equilibrium level" of protection as an outcome of the political process. This subject has attracted increasing attention because, as Rodrik (1995) argues, there is no other area in economics that illustrates such large gaps between what policy makers practice and what economists preach. Economic theory strongly argues that free trade leads to the most efficient allocation of resources and maximises a country's economic welfare. However, the reality is that trade protection still prevails in practically every country. As international economists argue, governments set trade policy not only in response to concerns for the welfare of society but also in response to pressure from interest groups. It is important to understand the underlying political economy factors behind trade protection, in order to understand the debate on the structure of protection and trade policy more generally.

There is a rich literature on the political economy of trade protection, both on theory and empirical analysis.¹ In addition, there are some excellent literature reviews available, including Rodrik (1995), Helpman (1997) and Magee (1997).

Although much has been written, there is still no consensus as to which economic and political economy variables best explain the pattern of protection. Disagreement also

¹ Examples of the former include Findlay and Welliz (1982), Mayer (1984), Hillman (1989), Magee, Brock and Young (1989), Long and Voudsen (1991) and Grossman and Helpman (1994). Empirical surveys, include Caves (1976), Anderson (1980), Anderson and Baldwin (1987), Trefler (1993), Greenaway and Milner (1994), Goldberg and Maggi (1999).

exists on the way in which political decisions are reached. One viewpoint treats government officials simply as mediators, balancing the conflicting range of groups in society with a view to maximising political support, and with the State having little influence. The opposing argument is that the State acts independently, for the most part, in the decision making process (Baldwin, 1984). Most authors take an intermediate position between those two extremes.

This chapter provides a brief review both of the theoretical and empirical approaches of political economy trade policies and also of some theoretical framework in interpreting the Indonesian political economy. It is organised as follows: Section 2.2 focuses on the general framework of theories of protection; Section 2.3 explores the typology of political economy models; Section 2.4 discusses theoretical frameworks used in the study of trade liberalisation; Section 2.5 explores empirical surveys of the political economy of trade protection; and the final section provides a brief review of several frameworks used in interpreting Indonesia's political economy features.

2.2 General framework of theories of protection

Although acknowledge as important, there exists no coherent theory to explain the political economy of trade protection. In pure trade theory, economists have devoted much effort to studying the impact of protection on the economy and treating protection as an exogenous variable. This suggests a feedback effect from trade protection to economic variables, such as income, price levels, unemployment and trade balances. In contrast, the political economy of protection employs protection as an endogenous variable. This suggests some economic and political variables influencing the structure of protection. This relationship is known as endogenous protection. According to Webster's New Universal Dictionary, as cited from Magge (1997:526), endogenous protection is defined as:

'A description of the internal process by which the level of protection is explained by all individuals and groups in an economy and the political system acting in their self-interest'

Although this definition depicts major aspects of endogenous protection, it overlooks government preferences regarding social concerns. Therefore in a broader context, this definition could be rephrased as:

a description of the determinants of trade protection in which the level of protection is explained by all individuals and groups in an economy and the political system driven by self-interest, as well as government preferences regarding social concerns

Without much complication, it can be predicted that the determinants of trade protection are closely related to the distributional impact of trade policy on various factor groups. Factors benefiting from trade protection will strongly support it, while disadvantaged factors will oppose it. Generally the standard explanation of this relationship is drawn from the Heckscher-Ohlin-Samuleson framework (HOS) and the Ricardo-Viner specific factors model.

Using a simple two factors model of the HOS framework, the Stolper-Samuelson theorem shows an increase in the relative price of a commodity due to any government policy such as trade protection. Leading, to a rise in the real return to the factor used intensively; in the producing commodity and a fall in the real return to the other factor. As a result, protection is clearly supported by any factor which is used intensively and opposed by any other factor whose real return is reduced by protection. However, this result appears to be at odds with observed behaviour, because it overlooks the commonly observed possibility of a short-term coalition between capital and labour within industries.

Due to the limitations of the HOS framework, an alternative model is developed. This alternative employs Ricardo-Viner specific models, as developed by Jones (1971 and 1975), Mayer (1974) and Mussa (1974). Using this particular framework, Mussa (1974) and Jones (1975) demonstrate that the Stolper-Samuelson theorem is a long run phenomenon and not particularly adequate for analysing the effect of protection. The specific factor hypothesis suggests that, in the short run, protection raises the real return of capital in the protected industry, lowers the return of capital in the unprotected industry and raises the return of labour in terms of unprotected goods (Mayer, 1974).

However, because it depends on the share of protected goods in that factor's budget, the effect for labour is not clear (Vousden, 1990; Mayer, 1974). If the share of protected goods is a small proportion of that factor budget, the specific factor hypothesis could give a partial explanation as to why labour and capital will collude to seek protection in the short run (Vousden, 1990).² The models of Mussa (1974) and Jones (1975) are also supported by the empirical tests of Magee, Brock and Young (1989).

Although they provide different outcomes, both the HOS and Ricardo-Viner specific models imply trade policy has a strong distributional impact. In the specific factor model, these consequences are particularly robust for owners of the specific factors, which can be deduced from the ownership pattern of individuals across the specific factors employed in the industry. In the HOS model, the distributional inference takes place among factors, rather than in the industry as predicted in the Stolper-Samuelson theorem (Rodrik, 1995).

The general framework of the theories of protection falls into two broad approaches. The first focuses on self-interested acts driven by various groups, while the second emphasises welfare aspects as represented by the national interest. Baldwin (1989) refers to the former as the economic self-interest approach and to the latter as the social concerns approach.

The economic self-interest approach assumes that the individual or group favours or opposes a specific trade policy, depending on whether or not it improves personal income. On the other hand, the social concerns approach assumes trade policy is determined by government concern for the welfare of certain groups and for various national and international objectives. The social concerns approach is parallel with the conservative social welfare function introduced by Corden (1997).

This function argues that a significant absolute fall in the real income of any significant

² It is called a partial explanation, since there are many factors that determine the demand for protection, such as comparative advantage, the role of labour and capital owners in the political decision and trade unions.

social group should be opposed (Corden, 1997). Corden (1997) argues this proposition for several reasons. First, unless it is unavoidable, it is "unjust" to let anyone's real income be significantly reduced, particularly when this is the outcome of deliberate policy decisions. Second, there is a need for social insurance as provided by a conservative social welfare function. Third, social peace requires that no major group's income shall fall when that of others is rising. Fourth, if policy is directed into a certain target such as the level of protection, most governments want to minimise undesirable consequences on sectional incomes, so as to not be involved in political battles incidental to the main purpose.

Although there are some distinctions between the economic self-interest and social concerns approach, Baldwin (1989) argues that the two do not contradict each other. Both self-interest and social concerns motivations are included in the standard formulation of the social welfare function. In addition, it is worth noting that there is no clear division between the economic self-interest and social concerns approach. For instance, provided there is a strong labour union, government concerns to protect employment could also be classified as an economic self-interest approach. A national objective to protect a strategic industry to some extent could also overlap with pressure from interest groups benefited by this policy. While confusing, this ambiguity is inevitable. However it is preferable to accept ambiguity, rather than dogmatically claim those variables can uniquely belong to one approach in preference to another (Basri and Hill, 1996). While this ambiguity cannot be totally eliminated, it can be minimised by taking into account the political economy features uniquely associated with each country.

Baldwin's (1989) classification of self-interest and social concern is relatively similar to the demand and supply protection approach of Anderson (1980), which argues that trade protection is determined by the demand for and supply of protection. Demand and supply of protection is driven by the self-interest motives of various groups and government officials. The demand originates from industries seeking protection and supply is granted by the government. Nevertheless, Anderson (1980) does not explicitly distinguish between economic self-interest and social concerns in the supply of protection. For

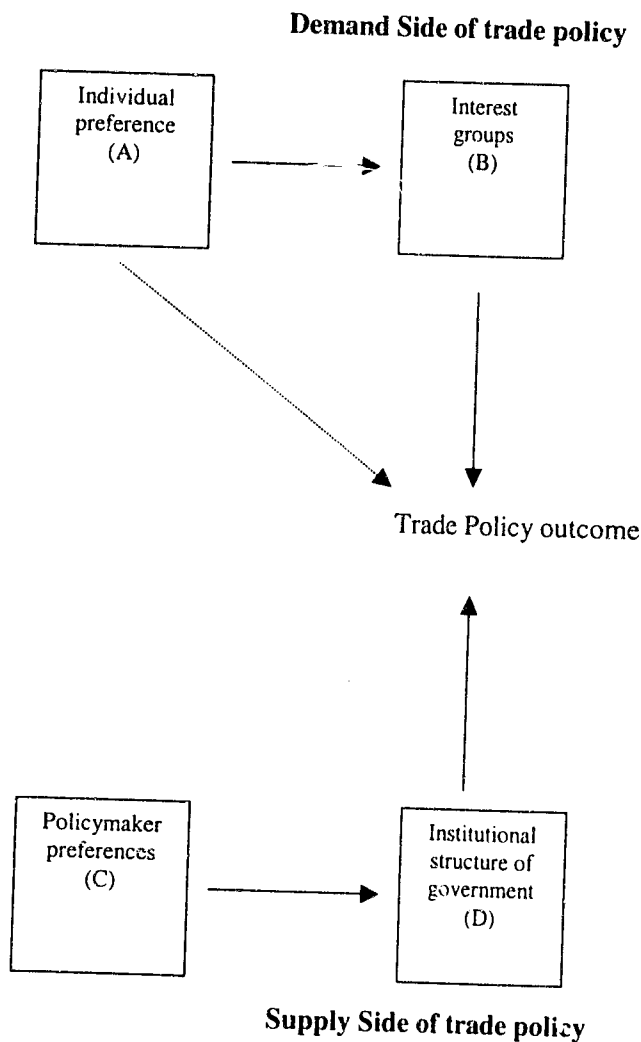
instance, government preferences are not only influenced by the self-interest motives of government officials to maximise personal wealth or the probability of re-election, but also by social concerns motives or national objectives, including the development of technological competence or the infant industry arguments. Although there are some differences, both approaches agree that trade protection depends on various pressure groups and government preferences.

In addition to this typology, Rodrik (1995) elaborates these two approaches into four elements (Figure 2.1):

The first element contains a description of the structure of individual preferences (A). Here the standard trade theory, such as specific factor hypothesis and the HOS theorem, is dedicated to examining the consequences of trade policy for individuals who obtain income from different factors of production.

The second element (B) is a depiction of how these individual preferences can be aggregated and channelled through pressure groups or political parties, into demand for a particular trade policy. This involves a characterisation of the mode of political organisation as well as the form of political influence. The prominent approaches in this area are Olson (1965) and Stigler (1974). This approach indicates that a small, wealthy and vocal group can exert political influence, whereas a small number of ordinary individuals are unlikely to exert any political influence (Olson, 1965). Olson (1965) points out that, as the membership of these pressure groups becomes larger, the cost per "actual" contributor tends to increase because of the free rider problem that accompanies size. The benefit from a tariff is available to all members of a pressure group, regardless of whether or not they contribute, creating an incentive for members to free ride. Moreover, when a group is large, it is likely that benefits from a particular policy will be spread more thinly across the members. At a given level of benefit from trade protection, the per capita benefit becomes smaller the larger the number of members in the pressure group.

Figure 2.1: Principles of a political economy model



Source: Modified from Rodrik (1995)

The third component of the interest group model is policy maker preferences (C). This is connected to the supply side of trade policy. This element attempts to examine the motives behind policy maker preferences, such as being re-elected, transferring resources to favoured groups, maximising personal wealth, and maximising the aggregate welfare of society. The final element (D) is the institutional structure of government. This element focuses on the institutional setting in which trade policy takes place. The interaction here is depicted in Figure 2.1

In this political economy map, Rodrik (1995) assumes there is no direct connection leading from individual preference into demand for a particular trade policy (noted by the dotted line). This is partly true when the role of interest groups is relatively strong. However when the role of an interest group is relatively weak it becomes more efficient to influence policy via a personal connection with the decision makers. This type of relationship commonly takes place when the pattern of nepotism is relatively strong. This is an important issue that will be examined in detail in Section 2.6.

Caves (1976) divides the political economy approach into the interest group model, the adding machine model and the national policy model. The interest group model perceives that trade protection is the result of interest group pressure and therefore will depend on the costs and benefits for industry groups of organising a lobby to secure protection. The adding machine model (vote buying model) assumes that government will maximise its probability of being re-elected in a democratic environment. This implies that economic policy, including trade protection, will be accepted or rejected on the basis of the number voters who can be expected to accept it. The national policy model assumes that governments have their own particular policy preference, which may transcend personal interest. In fact, the interest group model and the adding machine model can be classified as an economic self-interest approach, because both focus on the self-interest motive of government to maximise the probability of re-election, under democratic system.

Rodrik's map and Baldwin's classification, Anderson's supply and demand approach and Caves's classification all help systemise the political economy model into two categories. The first is the economic self-interest model (demand and supply approach), primarily focusing on self-interest motives arising from the interaction between interest groups and policy makers in determining the equilibrium level of protection. This implies that trade policy is shaped through bargaining between the self-interest motives of government officials and industry. The second is the national policy model, emphasising policy makers' motives for maximising the aggregate welfare of society. This model assumes that governments have a particular policy preference, often formed by some ideological or analytical framework, which may transcend personal interest. A further detailed

explanation, and the application for Indonesia of these two models, will be developed in Chapter 7.

2.3 Typology of the political economy models

The typology of political economy models usually utilises the HOS or Ricardo-Viner specific factors framework. It is subject to how political decisions are reached. Either governments are assumed to be mainly autonomous, or individuals and/or interest groups are able to influence policy makers' preferences. However, as noted, most political economy models hold an intermediate position between these two views.

This thesis highlights several leading political economy models emphasising these two dimensions. Excellent reviews on the political economy models are available in Rodrik (1995) and Helpman (1997).

2.3.1 The political support function

In this approach, government acts as an intermediary to balance various conflicting groups in society in order to maximise political support. The government's objective function takes into account the favoured treatment of organised industry as well as the welfare consequences for consumers. Pioneered by Hillman (1982), and borrowing from the theory of economics regulation in Stigler (1971) and Peltzman (1976), the political support function points out that the choice of tariff rate can be viewed as an optimising problem in which government will reach a trade-off between the political support of industry interests and the dissatisfaction of consumers. Industry interests provide more support the higher the industry's profit. On the other hand, the lower the consumer price, the more government gains more support from the consumer. If government raises prices by introducing a tariff, increased support from industry interests will be offset by a loss in support from consumers. As a result, a tariff rate is usually chosen at a level to maximise government aggregate support.

An important contribution was made to the political support function approach by Long and Vousden (1991), in providing a generalisation, where political support depends

explicitly on the income levels of various groups in a sector-specific factors economy.

Nevertheless, this approach still has limitations. Competition to gain special treatment often takes place in an active way, where lobbying for trade protection is common and many groups actively pursue their interests. The political support function approach does not explicitly capture this important feature in its analysis (Grossman and Helpman, 1994).

However, the political support function makes a major contribution in observing the internal processes in shaping trade protection. The level of protection is explained as a level which balances the conflict between these opposing groups within an economy.

2.3.2 The tariff-formation approach

One of the pioneering models in the political economy literature is the tariff formation function, was first introduced by Findlay and Welliz (1982). This model deals with active protection seeking behaviour not captured in the political support function.

Drawn from a specific factor model in its simplest version, this approach argues that trade policy can be endogenised to the amount of lobby resources available to the contending organised groups. According to this view, the level of protection reflects the outcome of a contest between opposing interest groups (Helpman, 1997). More specifically, the tariff levels for sector i will depend on the lobbying expenditure of the pro-protectionist group within sector i and the anti-protectionist group or consumers in the same sector. The larger the lobbying expenditure of the pro-protectionist group relative to the anti protectionist group, the higher the level of protection. The tariff increases on the import competing industry's lobbying and decreases on the export industry's lobbying. In other word, the larger the import competing industry's lobbying, the higher the tariff. On the other hand, the larger the lobbying of the export industry, the lower the level of tariff. Moreover, this model assumes a diminishing return for lobbying. The equilibrium level of protection is determined as the Nash Equilibrium in a non-

cooperative game, where each lobby group chooses a degree of lobbying expenditure in order to maximise net benefits.

However, this approach has been criticised for leaving the supply side untouched (Rodrik, 1995), as the preferences of politicians or government are not explicitly stated. Nevertheless, Findlay and Welliz's (1982) tariff formation approach is an important contribution to the political economy of trade protection.

2.3.3 Direct democracy or median voter

One of the prominent theoretical models under this typology is the median voter model developed by Mayer (1984). This model argues that trade policy is the outcome of majority voting among the population. Employing the HOS model, Mayer shows that each factor has an optimal tariff rate where the value is uniquely determined by individual factor ownership. If an imported good is produced in a labour-intensive way, labour will favour protection, while the capitalist will favour free trade. As a result, under majority voting, when the number of workers is larger than the number of capitalists, protection will be the outcome. But if income redistribution is costless, the capitalist can always compensate the worker's loss, and the outcome will be free trade. This approach differs from the political support function in the way in which political decisions are reached. In the median voter model, or direct democracy, the distribution of ownership of factors proportions has an important effect on trade policy. In contrast, in representative democracy, where the political support function operates, trade policy is determined by the marginal rates of substitution between the welfare of consumers and industry interests. The main criticism of the median voter model is that in reality income redistribution is not costless. Furthermore, in practice, trade policy is rarely determined by majority voting and the assumption of direct democracy greatly simplifies the institutional aspects of political process (Rodrik, 1995).

2.3.4 Electoral competition

This model was proposed by Magee, Brock and Young (1989) (hereafter MBY). The model argues that interest groups' contributions to political parties and candidates

increases the probability of a party being elected. This model has a major difference from the tariff formation approach. In the tariff formation approach, policy is influenced by the contributions of interest groups. In contrast, MBY construct a model for two political parties competing in an election. As each party commits its policies before the choice of contributions by the interest groups, policy choice is not influenced by industry interests. Instead, the role of interest groups is to increase the probability of one party being elected. Obviously, interest groups will choose the party whose policies will give them the maximum benefit.

Formally, MBY assumes four players, such as a protectionist lobby which gains from tariffs; a pro-export lobby, which prefers negative tariffs or a subsidy; a pro-export party (party 1) and a protectionist party (party 2). Moreover, each lobby makes a contribution to one of the two political parties. The strategy of the protectionist lobby is to maximise the expected incomes of the groups they represent, net of campaign contributions. The protectionist party 2 will choose its tariff t in order to maximise the probability of being elected. The pro-export party 1 will also choose its export subsidy to maximise the probability of being elected. Because the probabilities of election sum to 1, each party's maximising strategy is equal to minimising the probability of the other party's success. In addition, the various lobbies' decisions to contribute to the political process and the announcement of each party's policy stance are assumed to have taken place before the election. Therefore lobbies maximise their expected returns from contributing to a political party, while the political parties maximise their expected probabilities of being elected.

A strong criticism of this model, as raised by Austen-Smith (1991), is the artificial restriction on the parties' platform classification: pro-export and pro-protection. As Helpman (1997) argues, it is quite common in practice for a lobby to contribute to both political parties. Moreover, this framework is too complex to yield a reduced-form solution and does not provide specific parametric assumptions.

2.3.5 Influence-driven contribution

One of the prominent models in the recent literature of the political economy of trade protection is Grossman and Helpman's "protection for sale"(1994) (G-H). This model has turned out to be state of the art concerning recent political economy analyses of trade protection, because it provides an empirical parameter based upon a coherent theoretical foundation (Goldberg and Maggi, 1999; Mitra, 1999 and Gawande and Bandyopadhyay (2000). What is new in the G-H model, as argued by Gawande and Bandyopadhyay (2000: 139) is:

'What is new in the G-H model is that it makes explicit a mechanism through which lobbying contributions are converted into protection, and lobbies solve their optimal lobbying spending'

G-H argues that a political contribution is indeed important in influencing an election outcome. Nevertheless, this does not mean that individual contributors necessarily believe their contribution will improve a candidate's chances of election. It is possible that each individual contribution may be relatively small compared with total contributions. This is particularly true for a country which has a legal limit on contributions. As a result, the contribution from each individual contributor has a marginal effect on the election outcome. Under this condition, it is far more likely that the contribution given aimed at influencing future policy choice rather than election outcomes. Grossman and Helpman (1996) show that, when the number of organised interest groups is large, the electoral motive for campaign contributions is negligible. This is supported by the empirical study of Magelby and Nelson (1990) which shows that the influence motive is more prominent. Taking this into account, Grossman and Helpman (1994) develop a theoretical model that puts the influence motive at the core of campaign contributions. Helpman (1997:31) summarises this approach as follows:

'According to this approach, interest groups move first, offering politicians campaign contributions that depend on their policy stance. Special interests seek to maximize the well being of their members. Then politicians choose policy stances, knowing their contributions depend on the selected policies. Politicians seek to maximize a political objective function that depends on contributions and on the well being of the general public.'

One of the advantages of the G-H model is that it provides a micro foundation for the behaviour of organised lobbies and politicians (Mitra, 1999). Moreover, this model also provides a micro foundation for the empirical prediction of multisectoral analysis. There are a vast number of empirical studies in the literature that investigate the political-economy determination of trade policy. However, all these empirical models take the reduced-form approach, in the sense of not being guided by a consistent theoretical model (Goldberg and Maggi, 1999). In addition, the G-H model also has a strong implication for the cross-sectional structure of trade protection, since it specifically predicts that cross-sectional variations of protection can be explained by import elasticity, the import-penetration ratio and whether or not the industry is politically organised.

This model has been extensively used as a starting point in developing the recent political economy of trade policy models. Bransteter and Feenstra (1999) have used the G-H model in the case of China and Goldberg and Maggi (1997) and Gawande and Bandyopadhyay (2000) have used it in the case of the United States. All found a reasonable degree of support for the G-H model.

However, the main criticism of this model is that only a small part of lobbying activity in real politics takes the form of financial contributions (Rodrik, 1995). The formal presentation and findings for the case of Indonesia will be discussed in Chapter 7.

From this review, it can be seen that all approaches enrich the political economy theory of trade protection. It can also be seen that the political support approach, tariff formation, direct democracy and the influence-driven contribution model are more appropriate for evaluating inter-industry variations in protection, because these approaches focus on the question of how levels of protection are determined by pressures from various groups in the economy, and also on the welfare consequences for society. The stronger the pressure for protection, the higher the levels of protection. On the other hand, the electoral competition model (MBY) is more appropriate for deciphering whether trade policy will be liberal or interventionist, or will benefit capitalists or labour, since this approach emphasises the probability for the party which has a particular trade

policy platform (pro-export or protectionist) of being elected. The higher the probability of a protectionist party winning an election, the larger the likelihood of trade policy becoming protectionist. In contrast, the larger the probability of a pro-export party winning an election the higher the possibility of trade policy becoming pro-export.

2.4 Protection over time and trade liberalisation: an analytical framework

Discussion of the various theories of protection and some typology of the political economy models have to be supplemented with a framework of trade liberalisation. The reason should be obvious. The discussion on the political economy of trade protection, especially a change in protection over time, is closely related to trade liberalisation.

The analytical framework in this section focuses on the question of what factors determine trade liberalisation. There are several broad theories on trade liberalisation, such as the distributive consequences of reform (among others, Rodrik, 1998), the "crisis" hypothesis (pioneered by Bates and Krueger, 1983) and cyclical protection (among others Magee, Brock and Young, 1989, Frey, 1985). This section presents these three major analytical frameworks.

2.4.1 Distributive consequences among interest groups

This approach is concerned with the distributional impact due to economic reform, including trade reform. Support for, or objection to, trade reform is determined by the distributional impact among various interest groups. This approach argues that the politics of trade liberalisation usually focuses on the conflict among interest groups attempting to increase their share of national income. In other words, trade liberalisation is closely associated with income distribution (Rodrik, 1998). The standard framework for explaining the impact of trade liberalisation on income distribution is drawn from the Stolper-Samuleson theorem and the specific factor hypothesis.

The distributive consequences framework argues that some groups will be hurt by trade reform and so will oppose it, while other groups will benefit and so will support it. This

complicates the trade liberalisation process. Therefore, from the policy makers' viewpoint, the pure reallocating on income should be considered a political cost. While, on the other hand, the efficiency gain from reform should be considered a political gain. In this framework, Rodrik (1998) argues that political support for trade liberalisation will be proportional to the difference between redistributed income and the net efficiency gain due to the trade reform. Rodrik (1998) provides a formal index for what he calls the political-cost benefit ratio (PCBR), defined as follows:

$$PCBR = \frac{1}{2} \left[\frac{\sum_j |\Delta Income_j| - net\ gain}{net\ gain} \right]$$

Where: net gain stands for the efficiency gain of the reform,
 j indexes groups (or individuals) in society,
 Δ income is the change in the income of group j.

The numerator captures the political cost of trade reform, while the denominator captures its benefits. This index measures how many dollars of income are shuffled from one group to another for every dollar of efficiency gain.³ The index has a value ranging between zero and infinity. When a policy increases some groups' incomes without taking away from any other groups (i.e. Pareto efficiency), the index is equal to zero. On the other hand, if the policy does not produce any net gain, the value of the index goes to infinity. A PCBR equal to five, for example, means that for each dollar of net income generated, \$5 of income is being reshuffled amongst different groups in the economy.

Furthermore, in identifying these groups, Rodrik classifies them into: (1) import substituting industrialists, (2) holders of import licences and (3) users of imports, including producers that rely on imported inputs. Each group will serve their own interests in the reform process. Opposition to reform will usually come from the import competing industrialists and import licence holders. However, as Edwards and Lederman (1998) argue, some import competing sectors may support trade liberalisation if they can expect to benefit from labour market reforms, privatisation or financial liberalisation.

³ For detailed and technical explanations see Rodrik (1998).

In an extension of the original model, Edwards and Lederman (1998) classify users of imports into users for domestic purpose and users for export. Consumers of imported goods and exporters are usually amongst the early supporters of trade reform, since they directly benefit from it. Exporters also benefit from the exchange rate depreciation that usually takes place in the early stages of trade reform. Producers of import competing goods generally resist trade reform but are at least partially compensated by the exchange rate depreciation (Edwards and Lederman, 1998).

Moreover, since its role is very important, government should also be included in this model. Although government could be harmed by trade liberalisation, due to the loss of revenue from import tariffs, usually the trade reform takes place via shifting non-tariff barriers into tariffs in the early stages. This creates additional income for the government. The loss of revenue from import tariffs can also be compensated through value added tax (VAT) or tax reform. Therefore, this argument has to be enhanced with the possibility of a distributive effect within the government itself.

Although this framework can help to configure the winners and losers from trade reform, it has its own limitations. As Rodrik (1998) admits, by its very nature, trade liberalisation creates a lot of winners whose identity cannot be predicted prior to the reform. For example, after a medium or even a long term, some import competing industrialists could transform themselves into export-oriented industrialists, and eventually support the reform. Rodrik (1998) argues that the full configuration of winners and losers only becomes apparent after the reform takes place. Subject to its limitations, this analytical framework could help give a brief picture of winners and losers from trade reform but is silent about the trigger. So, in order to get a better perspective of the trigger factors, the distributive consequences of trade reform should be combined with the "crisis" hypothesis introduced by Bates and Krueger (1993).

2.4.2 "Crisis" hypothesis

This approach argues that economic reform, including trade reform, is initiated by an economic crisis. The leading proponent of this approach, Bates and Krueger (1993: 454)

state:

'There is no recorded instance of the beginning of a reform program at a time when economic growth was satisfactory and when the price level and balance of payments situation were stable. Conditions of economic stagnation... or continued deterioration are evidently prerequisites for reform efforts'.

Although this statement is quite strong, in the sense that an economic crisis is the main source for economic reform, their empirical findings show a reasonable degree of support, although the sample is limited to eight countries.

Krueger and Bates (1993) argue that a crisis is probably the most powerful stimulus for reform. However the degree of crisis sufficient to initiate reform can be unique for each country. When a crisis is the trigger, the policy change can be driven either because earlier policies are perceived as having failed or because exogenous events, such as a worldwide recession, are blamed for events which, in turn, demand policy change. Furthermore, the "crisis" hypothesis argues that, in the midst of an economic crisis, the role of social scientists becomes increasingly important and they are consulted by politicians to help forge a way out of the crisis (Edwards and Lederman, 1998).

In their studies, Bates and Krueger identify three different sources of a crisis: a balance of payments problem, accelerating inflation and loss of economic control. Drazen and Grilli (1983) support this "crisis" hypothesis. They argue that the heavy cost of extremely high inflation and the situation of emergency associated with it are necessary to force the adoption of a stabilizing program. Likewise Rodrik (1998: 210) shares this view arguing:

'The reasons for the free trade bandwagon are more or less unique and derive from the intense, prolonged macroeconomic crisis that surrounded developing countries during the 1980's. The crisis overshadowed the distributional considerations that had blocked trade reform until the 1980's.'

Although there is some truth in this hypothesis, Williamson and Haggard (1994) produce a more cautious conclusion that a crisis is neither a necessary nor sufficient condition to initiate reform. Nevertheless, it is true that a crisis has often played a critical role in stimulating reform. This argument has been concluded in some country cases, including

Australia and Colombia, where a crisis seemed to play no major role in motivating a reform effort. For the case of Australia, Garnaut (1994) points out that reform was initiated by a new government. While it is true the Australian government used a crisis atmosphere to advance reform, the shape of the reform was determined more by the initiative of the new government than the crisis itself (Garnaut, 1994). Similar to Australia, economic liberalisation in Colombia was not preceded by an economic crisis, but by government initiative. In this case, the outgoing government decided to commence reform, with the back up of an incoming administration of the same party (Williamson and Haggard, 1994). In addition, Rajapatirana et.al (1997) share a sceptical view of the "crisis hypothesis". They argue that a trade tightening has been the immediate response to some macroeconomic crises in Latin America. The reason being that the macroeconomic crises were associated with high inflation, which led to an appreciation of the real exchange rate. This in turn led some governments to tighten their trade regime.

This discussion shows that, although a crisis can be a powerful stimulus for reform, this argument has to be carefully examined in explaining the economic reform process in many countries.

2.4.3 The cycle of trade protection

In contrast to the "crisis" hypothesis, the cycle of trade protection argues that trade liberalisation has the best chance of occurring during good economic times. This approach focuses on the impact of some economic variables on trade protection. The cycle of trade protection over time is influenced by some macroeconomic variables, such as employment, real GDP, inflation and the exchange rate.

This approach argues that protectionism is strongest when a country's economic position is weak. Therefore any attempt at liberalising the trade sector has the best chance of succeeding in good economic conditions (Frey, 1985). Empirically, this approach finds a reasonable degree of support, as shown in Magee, Flock and Young (1989) and Bohara and Kaempfer (1991), both for the case of the U.S. Good economic conditions, for example rapid GDP growth, may signal the ascendancy of growth-leading export

industries, and an increased lobby for more trade liberalisation, in order to minimise the chance of retaliation from foreign countries. On the other hand, higher unemployment, which is often associated with economic recession, tends to lead industries to intensify the lobby for protection. In summary this approach argues that protectionism is strongest when a country's economy is weak. As a result, any attempt at liberalising the trade regime has the best chance during good economic conditions, thereby completely contradicting the previous argument.

2.5 Empirical survey

2.5.1 Cross-sectional analysis

Besides these theoretical models, there are quite a few empirical surveys of the political economy of trade protection which focus on inter-industry variations of protection (cross section analysis). However, most focus on developed countries and have used many different indicators such as ERP, NRP, and NTB.⁴ It is useful to selectively review some of the important references on this topic, and the results of these studies are presented in Table 2.1.

In general, most results provide a reasonable degree of support for the interest group model. Caves (1976) employed the adding machine model, the interest group model, and the national policy model, to elucidate the structure of tariffs in Canada. He identified the interest group model as being the most persuasive. However, Milner and Greenaway (1994) show that inter-industry differences in protection are significantly related to various factors of the industrial structure and adjustment factors rather than to political economy factors. They observed that political economy variables such as union density, lobbying power, total numbers employed in industry, and total employment relative to output, were not statistically significant.

Table 2.1 shows that levels of protection had a positive relationship with labour intensity (LI) (Anderson, 1980 (for Australia); Shouda, 1980 (for Japan); Lundberg, 1980 (for

⁴ Among others are Anderson (1980), Anderson and Baldwin (1987), Caves (1976), Trefler (1993), Greenaway and Milner (1994), Golberg and Maggi (1999), Gawande and Bandyopadhyay (2000).

Sweden); Ray, 1979 (for the U.S.)). In addition, the level of protection was negatively correlated with the average wage per employee (AWPE) (Anderson, 1980 (for Australia); Tharakan, 1980 (for Belgium); Caves, 1976 (for Canada); Ray, 1979 (for the U.S.) and Greenaway and Milner, 1994 (for the U.K.)). Moreover the level of protection was also negatively correlated with value added share of turnover (VASH) (Anderson, 1980 (for Australia); Shouda, 1980 (for Japan) and Ray, 1979 (for the U.S.)). All of these variables confirm that for the developed countries, labour intensive, low wage industries with low value-added shares to output were the most highly protected.

Table 2.1 also shows that industries with a low number of firms (NFIRM) tended to be more protected.⁵ Furthermore Anderson (1980) (for Australia); Glismann and Weis (1980) (for West Germany); Greenaway and Milner (1994) (for the U.K.) and Saunders (1980) (for Canada) found that industries with lesser share of production exported (EXP) were the most protected. The other variables such as import penetration ratio (IMP) had ambiguous results, meaning not only a negative relationship with level of protection (Anderson, 1980) (for Australia); Koekkoek, Koland and Mennes, 1980 (for Netherlands)) but also a positive relationship (Tharakan, 1980 (for Belgium); Glismann and Weis, 1980 (for West Germany); Trefler, 1993 (for the U.S.) and Greenaway and Milner, 1994 (for the U.K.)). Similarly the value added per worker (VAWORK) also had ambiguous results.⁶ The level of protection was also positively correlated with the concentration ratio (Lundberg, 1980 (for Sweden) and Trefler, 1993 (for the U.S.)).

⁵ See Anderson (1980), Trefler (1993), Ray (1979), Glismann and Weis (1980).

⁶ See Anderson (1980), Caves (1976), Koekkoek, Koland, Mennes (1980), Tharakan (1980) and Helleiner (1977).

Table 2.1: Determinants of levels of manufacturing industry protection in some industrial countries

EXOGENOUS Variables	Australia		Belgium		Canada		Japan		Netherlands		Sweden		U.K.		USA				W. Germany			
	ERP 1968-69	ERP 1977-78	ERTP 1970	ERTP 1963	ERTP 1967	ERTP 1970	ERP 1975	ERP 1970	ERP 1975	ERP 1970	ERP 1975	ERTP 1959	ERTP 1972	D	1978	NRP 1979	NRTTP 1976	NTB 1970	NTB 1976	ERP 1972	ERP 1974	
LI(+)	+	+			+		+	+	+	+	+	+					+	+	+			
VASH(+)	-**	-**			+			+										+	+			
NOE(+)	+	+																+	+			
AWPE(-)	-**	-**			-*													+	+			
NFIRM(-)	-	-																				
CR(+)	-	-																				
IMP(+)	-*	+			+																	
EXP(-)	-**	-*			+																	
VAWORK(-)	-*	-*			+																	
Adjusted R ²	0.36	0.26	0.23	0.4	0.22	0.36	0.2	0.2	0.19	0.51	0.33	0.28	0.46	0.42	0.38	0.15	0.8	0.41	0.27			
F-Statistic	8.7	5.4	3.2	3.5	3.7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6.3	12	16.2	5.8	3.5	3.3				
No. of observations	130	130	37	59	87	84	76	76	17	17	42	42	89	75	244	244	322	26				

Sources: Anderson and Baldwin (1987), Greenaway and Milner (1994), Treffler (1993).

Notes: The +, . and - signs indicate the sign of estimated regression coefficients; t-values are shown as * if significant at 5% level and ** if significant at the 1%. The sign in parentheses indicates the hypothesised sign for the exogenous variable's regression coefficient.
n.a. : not available.

NRP or NRTTP : Nominal rate of protection or nominal tariff rate of protection.

ERP or ERTP : Effective rate of protection of effective rate of tariff protection.

NTB : Non tariff barriers.

D : Dummy, 0-1-2-3 indicating levels of protection.

LI : Labour intensity.

VASH : Value added share of turnover.

NOE : Number of employees.

AWPE : Average wage per employee.

NFIRM : Number of firms.

CR : Concentration ratio.

IMP : Import penetration ratio.

EXP : Production exported.

VAWORK : Value added per worker.

Recent empirical studies on the political economy of trade policy attempt to investigate the seminal G-H model. Both Goldberg and Maggi (1999) and Gawande and Bandyopadhyay (2000) find the G-H model consistent for the case of the U.S. For example Goldberg and Maggi (1999) show that the inter-industry variation of protection in the U.S. can be explained by import demand elasticity, import penetration ratio and whether or not the industry is politically organised. For Australia, MacCalman (2000) finds that the predictions of the G-H model are consistent with the data in 1968/69 and 1991/92.

These cases for developed countries show that there is still no consensus as to which economic and political economy variables best explain the pattern of protection.

While there are some studies, the literature on developing countries is not extensive. The following discussion is focused primarily on Southeast Asian countries (Table 2.2).

For Indonesia, Pangestu and Boediono (1986) identified that the level of the effective rate of protection (ERP) was influenced by the share of value added per output (VAO) and trade classification. The overall regression result was rather poor, a fact attributed by the authors to data limitations and the absence of variables which accurately capture lobbying power.

Pack (1994) shows that, for Indonesia, ERP in 1984 had a positive relationship with the ratio of total factor productivity relative to competitor countries, average wage per employee, price cost margins and capital intensive industries. With reference to this result, Pack (1994) argues that tariff levels were set to offset low productivity in individual sectors and political influence did not appear to have a significant impact on trade protection. In contrast to Pack (1994), Basri and Hill (1996) show that, although interest group dynamics have not been the sole element in the policy making process, the interest group model continues to have much appeal in the case of Indonesia. Their empirical analysis provides a considerable degree of support for the interest group model. Some variables, such as value added, foreign ownership and a dummy variable for

Table 2.2: Determinants of levels of protection in some Asian countries

Exogenous Variables	Indonesia				Philippines	Malaysia				Taiwan	
	NRP 1975	ERP 1975	ERP 1984	ERP 1995	ERP 1974	NRP 1973	ERP 1973	NRP 1978	ERP 1978	NRP 1981	ERP 1981
LI(+/-)	-				-*						+*
VAO(-)	+*	-*									+*
NOE(+)			+*			+*	+*	+*	+*		
AWPE(-/+)	+*	+*	+*			-					-*
NFIRM(-)						+					
CR4(+)			+	+		+*	+*	+*	+		
IMP(+)	-*	-*			+**	-	-*			-*	
EXP(-)					-*		-				-*
VAWORK(+)				-*							
DC				+*							
PCM			+*								
Adjusted R ²	0.67*)	0.43*)	0.64*)	0.28	0.17*)	0.31	0.26	0.12	0.07	0.38	0.37
F-Statistic	n.a.	n.a.	n.a.	5.7	4.5	3.9	3.3	3.8	2.1	12.9	7.77
No of observations.	n.a.	n.a.	n.a.	n.a.	119	40	40	79	79	60	60

Source: Pangestu and Boediono (1986), Pack (1994), Basri and Hill (1996), Tan (1986), Lee (1986), Smith (1998).

*) Using R² instead of Adjusted R²

Notes: The + and - signs indicate the sign of estimated regression coefficients; t values are shown as * if significant at 10% or better.

The sign in parentheses indicates the hypothesized sign for the exogenous variable's regression coefficient.

n.a: not available

- NRP : Nominal rate of protection or nominal rate of tariff protection
- ERP : Effective rate of protection or effective rate of tariff protection
- LI : Labour Intensity
- VAO : Value added per unit of output
- NOE : Number of employee
- AWPE : Average wage per employee
- NFIRM : Number of firms
- CR : Concentration ratio
- IMP : Import penetration ratio
- EXP : Production exported
- VAWORK : Value added per worker
- DC : Dummy for crony industry
- PCM : Price cost margins

crony industries were found to be significant, suggesting the power of vested interests in lobbying for protection (Basri and Hill, 1996).

In the case of Malaysia, Lee (1986) concluded that none of the usual explanatory variables were significant. By developing countries standards, Malaysia has always had low levels of protection, so it is possible the models do not perform well since there is little to explain.

Similarly, for the case of Thailand, Terdudomtham (1994), employing the interest group and national policy models, shows that neither satisfactorily explains the determinant of ERP. However, for the case of tariffs, the national policy model appears to have greater explanatory power, where industries that are utilising raw materials and are labour intensive, tended to be more protected. In the case of non-tariff barriers, Terdudomtham (1994) points out that the interest group model has greater explanatory power, meaning that government tended to protect industries with high concentration ratios and a large number of workers.

Tan (1986) shows that protection tended to be higher for low wage industries in The Philippines as well as for those where the wage share in the value of output ratio was low. In addition, similar to the case for developed countries, industries with a small proportion of their output being exported tended to be more protected. Tan (1986) also shows that ERP had a positive relationship with import penetration (IMP). This suggests that industries with a lower import penetration ratio were associated with high protection.

The recent study for Taiwan, by Smith (1998), shows some support for the interest group model. In particular, Smith (1998) argues that during the 1980s the incentive structure discriminated in favour of high labour intensive industries with low average wage per employee, low skill and low rates of growth. In addition, Smith (1998) points out that protection tended to be high in industries where a small proportion of their production was being exported.

Overall, although the results are not convincing the interest group model seems to be more persuasive than the national policy model. Most of the studies show the results to be statistically weak with many qualifications. Anderson (1980) states that, for numerous reasons, strongly significant regression results cannot be expected because the effective rate of assistance does not include all forms of assistance and not all factors are included in the analysis. In addition, the ability of econometric analysis to explain political influences is also limited and difficult to quantify accurately. The rather poor econometric results could also be attributed to other factors such as data limitations, in the sense that the variables used do not accurately reflect the characteristic to be included. Krueger (1996) argues that there was no strong systematic pattern that emerged from the econometric results. Rodrik (1995) points out that regression analysis frequently takes the "kitchen-sink" approach, in the sense that it is not guided by a consistent theoretical model. In many cases, the R^2 of the regressions were relatively low and not many variables were significant, implying that testing the theory has not yet become well established. These results underline the importance of undertaking detailed industry case studies in addition to the econometric approach. As noted, this is undertaken in Chapters 8 and 9.

As for the Grossman and Helpman model, unfortunately there is as yet no study for Indonesia or other Southeast Asian Countries available. It is therefore important to fill this gap by employing the G-H model, with some modifications, for the case of Indonesia.

2.5.2 Time series analysis

Differing from cross section analysis, the time series analysis of protection focuses on the change in protection over time. There are wide studies available for the case of developed countries.⁷ Nevertheless, as with cross-section analysis, only a few studies are available for the developing countries, including Terdudomtham (1994) for Thailand, and no study is available for Indonesia.

⁷ Examples include Cheh (1974), Lavergne (1983), Magee, Brock and Young (1989), Gardner and Kimbrough (1989) and Bohara and Kaempfer (1991) for the U.S.; and Krol (1996) for Japan.

Most of these studies examine the relationship between some macroeconomic variables, such as Gross National Product (GNP), inflation, terms of trade and balance of payments with average tariff. The empirical studies for the case of developed countries support the view that tariffs tend to increase during a recession. Cheh (1974), for example, shows that tariff rates in the U.S. negatively correlated to growth rates. Lavergne (1983) found that growth rates (in U.S. employment) had a negative relationship to protection. This implies that the level of protection tends to increase during a recession (often indicated by higher unemployment).

Table 2.3 shows the case studies for the United States, Japan and Thailand. By using the Granger causality test, Bohara and Kaempfer (1991) observe that unemployment, real GNP and price levels influenced the change in tariffs over time in the U.S. In addition, they show that tariffs did influence the price level and trade balance. The relationship was negative, meaning that an increase in tariffs resulted in lower price levels. Moreover, Bohara and Kaempfer (1991) show that real GNP did influence tariffs. The relationship between real GNP was negative and after 4 years became positive. This suggests that slower real GNP resulted in higher average tariffs in the first 3 years before turning positive in the fourth year. Bohara and Kaempfer (1991) argue that there existed a compensation effect in the short run in which tariffs could be justified to help import competing sectors. However, in the long run, the type of redistribution generated by trade protection was less affordable after recessionary shocks. The reason tariffs tended to increase in recessions was quite straightforward. During a recession protectionist interest groups gained political power by using the image of "unfair foreign competition" creating unemployment. (Bohara and Kaempfer, 1991). Rodrik (1995) argues that the other possible reason was the Keynesian motive of switching demand to home products.

For Thailand, Terdudomtham (1994) found that inflation and the balance of payments influenced tariff rates, while tariff rates did not influence the balance of payments or inflation (Table 2.3). Specifically he points out that increased inflation resulted in a

decrease in average tariffs after four months. From this result Terdudomtham (1994) argues that the 1974 tariff reduction in Thailand was related to the Thai's government's

Table 2.3: Relationship between protection and macroeconomic variables, some comparative studies

Country	Causality directions	Sign ^{a)}
U.S.A.	Tariffs influenced price level	-
	Tariffs influenced trade balance	-
	Unemployment influenced tariffs	+,-
	Real GNP influenced tariffs	-,+
Japan	Terms of trade influenced tariffs	+
	Trade balance influenced tariffs	-
	Δ GNP influenced tariffs ^{b)}	-
	Δ GNP influenced tariffs ^{c)}	+
Thailand	Inflation influenced tariffs	-
	Trade balance influenced tariffs	-

Source: Bohara and Kampfer (1991) for U.S.A; Krol (1996) for Japan. Terdudomtham, (1994) for Thailand.

Notes: GNP : Gross National Product,

Δ GNP: GNP growth

^{a)} Sign shows the relationship between variables based the on impulse response function results.

^{b)} During pre-war

^{c)} After war

effort to contain inflation in order to stabilise the economy and domestic politics, and to maintain minimum political support. Terdudomtham (1994) also points out that an improvement in the balance of payments resulted in a decrease in average tariffs after two quarters. A balance of payments deficit has potential to destabilise the economy, and with it the domestic politic situation. Thus, to stabilise both the economy and politics in Thailand, and in order to maintain the minimum political support, the government increased tariffs when the deficit in the balance of payments increased.

Krol (1996) shows that tariff changes did influence GNP growth and inflation in pre-war Japan (Table 2.3). However, the reverse was true during the post-war, when GNP growth and terms of trade influenced tariff changes. Parallel to Bohara and Kaempfer (1991),

Krol (1996) points out that in pre-war in Japan slower GNP growth resulted in high tariffs. However, the reverse was true after the war, where increased GNP resulted in an increase in average tariffs. In fact this result contradicts the tariff cycle hypothesis (discussed in Section 2.4.3) or the argument that protection tends to increase during a recession.

To sum up, these studies show the relationship between some macroeconomic variables and tariffs. In general, the empirical studies for developed countries support the view that tariffs tend to increase during a recession.

2.6 A theoretical framework for Indonesia's political economy

As noted, most of these studies on the political economy of trade protection focus on developed countries, which have different political features, such as democratic political systems and an important role for interest groups in influencing trade protection. Under these political features, the role of nepotism patronage in shaping trade protection is limited. However, the reverse is true for the case of non-democratic political system, such as Indonesia during the Soeharto era. As a result, when applying the political economy of protection theory for Indonesia, the study has to take into account Indonesia's unique political features. These features are very important, particularly with respect to the manner in which political decisions are made. As discussed earlier, there are two extreme views on how political decisions are reached, including those on economic policy. One view argues that political decisions depend on social pressures, including various interest groups, with the State having little influence. The other view argues that the State is largely independent in the decision making process. This view suggests the State has its own views on creating a better society, which can be different from what society believes. As Stepan (1978) states:

' The concept of the common good, with the moral obligation it imposes on the state to achieve the general welfare, leaves open the possibility that the state can formulate and impose on its own initiative major changes in the established order so as to create a more just society'

While this very large topic is beyond the discussion of this thesis, it is useful to note that trade policies not only respond to the society or to extra-State interests, but can also serve

State interests. However, most authors take an intermediate position between those two extremes.

This section attempts to outline a political approach to Indonesia's political economy, and focuses particularly on how political decisions are reached. While there are a vast number of studies available on this particular topic this section focuses on the seven leading approaches.⁸

2.6.1 State qua state

This approach was introduced by Ben Anderson (1983). He argues that, the New Order's government policies are best understood as the maximum expression of State interests. In other words, he depicts Indonesia's New Order state as being entirely detached and unresponsive to society interests, with the partial exception of foreign capital. As a result, government policy largely reflects the State's interests, rather than extra-State interests. The role of interest groups is almost negligible in influencing government policy.

This argument is parallel with the view that the State is largely autonomous in the decision making process (Baldwin, 1984). The 'State qua state' view, implicitly suggests that trade protection in Indonesia's New Order government was largely determined by the government interests. As a result, the role of interest groups was limited.

Nevertheless, the 'State qua state' concept was conceived in 1983, and was dealing more with development in the 1960s and 1970s. It does not capture recent developments regarding the increasing role of interest groups in influencing policy, particularly since the mid 1980's.

6.2 The Patrimonial approach

The basic argument for the patrimonial approach is that the head of the State runs the

⁸ An excellent review on this topic is available on MacIntyre (1991, Mackie and MacIntyre (1994) and Robison (1986).

country in a mode similar to traditional rulers of the past. This approach is derived originally from Max Weber. The patrimonial approach argues that heads of State secure their position by providing material rewards and opportunities to leading members of the elite. In other words, the patrimonial model emphasises on the patron-client relationship network, characterised by personal links between individuals of different status, with the client dependent on the support of an influential patron (MacIntyre, 1991). The other important characteristic of the patrimonial approach is that the patron-client relationships are by nature non-ideological and non-class-based. The objective for the client is to get economic resources, including money or trade protection. The patron's objective is to gain client loyalty (Haynes, 1996). In this approach, elite groups who are close to the top enjoy the benefits, while the interests of the rest of society are simply repressed.

Many writers have employed the patrimonial approach for Indonesia's politics. Crouch (1979) argues that, although Indonesia had undergone significant economic, social and political change, the development revealed important traditional features in the Indonesian political system. He points out that intra-elite politics was not primarily concerned with the division of rivalry over important policy matters but with the distribution of material rewards and appointments to particular positions which offered the prospect of material rewards. Crouch (1979) also argues that, as the economy developed, and rationalisation of the political system gradually took place, major policy issues became increasingly important. In addition, Crouch (1979) addresses the question of the significance of business as a political force in Indonesia, pointing out that the State was responsive to business interests on a patrimonial basis, with individual senior officials providing particular concessions or protection to business clients.

Although the patrimonial approach usually focuses on Indonesia's politics in the 1970s, it is also useful in explaining how the relationship worked in Indonesia, for crony capitalists in enjoying the benefits of a personal relationship with their influential patron. It also demonstrates that the decision making process was relatively centralised and personalised around Soeharto, and was not very transparent. Crouch (1979:581) points out that a circle of 'palace millionaires' emerged whose business success was heavily dependent on the

patronage of the former President Soeharto and/or Ministers with responsibility for economic and industry affairs. In addition, high level government officers, using their influence in government administration, secured licences, trade protection and other amenities for the enterprises with which they were privately associated. Therefore, from a patrimonialism viewpoint, trade protection can be explained as a result of "trade" between crony capitalists and decision makers. This issue will be discussed in greater detail in Chapter 4.

2.6.3 Bureaucratic pluralism

Another interpretation of Indonesian politics is bureaucratic pluralism, commonly associated with Donald Emmerson (1983). Bureaucratic pluralism argues that Indonesian politics at the national level is relatively regularised and pluralistic. To support his proposition, Emmerson (1983) employs some case studies involving major policy choices over a major industrial development project in Sumatra, and concludes that debate over policy did take place among various agencies. He also points out that the cohesiveness of the government officials was not clear. Emmerson (1983) demonstrates that the State was more pluralistic than in the "State qua state" concept introduced by Anderson (1983). In addition, Emmerson (1983) suggests that political competition was not only a rivalry over material rewards among clients, as argued by the patrimonialism approach, but there was evidence of substantive policy debate. Although Emmerson (1983) provides an alternative view to both the 'State qua state' approach and patrimonialism, he does not see the State as responsive to societal pressure or demand. The State, or some sections of it, may be sympathetic to extra State interests, but, in general, policy formation is not subject to the interests of society.⁹

This approach could give a partial explanation for the substantive debate over economic and trade policy between pro-market and pro-intervention groups within the Indonesian government in the 1970s and mid 1980s. This issue will be discussed in greater detail in Chapter 4.

⁹ This paragraph heavily draws on MacIntyre (1991:10-11).

2.6.4 Bureaucratic authoritarianism

This approach is largely derived from Guillermo O'Donnell (1977) on Latin America and Juan Linz (1970) on Spain. O'Donnell (1977) attempts to observe the relationship between political transformation and the economic shift from import substitution to industrial deepening. The proponent of this approach for Indonesia is Dwight King (1982). King argues that political repression under Soeharto's New Order can be best understood in terms of corporatist strategy for structuring interest representations. In general terms, corporatism is described as the State playing the far superior role in political life. Schmitter (1974:96), states:

'Corporatism can be defined as a system of interest representation in which the constituent units are organised into a limited number of singular, compulsory, non competitive hierarchically ordered and functionally differentiated categories recognised or licensed (if not created) by the state and granted a deliberate representational monopoly within their respective categories in exchange for observing certain controls on their selection of leaders and articulation of demands and supports'.

It is particularly true that in the early years of the New Order, Soeharto's government restructured the large society organisations into various State-designated representative institutions, such as compulsory or semi-compulsory representative organisations, including business representation (MacIntyre, 1991; Mackie and MacIntyre, 1994).

Employing this approach, it would be expected that the role of interest groups in Indonesia in influencing economic policy, including trade protection, would be rather limited. However, this argument has to be seen in the light of the stage of economic development. As Mackie and MacIntyre (1994) argue, economic deregulation policies which marked economic policy since the mid 1980s, were accompanied by the emergence of many large private sector conglomerates, and a transformation into a more private sector oriented economy. This resulted in emerging private business firms and interest groups to influence government policies.

2.6.5 The Structuralist approach

One of the distinctive approaches in interpreting the Indonesian political economy is that

of Richard Robison (1986 and 1988). He argues that State leaders were dominant in influencing various public policies. This implies that decisions on trade protection were largely in the hands of State leaders. Robison (1986) admits to important indications that the capitalist class expanded, and that the Chamber of Commerce (KADIN), as the most significant domestic extra-State interest, became more vocal and influential, and the possibility of increased links between domestic capitalists and GOLKAR (the State political party). Nevertheless, Robison (1986) maintains that neither had any significant direct influence on government policy.

Rather than following the Instrumentalist Marxist argument, in which capital begets power, Robison (1986) adopts the structuralist framework, where the constraints, obligations and imperatives imposed upon the State by various configurations of class power and conflict are inherent in the structure of the domestic and global economy. He argues the New Order State provided conditions necessary for the process of economic growth and capital accumulation such as legal, political and fiscal conditions. These necessary conditions had to be taken into account by the Indonesian government in order to achieve long-term economic growth and development aims.

This implies that trade liberalisation in the mid 1980s should be best understood in the context of structural constraint, in which the State was being forced to rely more heavily on the private sector due to the declining capacity of the State to provide protection and subsidy.

2.6.6 Restricted pluralism¹⁰

This approach argues that politics in general, and influence over policy in particular, is more pluralistic than generally recognised (MacIntyre, 1991). Differing from other writers, Liddle (1987) argues that State officials in Indonesia did not monopolise the policy process, and there was evidence of interaction between State and extra-State interests. He points out those extra-State actors, such as the media, intellectuals, organised producers, consumers and local officials also helped in influencing policies.

¹⁰ The term of restricted pluralism is taken from MacIntyre (1991).

Nevertheless, this influence took place in an indirect rather than a direct form.

Similarly to Emmerson (1983), Liddle (1987) argues that bureaucratic conflicts influenced the policy making process. However, where Liddle differs from Emmerson (1983), in pointing to a wide variety of extra-State actors with the potential to influence policy outcomes (MacIntyre, 1991). Liddle's arguments in pointing to the potential importance of extra-State groups are supported by two excellent case studies from Wibisono (1987) on the Indonesian textiles industry and Mallarangeng (2000) on economic liberalisation in Indonesia.

2.6.7 Business and political relationships

Most of the above political economy analyses, except for Liddle (1987), focus on a State-centred approach. Robison (1986), although recognising the growing link between business and the ruling Party (GOLKAR), argues that the New Order State was relatively immune to pressure from business groups.

However, MacIntyre (1991) provides excellent case studies on the relationship between business and politics in Indonesia. Using three case studies, MacIntyre (1991) shows that sections of business in Indonesia did organise themselves collectively and pursue group interests relatively independently. The period since the mid 1980s witnessed changes associated with the sharp economic down turn due to the collapse of the oil price, and contributed to business developing new and independent political capabilities.

MacIntyre (1991) does not deny that influence over policy was largely limited to the State, with societal groups being almost wholly excluded. Within the authoritarian environment of the New Order, he admits to only three types of political linkage between the State and society: corporatist institution, political 'osmosis' or absorption, and patron client links. However, MacIntyre (1991) demonstrates organised groups, such as SEKBERTAL (The Joint Secretary of Spinning Industry), GPF (The Pharmaceutical Association) and DAI (The Insurance Council of Indonesia), were phenomena which qualitatively different from the previous explanation regarding the link between the State

and society. These three organised groups were neither clientelistic in nature nor associated with a State or restrictive authoritarian style of corporatism. These three groups operated quite independently of State control, and, in the case of SEKBERTAL, arose spontaneously. In addition, he argues that business groups could manipulate a restrictive corporatist institution for their own purpose.

The foregoing review on Indonesia's political economy framework shows that, in general, the decision making process was very much State-centred, particularly from the 1970s until the mid 1980s. The link between the State and society took place via patron-client links and corporatist strategy. This suggests that trade protection was mainly determined by the government and crony capitalists. The role of interest groups was rather limited, because, as pointed out in the bureaucratic authoritarianism approach, government restructured the interest groups into State-sponsored institutions, making it difficult for them to represent industry interests.

As argued by McIntyre (1990), this was not the whole story, because there was evidence that the role of interest groups began to increase after the mid 1980s.

These various perspectives are not mutually exclusive when viewed from historical perspective. The power of the State was greatest during the oil boom but other actors played an important role later on (see Chapter 4)

This summary shows that there is no single theory to explain how political economy decisions, including trade protection, are reached in Indonesia. Each approach has its advantages and limitations and can also complement each other. However, the major players in the decision making process can be classified into three parties of government, crony capitalists and interest groups. Within the government itself, there is a substantive policy debate.

Taking this summary into account, this thesis emphasises the patrimonialism, business and political relationship approach, in order to study the political economy of trade protection in Indonesia. The discussion on the decision making process will focus on the

interaction between government, crony capitalists and interest groups. Nevertheless, this thesis also employs bureaucratic pluralism and restricted pluralism in explaining the tug of war between pro-market and pro-intervention groups within the Indonesian government, and to capture the possibility of the role of extra State interests, such as the dynamic role idea and the media in supporting trade liberalisation. The decision making process will be discussed in greater detail in Chapter 4.

2.7 Summary

The literature provides a broad account of the political economy theory of trade policy. There are several theories available on the inter-industry variation of protection (i.e. cross section analysis) which can be categorised into two broad branches. First is "the self-interest motive" where policy is shaped through bargaining between the self-interests of governments and industry. Second is the "social concerns approach" which assumes governments have particular policy preferences, that are often formed by some ideological or analytical framework, which may transcend personal interest. Moreover, government may take the view that there are particular market failures which need to be resolved, or there may be other goals which deserve a higher priority than the short run maximisation of economic efficiency.

On the change in protection over time, the discussion points to a close relationship between changes in protection and economic reform, particularly trade liberalisation. The literature also provides several broad theories on trade liberalisation, such as the distributive consequences of reform, "crisis" hypothesis and the cycle of trade protection. The distributive approach argues that the politics of trade liberalisation usually focuses on the conflict among interest groups wishing to increase their share of national income. The "crisis" hypothesis argues that economic reform, including trade reform, is initiated by an economic crisis. In other words, economic reform is viewed as the result of an economic crisis, while the cycle of trade protection approach focuses on the impact of some economic variables on trade protection. The cycle of trade protection over time is influenced by some macroeconomic variables, such as employment, real GDP, inflation and the exchange rate. This approach argues that protectionism is strongest when a

country's economic position is weak.

On the empirical front there are several surveys available. However, only a few are available for developing countries. The empirical results show that the interest group model seems more persuasive than national policy; however it is necessary to bear in mind that the results are not very strong. Most of the empirical studies show results that are statistically weak, and have many qualifications. This implies these theories have not yet become firmly established.

The literature also shows that the political economy of trade protection is heavily determined by the political features of specific countries. This is obviously important, particularly with respect to the manner in which political decisions are made. As Baldwin suggests, there are two extreme views on how political decisions are reached, including on economic policy. One treats the State as having little influence, while the other argues that the State is largely autonomous in the decision making process. A study of the Indonesian political economy suggests that government policies, including economic policy, were more State-centred, mainly in the 1970s and 1980s. The significance of business as a political force was limited. Any linkages between business and the State took place via the patron-client relationship. Although most approaches agree upon the major role of the State in policy, there was evidence that organised business groups could and did organise themselves and pursue their own purpose. This was particularly true after the oil crisis in the mid 1980's. Furthermore, policy formation in Indonesia was much more multifaceted than has generally been identified, involving bargaining and coalition building between State and society.

Chapter 3

Trade policy and the structural change in the Indonesian manufacturing sector

3.1 Introduction

During 1969-1996, Indonesia's economic performance was impressive. By 1996, per capita income had risen fifteen fold to \$1080, from a base of \$70 in 1969 (World Bank World Tables). Far-reaching structural change accompanied this rapid economic growth. From the mid 1960's to the early 1980's, the average annual rate of growth GDP was more than 7% p.a. This period also coincided with a significant improvement in the terms of trade.

Nevertheless, Indonesia was confronted with a series of problems in the 1980s. The decline in oil prices after 1982 sharply reduced export earnings and budget revenues. At the peak of the oil boom years, 80% of export earnings and 70% of budget revenue came from oil and gas. As a result, the large decline in oil prices severely affected Indonesia's balance of payments. The government undertook some adjustment programs to increase economic efficiency, altering its trade regime to become more outward looking, and according a high priority to non-oil and gas exports. During 1983 to 1995, the government introduced no less than 24 packages of economic reforms aimed at increasing economic efficiency and encouraging investment as well as non-oil exports. Along with this change of orientation, the government changed its investment policy from one of control to one of promotion.

This adjustment program commenced in 1983 and intensified following the dramatic drop of oil prices in 1986. In 1983, the government cut public investment, initiated a

major re-phasing of large capital-intensive projects, devalued the Rupiah, and undertook financial reforms to remove interest rate controls and credit ceilings. In 1984-86, tax reforms were introduced to mobilise domestic resources. Finally, various trade reforms were launched to improve the trade and industrial policy regime. These highlights emphasise the historical shift from import substitution to export orientation, particularly in the manufacturing sector.

This chapter develops these themes, with special reference to trade policy, and demonstrates how trade reform influenced the process of structural change in the manufacturing sector. This chapter is organised as follows: Section 3.2 discusses the structural transformation in the Indonesian economy during 1970-1995; Section 3.3 highlights the structural change in manufacturing and the international dimension; Section 3.4 provides a summary of trade policy instruments and the final section highlights trade policies during 1966-1995.

3.2 Structural transformation of the Indonesian economy

Chenery and Syrquin (1975) argue that transformation of the economic structure is determined by the interaction of three factors. The first is universal factors, such as Engels law, which predicts that the pattern of consumption will evolve following a specific pattern in which the share of food in total consumption will decline as the level of per capita income rises. This hypothesis is deduced from the fact that the elasticity of demand for food products is less than one while that for non-food is generally greater than one. The Engels law helps explain why, as per capita income rises, agriculture's share of total GDP declines. Second, significant factors specific to individual countries also contribute to structural change, including natural endowments, and market size. Third, economic transformation depends on a country's individual history, including social and political objectives and government economic policies. Hence, governments can influence and shape the economic structure by influencing the structure of incentives in the economy.

Table 3.1: Structural change and rate of growth in the Indonesian economy (%)

Structural change (% of GDP)						
Sectors	1970	1975	1980	1985	1990	1995
Agriculture	44.8	28.8	22.6	23.2	21.5	17.1
Mining and Quarrying	5.4	19.9	25.0	14.0	13.4	8.8
Manufacturing Industries	12.2	11.9	14.8	16.0	19.9	24.1
Electricity, Gas and Water Supply	0.2	0.3	0.3	0.4	0.6	1.2
Construction	3.1	4.6	5.0	5.5	5.5	7.6
Trade, Hotel and Restaurant	13.7	13.8	13.4	15.9	16.9	16.6
Transport and Communication	3.3	4.5	4.4	6.3	5.6	6.8
Services	17.3	16.2	14.5	18.7	16.6	17.8
Gross Domestic Product (GDP)	100	100	100	100	100	100
Real output growth (%)						
Sectors	1970-75	1975-80	1980-85	1985-90	1990-95	
Agriculture	3.7	4.7	3.2	3.0	2.9	
Mining and Quarrying	9.7	4.5	-3.4	2.5	4.5	
Manufacturing Industries	14.2	15.3	8.5	10.7	10.4	
Electricity, Gas and Water Supply	12.8	12.1	14.1	15.0	12.9	
Construction	20.6	13.9	3.2	8.2	12.4	
Trade, Hotel and Restaurant	8.8	7.7	5.2	8.4	7.4	
Transport and Communication	12.8	14.6	8.5	7.3	9.1	
Services	9.5	8.8	6.9	6.4	6.2	
Gross Domestic Product (GDP)	8.5	7.5	3.7	6.3	7.1	

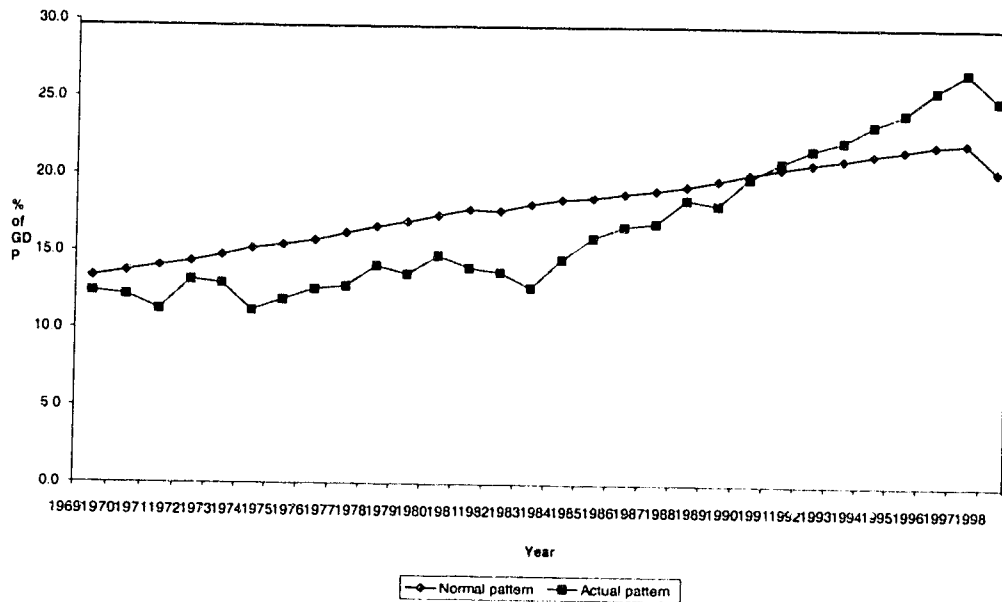
Source: calculated from national income data, BPS, various years.

Notes: output/GDP is measured at current prices.

Real output growth is based on constant price for 1983, except for 1990-95, which is based on constant price for 1993.

Table 3.1 shows the structural transformation of the Indonesian economy from 1970 to 1995. In 1970, the share of the agriculture sector to GDP accounted for 45%, while the manufacturing sector was 12%. By 1995, the share of agriculture to total GDP had declined to 17%, whilst the manufacturing share had risen to 24%. The pattern was consistent with the Chenery and Syrquin stylised facts during this particular period. It is worth noting that during the structural transformation, growth in the agriculture sector remained positive. The shrinking share of the agriculture sector share took place due to the sectors relatively low growth compared to GDP. It reflects that the source of growth in the Indonesian economy had shifted from agriculture to the manufacturing and services sector. During 1985 - 1995 the manufacturing sector grew by 10% p.a.

Figure 3.1
Structural change in the manufacturing sector



Source: calculated from national income data, BPS, various years

Figure 3.1 presents a comparison between a normal pattern and the actual pattern in the manufacturing sector. The normal pattern is estimated based on the Chenery and Syrquin coefficient of structural change for various countries.¹

In general there is a consistency between Chenery and Syrquin's (1975) normal pattern and the structural change in the Indonesian economy. Nonetheless, there are some

¹ The normal pattern is obtained from Chenery-Syrquin's estimation for countries with a large primary orientation (1989). For the complete coefficient see Chenery and Syrquin (1989).

The equation is: $X = \alpha_1 + \alpha_2 \ln Y + \alpha_3 (\ln Y)^2 + \alpha_4 \ln N + \alpha_5 (\ln N)^2 + \epsilon$
Where: X= share of sector or aggregate macroeconomic components/GDP

Y= GNP/Capita (US \$ 1987)

N= number of population

It is realised that Chenery and Syrquin's estimate may be misleading because the structural change process may be unique for specific countries. So, for robustness, this study also compares the share of manufacturing/GDP for various countries which supports these findings.

notably significant differences in the level of share between the normal pattern and the actual share of economic transformation in Indonesia.

The actual trend tended to converge to the normal pattern, particularly after 1983, and surpassed the normal pattern, particularly after 1992. This suggests that, prior to 1992, structural change in the manufacturing sector was lower than the "normal" pattern. The rapid expansion of the Indonesian manufacturing sector could be credited to factors such as the devaluations in 1983 and 1986, high savings and investment rates and the economic liberalisation following 1984 (Hill, 1996). In addition, Hill (1996) points out that credible macroeconomic management and a predisposition towards moderate inflation also contributed to this remarkable performance. One of the important factors perceived as a source of the notable performance of the manufacturing sector after the mid 1980's is trade liberalisation.²

3.3 Structural change in the manufacturing sector and the international dimension

3.3.1 The manufacturing sector

Subsequent to the broad picture of structural change in the Indonesian economy, this section focuses on the non-oil manufacturing and trade sector.

Table 3.1 shows that the manufacturing sector was rebounding during the period 1985-1990. After experiencing slower growth in 1980-1985 (8.5%), it grew by 10.7% in the period 1985-1990 and 10.4% during 1990-1995. This shows that manufacturing grew even faster after the trade liberalisation in 1985.

This is particularly true because, as demonstrated by Aswicahyono (1998), the total factor productivity growth (TFPG) in Indonesian manufacturing sector during 1976-1993 were determined by the trade regime and domestic competition. Other variables such as foreign and government ownership provide little evidence in determining the total factor productivity growth (TFPG). Aswicahyono (1998) points out that sectors which relied

² See for example Azis (1993), Hill (1996), Pangestu (1987), Simandjuntak (1989).

more on export expansion had a superior performance in terms of TFPG, compared with those which were more domestic and import substitution oriented. Furthermore, Aswicahyono found a negative relationship between the change of the ERP and TFPG across industries. This finding supports the hypothesis that trade liberalisation undertaken by the government after 1984 propelled the growth of the non-oil manufacturing sector. In this case, structural change in the non-oil manufacturing sector was more a supply and policy factor rather than a demand factor as shown by Engel's law.

Table 3.2 presents the structural change in the non-oil manufacturing sector. Food products (ISIC (International Standard Industrial Classification) 31) that accounted for 47% of total non-oil manufacturing in 1975 had declined to 23% of total manufacturing by 1995. This figure supports Chenery and Syrquin's stylised facts that the share of food products shrinks as per capita income rises. On the other hand, the share of the footloose and labour intensive industry (ISIC 32+39) in total manufacturing continued to rise, from 11% in 1975 to 19% of total manufacturing by 1995.

Table 3.2: Change in the manufacturing sector, 1975-1995
(% Share of total non-oil manufacturing)

	ISIC 31	ISIC (32+39)	ISIC (33+34)	ISIC (35+36)	ISIC (37+38)
1975	46.6	10.8	7.0	22.7	12.9
1980	39.5	13.6	8.9	21.5	16.5
1985	32.1	14.4	12.3	21.2	20.1
1990	24.1	16.8	16.5	17.6	25.0
1995	23.0	19.3	13.3	17.4	27.0

Source: calculated from the manufacturing surveys "backasted" data, BPS, various years.
Share measured on current price

Notes: ISIC 31 : Food processing

ISIC (32+39): Footloose labour-intensive

ISIC (33+34): Woods and paper products

ISIC (35+36): Heavy processing

ISIC (37+38): Metal Goods

Owing to its natural resource base, Indonesia has a strong comparative advantage in wood and paper products (ISIC 33+34). The share of this sector continued to rise until

1990, and then declined slightly in 1995 due to unfavourable conditions in the international market (Aswicahyono, 1998).

The heavy processing industry (ISIC 35+36) is another sector which possesses a potential comparative advantage, since it relies heavily on natural resources. Nevertheless, heavy processing needs large capital investments. Therefore, the ups and downs of this sector are closely related to the ability of the sector to handle the problem of capital shortages. In 1975, the heavy processing sector accounted for 23% of total manufacturing and this share continued to decline marginally until 1995, particularly after 1985. This can be explained as an impact of the decline in oil revenue after 1985. High government revenue during the oil boom period enabled the government to promote this sector, but the collapse in oil revenue forced the government to postpone or cancel projects in this sector.

Other sectors such as metal goods (ISIC 37+38) continued to expand due to high government investment and trade protection. Hence, when the oil price plunged and trade liberalisation took place in the mid 1980's, the metal goods share continued to decline (Aswicahyono, 1998).

Table 3.3 shows the structural change in the manufacturing sector based on factor intensity. In 1975 Agriculture Resources Intensive (ARI) dominated non-oil manufacturing product. However, its share in total non-oil manufacturing continued to decline until 1995. Another product, such as Unskilled Labour Intensive (ULI), was only about 18% of total non-oil manufacturing in 1975. Albeit, its share gradually rose and by 1995 had increased more than twofold to 34%. This rapid expansion in ULI shows how the non-oil manufacturing sector tended to reflect its comparative advantage particularly after the trade liberalisation in 1985.

Table 3.3: Structural change in the manufacturing sector based on factor intensity*)
(% Share of total manufacturing)

	1975	1980	1985	1990	1995
ARI	48.9	44.5	39.3	34.2	31.8
MPI	4.7	6.4	6.7	5.3	6.2
ULI	18.3	23.3	26.5	30.5	34.0
TI	2.9	4.0	6.0	6.4	8.6
HCI	25.2	21.8	21.5	23.6	19.4

Source: calculated from Statistik Industri, various years

Share measured on current price

Notes: ARI : Agriculture resource intensive.

MRI : Mineral resource intensive.

ULI : Unskilled labour intensive.

TI : Technological intensive.

HCI : Human capital intensive.

*)Classification is based on Ariff and Hill (1985) (See appendix 1)

Products that are Technology Intensive (TI) also experienced rapid expansion, although slower than ULI. This raises a question of why TI rapidly grew, even though Indonesia comparative advantage is not on TI. This can be explained as an impact of the rapid expansion of electronics, which in Indonesia's case, actually, are not supposed to be classified as TI.

3.3.2 International orientation

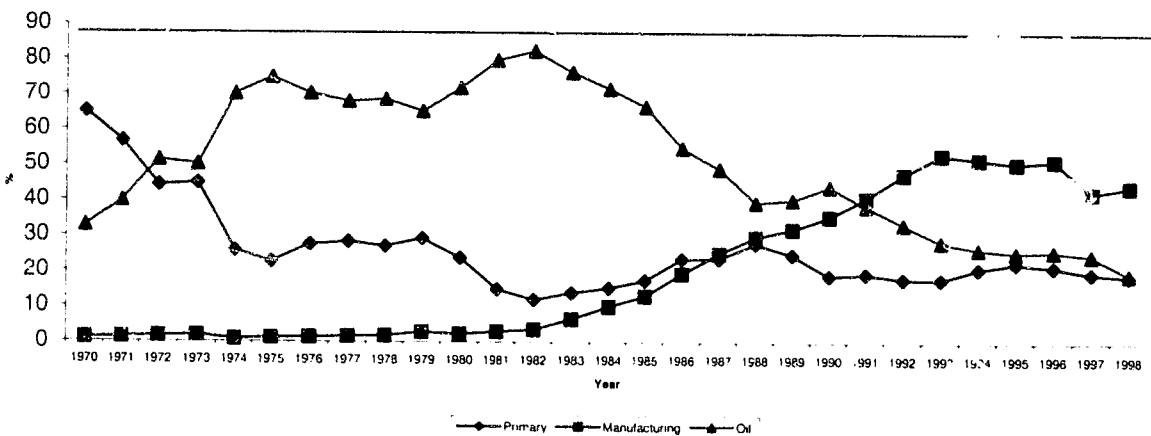
Theoretically, a rise in per capita income will also have an impact on structural change in the trade sector. At the early stages of development, primary exports tend to dominate the export sector, while capital goods and raw materials tend to dominate the import sector. As per capita income rises, exports and imports of manufacturing goods will steadily expand. Nevertheless, this pattern will vary across countries for at least two reasons. The first is factor endowment. The second is trade policy.

A resource rich country tends to export resource-intensive products, while a country with a labour abundance tends to export labour intensive goods. As discussed previously, trade policy also plays an important role in determining the structure of trade. A country with an import substitution strategy tends to experience slower growth in manufacturing exports than one with an export-oriented strategy (Krueger, 1978; Bhagwati, 1978).

Considering these two factors for the case of Indonesia, a rapid expansion in manufacturing exports was predictable following the trade liberalisation.

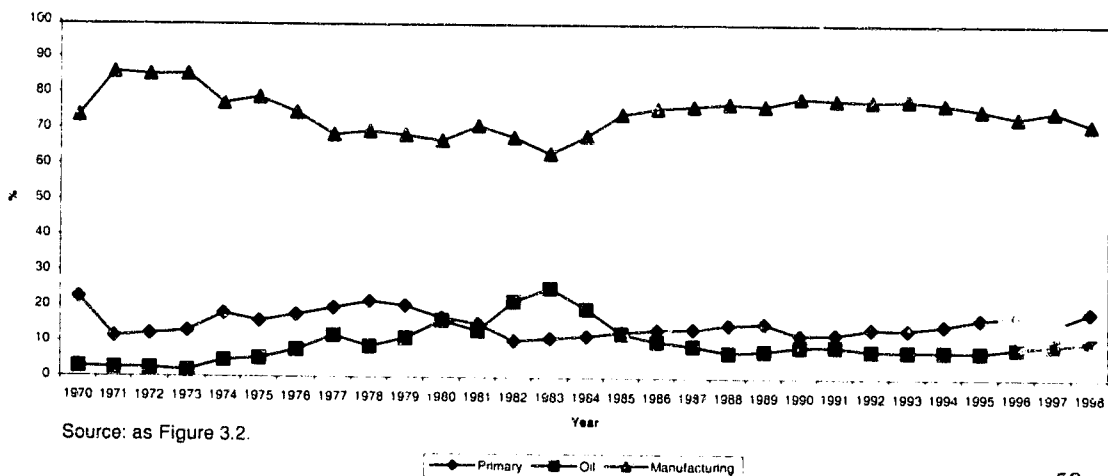
Figure 3.2 depicts the pattern of Indonesian exports from 1970 to 1998. In the 1970's, manufacturing exports contributed less than 3% to total exports, and primary goods dominated. However, by 1987, the share of manufacturing exports had surpassed that of primary exports.

Figure 3.2
Composition of Indonesian exports, 1970-98
(% to total exports)



Calculated from: the International Economic Data Base (IEDB). Australian National University (ANU)

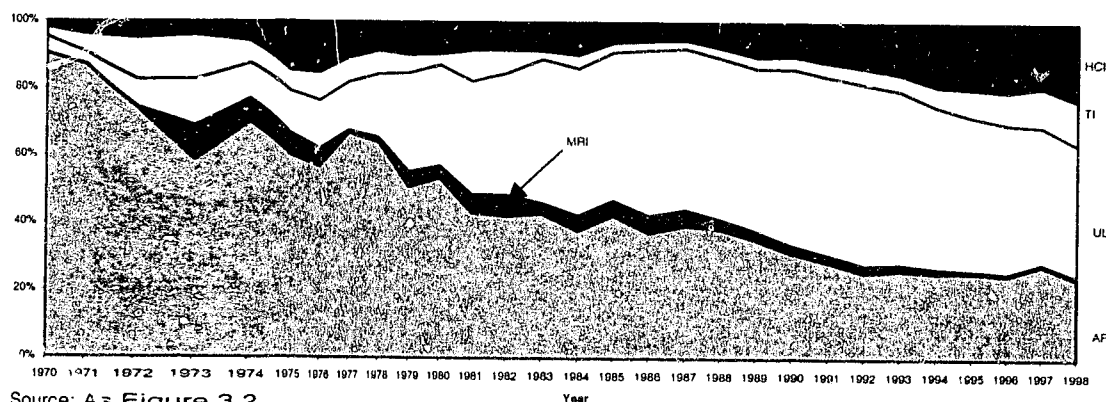
Figure 3.3
Composition of Indonesian imports, 1970-98
(% of total imports)



Source: as Figure 3.2.

Figure 3.3 depicts the changing structural composition of imports. Since the 1970's Indonesia's imports have been dominated by manufacturing, accounting for more than

Figure 3.4
Factor intensity composition of Indonesian non-oil manufacturing exports, 1970-98
 (% of total)

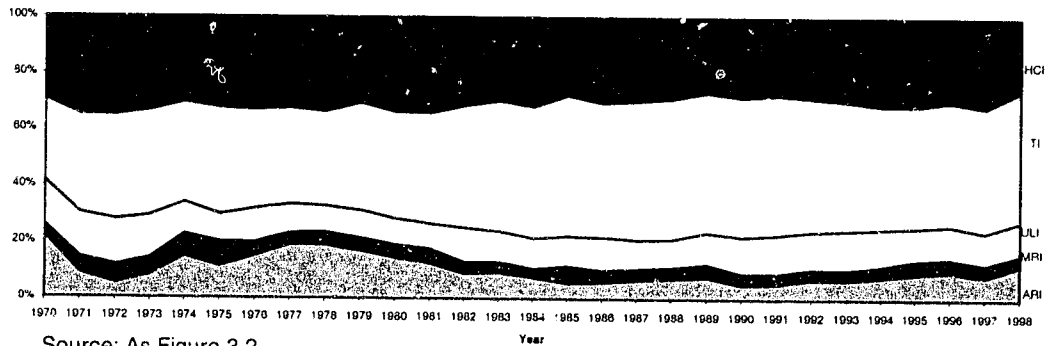


Source: As Figure 3.2

70% of the total. In-depth observation of the manufacturing imports in this figure demonstrates how capital-intensive products continue to dominate manufacturing imports.

Figure 3.4 shows that, in 1970s prior to the mid 1980s, manufacturing exports were dominated by the Agriculture Resource Intensive (ARI) group. In the 1970, the share of ARI exports to total non-oil manufacturing exports accounted for 90%, while the share of Unskilled Labour Intensive (ULI) accounted for only 5%. Nevertheless, ULI's exports grew rapidly and surpassed the share of ARI in 1985. In 1985, the share of ULI to total manufacturing exports was 44%, while ARI was 42%. The share of ULI continued to increase, reaching 54% in 1992, while the share of ARI continued to decline, accounting for 25%. This notable performance of labour-intensive exports could be attributed to the trade liberalisation which began after 1985. This indicates how trade liberalisation enabled Indonesia to exploit its potential comparative advantage in labour intensive products.

Figure 3.5
Factor intensity composition of Indonesian non-oil manufacturing imports,
1970-98
(% of total)



In manufacturing imports, it can be seen that Human Capital intensive (HCI) and Technological Intensive (TI) continued to dominate manufacturing imports (Figure 3.5). Both (TI and HCI) accounted for about 59% in 1970, and increased to about 74% in 1995.

3.4 Review of trade policy instruments

It is important to discuss the instruments of trade policy in Indonesia, because it helps to provide a background for the discussion on trade policy in the remainder of this thesis. This section will focus on the description of the instruments of trade policy in Indonesia during 1970 to 1995.

There are several policy instruments which have been used to protect Indonesian manufacturing. The list of trade policy instruments is presented in Table 3.4.

Table 3.4: List of major policy instruments in trade which have a protective effect on Indonesia's manufacturing

Policy instruments	Principal decision makers	Status
1 Custom duties	Department of Finance	Still applies now
2 Import sales tax	Department of Finance	Still applies now
3 Domestic sales tax	Department of Finance	Still applies now
4 MPO	Department of Finance	Abolished in 1984
5 Import pre financing requirements	Bank Indonesia/Department of Finance	Still applies now
6 Prohibition or quota on certain imports/exports	Department of Trade on recommendation from Department of Industry or other relevant departments	Still applies for particular products, but has been largely phased out in 1998
7 Government monopoly on certain product	Cabire*	Still applies for particular product, but has been largely phase out in 1998
8 Check prices: Exports Imports	Department of Trade Custom office /Department of Finance in coordination with Department of Industry and Trade	Still applies now
9 Export taxes	Department of Finance	Still applies now
10 Various levies on specific products	Individual departments	Still applies
11 Exchange rate	Cabinet/Bank Indonesia	Not effective since 1997
12 Export certificates: Percentages Check prices	Department of Finance Department of Trade	Abolished in 1986
13 Investment licensing	BKPM (Investment Coordination Board)	Still applies for some products but has been largely phased out in 1998
14 Special tax/custom duties facilities	Department of Industry	Still applies now
15 Preferential credit policies	Bank Indonesia/Department of Finance	Abolished in 1985
16 Compulsory use of domestic components by domestic industries	Department of Industry, BKPM	Abolished in 1998
17 Compulsory of domestic products in government projects	Cabinet/Minister for the promotion of the domestically produced goods	Still applies now
18 Import licensing (Tata Niaga Impor)	Department of Trade	Still applies for particular products

Source: adapted from Pangestu and Boediono (1986: 10) and Togashi (1993).

MPO: *Menghitung pajak atas orang* (withholding tax)

These instruments, in fact, can be classified as two types: trade policy instruments affecting imports and trade policy instrument affecting exports. Some of these instruments are discussed below.

3.4.1 Trade policy instruments affecting imports

There are several instruments which affect imports. Because these regulations can influence domestic prices they should be considered to have a protective effect.

Tariffs

According to Indonesian legislation, the basic schedule of a tariff can only be changed by parliament. In addition, surcharges and exemptions are allowed after review by a team from the Department of Industry, Department of Trade and Department of Finance.³ After changes have been agreed upon formal approval is required from the Minister of Finance.

Since 1973 there have been three types of classifications of the scheduled rates:

- (a) Brussels Tariff Nomenclature (1973-1980)
- (b) Customs Co-operation Council Nomenclature (CCCN) from 1 April 1980 to January 1989.
- (c) Harmonized Commodity Description and Coding systems (HS) since January 1989 until now.

Under CCCN, the basic schedules for tariff are: 0, 5, 10, 25, 30, 40, 60, 90, 100 percent. Within this structure, tariffs cascaded with a range of basic tariffs being 0-20 percent for basic materials, 20-40 percent for intermediate goods and 50-100% percent for finished goods.

In January 1989 the CCCN system was converted into the HS system. As a result the number of tariff lines increased from just over 5,000 to more than 9,100 (Togashi, 1993). The introduction of the HS code also increased the average tariff (inclusive import

³ *Menteri Muda Peningkatan Pendayagunaan Produksi Dalam Negeri* (Junior Minister for the Promotion of the Use of Domestically Produced Goods) was also involved in this team when it existed in 1983.

surcharges). As a result the already high dispersion became higher. The trend of protection over time will be discussed in greater detail in Chapter 5.

The above brief discussion shows the complexity of the decision making process in the tariff system. Obviously, this could invite debate and internal conflict within the government agency on the decision making process. This was particularly true, as suggested by Emerson's bureaucratic pluralism (see Chapter 2) that there was a substantive debate over policy within the government itself. In addition, as suggested by Liddle's (1987) restricted pluralism sometimes this process not only involved government agencies but also other actors such as business groups. Wisisono (1989) shows how conflict occurred between the Minister of Industry and the Junior Minister of Promotion of the Use of Domestically Produced Goods in the case of fibres in 1986. Therefore, the decision on tariffs is not merely a simple interaction between interest groups and a single government institution, as it often involves different views within the government.

Import surcharges

Import surcharges have to be considered to produce a protective effect, since an import surcharge raises the price of imports and protects the domestic producer in import competing sectors. Togashi (1993) points out that import surcharges have two functions. First, as compensation for a tariff reduction or the relaxation or removal of import licensing. In this case, import surcharges are a temporary instrument to protect the domestic producer during the transition period before the full trade liberalisation takes place. Togashi (1993) shows that when import licensing was removed under the May 1990 package, import surcharges were imposed or increased on some goods. A second function of import surcharges is to protect domestic infant industries from fluctuations in world prices.

Import surcharges are mainly imposed on intermediate and consumer goods, such as iron, steel goods, vegetable oil, chemicals, rubber products, and paper and paperboard, to name a few (Togashi, 1993). In July 1992, as part of a trade reform package, a large number of

items of import surcharge were abolished. Nevertheless, import surcharges still apply to some items even to the present day.

MPO (*Menghitung Pajak Orang*) or withholding tax

The other protective instrument affecting imports was the MPO, which made taxes on imports higher.

Pangestu and Boediono (1986:11) state:

'The *Menghitung Pajak Orang* (MPO) or withholding tax amounts to prepayment of the corporate profit tax and has a protective structure, since the tax is usually higher for imports'.

According to Pitt (1981) MPO would only have a minor protective effect if seen as prepayment of corporate tax. However, Pangestu and Boediono argue that if a firm prefers not to claim an MPO tax credit, so that profits appear lower, the MPO could be considered similar to a sales tax. In 1984, the MPO was abolished and the Value Added Tax (VAT) introduced.

Tariff concessions and exemptions

The other important scheme of export promotion was an export certificate or SE (*Sertifikat Ekspor*). The main purpose of SE was to refund tariffs, sales taxes and MPO paid on import materials and other imports used in producing export goods. However, there were two major problems with this scheme. First, the tendency to use imported input was increased, because using similarly higher priced domestically produced inputs did not cause obtaining refund (Pangestu and Boediono, 1986). Second, there was a problem of export falsification in order to earn the rebate.

On 6 May 1986, the government abolished the SE and replaced it with P4BM. (the centre for the management of import duty exemption and restitution). This scheme has two parts. First, exporters who export at least 85% of production are exempt from all import duties and import regulations when importing inputs (Muir, 1986). Second, a duty drawback system applies for exporters who export less than 85% of production. Furthermore, exporters are allowed to import goods, subject to import restrictions, if local

suppliers fail to match the prices of the imported inputs. Exporters are subject to import duties, but can seek a refund on duties paid for imports used in the manufacture of exports (Togashi, 1993). Hill (1992) points out that almost one-quarter of manufacturing exports have come under P4BM and, subsequently, the Bapeksta (agency for export facility services and financial data processing) scheme. According to Togashi (1993) more than one-third of total non-oil imports such as rubber, footwear, plastic products, processed food, and electronics were covered by the P4BM scheme in 1990. This Bapeksta scheme still applies.

Import quota, import licensing and quantitative restrictions

Prior to the economic crisis, Indonesia explicitly prohibited the import of certain products, such as the waste of selected plastics, selected printed matter, videos, rice, specific pesticides (Togashi, 1993; World Bank, 1997). The import of transport equipment was also banned prior to 1994. Togashi (1993) shows that the objective of import bans was to protect domestic assembly or processing industries, for the case of transport equipment, and to protect national security and culture (the case for rice).

Moreover, there were only a few explicit import quotas in Indonesia, such as on foreign films and powdered milk (Pangestu and Boediono, 1986). However, import quotas appeared in the implicit form, such as the *Tata Niaga Impor* (TNI) (approved importers system), introduced in 1982, and most of these, particularly in rice, wheat flour, dairy products, cloves and sugar were abolished in 1998 in accordance with the letter of intent to the IMF signed by the Indonesian government as a result of the economic crisis.

Under the TNI system the government did not explicitly impose a quota on a particular product. But only approved importers could import these particular products, and hence there was an implicit import quota imposed through the import licence.

The basic licence for importers is an importer identification number (API). In order to become involved in any import activity, it is necessary to hold a full API, a provisional API (APIS) or a limited API (APIT). During the period 1984 to 1988, an API was only

valid for five years but was renewable. However, under the 21 November 1988 deregulation package, an API became valid for an unlimited time, provided the original importer was still involved in any unrestricted import activity.

In addition to an API, there are two types of licences issued by the government. The first is a **general licence**, under which importers are permitted to import goods under certain categories. This is called a General Importer (*Impotir Umum*), where additional import licences are not needed and the amount, type and country of origin is not specified. However, the government could limit the number of approved importers to bona fide ones, providing they fulfilled requirements such as good past performance and hiring skilled labour (Pangestu and Boediono, 1986). The second type is a discretionary and specific licence called *Importir Terbatas*. Under this type of licence certain importers are allowed to import certain goods. Both the type and amount of goods imported are specified. This licence further allowed the government either to set zero amounts or not permit any imports of certain goods. This second type of limited import licence can be further classified into 4 groups:

1. **IT (Importer trader)**. This gives a monopoly power to the licence holder to import a number of finished goods. This type of licence has only been granted to six state-owned companies PT Kerta Niaga, PT Pantja Niaga, PT Mega Eltra, PT Tjipta Niaga, PT Dharma Niaga and PT Sarinah. Those companies particularly deal in apparel and accessories and beverages items.
2. **PI (Producer importer)**. This licence has mainly been phased out, but is still valid for some explosives. This allowed licence holders to import the same goods they produced. Examples of companies holding this PI licences were BULOG, which was the only approved importer of rice and several other important foodstuffs, and Krakatau Steel, a state-owned company producing steel products, which was the only designated importer for steel.⁴

⁴ The PI licence for BULOG was abolished in 1998 in accordance with the IMF letter of intent, while the PI for Krakatau Steel was moved into the IP category.

3.IP (Importer Producer). This licence is given to companies wishing to import items used in their production process not available domestically. This import licence still applies.

4.AT (Agent Trader) or sole agent. This licence allows the holder to import a particular brand of product. This import licence still applies.

All these import licences are part of the non-tariff barriers. As there are a limited number of importers, the number of imported goods is also limited. Due to the policy shift towards export promotion, import licences became fewer. Moreover, the May 1990 reform package notably reduced import licensing from the IT, PI and AT categories into the general importer or *Importir Umum* (IU) category.

Government procurement

Government procurement is another type of implicit quantitative restriction preferring domestic firms in the granting of government contracts. The notable regulations for government procurement in the past were *Kepres 14* (Presidential Decree no 14) in 1979, *Kepres 14 A*, 1980 and *Kepres no 10*, 1980 (Schwartz, 1994). All *Kepres* provided priorities for 'weak economic groups' (synonymous for indigenous Indonesians) and domestic suppliers. The priority was in the form of a regulation where for small projects only 'weak economic groups' were allowed to bid e.g. for contracts less than Rp. 20 million. If the value of the contract was between Rp. 20 to 500 million it went to tender, with domestic suppliers invited into the bidding process, and, in most cases, foreign suppliers not invited to participate. Only contracts for above Rp. 500 million were open to foreign suppliers. A foreign supplier was also obliged to purchase certain amounts of Indonesian non-oil and gas exports. Furthermore, according to the 1984 Presidential decree it was compulsory to use domestic products in government projects whenever possible. This regulation was revised slightly in 1994, and has somewhat clarified the government procurement framework and promoted the use of clear written procedures. However, the regulation to oversee the procurement process is still in place.

Local content scheme

Another type of quantitative restriction that had been used was the local content scheme.⁵ This scheme required domestic final good producers to purchase a specified minimum proportion of intermediate goods from domestic firms.

In Indonesia some industries, including motor vehicles and dairy products, were required to buy a specified minimum portion from domestic firms. For example, in 1976, the government introduced a deletion program in the automotive industry, and began to specify which component should be produced locally. However, the targets were not generally met, partly because they were too ambitious and partly due to an economic recession in the mid 1980's. In 1993, the government abolished the 'deletion program' and replaced it with a more market oriented incentive system, although it was still heavily regulated (Aswicahyono, Basri and Hill, 2000). The local content program for the automotive industry was eliminated in 1999, and for dairy products in 1998.

Exchange rate

The exchange rate has been used to protect the import competing sector and non-oil export sector. Pangestu and Boediono (1986) point out that the 1978 rupiah devaluation was in part protectionist. The objective was to assist the non-oil export sector due to the Dutch Disease problem in 1978 (Corden and Warr, 1981). The 1978 devaluation is a good illustration of how the exchange rate was used to protect the import competing and non-oil sectors. In 1978, increased oil revenue, owing to the increase in the oil price, entered the economy through government spending on domestic or non-traded goods. This led to excess demand for non-traded goods, thus pressuring the price of non-traded goods and inflation upwards. To reduce the demand for non-traded goods, the relative price of traded to non-traded goods must fall (referred to as the real appreciation or the appreciation of the real exchange rate). The real appreciation of the exchange rate attracts resources from the non-oil traded sector to the non-traded sector. To counter this

⁵ For theoretical concept of local content protection, see Corden (1971), Voudsen (1987), and Grossman, (1981).

problem, in 1978, the Indonesian government devalued the rupiah by 50% to assist the non-oil traded sector.

As Indonesia moved into a free-floating exchange rate regime in 1997, the role of the exchange rate as a direct instrument for regulating import diminished.

There were some other specific regulations which affected imports including a cloves monopoly and the national car policy. In 1992 the government awarded monopoly rights to the clove marketing board (BPPC) which was owned by Tommy Soeharto (Soeharto's youngest son). In June 1998, this BPPC monopoly was abolished and moved into general importer (IU) status in accordance with the IMF letter of intent. Moreover, in 1996, the government introduced the national car program which the intent of achieving full domestic production of a 'national car'. To support this program, the government provided full exemption from all import duties and waiving of the luxury car tax. However, the program was withdrawn in 1998. This will be discussed in greater detail in Chapter 8.

3.4.2 Instruments and restrictions affecting exports

There are four categories of export goods in Indonesia. The first, is goods subject to the export trade system which can only be exported by an approved exporter. Second, is goods that can only be exported with the approval of the Minister of Industry and Trade or other authorised official. Third, is goods subject to export bans, which are prohibited from export and the fourth category is goods which can be exported freely.

This section focuses on the first of the three categories. There are several measures which affect Indonesian exports such as export finance, export bans, licensing arrangements, quotas, and taxes. There are generally several reasons officially cited for employing export restrictions. The first deals with quotas imposed by importing countries. The second is to promote higher value added for downstream industries. The third is to regulate domestic supply. The fourth, is to preserve natural resources and endangered species and the last to raise the quality of exported products (World Bank, 1995).

Export credits and other export promotion policies

The higher cost of imports due to import protection has the same effect as a tax on exports. In order to compensate for this implicit export tax, the Indonesian government imposed several export promotion measures such as export credits. Prior to the GATT agreement on Code on Subsidies and Countervailing Duties in March 1985, the Indonesian government supported the export sector by providing credit with a subsidised interest rate, pegged below the market rate. In 1976, the interest rate on credit for exporters and producers of exportables was reduced from 25% to 12%. Moreover, in 1982, the government lowered the interest rate on credit exports to 6% for 'weak' exports and 9% for 'strong' exports. This scheme was phased out after Indonesia signed the Code on Subsidies and Countervailing Duties. Export credit is now provided by commercial banks at market rates.

In 1982, the government also abolished the requirement for exporters to sell their foreign exchange to Bank Indonesia, thereby allowing the use of foreign exchange for acquiring the raw materials or capital goods used in the production of their exports. Furthermore exporters are free to sell their foreign exchange to foreign exchange banks, importers or foreign exchange dealers. The same rule applies to importers.

Free trade zones / warehouses

There are numbers of export processing zones (EPZs) in Indonesia, including Batam Island where companies can employ expatriates with no restrictions. 100% foreign ownership is permitted for the first 15 years of operation, and the foreign company need eventually divest only 1% of its shares. Indonesia also has several bonded zones, or areas designated Entrepôts for Export-Destined Production (EPTs). Companies are encouraged to locate in bonded zones or industrial estates when possible. Other free trade zones include a facility near Tanjung Priok Jakarta and a bonded warehouse in Cakung, West Java. This policy is a part of government efforts to promote exports.

Export Bans

Exports for particular commodities such as logs, rattans, minerals and low value added manufactured goods, were explicitly prohibited. Exports of logs had been restricted from 1981, where a certain percentage of logs were requested to be directed to domestic timber processing industries. The objective was to promote investment in the domestic timber industry and to preserve forestry resources. In 1985, the export restriction on the export of unprocessed logs culminated in an outright ban of log exports. However, in 1992 the export ban for sawn timber and logs was eliminated and replaced by a prohibitive tax.

By 1995, export bans were applicable to 72 products, including live fishery products, protected wildlife and natural vegetation, iron and steel waste and scrap, copper waste and scrap, sub-standard rubber and remilling rubber materials.

Export licensing and quantitative restrictions

There are two types of export licensing and/or quantitative restrictions on exports. The first is export goods subject to the international imports or production quota, such as textiles (which is covered by the Multi-fibre arrangement (MFA)) and petroleum oil (which comes under OPEC's quota). The second, is goods that can only be exported after domestic conditions have been met, such as rice, and pesticides (Togashi, 1993). Togashi (1993) points out that, as in the case of import quotas, export quotas are not clearly specified in a formal framework and very little information is available. In most cases, quotas were informally applied as part of the export licensing systems. One important example is the export quota on textiles. These allocations of export quotas lack transparency. As pointed out by Hill (1992), the Department of Trade does not produce a complete list of quota holders, nor does it give the grounds for quota allocations. This obviously provides room for rent-seeking activities in textiles export quota allocations. This topic will be discussed in greater detail in Chapter 9.

Export taxes

Generally the Indonesian government imposed export taxes in ad valorem rates ranging from 5% to 30%. The tax is measured on the f.o.b. price (Togashi, 1993). Prior to 1976

the export tax was a flat 10% on non-oil exports. Furthermore, the government also imposed additional taxes (*cesses*) on certain goods, such as leather, and regional levies on agricultural products (Pangestu and Boediono, 1986). However, the additional taxes, were abolished in 1976 and, in line with the promotion of non-oil export exports, taxes were reduced for many goods. Albeit, the government sometimes imposed additional taxes on exports when it was concerned about domestic supply, such as in the case of cooking oil.

3.5 Review of trade policy 1966-95

The trade policy in Indonesia can be classified into five periods. Each period is characterised by its unique policy and macroeconomic condition.

3.5.1 The period 1966-72

The rapid economic reform undertaken by the New Order government during the period 1966-72 produced remarkable results. The hyperinflation at rate around 635% in 1966, dropped to less than 115% in 1967 and plunged further to double digit rates in 1969 (17%) (Pitt, 1991; Azis, 1994). Pitt (1991) points out that this period witnessed sweeping changes in the regulation and organisation of the foreign trade sector. There was a dramatic shift from the direct control of almost aspects of the Indonesian economy toward heavily dependence on market signals. In addition, a new foreign investment law was enacted in 1967, which constituted the basis for open door foreign investment policy. There were various incentives, such as duty free imports of capital equipment and tax holiday were offered to attract investment (Pangestu, 1997). An open capital account with no foreign exchange control was introduced. Moreover, the government introduced new "export bonus" scheme in 1967. In 1970, the multiple exchange rate system had been removed and a "market consistent rate had been introduced (Hill, 1996), and rupiah was devalued in August 1971.

During the period 1966-1972, foreign trade was relatively liberal compared with the subsequent period (1973-1985). In October 1966, the import licensing system was abolished. At the initial stage (1966), protection of domestic industries was not a major

concern. However, manufacturing sector had been continually depressed during the period of 1966-1968 (Pitt, 1991). The rate of capacity utilisation declined to a rate below 20% in 1966 and 1967 (Pitt, 1991). As a result, the government was persuaded to increase trade protection. Under this pressure, the government announced in 1967 to switch emphasis from "checking inflation" to "stimulating production" (Pitt, 1991). In fact, there was no major change in trade policy, except moderate increases in tariff protection for import competing sectors in 1968 (Pitt, 1991; Pangestu and Boediono, 1986). Regardless this trend the levels of protection were relatively low compared to the later years.

3.5.2 The period 1973-82

In the late 1973, there was an oil bonanza. During the oil boom period the economy grew by 7.5% (see Table 3.1). This enabled the government to finance a number of highly subsidised projects, and it adopted the import substitution policy.

As noted, Indonesia implemented an open door policy to foreign investment from 1966-1972. However, a nationalist backlash towards foreign investment led the government into more protectionist and interventionist policy. Due to the Malari Affair 1974,⁶ regulations on foreign investment became more restrictive. As a result, all new foreign investment was to be in the form of joint ventures, Indonesian equity was to be increased within a specific period, and the list of closed sectors was extended (Pangestu, 1996).

Following many complaints from foreign investors, the administrative procedure was simplified in 1977. However, after the second petroleum boom in 1979, foreign investment requirements were again tightened by making the priority list more restrictive.

During 1973-1982, trade and industrial policy was directed at influencing the pattern of industrialisation by way of protecting domestic industries. Similar to other developing countries, Indonesia adopted an import substitution strategy beginning with final

⁶ On January 15th 1974, there were large anti Japanese riots during the visit of Prime Minister Tanaka, due to the Japanese concentration in consumer products. See discussion in Chapter 4.

consumer goods then moving to intermediate and capital goods. The trade regime was characterised by increasing protection through tariff and non-tariff barriers. Discussion on the change of protection over time, and the estimation methods of the ERP, NRP and percentage of NTB coverage to gross output, will be covered in more detail in Chapter 5.

In 1978, the rupiah was devalued from Rp. 415 to Rp. 625 per US dollar. The objective was to assist the non-oil export sector due to the Dutch disease problem (Pangestu, 1986; Corden and Warr, 1981). As noted, this was part of protectionist policy. Subsequently accompanying policy packages, such as tariff reductions, liberalisation import prepayment requirements and export certificate schemes were introduced in 1979. Pitt (1991) argues that these policies appear to have reduced the import substitution bias.

3.5.3 The period 1982-85

During this period the oil price began to decline, and economic reform began. However, until 1985 there was still a trend for increasing trade protection. Hill (1994) and Pangestu (1991) identify this period as one of ambivalence. In March 1983, the government devalued the rupiah to Rp. 970 per US dollar, primarily as a reaction to the falling oil price, and deregulated the banking sector by removing the interest rate ceiling, abolishing the credit ceiling and reducing liquidity credits. Several capital and import intensive projects were postponed. Furthermore, the government introduced tax reform in 1984 by abolishing the withholding tax (including MPO) and introducing a value added tax. Subsequently, income tax and sales tax were rationalised.

However, the reverse was true in the trade sector. Quantitative restrictions on imports were increased under the approved import system, or *Tata Niaga Impor* (TNI), which was introduced in 1982. Under this scheme, goods listed in nine categories (electrical and electronic goods, chemical products, metal industry products, machinery and spare parts, heavy equipment and spare parts, motor vehicle components, textiles, agricultural products, and food, beverages and fresh fruits) could only be imported under approved imports. The objective of the approved import system was to protect domestic industries and save foreign exchange (see the discussion in Section 3.4.1).

Hill (1994) points out that trade policy during this period became a much more explicit instrument for industrial policy. He argues that large projects, such as those in the Krakatau Steel complex, were not only given trade protection but also full authority over their industry's imports. In addition, similar to Pangestu (1991), Hill (1994) points out that non-tariff barriers became increasingly complex. Moreover, the process of granting trade protection became intensely politicised, parallel to the emergence of powerful political business interests. This issue will be discussed in greater detail in Chapter 4.

Despite the increase in protection during this period, by the end of the oil boom era in 1985, the government undertook some substantive reforms with respect to tariffs and customs procedure.

In 1985 the tariff system was extensively rationalised by an across the board reduction in the range and level of nominal tariffs. Moreover, in April 1985, the government introduced deregulation on customs and improvement in shipping regulation (Presidential Decree 4/1985 (Inpres 4/1985)). The range of tariffs was reduced from 0-225% to 0-60%. In addition, the government also introduced reform in customs services, in which the Swiss surveillance company (*Societe Generale de Surveillance* or SGS) was to assume responsibility for verification at the point of export of all imports valued higher than \$5000 (Hill, 1996). This reform was undertaken to reduce the discretionary authority of customs officials. For a long time, there had been a perception that the customs system prior to Inpres 4/1985 appeared to be a major problem in a high cost economy. Under this reform, all the processes relating to the export or import of goods by the customs department were totally disbanded and replaced by a private Swiss surveying company (SGS) (Hill, 1996; Fane, 1996; and Pangestu, 1991).

3.5.4 The period 1985-90

A sharp decline in the oil price occurred in 1986. Contrary to the cycle of trade protection hypothesis, as discussed in Chapter 2, the decline in oil revenue provided support for significant deregulation. Policy orientation began to shift towards export promotion. A

set of trade policies was introduced to achieve the goal of stabilising the Indonesian macroeconomy and shifting from a protected inward looking into an outward-looking and internationally competitive economy.

In general, these policy changes can be classified into two steps. The first step was to stabilise the Indonesian macroeconomy by undertaking devaluation in 1986 and controlling inflation. The second step was to maintain development momentum through economic liberalisation in order to reduce the country's dependency on oil and gas revenues and to increase efficiency.

The impact of these measures on non-oil manufacturing exports appears to have been quite remarkable. As previously discussed, non-oil manufacturing exports increased sharply and experienced 57% growth in 1987. The share of non-oil manufacturing to total exports rose significantly, from 31% in 1978 to 50% in 1987. Within non-oil exports, the share of manufacturing increased substantively from 6% to 49% during the same period.

From 1983 to 1995, no less than 24 reform packages were introduced by the government, ranging from banking reform, tax reform, investment reform, capital market reform, and trade reform (Table 3.5). Due to their coverage and boldness, some of these packages are considered very important e.g. the October 1986 and the November 1988 deregulation packages. The October '86 deregulation package was the first which succeeded in reducing quantitative restriction/NTB on several imported commodities. Nevertheless, since the number of commodities subject to this change from NTB to tariffs was not large, local business people considered this package too little. Sjahrir and Brown (1992:128) point out:

'This measure was in fact at the centre of a minor political crisis involving the Jakarta evening Newspaper *Sinar Harapan*. This paper had printed a draft of the deregulation measure which suggested —incorrectly— that NTBs were eliminated altogether. Had this been true, it would have adversely affected many business people, including some with close connections to the government, and those involved in the import of plastics and steel products'.

Table 3.5: Major deregulation packages 1983-1995

Reform	Contents
June 1983 Banking deregulation	<ul style="list-style-type: none"> - Removed interest rate control for State banks. - Reduced liquidity credits. - Removed credit ceiling.
April 1984 Tax reform	<ul style="list-style-type: none"> - Introduced value added tax (VAT). - Rationalisation of income and sales tax.
March 1985 Tariff reform	<ul style="list-style-type: none"> - Range reduced from 0-225% to 0-60%. - Number of tariff levels reduced 25 to 11.
April 1985 INPRES 4	<ul style="list-style-type: none"> - Removal of customs service. - Appointment of private survey SGS. - Removal of restriction on choice of carrier for international shipment.
May 1986 May package	<ul style="list-style-type: none"> - Duty drawback and bypass monopoly. - Arms length transaction and computerisation of processing. - Up to 95% foreign ownership of export-oriented sector joint ventures permitted. - Relaxation on domestic distribution for export oriented firms. - Joint ventures can utilise export credit.
October 1986	<ul style="list-style-type: none"> - Removal of significant no. from import licensing to general importers. - Decrease in tariffs for items facing down NTB. - Reduction in tariffs for goods needed in production. - Removal of ceiling on central Bank (BI) swaps.
January 1987	<ul style="list-style-type: none"> - Removal significant from import licensing to general importers.
June 1987	<ul style="list-style-type: none"> - Deregulation of investment and capacity licensing. - Closed sector opened for export-oriented firms.
July 1987	<ul style="list-style-type: none"> - Rationalisation of textile exports quota allocations. - Export quota allocations are published in the media by company and allocation size.
December 1987 Capital market reform	<ul style="list-style-type: none"> - Deregulation of capital markets. - Reduced government role in stock exchange. - Foreign investors can buy stocks. - Tourism and hotel sector deregulation. - Exporter reclassified to exporting 65% (CF 85% before) of production.
October 1988	<ul style="list-style-type: none"> - Opened up licences for new banks and foreign joint venture. - Reduction of reserve requirements from 15% to only 2%.
November 1988	<ul style="list-style-type: none"> - Removal of import monopolies plastic and steel. - Shipping deregulation. - Foreign investors allowed engaging in wholesale trading of their own products via joint venture.
December 1988	<ul style="list-style-type: none"> - Further capital markets deregulation. - Deregulation in insurance industry. - Rationalisation of financial services.

Reform	Contents
May 1990	<ul style="list-style-type: none"> - Continuation of procedure simplification. - Further reduction in tariffs.
February 1991	<ul style="list-style-type: none"> - Continuation of October package 1988. - Introduced Capital Adequacy Ratio 8% of bank assets.
June 1991	<ul style="list-style-type: none"> - Further reduction in import tariffs. - Reopening of several sectors to new domestic and foreign investors. - Simplification of approved import system (TNI) particularly for raw materials and intermediate goods. - Abolition of supply quota on raw materials for palm oil.
July 1992	<ul style="list-style-type: none"> - Further reduction in NTB. - Further reduction in import tariff. - Reopening several business areas for domestic and foreign investors.
May 1993	<ul style="list-style-type: none"> - Credit expansion.
June 1993	<ul style="list-style-type: none"> - Deregulation in automotive. - Further reduction in import tariffs. - Reopening a several business areas for domestic and foreign investors.
October 1993	<ul style="list-style-type: none"> - Further reduction in NTB and import tariffs.
May 1994	<ul style="list-style-type: none"> - Allowing foreign investors to own 100% shares.
May 1995	<ul style="list-style-type: none"> - Further reduction in import tariff (about 64% of total items). - Further reduction in NTB. - Announced a program of tariff reductions in import duty rates (1995-2003).

Source: Pangestu (1991), Simandjuntak, 1989; Nasution, 1991; Fane and Condon, 1996; World Bank, 1995.

The authorities promptly banned this paper since they considered it 'tended to create public unrest'.⁷

The November 1988 package was considered the most sweeping NTB reduction prior to the IMF letter of intent in January 1998. From the political economy view point, this package indicated the government's commitment to further trade liberalisation, since its coverage included plastics which involved State owned companies and PT Polychem Lindo, parts of the Bimantara Citra Group, owned by Bambang Trihatmodjo, one of Soeharto's sons (Bresnan, 1993).

⁷ Bresnan (1993) points out that the plastics monopoly had little to do with protecting local industry and a lot to do with making money for the president's family and friends. The steel industry involves PT Giwang Selogam which is notoriously owned by Suharto's crony Liem Sioe Liong.

3.5.5 The period 1990-95

The trade reform continued to take place in the 1990s. There were several important trade reforms in the 1990s, including May 1990, May 1994 and May 1995 deregulation packages (see Table 3.5). Nevertheless, the trade reform slow down in the 1990s, particularly from 1990 to 1993. This is particularly true as indicated by relatively minor slower reduction of NTBs for both agriculture and manufacturing after 1990 (this will be discussed in greater detail in Chapter 5). This is supported by Hill (1996) who argues that the high point of trade reform was in 1986-89, when the trend in the direction of increasing protection was halted and reversed.

The economic liberalisation and trade reforms received another boost through the May 1994 deregulation package, which allowed foreign investors to own 100% shares (Table 3.5). In 1995, the government introduced the May 1995 deregulation package which resulted in significant reduction in average tariff. World Bank (1995) point out that the May 1995 deregulation package was the first significant trade reform after 1991 and the largest since 1990.

Although the economic liberalisation had been the dominant feature of economic policy from 1985-95, there have also been important examples of new regulations being introduced after 1991. Examples include the creation of a private monopoly in cloves (see Section 3.4), the minimum wage regulation in 1993-94, the transfer of customs inspection duties from SGS to Indonesian inspection company (Fane, 1996). In addition, in 1995-96, the Indonesian government introduced a potentially interventionist industrial policy, which included Chandra Asri a petrochemical company (this will be discussed in Chapter 4) and the National Car policy. Despite these trends, trade policy in general remained liberal and some trade reform continued to take place.

3.6 Summary

The purpose of this chapter is to observe how trade policy took place in the Indonesian economy in general and the manufacturing sector in particular. This chapter argues that

the patterns of structural change are generally consistent with Chenery and Syrquin's stylised facts. The structural change in the Indonesian manufacturing sector increased significantly after 1983, so that the actual pattern tended to converge with the normal pattern and eventually surpass the share of the agriculture sector in 1992. The period after 1985 indicates an outstanding performance for the Indonesian manufacturing sector. This rapid expansion could be credited to factors such as the devaluations of 1983 and 1986, high savings and investment rates and the economic liberalisation following 1985.

In addition, this chapter shows that, during the 1970's, the high price of oil enabled the Indonesian government to finance a number of highly subsidised projects. During the period of 1975-1985, the government adopted an import substitution industry policy in order to develop industrialisation in Indonesia and used tariffs and non-tariffs barriers as a protection instrument.

However, Indonesia was confronted with a series of problems in the 1980s. The decline in oil prices after 1982 sharply reduced export earnings and budget revenues. The large decline in oil price deteriorated Indonesia's balance of payments. The government undertook some adjustment programs to increase economic efficiency, altered its trade regime, become more outward looking and made the development of non-oil and gas exports a top priority. This adjustment program commenced in 1983 and was intensified following the dramatic drop of oil prices in 1986. In 1983, the government cut public investment, initiated a major re-phasing of large capital-intensive projects, devalued the Rupiah and undertook financial reforms to remove interest rate controls and credit ceilings. In 1984-86, tax reforms were introduced to mobilise domestic resources. Finally, various trade reforms were launched to improve the trade and industrial policy regime.

During 1983 to 1995, the government introduced no less than 24 packages of economic reforms aimed at increasing economic efficiency and encouraging investment as well as non-oil exports. Along with this change of orientation, the government also changed its investment policy from investment control to investment encouragement.

Indonesia experienced remarkable growth in the manufacturing and export sectors during the pre crisis era and this achievement could be attributed to credible macroeconomic management, a political predisposition towards moderate inflation as well as trade liberalisation during the 1980's.

After 1985, policy orientation began to shift towards export promotion. To achieve macroeconomic stabilisation, improve resource allocation and restore economic growth, the government introduced various trade policy reforms. In the area of trade policy there have been numerous regulations that have been removed since 1985. The level of protection declined substantially during the period 1985 to 1995.

Appendix 1:
Classification of the manufacturing sector according to ISIC

ISIC	Commodities
	(1) Agriculture Resource Intensive
311-2	Food
313	Beverages
314	Tobacco
323	Leather goods, fur excluding footwear and clothing
33111-3	Sawmills, planing and other wood mills
35521-3	Pulp, paper and paperboard
	(2) Mineral Resource Intensive
3512	Fertilisers and pesticides
354	Miscellaneous petroleum and coal products
361	Pottery, china, earthenware
363-9	Building products and minerals, non-metallic
372	Non-ferrous metal basic industries
	(3) Unskilled Labour Intensive
321	Textiles
322	Wearing apparel, excluding footwear
324	Footwear excluding rubber, plastic footwear
331	Rest of wood, cork excluding furniture, and excluding 33111-1
332	Furniture, fixtures, excluding those primarily metal
3522	Drugs and medicines

ISIC	Commodities
356	Plastic products n.e.s.
362	Glass, glass products
3811	Cutlery, handtools, general hardware
3812	Furniture, fixtures primarily of metal
3832	Electronics components, communication
3841	Ship building and repairing
3845	Transport equipment n.e.s.
390	Rest of other manufacturing, excluding jewellery
	(4) Technology Intensive
351	Rest of Industrial chemical, except 3512
3529	Chemical products n.e.s.
3813	Structural metal products
382	Machinery excluding electrical
3831	Electrical industrial machinery
3839	Electrical apparatus and supplies n.e.s.
3849	Aircraft
3851	Professional, scientific equipment
3852	Photographic and optical goods
	(5) Human Capital Intensive
341	Rest of paper products excluding 3411
342	Printing publishing and related
352	Rest of other chemical products excluding 3522
3551/3559	Rubber products
371	Iron and steel basic industries
3814-9	Fabricated metal products
38321-8	Radio, television, communication equipment
3833	Electrical appliances and house wares
3842-4	Railroad equipment vehicles, bicycles

ISIC	Commodities
3853	Watches and clocks
3901	Jewellery and related articles

Source: Arif and Hill (1985: 239, Appendix II)

Chapter 4

The struggle over economic and trade policy in Indonesia

4.1 Introduction

Chapter 2 provided a theoretical framework for the institutional aspects of policy formation in Indonesia. The discussion in Chapter 3 examined trade policy in Indonesia. With special reference to trade policy, these two chapters lead to the specific question of how conflict over economics took place in Indonesia.

The dynamic conflicts over the direction of economic policy in Indonesia are complex and cannot be explained with only a specific theoretical framework. They involve both domestic and external factors, including the government, crony capitalists, interest groups and multilateral institutions.

On the domestic front, neither State nor society's interests¹ appeared to be a single explanatory variable of the direction of economic policy. In addition, it is worth noting that neither appeared to be a single entity. As Robison (1986) points out, domestic capitalists comprise various elements including large and small scale, Sino-Indonesians and indigenous capitalists. State interests fall into several contending groups, including market-oriented technocrats, and economic nationalists more supportive of an interventionist approach.

On the external factors, several variables, including oil prices, foreign debt and multilateral institutions also play a role. This shows the complexity of policy

¹ For the term "State interests" and "society interests" see the discussion in Chapter 2.

formation in Indonesia. Neglecting any of these various factors can lead to incomplete analysis.

This chapter attempts to explain how institutional aspects, including the various actors and political features, played a role in influencing economic policy, particularly trade policies in Indonesia from 1966 to 1995. It also attempts to provide a detailed description of Soeharto's crony capitalists. This is particularly important in order to provide a basis for defining the variable "dummy for crony's industry", which will be used in the econometric estimation in Chapter 7.

The rest of the chapter is organised as follows: Section 4.2 provides a brief review of Indonesia's political setting; Section 4.3 focuses on the various contending groups; Section 4.4 highlights the role of ideas and the media in pressuring trade liberalisation; Section 4.4 discusses Soeharto's crony capitalists in greater detail; and the final section attempts to summarise all of the implications for trade policy in Indonesia.

4.2. Review of the political setting

As discussed in Chapter 2, there is a consensus among political scientists who study Indonesia that the State has dominated political life, including economic policy formation. Table 4.1 provides a summary of the evolution of the New Order power structure. To gain more insight into the power structure, and following Mackie and MacIntyre (1994), this study divides the evolution in power in the New Order structure into three phases:

4.2.1 The Period 1966-73

In the early years of Soeharto's New Order government, Indonesia experienced an enormous campaign of political restructuring (Anderson, 1983; MacIntyre, 1991; Mackie and MacIntyre, 1994). In order to control political participation, the New Order government reorganised Indonesia's large society organisations into various State-designated representative institutions. In addition, during 1972-73, the nine political parties, besides GOLKAR (the ruling party), were fused into two large parties:

Table 4.1: Three phases of evolution of the New Order power structure

	1966-73	1974-82	1982-95
Main Features	Political consolidation and economic recovery.	Steady growth, boosted by oil boom, increasingly patrimonialist state structure with high concentration of political control.	Falling oil prices (1982-1986); strong deregulation thrust in economic policies. Political status quo unchallengeable. Presidential authority highly personalised.
Principal power relationships	Army dominant. President's authority not yet unchallengeable. Bureaucracy weak and ineffective. Technocrats influence considerable	Army still the dominant force. President's position vulnerable 1974-78; but becomes stronger as economy improves. Bureaucracy gaining in influence and effectiveness. Technocrats' influence in eclipse A transitional phase: some private businesses and state corporations grow rapidly in boom conditions, others fall behind. Rent seekers relatively dispersed around military, Soeharto and bureaucracy. The role of interest groups relatively weak.	President's personal authority at peak. Decline in ABRI political influence. Technocrats exert strong influence over deregulation policies Large conglomerates proliferate, some increasingly influential. State enterprises under attack for unprofitability. Rent seekers concentrated around Soeharto's family. The role of interest groups began to increase.
The role private business groups, rent seekers and interest groups	Private business groups weak (but <i>cukong</i> gained influence). The role of interest groups was relatively weak.		
Political climate	Open, competitive, highly participative atmosphere, relatively free expression of opinions, except for the left.	Increasing constraints on political activity, press and public statements.	Tighter social control, with ideological conformity.

Source: adapted from Mackie and MacIntyre, 1994; MacIntyre, 1991; Robison, 1986.

the Unity Development Party or *Partai Persatuan Pembangunan* (PPP) and the Indonesian Democratic Party or *Partai Demokrasi Indonesia* (PDI). This political restructuring shifted political participation and policy formation into the hands of the State.

Parallel to the political restructuring, economic policy, including trade policy, tended to be State centred. As a result, the role of private business groups was relatively

weak, although *cukong* (Chinese businessmen, often in partnership with senior military officer or bureaucrats) gained personal influence (Crouch, 1979; Mackie and MacIntyre, 1994). The role of business representation or interest groups was ineffective, because it was more efficient for leading firms to win special privilege through personal relationships with higher-level government officers rather than via collective action (MacIntyre, 1994).

4.2.2 The period 1974-82

The period 1974-82 witnessed a shift further of political and economic decision making into the hands of the State. This shift was supported by external economic conditions. The 1973-74 oil boom enabled the New Order government to glean the benefits of oil revenue and adopt an import substitution strategy via various government interventions and protectionist trade policy. The political system became increasingly patrimonial in character. Nepotism flourished and, using their power in administration, high level government officers secured licences, contracts, credits, trade protection and other advantages for the enterprises with which they were privately associated (mostly managed by Indonesian Chinese) (Crouch, 1979).

The various government interventions and protectionist trade policy gained considerable political support owing to the *Malari* affair on 15th January 1974. This can be explained as follows: the government's open door policy to foreign investment resulted in a flourishing of Japanese and U.S. investment in Jakarta, usually on a joint-venture basis with a Chinese Indonesia partner (Robison, 1986; Bresnan, 1993; Mackie and MacIntyre, 1994). This created nationalist resentment, particularly to Japanese investment. The resentment exploded on January 15th 1974 when Japanese Prime Minister Tanaka visited Jakarta in the incident known as *Malari (Malapetaka 15 Januari)* (The disaster of 15 January).² Foreign investment policy became more restrictive after the *Malari* affair, evidenced by the regulation which obliged foreign investors to form joint ventures with indigenous Indonesian partners and other various restrictive foreign investment policies.

² About the January 15th disaster see Bresnan (1993) and Mackie and MacIntyre (1994).

Although political and economic decision-making had shifted more firmly into the hands of the State, in this period 1974-82 the principal power relationship was not yet centralised around Soeharto, as evidenced by the challenge from various student demonstrations during 1977-78 rejecting Soeharto's nomination to be the next President. Consistent with this power relationship, rent seekers were dispersed around the military officers, Soeharto and the bureaucracy.

4.2.3 The period 1982-95

At the end of the previous period and the beginning of this period (1982-83), there was a major change in the political dynamics, due to a basic structural change in the Indonesian economy resulting from the decline in oil prices. This led to progressive economic deregulation and much a greater reliance on the private sector which, in turn, had important political consequences. The deregulation policies which coloured economic policy from the mid 1980s, were accompanied by the emergence of many large private sector conglomerates and a transformation into a more private sector oriented economy. Nevertheless, as argued by Robison (1986) and Mackie (1990), they did not yield much political influence. The pressure for deregulation was believed to stem from the technocrats and not the business sector (Soesastro, 1989; Azis, 1994; Pangestu, 1996). However, this argument has to be juxtaposed against the fact that the role of business sector and the crony capitalists became increasingly important during the mid 1980s. Arguments that only focus on the role of the State tend to overlook the distributive consequences of the reform. This issue will be discussed in greater detail in Chapter 6.

The other notable change was marked by an enlargement in Soeharto's personal authority following his fourth election in 1983. Mackie and MacIntyre (1994) argue that, as a consequence of the increasing power of the President, the role of military in political and administrative power declined. This argument is very important in understanding why rent-seeking patronage shifted towards Soeharto's family after the mid 1980's. While business patronage was scattered around military officers, the bureaucracy and Soeharto in the 1970's, it became concentrated around Soeharto's family circle during the 1980s. This resulted in competition between Soeharto's business interests and the military.

To summarise, there were four important factors in the decision making process in Indonesia. First, from the 1980s (and prior to the economic crisis) political power was highly centralised and personalised around former President Soeharto. Second, independent political institutions were limited in number and influence. Third, policy formation, including trade policy, was very much State centred, with the link between the State and society existing mainly via a patrimonial and corporatist framework. Fourth, most large businesses which emerged from the mid 1980s were owned either by Sino-Indonesians, well-connected indigenous business interests (mostly extending to Soeharto's family) or by an extensive State enterprise network.

4.3. The contending groups over economic policy

As noted, the conflict over economic policy in Indonesia, including the direction of trade policy embraced the government, domestic and foreign business groups and multilateral institutions. Within the government itself, there was a struggle between technocrats and economic nationalist groups. Table 4.2 summarises the contending groups and shows that there were at least six major groups contending economic policy in Indonesia. Each group had their own policy stance which could be either opposite or complementary to each other. For example, the technocrats tended to emphasise the market, while economic nationalists tended to be protectionist.

Table 4.2: Major contending groups over economic and trade policy in Indonesia, 1966-95

Period	Technocrats policy stance	Economic nationalists policy stance	Rent seekers ^{a)} policy stance	Interest groups policy stance	Foreign institutions policy stance	Foreign firms policy stance
1966-72	Market approach	Protectionist	In favour of protectionist policy	Pursued each industry's interests	Pro market	Pursued firms' interest, but tended to protectionist
1973-82	Adopted Import substitution strategy, although still relatively pro market	Protectionist	In favour of protectionist policy	Pursued each industry's interests	Pro market	Pursued firms' interest, but tended to protectionist
1982-85	Began to support economic liberalisation	Protectionist	In favour of protectionist policy	Pursued each industry's interests	Pro market	Pursued firms' interest, but tended to protectionist
1985-90	Market approach and support for economic liberalisation and trade reform	Protectionist	In favour of protectionist policy	Pursued each industry's interests	Pro market	Pursued firms' interest, but tended to pro export
1990-95	Pro market and support for economic liberalisation and trade reform	Protectionist	In favour of protectionist policy	Pursued each industry's interests	Pro market	Pursued firms' interest, but tended to pro export

a) Concentrated around military, bureaucrat and Soeharto in the 1970s, and concentrated around Soeharto in the 1980s and 1990s prior to economic crisis.

However, it is worth noting, that there was not always a clear distinction between each contending group. Furthermore, the views of contending groups also need to be understood in terms of the time period, owing to the dynamics of change in the political sphere and to the economic conditions.

It is also difficult to classify the conflict between economic nationalists and technocrats as a dispute between a market approach and an interventionist approach in an ideological sense. Hill (1997) argues:

'It would be a mistake to cast the disputes between the two camps as over a 'free market' versus a 'state-led' approach, as some have done. The differences had more to do with shades of emphasis than sharp ideological disputes.'

In order to gain a clearer description of the various contending groups, this study has classified them as follows:

4.3.1 The technocrats

The term 'technocrats' has been used to refer to the group of economists employed to help Soeharto with economic policy. Most were from The Faculty of Economics, University of Indonesia (FEUI) and had advanced degrees from abroad, mainly the United States. Originally they consisted of the five following men: Widjojo Nitisastro, Ali Wardhana, Emil Salim, Mohamad Sadli and Subroto.³

During the years 1966 to 1968, their economic policies essentially amounted to bringing back the 'free market' economy and limiting the role for the State in fiscal and monetary policy. However, since REPELITA I (the first five years development plan) the technocrats put a high priority on the development of import substitution manufacture, and listed some priorities in industries which supported the development of the agriculture sector, such as chemicals, fertilisers, and cement. The oil boom in 1973-74 enabled the technocrats to use oil revenue to adopt an import substitution strategy, by imposing government taxes or bans on some traditional exports. This approach prevailed until the early 1980s, prior to the decline in the oil price.⁴ However, after the mid 1980s, and the significant loss in revenue due to the collapse in the oil price, the government could not maintain this import substitution strategy and began to emphasis on the market approach, as evidenced by various deregulation policies.

In the 1990s, particularly during 1993-1995, the technocrats' role in economic policy declined,⁵ as the pro high tech groups around the former State Minister of Research and Technology, B.J. Habibie, gained considerable ground.

The technocrats' economic policy approach is perhaps best explained as a pragmatic and professionally based approach rather than an ideological stance. This was evidenced by the transformation of their economic views from inward looking towards outward looking as discussed above. While the technocrats' view tended to stress market-oriented policy compared with the engineers in the economic nationalist

³ For a review of the role of technocrats, see Brooks, 1997.

⁴ Interview with Emil Salim (5 January 1999), Mohamad Sadli (30 September 1998) and Suhadi Mangkusuwondo (1 February 1999).

⁵ In fact, the technocrats regained influence during the economic crisis in 1997-1998, however, this issue is beyond this thesis.

groups, it is difficult to classify them as *laissez faire* economists. Sumitro Djojohadikusumo,⁶ and Emil Salim, admit their approach was more 'economic planning through the market' than a free market approach.⁷ In other words, while they agreed that the role of the market was important in producing maximum economic growth, they also took into account the importance of national policy for social concerns.

4.3.2. The economic nationalist group

The economic nationalist grouping has been a loose one. It consisted of a coalition of several sub-groups with similar views on economic policy. Although they had similar views on industrial policy (which tended to be protectionist), opinions differed on issues such as the support of "economically weak" groups or the development of strategic industries.

In the early 1970s, Lieutenant General Ibnu Sutowo (the first President Director of *Pertamina*, the State owned oil company) was a notable supporter of economic nationalism. *Pertamina* had emerged as a giant State owned company and a most important source of funds for supporting extra-budgetary army activities. Sutowo appeared to be a patronage politician extraordinaire, and succeeded in expanding *Pertamina* into various activities outside of its own core business, including steel, cement, chemicals, fertilizers and aluminum industries and providing favours to crony businessmen, pro-*pribumi* and pro-high tech technologists (McCawley, 1978 and Brooks, 1997).

In justifying *Pertamina*, Sutowo argued for the importance of a 'national bureaucratic' development strategy, which designated a leading role for technically advanced firms such as *Pertamina*. This strategy was said to be modeled after the Japanese pattern of government support for large private companies (Brooks, 1997).

Although the economic nationalist grouping is loose, by tracing the interests of each sub-group, it can be disaggregated into at least four sub-groups: the pro-*pribumi*

⁶ Sumitro Djojohadikusumo was known as Widjojo's teacher in the Faculty of Economics, University of Indonesia.

⁷ Interview with Sumitro Djojohadikusumo (29 March, 1999) and Emil Salim (5 January, 1999).

group, pro-high tech technologists, the structuralist group and rent seeking or patronage patrimonialists.⁸ As noted, there is no clear-cut division between each group. For example, rent seekers often justified their view by using social welfare concerns, such as the necessity to have strategic industry or the harm of dependency on foreign capital. Thus each of these sub-group classifications should be viewed with caution.

4.3.2.1 The structuralist group

The most notable proponent for the structuralist approach to industrialisation was A.R. Soehoed (the Minister of Industry from 1978-1983). As Minister of Industry, Soehoed played an important role in designing industrialisation strategy, arguing that the best way to transform Indonesia into an industrialised country was to set up basic industries, making use of the available natural resources, and then develop downstream industries (Soehoed, 1988). Although, what is meant by basic industries is obscure, it is perceived as an industry producing the goods needed in a country, such as fertilisers, salt, cars, trucks, electronics, glass, etc. (Soehoed, 1967 and 1988). Soehoed further pointed out that, in countries with a long history of industrial development, basic industries were usually developed from downstream activities upwards, in order to secure supplies of raw and basic materials (Soehoed, 1988). This goes with a market-oriented approach. However, this was not possible for Indonesia, since private enterprise was reluctant to enter the upstream sector due to the small profit margins and higher risk, and the huge amount of capital required. As a result, Soehoed suggested government take the lead because private enterprise was not ready.⁹ He states: (Soehoed, 1988:45)

'I propagated the idea that it was time for the government to put all available resources into infrastructure and basic industries. But I did not have many supporters for this idea'.

This approach suggests a need for government intervention and trade protection in the developing basic industries.

⁸ Brooks (1997) disaggregated this group into three main sub-groups: *pro pribumi*, pro high tech technologists and pro patronage patrimonialists.

⁹ Interview with A.R. Soehoed (30 December, 1998).

4.3.2.2 The pro-*pribumi* group

The pro-*pribumi* group argued that the government had a responsibility to protect indigenous businessmen from competition both from foreign capitalists and the Chinese businessmen who had long dominated the Indonesian economy. This could be done through various government interventions, including trade protection.

The early 1980s witnessed some affirmative action through government procurement, implemented via various Presidential decrees (*Kepres*), such as *Kepres* 14 in 1979, *Kepres* 14 A and *Kepres* no 10, 1980 (Schwartz, 1994). All these *Kepres* provided priorities for "weak economic groups". A special team, known as Team 10, was established in 1980 to allocate projects for this purpose (Schwartz, 1994). This team headed by Sudharmono (Minister of the State Secretariat) as Chairman and Ginandjar Kartasasmita (Junior Minister for the Promotion of the Use of Domestically Produced Goods) as Vice Chairman. Both were notable figures among the pro-*pribumi* group. With a huge budget and the power to allocate projects, Sudharmono and Ginandjar quickly turned Team 10 into an instrument for building and maintaining highly centralised patronage (Brooks, 1997).

Although this team was initially established to oversee government procurement, it was not always clear whether it was working in favour of the *pribumi* or justifying rent seeking by using the pro-*pribumi* argument.

4.3.2.3 The pro-high tech technologists

The pro-high tech technologists supported government intervention and trade protection in order to develop strategic industry. They argued that government should emphasise the development of high technology in which high value added technology was the key to the future success of Indonesia's industrial policy (Brooks, 1997; Schwartz, 1994). In addition, the pro-high tech technologists suggested that Indonesia should focus on the 'competitive advantage' that only technology could provide, rather than depending on the country's comparative advantage in labour abundance and natural resources.

The leading proponent of this view in the 1990's was B.J. Habibie (State Minister for Research and Technology during 1978-1998). Habibie argued that a focus on

technology would increase the value added of domestic production, which would in turn increase the productivity of Indonesian workers. He admitted that, in order to do so, the State could not rely on private firms, since they could not be expected to invest significantly in research and development. As an alternative, Habibie argued for State intervention to play a leading role in research and development and that, in order to do that, economic subsidies and protection could be justified (Rice 1998).

This group gained significant political power in the 1990s when some of Habibie's protégés were promoted into ministerial position.

4.3.2.4 The pro-patronage patrimonialists or rent seekers (crony capitalists)

As discussed in section 4.2, the weakening of political parties, the depoliticisation of the masses, and the high government revenue from oil, all contributed to the political system becoming increasingly patrimonial in character. As a result of Indonesia's State-structured and repressive political framework, the traditional patrimonial or clientelistic pattern of political participation flourished within the business community (Crouch, 1979). This produced patronage patrimonialists/crony capitalists or rent seekers.

Yoshihara (1988:68) defines rent seekers as follows:

'The capitalists who try to establish government connections for business advantage can be called rent seekers because they are essentially seeking opportunities to become the recipients of the rent government can confer by disposing of its resources, offering protection, or issuing authorization for certain types of activities it regulates'

This definition suggests that rent seekers channeled their political demand for a particular policy, by forming a patron client relationship with Indonesian power elites. The rent seekers generally supported government intervention or protectionist trade policy in order to secure economic privilege. In addition, as pointed out by Hill (1996), this relationship could also take the form of an informal but quite explicit contract with government, in which private interests invested in "pioneering" activities in exchange for trade protection. This "protection for sale" activity also occurred to finance government campaign spending. For example, Iswandi (1998) discusses the link between GOLKAR and the business sector. He argues that Soeharto utilised *Yayasan DAKAB (Dana Karya Abdi)* as a money machine for the interests of

GOLKAR. Furthermore, he reports that in September 1991 several conglomerates, such as Liem Sioe Liong, Prajogo Pangestu, William Soeryadjaya, and Eka Tjipta contributed money to GOLKAR in exchange for economic privilege, including trade protection.

Although the rent seekers supported protectionist policy, it is dangerously heroic to attempt to classify the crony capitalists group as entirely pro protectionist. In some cases e.g., where they were dominant players in the export sector, they did not always reject trade reform. This occurred in a few cases after the mid 1980s, although in general they tended to favour protectionist trade policy.

Interestingly, individuals in this group understood that the best mechanism for justifying this patron-client connection was to disguise their patrimonial designs by co-opting the theme of greater equity as their goals (for example, by establishing cooperatives) or the need to develop various strategic industries. This makes it hard to distinguish between the pro *pribumi* group, the pro-high tech technologists and the rent seekers.

As a consequence of their dependence on patrons, the ups and downs of this group were closely associated with the evolution of the principal powers in the New Order government, which was in the hands of the military, the bureaucracy and Soeharto himself. To be more precise, the pro patronage group was spread across military patronage business, bureaucracy patronage business and Soeharto's crony capitalists and the distinction among each sub-group was not always clear. One member of a particular patronage group could also have a close relationship with another patron. This led to difficulties in accurately classifying the members of each group. Nevertheless, based on their major patron, patrimonialist patronage falls into three sub-groups.

- **Military patronage business**

The military has been involved in business since the early 1950s (Crouch, 1979; Robison, 1986; Samego et.al, 1998). Its initial involvement was to raise extra-budgetary revenue in order to finance military activities. However, in the years that followed, particularly from the beginning of the New Order in 1966, the military was

actively involved in private business, not only to raise extra-budgetary military revenue. The patrimonial system benefited the military through various government interventions, including licences, government procurement, credits and import protection. This resulted in the transformation of military patronage business into big business activities involving wives, brothers, and cousins etc., and mostly managed by Chinese Indonesians (Crouch, 1979; Robison, 1986).

Nevertheless, with the evolution of the power structure, the position of military patronage business began to decline in the 1980s owing to the emergence of Soeharto's crony capitalists business.

- **Bureaucracy patronage business**

Similar to the military patronage business, bureaucracy patronage business also grew on a patrimonial basis which established a link with a bureaucrat who held the power to allocate economic resources and licences. As discussed, the most important patrons for bureaucracy were Sudharmono and Ginandjar Kartasasmita. Both chaired Team 10 which provided important access for bureaucracy patronage business, particularly to those close to Sudharmono and Ginandjar. In fact, bureaucracy patronage business was not limited to *pribumi*, but also involved Sino-Indonesian businesspersons.

Although a bureaucracy patronage group began to emerge in the early 1980s, their role was relatively limited compared with the military patronage sub groups in the 1970s and Soeharto's cronies after the mid 1980s.

4.3.3 The interest groups

The term interest group is confined here to business representative bodies which channeled industry-specific interests into demand for a particular policy, particularly trade policy.

In terms of an economic policy stance, it is impossible to divide these interests groups into pro market or pro State intervention, since their policy position was basically driven by industry specific interests. For example, in the case of SEKBERTAL (Joint Secretary of the Spinning Industry) and textiles, they rejected an import monopoly of cotton, as did the plastic association (APINDO), as discussed earlier. However, as in

the automotive industry, GAIKINDO (Association of Indonesian Automotive Industry) they supported trade protection, particularly prior to the 1993 trade deregulation.¹⁰

By the mid 1990s, there were several hundred businesses associations operating at the national political level in Indonesia. To be more precise, for every sector and sub-sector business there was a separate business association (MacIntyre, 1991). Nevertheless, KADIN (Indonesia Chamber of Commerce and Industry), which was established in 1968, remained the main business representative.

Prior to the mid 1980s the role of KADIN in representing business or interest groups was limited and ineffective. This can be attributed to at least two reasons: First, economic policy was very much State centred, particularly in the 1970s. Second, as noted in Chapter 2, under a corporatist framework, industry associations tended to represent the State's interests more than those of industry.

Nevertheless, structural change in the 1980s provided an opportunity for the Indonesian private sector to influence economic policy. As a result, some industry-specific or sector-specific associations began to take control within their broad industry associations and attempted to transform them into effective vehicles for collective action (MacIntyre, 1991 and 1994).

Although rather limited, some empirical studies by Wibisono (1989) and MacIntyre (1991 and 1994) showed that the associations in textiles, pharmaceuticals, insurance, and cigarettes played an increasingly important role in fighting for industry interests. Although outcomes were limited and the patrimonial pattern or rent seeking was still dominant, collective action began to emerge, particularly from the mid 1980s.

4.3.4. The role of external institutions and foreign investors

As discussed in section 4.2, the dynamic conflict over economic policy in Indonesia cannot be disassociated from external factors, including the oil price, foreign capital

¹⁰ Interview with Suhari Sargo (20 October, 1998 and 4 November, 1998).

and external institutions. This section examines the role of external factors in Indonesian economic policy.

4.3.4.1 The International Monetary Fund (IMF) and The World Bank

In terms of dynamic conflict over policy, it is hard to dispute that, via the technocrats, The World Bank and the IMF had an indirect influence on economic policy in Indonesia, including trade policy. For example, the establishment of a consortium framework for foreign aid was an important support behind the technocrats push for trade liberalisation. Or, in Emil Salim words, 'We were using World Bank hands to push for further economic liberalisation'.¹¹

In this consortium (previously called Inter Governmental Groups on Indonesia (IGGI) and later called CGI or Consultative Group on Indonesia), technocrats had to present economic progress to estimate the level of foreign aid that could be expected in upcoming years. This consortium framework put The World Bank and the IMF in an important position of influence. At each meeting, The Bank and the Fund evaluated economic trends and Indonesian aid requests. Donor countries have consistently followed their recommendations. This meant The Bank and the Fund became relatively important in Indonesia's policy making process, requiring Indonesia to follow certain policies in order to maintain a good relationship with them (Brooks, 1997).

However, despite the important role of both institutions in influencing economic policy, prior to the economic crisis in 1998, they could not simply dictate economic prescriptions to the Indonesian government. The government did not always agree with or follow every Bank or Fund recommendation. For example, in 1981, the Bank produced a report strongly criticising economic inefficiency due to Indonesia's protectionist policy from 1973-81. The Indonesian government, including the technocrats, reacted negatively to this report and publicly rejected its main policy recommendations (Robison, 1986; and Brooks, 1997).

¹¹ Interview with Emil Salim (5 January 1999)

Thus, although The World Bank and The IMF had an indirect influence in economic decision making in Indonesia, particularly when the oil price collapse in the mid 1980s, their role was sometimes rather limited, primarily during the oil boom period.

1.3.4.2 Free trade agreements

Indonesia is a member of the General Agreement on Tariffs and Trade (GATT)/World Trade Organisation (WTO). As a member, Indonesia has a commitment to the principles of non-discrimination, unconditional most favoured-nation treatment, and other regulations in GATT/WTO. Thus, Indonesia's trade and regulatory interventions are under scrutiny by GATT/WTO framework (Hill, 1996). In addition, since the 1990s, Indonesia has also been a participant in the Association of Southeast Asian Nations Free Trade Arrangement (AFTA), and Asia Pacific Economic Cooperation (APEC) in the 1990s. These two organisations have given detailed schedules for achieving particular targets for trade liberalisation. By agreeing to these principles, Indonesia committed itself publicly to implement trade liberalisation. In fact, there was a hidden agenda behind the strategy of joining APEC and AFTA. To secure the continuation of trade liberalisation in Indonesia, as admitted by Emil Salim the technocrats urged Indonesia to join the trade blocks APEC, WTO and AFTA.¹² In addition, as pointed out by Hill (1996), one of the reasons for joining the economic cooperation forum was to ensure continuing international market access. Therefore, Indonesia had to engage in vigorous international commercial diplomacy. This suggests there was pressure from these multilateral institutions for trade liberalisation in the 1990s.

It is worth noting that tariff reduction and investment liberalisation made substantial progress after 1994. One of the most important economic reforms came in May 1995, which was perceived as a 'down payment' on Indonesia's commitments under the AFTA agreement. This package substantially reduced tariffs and was the first time Indonesia announced a schedule of future tariff reduction covering the period 1995-2003. After the May package, the only items with above 40 per cent tariff protection were motor vehicles and components and alcoholic beverages (Fane, 1996).

¹² Interview with Emil Salim (5 January, 1999)

However, it is important to note that joining these economic institutions did not automatically mean trade protection would be entirely abolished. Despite the existence of the free trade agreement block, the role of crony capitalists continued to have appeal, including in the national car policy which was launched in 1996. This reflects both the continued complexity of Indonesia's trade policy, and that these trade arrangements could not entirely dictate Indonesia's trade policy. Indonesia's commitment to the free trade agreement has to be juxtaposed against the continuing attempts to increase protection.

4.3.4.3. The role of foreign investors

The restricted foreign investment policy during 1973-1981 provided evidence that the role of foreign investors in Indonesia in general was rather limited. However, in specific industries there was some evidence that foreign investors played an important role in influencing trade policy. The automotive industry is a good example of the influence of foreign capital on trade policy. The lobby from Japanese companies was relatively strong and they pushed for trade protection. When the government wanted to reduce protection in the 1980's the Japanese lobbies complained pointing to their heavy investment in the automotive industry.

Another influence of foreign capitalists on domestic policy existed via 'tariff bargaining' as a condition of entry in which the larger the foreign presence in an industry the more likely protection would be offered (Hill and Aswicahyono, 1995; Basri and Hill, 1996). As Aswicahyono and Hill (1995) argue, 'tariff bargaining' was quite common in Indonesia during the high protection years to the mid 1980s. It became less common after the decline of protection and the shift of foreign investment into export competing sectors. This suggests that, particularly after the mid 1980s, the pressure for trade protection from foreign investors was in general rather limited.

4.4. The dynamic role of the liberal epistemic community¹³

As the previous discussion shows, economic policy was very much State-centred. Nevertheless, it is hard to deny that particularly after the mid 1980s intellectuals and

¹³ The terminology of liberal epistemic community is taken from Mallarangeng (2000).

the media contributed in influencing the policy making process and disseminating ideas regarding liberalisation (Mallarangeng, 2000). As discussed in Chapter 2, parallel to Liddle's restricted pluralism approach, Mallarangeng (2000) argues that, besides the technocrats, the "liberal epistemic community" carried the primary role of pushing for further deregulation.

The term "liberal epistemic community" refers to the group in society which tried to convince both the government and the people that the best solution to the growing economic problems was economic liberalisation (Mallarangeng, 2000).

Unlike the technocrats who preferred "low politics", in the sense that they tried to keep a low profile in the deregulation policy debate (Soesastro, 1989), these community members expressed their views via the media and public forums. From the mid 1980s, and in particular during the 1990s, there were public debates in the media regarding economic policy. As Mallarangeng (2000) points out, criticism was allowed as long as it did not directly involve Soeharto, his family, or high-ranking officers. This made economic policy debate a catalyst for criticism of the government. The various discussions emphasising the need for trade liberalisation took place in leading major media including, *Kompas* and *Suara Pembaruan* (newspapers), and *Tempo* and *Warta Ekonomi* (magazines). The members of the "liberal epistemic communities", including prominent Indonesian economists Iwan Azis, Sumitro Djojohadikusumo, Kwik Kian Gie, Dorodjatun Kuntjoro-Jakti, Anwar Nasution, Mari Pangestu, Mohamad Sadli, Hadi Soesastro, Sjahrir, Christianto Wibisono; and several editorial writers of major newspapers, and magazines including Goenawan Mohamad; viewed deregulation as a powerful force for broader liberal transformation.¹⁴

Nevertheless, it is worth noting that their impact was relatively limited and the policy making process was still very much State centred. One interesting example was the use of the word "liberalisation" itself. In the 1980s 'liberalisation', including trade liberalisation, was a dirty word. Its use was prohibited in the media or in formal discussion. The media was very careful, preferring to use the terms "trade

¹⁴ Personal communications with Anwar Nasution, Iwan Azis, Sjahrir, Mari Pangestu, Hadi Soesastro, Sumitro Djojohadikusumo, Mohamad Sadli and Goenawan Mohamad.

deregulation" (*deregulasi perdagangan*) or "economic deregulation" (*deregulasi ekonomi*) in place of "trade liberalisation" or "economic liberalisation". Among the technocrats, the word "liberalisation" was initially used by Radius Prawiro (Coordinating Minister for the Economy, Finance, Industry and Development Supervision, 1988-1993). Prawiro's (1989) paper is perceived as a milestone for disseminating the word "liberalisation" into the public debate.¹⁵ The word "liberalisation" was still treated as a "dirty word" until Soeharto agreed to join APEC in the 1990s. After this, the word 'liberalisation' was allowed to be used and became common in the media. This simple illustration shows that, although there was room for ideas or debate, it remained subject to the existing authoritarian structure.

4.5 Soeharto's family business and crony capitalists

Similar to other patrimonial patronage, Soeharto's crony capitalists tended to advocate protectionist trade policy in order to protect their economic privilege, with the qualification that they did not reject trade reform providing they were dominant in the particular export sector (this only occurred in small cases).

Generally, the crony capitalists channelled their economic or trade policy demands by forming a personal relationship with Soeharto's family or even with Soeharto himself. Schwartz (1994) shows various cases where Liem Sioe Liong, Bob Hasan and Prajogo Pangestu enhanced their economic interests through their personal relationship with Soeharto. In addition he shows how they agreed to support Soeharto's development or "personal" projects in return for economic privilege.¹⁶

It is popularly argued that compared with other firms, many firms owned by Soeharto's crony capitalists received special privilege, including trade protection. It is important both to examine this argument and to observe the relationship between Soeharto's crony capitalists' businesses and the levels of trade protection. This issue will be examined econometrically in Chapter 7. However, before proceeding to the

¹⁵ This information was given by Rizal Mallarangeng, based on his interview with Radius Prawiro.

¹⁶ For further detailed see Schwartz (1994).

econometric analysis, this study has to define and list Soeharto's crony capitalists major businesses.

Defining Soeharto's crony capitalists is not easy. It is said that Soeharto invested in business, particularly in Liem Sioe Liong companies. This is difficult to verify since it was not done in his own name. Obviously documentation is not publicly available in all cases.

Nevertheless, as his family was extensively involved in various business activities,¹⁷ the best way to describe Soeharto's involvement in business activities is via his family businesses or the major business groups known to have "a good relationship" with Soeharto.

It is almost impossible to individually list all businesspersons with a connection to Soeharto's family, because most business groups had a good relationship with Soeharto in order to gain business privileges.

For the purposes of this analysis, this study employs a more "conservative definition" than Yoshihara (1988) (see Section 4.3.2.4). Here the definition of crony capitalists is confined only to the rent seekers who were well connected to Soeharto's family. This definition is inflexible and conservative when compared to a definition that includes all businesspersons well connected to government. Since this thesis is dealing with a variable which is difficult to model accurately, it is better to have a conservative definition than a loose one. This "conservative definition" only applies for the discussion in this section and in Chapter 7. Beyond this section and Chapter 7, the term "crony capitalists" is used interchangeably with "patrimonialist patronage" and "rent-seekers".

The next question is how does the study define 'well connected'? Obviously there is no quantitative measure for 'well connected'. Here the term refers to major businesspersons who incorporated Soeharto's family into their businesses. This could be as shareholders, leading position (e.g. as member of board directors or board of

¹⁷ For detail studies see Yoon (1989), Schwarz (1994), Robison (1986), Yoshihara (1988), Iswandi (1998), Samego et.al (1998), Aditjondro (1998a).

commissioners), or joint ventures. On the basis of this information, this study defines the industries in which Soeharto's crony capitalists were dominant players during the period 1975-1995.

It is true that the rent seeking activities or patrimonialist pattern was firm specific rather than industry specific, meaning that trade protection was given to a specific firm rather than to an industry in general. Nevertheless, considering the rent seekers/crony capitalists were dominant players in these particular industries, it is safe to assume these industries benefited from cronyism (a list of the industries influenced by cronyism is presented in Chapter 7). Inevitably, this definition cannot capture Soeharto's crony capitalists in a completely accurate fashion. While not complete, this qualification is inevitable. It is preferable to accept qualification rather than neglect the role of Soeharto's crony capitalists in manufacturing protection in Indonesia, because to do so would lead to inadequate analysis.

Before proceeding, it is necessary to define Soeharto's family in this thesis (Table 4.3).

Table 4.3: Soeharto's family in business

Name	Relation to Soeharto
Siti Hartinah Soeharto	Wife
Siti Hardijanti Rukmana (Tutut)	Daughter
Sigit Harjojudanto (Sigit)	Son
Bambang Trihatmodjo (Bambang)	Son
Siti Hediati Prabowo (Titiek)	Daughter
Hutomo Mandala Putra (Tommy)	Son
Siti Hutami Endang Adiningsih (Mamiék)	Daughter
Probosutedjo	Soeharto's half brother
Sudwikatmono	Soeharto's step brother
Bernard Ibnu Hardojo	Mrs. Soeharto's brother
Edy Kowara	Tutut father's in law

Source: Yoshihara (1988), Yoon (1989), Aditjondro (1998a), Iswandi, (1998), and Robison (1986).

Table 4.4 presents a list of major businesspersons who "well connected" with Soeharto, according to the definition in this study.¹⁸

Appendix 2 presents some of Soeharto's business interests and Appendixes 3 and 4 present Soeharto's old business (before Soeharto's children became heavily involved in various businesses) and Soeharto's family's new businesses (up to 1995).

Table 4.4: Business persons who were well connected to Soeharto's family

No	Name of business person	Soeharto's family connection
1.	Liem Sioe Liong	Soeharto, Sigit, Tutut,
2.	Bob Hasan	Soeharto, Sigit
3.	Eka Tjipta Widjaja	Sudwikatmono
4.	Prajogo Pangestu	Bambang Trihatmodjo
7.	Henry Pribadi	Bambang Trihatmodjo
8.	Agus Nursalim	Probosutedjo

Sources: Yoon, 1989; Iswandi, 1998; Yoshihara, 1988; Aditjondro, 1998a and 1998b; Samego et.al, 1998, Robison, 1986 and various interviews.

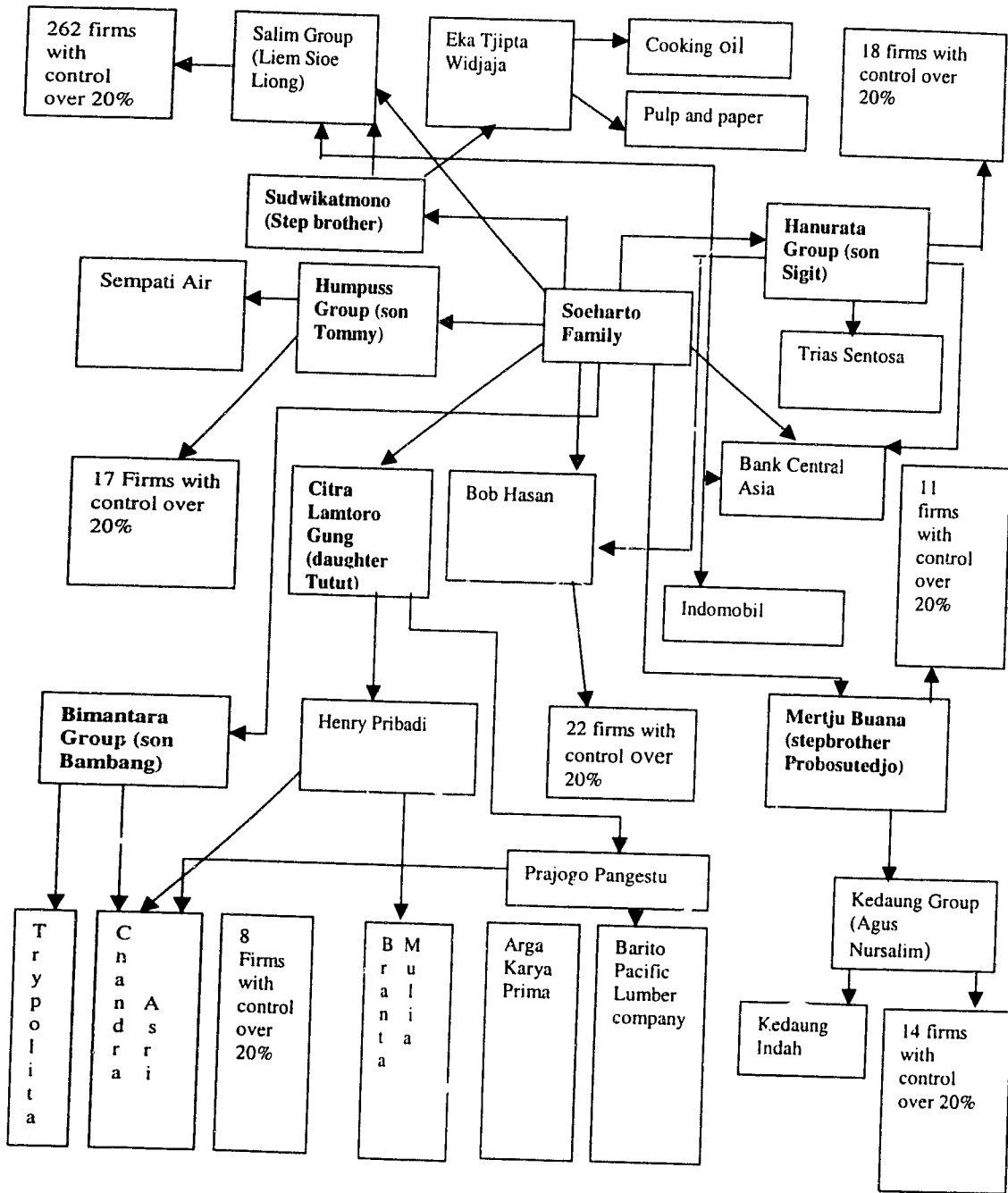
Figure 4.1 summarises the Soeharto Group. This thesis now highlights some of the major players in Figure 4.1:

Siti Hardiyanti Rukmana (Tutut)

In 1983, Tutut with her husband Indra Rukmana and her two younger sisters established the Citra Lamtoro Gung Group. This group was heavily involved in a wide range of businesses both in Indonesia and abroad. Schwartz (1994) points out that Tutut benefited from trade protection in 1993 through an import license for Malaysia's Proton car. This was part of a counter trade arrangement between the

¹⁸ Interestingly, a study done by Claessens, Djankov and Lang (2000) contain with a similar list to this study.

Figure 4.1: The Soeharto Group



Source: see text and Claessens, Djankov and Lang (2000)

Indonesian government and Malaysia, in which Indonesia imported the Proton in exchange for Malaysia buying aircraft from the National Aircraft Industry (IPTN).

Tutut also established a company with Prajogo Pangestu in PT Tanjung Enim Pulp and Paper. Tutut was also known to be a shareholder of Liem's Bank Central Asia.

Sigit Harjojudanto

Sigit was heavily involved with Bob Hasan in the Nusamba group. This group was awarded an import monopoly for tin plates and was heavily involved in timber and tea plantations, and telecommunications development projects (Yoshihara, 1988; Iswandi, 1998; Yoon, 1989).

Bob Hasan was not Sigit's only business associate. Sigit also established businesses with Liem Sioe Liong and Eka Tjipta Widjaja. Yoshihara (1988) states that Sigit owned a 10% share of the Sinar Mas Inti Perkasa group, owned by Liem and Eka Tjipta Widjaja. This group owned the largest company in palm oil and cooking oil and pulp and paper (Yoon, 1989; Yoshihara, 1988).

In addition, together with Liem Poo Hian and Yani Haryanto, Sigit owned two of the largest sugar plantations and refineries (Gunung Madu and Gula Putih Mataram) (see Appendix 4).

Bambang Trihatmodjo

In 1984, Bambang Trihatmodjo and his brother in law Indra Rukmana Kowara set up a business named Bimantara. This holding company comprised approximately 50 companies and had more than 100 subsidiaries. Bimantara was involved in a wide range of business, and was known as one of the largest companies in milk powder, plastics, and petrochemicals. In the 1990s, Bimantara also owned a tyres company (Intirub) and animal feed products. Their business interests are presented in Appendix 4.

In 1985, Bambang, his brother Sigit and his uncle Sudwikatmono, were granted an import monopoly for plastics (Schwarz, 1994, Iswandi, 1998). This is interesting

because it provides a good illustration of how trade policy works under a patrimonial system.¹⁹ The case is as follows:

In October 1984, the Minister of Trade decreed that a variety of imported basic materials for plastics were to be put under government control. These materials had to be imported via three State owned companies: Pantja Niaga, Tjipta Niaga and Mega Eltra. In 1985, the decision of the Minister of Trade was followed by an announcement that the three State owned companies had appointed a single private company based in Hong Kong as sole agent for all plastics imports (Panca Holding). Not only was Sudwikatmono a director of Panca Holding, but the company was also owned by two corporations registered in Vanuatu, in which Bambang and Sigit were members of the board of directors.

Through this import monopoly, the State trading companies charged a fee equivalent to \$23 per ton, whereas Panca Holding charged \$20 per ton, subsequently raised to \$70 per ton, plus 2 percent of the transaction value.

Although the government appointed PT Mega Eltra as the sole State owned company responsible for the plastic quota in 1986, Panca Holding continued as its agent. This created business dissatisfaction due to the lengthened waiting time for goods. APINDO (Indonesia's plastic industry association) proposed to Parliament that the import monopoly held by PT Mega Eltra be reviewed, but the decree persisted and industry dissatisfaction continued to grow until the deregulation package in November 1988, which abandoned the plastics monopoly. This case study illustrates how trade protection was used to generate income for a particular business group with a close relationship to the President's family.

Hutomo Mandala Putra (Tommy)

His business group, Humpuss, was established in 1984. He was awarded the exclusive agency rights for methanol and purified terphthalic acid. In 1988, Bulog awarded a monopoly for mill soymeal to PT Sarpindo owned by Tommy and Bob Hasan (Robison, 1997). Some of the Humpuss business interests are presented in Appendix 4.

¹⁹ This is drawn from Bresnan (1993), Schwartz (1994), and Steven Jones. *Asian Wall Street Journal*, 25 November, 1986.

In 1990, Tommy's company BPPC (Clove marketing board) was awarded the monopoly for cloves by the Ministry of Trade. Tommy became notorious outside Indonesia in 1996 after Soeharto's Indonesia decided on a 'national car policy' operated by Tommy's company Timor Putra Nasional (TPN). The national car policy will be discussed in detail in Chapter 8.

Probosutedjo

Soeharto's half brother Probosutedjo, heads the Mertju Buana group. In the early days of the New Order government in the late 1960s, Probosutedjo shared the monopoly import for cloves with Liem Sioe Liong. He was also a major contractor for government projects, a major supplier for *Pertamina*, and a major shareholder with PT Astra in the Peugeot and Renault agency, PT Multi France (25% shares), before he resigned in 1977 (Chalmers, 1996).

The Mertju Buana Group also owned PT Keramika Indah Perkasa and the Kedaung group (jointly owned by Agus Nursalim). The Kedaung group has been the largest company in glassware and glass products since the 1970s (Iswandi, 1998; PDBI, 1989; Yoon, 1989). In addition, Mertju Buana has also been the second largest company producing ceramic tiles (in terms of capacity production) since the 1980s.

Sudwikatmono

Suharto's stepbrother Sudwikatmono, often acted as front man for Liem Sioe Liong as well as running his own groups (Subentra). Sudwikatmono was a minority shareholder in most of Liem's companies, particularly PT Giwang Selogam, PT Bogasari Flour Mills and PT Indocement Tunggal Perkasa (Yoon, 1989). He was also awarded a monopoly in the import and distribution of motion pictures in Indonesia.

Liem Sioe Liong (Sudono Salim)

Liem's businesses began to grow significantly after Soeharto came to power. In 1968, he was awarded one of the two monopolies to import cloves. Jointly with Soeharto's stepbrother Sudwikatmono, and the government, he ran the flour milling company Bogasari. In 1969, Bulog appointed Bogasari as sole flour miller. Through Bogasari, Liem expanded his business into various food products, including noodles and baby

food. By 1994, the same group controlled 75% of the noodles market, 33% of milk and 20% of baby food (World Bank 1995; Schwartz, 1994). His business range is presented in Appendix 3.

In the mid 1970s, he also established several cement companies. Partly because the government set the price of cement above the world market and imposed trade protection, this was a lucrative business.

In 1983, Liem was persuaded to invest in Cold Rolling Mill Indonesia (CRMI). In return, the government provided him with an import monopoly for various steel products (Schwartz, 1994). However, Robison (1986) argues that, in the case of CRMI, Liem's private resources were used to assist State policy objectives. This project was not a lucrative business and there seems to be little prospect that Liem would voluntarily choose such a large investment project. Robison's argument rings true since, in 1988, despite subsidies and protection, the mill had racked up a total debt of \$610 million and Liem wanted to quit the business. This story shows that private sector investment in "pioneering" activities could obtain import protection (within limits). This provides a picture of the bargaining for trade protection or economic privilege between Liem and the government.

Bob Hasan

Bob Hasan's main business interests were in the forestry sector. He controlled some two million hectares of forestry concession areas, mostly in Kalimantan. He also controlled the Indonesian Plywood Association, Indonesian Sawn Millers Association, Indonesian Rattan Association and the umbrella Indonesian Forestry Community.

In addition, together with Sigit in the Nusamba Group, Bob Hasan controlled the largest companies in Indonesia making glass containers, craft paper, fenolformaldhyede and tin plate (PDBI, 1989). Bob Hasan was also involved in the construction industry as well as banking, tea plantations, pulp and paper, and shipping. Together with Tommy Soeharto, he owned shares in Sempati Airlines.

Prajogo Pangestu

In 1976, Prajogo established the CV Pacific Lumber Company and changed it into the PT Barito Pacific Lumber Company (Suryadinata, 1995). PT Barito was known as one of the largest companies in timber, plywood and sawmills. Prajogo also formed a partnership with Tutut in PT Tanjung Enim Pulp and Paper. In 1990, he established PT Chandra Asri, together with Henry Pribadi and Bambang Trihatmodjo. PT Chandra Asri was subjected to controversial debate due to the import protection imposed by the government in 1996. This will be discussed later in this chapter.

Henry Pribadi

Henry Pribadi established the Arga Karya Prima Industry and Branta Mulia (tyre sheet company). He also established the Napan Group, of which he is President. In addition, he worked closely with Bambang Trihatmodjo and Prajogo Pangestu, one of Soeharto's cronies, in the establishment of PT Chandra Asri, the largest petrochemical industry in Indonesia (Suryadinata, 1995).

Eka Tjipta Widjaja

Eka Tjipta Widjaja was the main shareholder of the Sinar Mas Group, one of the largest companies producing cooking oil and pulp paper. Sigit, Sudwikatmono and Liem Sioe Liong jointly owned Sinar Mas. This cooking oil company supplied approximately 50% of the Indonesian cooking oil market (Suryadinata, 1995).

Besides these major players, there were several other important businesspersons who had a direct and close relationship with Soeharto's family, including: Jan Darmadi and Peter F. Gontha (Yoon, 1989; Iswandi, 1998).

4.6 Some implications of trade policies

The discussion in Section 4.3 depicts the contending groups over economic policy formation in Indonesia. This invites questions as to the influence of these groups for

Table 4.5: Major contending groups over economic and trade policy and trade policy outcomes in Indonesia, 1966-95

Period	Technocrats policy stance	Role in policy making	Economic nationalists policy stance	Role in policy making	Rent Seekers ^{a)} policy stance	Role in policy making	Foreign Institutions policy stance	Role in policy making	Trade policy outcome
1966-72	Pro market	Moderate	Protectionist	Moderate	Protectionist	Strong ^{a)}	Pro market	Moderate	Relatively liberal
1973-82	Adopted ISI, although still relatively pro-market	Declining	Protectionist	Strong	Protectionist	Strong ^{a)}	Pro market	Declining	Protectionist
1982-85	Began to support economic liberalisation	Increasing	Protectionist	Declining, although still relatively strong	Protectionist	Strong	Pro market	Moderate	Ambivalence
1985-90	Pro-market and support for trade reform	Strong	Protectionist	Declining	Tended to be in favour of protectionist policy	Strong	Pro market	Increasing	Relatively liberal
1990-95	Pro market approach and support for trade reform	Declining	Protectionist	Increasing	Tended to be in favour of protectionist policy	Strong	Pro market	Relative strong ^{b)}	Relatively liberal

Notes: ISI: import substitution strategy.

^{a)} Scattered around military, Soeharto and bureaucracy in the 1970s, and concentrated around Soeharto from the 1980s.

^{b)} Increasing due the important role of trade organisations such as APEC and A.F.T.A.

trade policy during the period 1966-1995. Table 4.5 shows the implications of the struggle over economic policy for the implementation of trade policy in Indonesia.

4.6.1 The period 1966-72

During the period 1966-1972, foreign trade was relatively liberal compared with the period 1974-1985. The technocrats' policy stance was for a market approach. As noted, the economic policy tended to be State centred, making the role of private business groups relatively weak. Nevertheless, the role of patrimonialist patronage, particularly military patronage business was relatively important. In the beginning of the New Order in 1966, the military began to formalise their business activities by establishing military owned business. Furthermore, following the massive huge capital inflow to Indonesia after the open door policy in 1967, foreign investment usually took the form of joint ventures in which the Indonesian partner, usually a Chinese Indonesia backed up by military (Crouch, 1979).

In addition, as discussed in Chapter 3, manufacturing sector had persistently depressed during the period 1966-1968. Rent seekers and economic nationalists argued that the manufacturing industry needed trade protection. They pointed out that the cheap import policy was the main cause of their malaise. Under increasing pressure from the manufacturing sector, the government was persuaded to create protectionist measures in the form of tariff revisions and increased tariff protection for import competing sectors in 1968 (Pangestu and Boediono, 1986). Regardless of this trend, trade policy in general was still relatively liberal.

4.6.2 The period 1973-82

During this period, trade policy was increasingly protectionist. Table 4.5 shows that during this period both the technocrats and economic nationalists tended to agree on the adoption of an import substitution strategy. In addition, although technocrats were more sympathetic to the market approach than economic nationalists, their role was weaker than the earlier period. In addition, the influence of The World Bank and IMF in emphasising the market approach also declined due to the Indonesian government's low dependence on foreign aid.

During the oil boom, the role of economic nationalists was relatively strong. As noted, the oil boom enabled the government to finance various highly subsidised projects which led to the political system becoming increasingly patrimonial. As a result, the rent seekers – who were dispersed around the military, the bureaucracy and Soeharto – were relatively strong. This political economy setting resulted in a protectionist trade policy compared with the subsequent period. Warr (1992) shows that the ERP for all-tradables declined from 30% in 1975 to 8% in 1987. This will be discussed in greater detail in Chapter 5.

During this period, the pattern of protection was heavily influenced by an import substitution strategy which emphasised the so called 'national policy strategy', which was not only concerned with high economic growth but with social justice as reflected in REPELITA II (1974-1979).

4.6.3 The period 1982-85

As noted in Chapter 3, the period 1982-1985 is described as period of ambivalence. The government introduced quantitative restrictions, while at the same time beginning to deregulate the financial market, and then commencing to liberalise the trade regime from 1985. This ambiguity can be seen as reflecting the tug of war between the technocrats and the economic nationalists and crony capitalists. The decline in the oil price meant there was a greater need for economic efficiency, which led to the technocrats regaining influence.

Nevertheless, the role of the economic nationalists was still relatively strong. This can be seen from the various protections, including NTBs given to State owned companies. As discussed earlier, there was evidence that private sector investment in "pioneering" activities could (within limits) obtain import protection (see the case of Liem Sioe Liong in Section 4.5). Furthermore, import licences were discretionary and firm specific in nature (Hill, 1996). This obviously benefited powerful political business interests.

There was also an important development in the new Cabinet appointed in 1983, when Soeharto appointed Ginandjar Kartasasmita as Minister of Promotion of the Use of Domestic Products (*Promosi Pendayagunaan Produk Dalam Negeri*). Pangestu

(1991) points out that this Ministry was given the task of increasing the use of domestic products, mainly intermediate goods, as part of an industrialisation strategy. This resulted in increased NTBs and domestic components and "localisation" process. It marked a growing political role for *pro-pribumi* business patronage.

In addition, the role of crony capitalists around Soeharto became increasingly important due to the shift of principal political power into Soeharto's hands.

The period of ambivalence shows that, although technocrats could control macroeconomic policy, the industrial policy was still under the strong influence of economic nationalists. The result of this tug of war was a somewhat ambivalent trade policy.

4.6.4 The period 1985-90

The 1985-1990 period witnessed liberal trade policy. The sharp decline in the oil price that occurred in 1986 led to an economic crisis. This provided the political support for the technocrats to pursue trade liberalisation, due to a strong call for greater economic efficiency to overcome declining government revenue because of the collapse in the oil price. Policy orientation began to shift towards export promotion. A set of trade policies was introduced to achieve the goal of stabilising the Indonesian macroeconomy and shifting from a protected inward looking into an outward-looking and internationally competitive economy (see discussion in Chapter 3).

This period was perceived as a triumph for the technocrats over the pro economic nationalists. Supporters of deregulation label this situation as 'good times mean bad policy and bad times mean good policy' (Mallarangeng, 2000). During this period, the role of the technocrats was relatively strong, while the role of economic nationalists declined. This was evidenced by the important development in the cabinet where the Ministry of Promotion of the Use of Domestic Products was terminated in 1988. Azis (1994) argues that the increasing power of the technocrats could be attributed to the full support of former President Soeharto, adding that under Indonesia's paternalistic society, it was difficult to make economic policy without the "blessing" of the President.

Moreover, Fane (1996) points out that the fall in oil revenue diminished the influence of *Pertamina*, which, had been dominated by economic nationalists, as discussed earlier. The collapse in the oil price caused the *Pertamina* contribution to government revenue to decline from 82% in 1981/82 to 57% in 1985/86. In contrast, the role of the technocrats in the Ministry of Finance increased, due to the increasing contribution to government revenue from non-oil taxes.

It is true that the role of technocrats increased during 1985-1990 due to the economic recession, and they had full support from President Soeharto. However, as noted, at the same time, the role of crony capitalists around Soeharto was also becoming increasingly important. This leads to the question of how trade reform could be implemented during the economic recession in the mid 1980s even when the role of crony business around Soeharto was increasing? The issue has to do with the profitability of crony capitalists due to the economic crisis (to discuss in detail in Chapter 6).

4.6.5 The period 1990-95

During 1990-1995, the role of technocrats declined, as indicated by the dismissal of three prominent technocrats from Soeharto's cabinet in 1993. In contrast, economic nationalists, particularly the pro-high tech technologists around Habibie, gained significant political power. Four of Habibie's protégés were promoted to ministerial posts. In addition, Habibie's other protégé, Rahardi Ramelan, was made Deputy Director of BAPPENAS (National Planning Agency). Moreover, Ginandjar Kartasasmita, who was known to be sympathetic to the pro *pribumi* group, was appointed head of the National Planning Agency as well as the Minister of Development Planning. This political development suggested that the role of technocrats was declining and economic nationalists had regained considerable political power.

Parallel to this political development, the role of Soeharto's family and his crony capitalists was at its peak. In 1995-96, the Indonesian government introduced a potentially interventionist industrial policy, which included Chandra Asri a petrochemical company and the national car policy (*Mobnas*, see Chapter 8). Both companies were owned by Soeharto's sons (Tommy and Bambang, respectively). As

noted, Chandra Asri was a subject of controversy between the technocrats on the one hand and economic nationalists and crony capitalists on the other. Soeharto's crony capitalists argued that Chandra Asri could not survive without tariff protection, and the company requested 40% tariff for olefin producers for eight years. Parallel with this, economic nationalists in cabinet also argued that there was a need for trade protection for reducing imports and developing local capacity for engineering and new technological capacity (Robison, 1997). In this debate, even Soeharto argued that there was justification for protecting an industry which could support national industry structure. On the other hand, the technocrats were reluctant to provide import protection that could harm downstream industries. Finally, in 1996, the government imposed a 20% surcharge on imports of propylene and ethylene.²⁰ This shows that Soeharto's crony capitalists continued to be influential in the 1990's.

Despite this particular set back for the technocrats, trade policy in general remained relatively liberal and some trade reform continued to take place. This leads to questions about why trade policy relatively remained liberal even though the technocrats were removed from office and the role of economic nationalists and Soeharto's family and crony capitalists increased in the 1990s?

There are three possible explanations. First, trade liberalisation had created new constituencies for trade reform i.e. exporters. This issue will be discussed in more detail in Chapter 6. Second, as discussed, Indonesia had committed itself to trade liberalisation as a consequence of joining economic cooperation groups including APEC and AFTA. This created continued pressure for trade reform. Third, during the 1990s, some of Soeharto's crony capitalists tended to become involved in some exportables sectors, although their role was still relatively limited. Moreover, Soeharto's crony capitalists in the 1990's had become more concentrated in non-tradables including services, infrastructure and telecommunications, where classic rent seeking behaviour predominated (Manning, 1999; Backman, 1999; Schwartz, 1994). This made trade reform possible, even though the role of crony capitalists much stronger.

²⁰ For further explanation about the case of Chandra Asri, see Robison (1997).

4.7 Summary

The discussion in the previous sections presented the role of several groups in influencing economic policy in general and trade policy in particular.

There were at least six major groups influencing economic policy in Indonesia, i.e. technocrats, economic nationalists, interest groups (business associations), foreign firms, external institutions and the liberal epistemic community. The economic nationalist camp consisted of the *pro-pribumi*, the pro high-tech technologists, the structuralists and pro patrimonialists patronage, where the latter was dominated by the military, bureaucracy patronage and Soeharto himself.

Economic nationalists played a dominant role in the oil boom period of 1973-1981. Although there were conflicts over the direction of economic policy and trade policy, both technocrats and economic nationalists tended to agree in adopting an import substitution strategy and emphasising government intervention. Disagreement between technocrats and economic nationalists was limited to the extent of import substitution strategies and the required level of intervention.

However, following the collapse of the oil price, the role of the technocrats became increasingly important, particularly during 1985-1990. They tended to place more emphasis on the market approach. Nevertheless, at the same time, the role of crony capitalists around Soeharto also became increasingly important, and interest groups began to emerge. Although there was a swing of the pendulum in the policy making process, from protectionist to more market friendly policies, economic policy was still State centered. The link between State and society existed mainly via a patrimonial/rent seeking or corporatist system.

Within the rent seeking or patrimonial system, there was a dynamic change following a change in the principal power relationship. In the 1970s, patrimonialists or rent seekers were scattered, particularly around the military and Soeharto himself, although the role of the bureaucracy also increased. As a result, the military and Soeharto had a more or less equivalent influence on economic policy. However, after

1982, as Soeharto's personal authority began to increase, the role of army officers declined and rent seekers became concentrated around Soeharto's family.

In addition, multilateral institutions such as The World Bank and The IMF influenced economic policies, including trade policy in Indonesia. Although limited, free trade arrangements such as APEC, WTO and AFTA, contributed to the pressure for trade liberalisation, particularly in the 1990s. While the role of foreign capitalists in influencing economic policy was limited at the macro level, it was relatively strong in some sectors, such as the automotive industry.

Although the role played by the so-called 'liberal epistemological community' was rather limited, it probably did influence the public debate on the need for further economic deregulation.

Overall, this chapter shows that the institutional aspects of Indonesia's economic policy in general, and trade policy in particular, were complex and changed over time. Although decision-making was State-centred and dominated by the patrimonial pattern, this process involved bargaining between the State and societal actors as well as external actors.

This chapter also points out, that the analysis of trade reform in the mid 1980s cannot only be confined to the conflict between technocrats and economic nationalist policy makers, but also needs to take into account the distributive impact of trade reform on various economic groups and also some economic factors, including oil price. These issues will be discussed in greater detail in Chapter 6.

Appendix 2: Some of Soeharto's business interests

No	Name of company	Sector	Description /shareholders
1	Yayasan Dana Karya Abadi (DAKAB)	Holding company	Chaired by Soeharto
2.	Yayasan Dharma Bakti Sosial (Dharmais)	Holding company	Chaired by Soeharto
3.	Yayasan Surat Perintah Sebelas Maret (Supersemar)	Holding company	Chaired by Soeharto
4.	Yayasan Amal Bhakti Muslim Pancasila		
5.	Yayasan Harapan Kita (YHK)	Holding company	Mrs. Soeharto, Mrs Sutowo
6.	Yayasan Kartika Chandra (YKC)	Holding company	Persatuan Istri Tentara
7.	PT Kartika Chandra	Hotel	Yayasan Kartika Chandra and Sukamdani Gitosardjono
8.	PT Pacitakan Batas Gunung	Printing	YKC & various military officers
9.	PT Hanurata	Forestry	YHK and Yayasan Trikora
Soeharto/ Liem group			
1.	PT Waringin Kencana	Trade & crumb	Sudwikatmono (5%)
2.	PT Arimono	Trade	Sudwikatmono (25%)
3.	PT Bogasari	Flour Milling	Sudwikatmono (4%)
4.	PT Bank Central Asia	Finance	Sigit (16%), Siti Tutut(16%),
5.	PT Indocement	Cement manufacture	Sudwikatmono (5%)
6.	PT Distinct Cement	Cement manufacture	Unknown
7.	PT Perkasa Cement	Cement manufacture	Unknown
8.	PT Perkasa Agung Utama	Cement manufacture	Unknown
9.	PT Perkasa Indah Putih	Cement manufacture	Unknown
10.	PT Perkasa Inti Abadi	Cement manufacture	Unknown

Miscellaneous Soeharto enterprise

1.	PT Gunung Ngadg Jaya	Trade	Soemoharmanto (50%) and Bernard Ibnu Hardoyo (50%)
2.	PT Kablemetal	Cable manufacture	PT Gunung Ngadeg Jaya and West Germany
3.	PT Pasopati	Holding co	Bernard Ibnu Hardoyo, Bob Hasan
4.	PT Semen Nusantara	Cement manufacture	PT Gunung Ngadeg Jaya and Japan
5.	PT Rejo Sari Bumi	Agricultural estates	Probosutedjo, Sigit, Tutut
6.	PT Indonesia Japan Tobacco	Cigarettes	Benny Jonosiwono, Japan
7.	PT Bayu Air	Air Cargo charter	Sigit
8.	PT Subentra	Construction	Sudwikatmono, Mukmin Ali
9.	PT Subentra Petrokimia	Construction	PT Subentra

Source : Robison (1986) and Iswandi (1998).

Appendix 3: Maturation of Soeharto's old businesses

Name	Relation to Soeharto	Business patron
Sudwikatmono	Soeharto's step brother	Liem Sioe Liong

(Sudwikatmono was minority shareholder in most of Liem's companies).

1. PT Giwang Selogam (6,7% since 1984), monopoly for imports cold-rolled sheets.
2. PT Indocement Tunggal Perkasa (10%), half of the cement-making capacity.
3. PT Bogasari Flour Mills (4%), monopoly for producing wheat flours.
4. PT Mega one of two monopolies for importing cloves.
5. PT Subentra, monopoly in import and distribution of motion pictures in Indonesia (together with Benny Suherman).

Name	Relation to Soeharto	Business patron
Probosutedjo	Soeharto's half brother	Agus Nursalim

1. PT Mertju Buana (more than 40 companies). 1/2 of the monopoly for importing cloves. PT Mertju Buana also known as the second largest company producing ceramic tile.
2. PT Mertju Buana Raya Contractors. US \$ 700m hydropower development project.
3. PT Sagita Sarana Rahardja. 1/6 insurer for Garuda International Airways.
4. Kedaung group companies (with Agus Nursalim) (about 12 companies). Kedaung known as the largest glassware and glass products manufacturing company.

Probosutedjo was also major shareholder with Astra in the Peugeot and Renault agency, PT Multi France. He resigned in 1977.

Name	Relation to Soeharto	Business patron
Sukamdani	Mrs. Soeharto relatives	

1. PT Sahid & Co (more than 20 companies). Hotels, contracting, cement.

Name	Relation to Soeharto	Business patron
Bernard Ibnu Hardojo	Mrs. Soeharto's brother	Miwon group

1. PT Gunung Ngadeg Jaya, (about 14 companies). Cement, electric cables, trade.

Name	Relation to Soeharto	Business patron
Eddy Kowara	Tutut's father in law	

PT Teknik umum (about 32 companies).

1/2, 1/3, 1/6 etc indicates one of the two, three, six companies that hold licenses or contract from the government.

Sources: Yoon (1989), Iswandi (1998), Chalmers (1996).

Appendix 4: New business interests of the Soeharto's family

Name	Relation to Soeharto	Company
Bambang Trihatmojo and Indra Rukmana	Son and Son in law	Bimantara Group

1. PT Bimantara Citra (more than 50 companies, since 1982).

Dumai refinery, animal feed, plastic and petrochemical complex projects.

2. PT Trikora Lloyd (with the state bank BAPINDO).
3. PT Jasa Angkasa Semesta (with Pertamina) airfreight forwarding.
4. PT Indonesia Air Transport, helicopter, plane, jet charter.
5. PT Samudra Petrindo Asia (1981)
Oil trading on the spot market, 20-year contract for LNG tanker shipping to South Korea.
6. PT Food Specialties Indonesia. 1/3 local milk powder.
7. PT Elektrindo Nusantara. Telecommunications equipment supplier to Perumtel communications, satellite Palapa B-2R selling under negotiation with the government.
8. PT Chandra Asri, the largest petrochemical products company in Indonesia.
9. PT Bimantara Cakra (sole agent for Hyundai).
10. PT Intirub (one of the major tyre companies).

With Yani Haryanto (Liem Poo Hian)

1. PT Gula Putih Mataram, sugar plantation and refinery in Sumatra.

With Sigit, Probosutedjo and Yani Haryanto

1. PT Gunung Madu Plantation, integrated sugar estate and refinery in Sumatra.

With Sudwikatmono

Permindo Oil Trading and Co (65%) (Hongkong based, since 1985). Oil trading on the spot market US \$ 500 million annual turnover including that of PT Samudra Petrindo Asia).

Name	Relation to Soeharto	Business patron
Sigit Harjojudanto with Bob Hasan	Son and crony	Nusamba Group

1. PT Nusamba (10%) (about 15 companies, since 1982). Timber and tea plantations. Domestic monopolies in tin plate (PT Latinusa)

With Liem and Eka Tjipta Widjaja	Son and crony	Sinar Mas Inti Perkasa
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PT Sinar Mas Inti Perkasa (10%) (about 12 companies). Palm oil plantations and processing, Cooking oil processing and sale (PT Bimoli).

Name	Relation to Soeharto	Business patron
Sigit and Tutut with Liem	Son, daughter and crony	SCA Group

PT Bank Central Asia (32%). The largest private national bank

Name	Relation to Soeharto	Business patron
Sigit and Sudwikatmono with Eka Tjipta	Son, step brother and crony	Sinar Mas Group

PT Sinar Mas about 20 companies, including PT Tjiwi Kimia (one of the largest companies in pulp and paper).

Sigit, Bambang and Sudwikatmono

PT Panca Holog (directors, or possibly, stockholders). Sole agent for all imports of essential plastic raw materials (US \$ 30 million commission and fee in 1988).

Name	Relation to Soeharto	Business patron
Hutomo Mandala Putra and Sigit	Son	Humpuss Group

PT Humpuss (since 1984). Sole local distributor of several petrochemicals produced by Pertamina Oil services. Defense contracting and LNG shipping.

Name	Relation to Soeharto	Business patron
Eddy and Indra Kowara	Tutut's father in law and Tutut's husband	Teknik Umum Group

PT Teknik Umum (about 33 companies)

With Yani Haryanto

Yanita group (about 10 companies).

Notes: 1/2, 1/3, 1/6 etc indicates one of the two, three, six companies that hold licenses or contracts from the government.

Sources: Yoon (1989), Robison (1997), Iswandi (1998), Samego et.al (1998).

Chapter 5

Trends in trade protection in Indonesia

5.1 Introduction

Chapter 3 demonstrated that prior to the mid 1980s the Indonesian trade regime was relatively protected. Average ERPs and NRPs, as well as tariff dispersion, were all relatively high, and NTBs were present in many sectors. However, from 1985 when trade reform was embarked upon, the levels of protection declined and Indonesia entered the export orientation era.

Clearly, the question is how did trade protection change over time in Indonesia? In answering this question, it is necessary to discuss not only the changes in trade protection, but also the methodology of measuring trade protection. A review of methodology is as important as the discussion on the change of protection, because neglecting this can lead to an inadequate understanding of trends in protection in Indonesia.

Specifically, there are two aspects to be addressed in this chapter. First, the methodology of measuring trade protection, including ER_r, NRP and NTB. Second, an overview of the changes in trade protection over time in Indonesia from 1975 to 1995.

This chapter is organised as follows: Section 5.2 provides a review of the methodology in measuring trade protection in Indonesia and Section 5.3 highlights trends of protection in Indonesia from 1975-1995.

5.2 ERP, NRP and NTB in Indonesia: a methodology review

The theme of how trade protection is measured is central to the literature of the theory of trade protection. There are a vast numbers of studies available on this topic, including Corden (1966), Humprey (1969) and Ballasa (1982).

The theory of trade protection recognises several measurement methods, namely average tariffs, NRP, ERP, NTB and tariff dispersion, and while each of these has a specific feature they can complement each other.

The simplest measurement of trade protection is average tariff, defined as import duty divided by import value. This method infers tariff rates from duty collections and c.i.f. imports. This measure is widely used in time series econometrics analysis of trade protection, which usually focuses on the aggregate picture, observing the relationship between trade protection and some macroeconomic variables, such as inflation and GDP. Another advantage of using average tariff is that data are usually available for a long line span.¹

One shortcoming of measuring with average tariff is that it does not capture the impact of NTB's or subsidies, which generally are part of trade protection. Taking into account this limitation, a measurement is needed which can incorporate the various form of trade protection, including NTB's and subsidies, such as NRP and ERP measurements.

The other important measurement is tariffs dispersion. In assessing the protective effect, it is important to observe not only the level of the ERP or NRP, but also the dispersion or deviation of individual activity rates from the average. Observing tariffs dispersion can aid in understanding the distortionary effects of the structure of protection, or the degree to which trade protection discriminates in favour of one sector against another (Warr, 1992a). As argued by Fane and Phillips (1987), this is particularly true, because the inefficiencies caused by trade protection depend on the extent to which these policies have a different impact on

¹ In time series analysis, the estimator tends to be consistent as the sample size increases (Madala, 1992). This implies that time series analysis needs a long span of data, which is usually not available for ERP, NRP or NTB.

different industries. For instance, a uniform tariff rate of 30% for every industry would differ from free trade only in appearance but not in substance. In addition, The World Bank (1981) argues that a low average ERP or NRP for manufacturing does not necessarily imply a small re-orientation in the allocation of resources within a particular sector, if the standard deviation of the average ERP or NRP is high.

5.2.1 NRP and ERP: a conceptual framework

The NRP of any good is defined as the proportional excess of its actual price relative to the free trade price, at a given level of exchange rate. Formally, it can be written as:

$$(1) \text{NRP}(j) = [p(j) - p^*(j)] / p^*(j)$$

Where $p(j)$ = domestic price of good j

$p^*(j)$ = price of good j at which it would sell under free trade at a given exchange rate.

The gist of the NRP, as well as the ERP, is the comparison between free trade and domestic prices for tradable and non-tradable goods. While the domestic price can be directly taken from the actual price, free trade prices have to be estimated. There are three methods of estimating free trade prices (Warr, 1992a). First, free trade prices are derived from official tariff rates with the assumption that the price differential between free trade and the observed market price is proportional to the tariff rate. Second, free trade prices are derived from duty collection by commodity, and tariff rates inferred from these and the c.i.f. values of landed imports. Third, free trade prices are derived from direct comparisons between similar products that are produced domestically and traded internationally.

The shortcoming of measuring NRP is that it does not capture the impact of trade policies on the inputs of the sector (Wymenga, 1991). Thus, a more comprehensive protection measure is the ERP.

The theory of ERP emerged in the 1960s.² This concept aims to measure the overall amount of protection afforded to an industry after incorporating tariffs in both the outputs and inputs used by the industry (Fane and Phillips, 1987). The ERP can also be extended to incorporate the effects of export taxes, and subsidies, as well as NTBs.

While NRF focuses on the percentage differences between the domestic price under existing policies and free trade, ERP measures the percentage change in value added owing to government trade and subsidy policies. Generally, it is defined as the excess of value added under existing policies over value added under free trade, expressed as the percentage of value added under free trade (Fane and Phillips, 1987).

It can be written formally as:

$$(2) \text{ ERP}(j) = [v(j) - v^*(j) / v^*(j)]$$

Where: $v(j)$ = the observed level per unit value added in industry j , given existing government policies, and

$v^*(j)$ = value added that would be obtained under free trade and in the absence of government subsidies.

Once the NRPs for both outputs and inputs of a sector are available, the ERP measurement is quite straightforward. The value added under existing trade policies can be taken directly from the value added at existing prices. Whereas, the value added under free trade in the absence of government subsidies, can be obtained by adjusting the value of producer prices, as given from the Input-Output Table, by conversion factors derived from the NRP (Warr, 1992a).

The conversion factor can be obtained by re-writing equation (1) as:

$$(3) p^*(j)/p(j) = 1/[1 + \text{NRP}(j)]$$

Where $p^*(j)$, $p(j)$ and $\text{NRP}(j)$, are as for equation (1).

² For literature on ERP, see Corden (1966), Ballasa (1982), Humprey (1969).

A major problem in measuring ERP is the treatment of non-traded intermediate inputs. The three methods used are the Ballasa method, the Corden method, and, the Humprey method (Warr, 1992a). A detailed technical discussion of each method is beyond the scope of this thesis.³

Ballasa avoids the problem of calculating the free trade value added in each of the non-tradable industries by assuming it is the same in nominal terms as its observed value under protection. Corden (1966) also eludes the problem of estimating the free trade prices of non-tradable goods by redefining the concept of value added. By tracing through the Input and Output Table (I-O), the Corden method splits the non-tradable inputs used by industries into two categories, their direct and indirect traded inputs and primary factor inputs use. The value of traded inputs is included in the value of all intermediate inputs subtracted from the value of outputs in calculating value added and the ERP is estimated using this net value added. The Humprey method, estimates the hypothetical prices of non-traded goods under free trade.⁴

5.2.2 NRP and ERP measurement methods for Indonesia

There are several studies available on ERP in Indonesia, including Pitt (1981), The World Bank (1981), Pangestu and Boediono (1986), Fane and Phillips (1987 and 1991), Wymenga (1989) and Fane and Condon (1996). Because this thesis focuses mainly on trade protection estimates for 1975 to 1995, this section only highlights the estimation in these years. These are The World Bank (1981) for 1975; Pangestu and Boediono (1986) for 1975 and 1980; Fane and Phillips (1991) for 1987; and Fane and Condon (1996) for 1995. Although The World Bank (1981) also estimated the ERP for 1978, their report only covers some particular manufacturing sectors.

The World Bank (1981) and Pangestu and Boediono (1986) employed similar methodologies in estimating free trade prices. Both derived foreign prices from import duty and tax revenues in estimating the NRP for import competing goods. However, there was a significant difference between their treatments of goods which were subjected to quantitative controls.

³ For this topic see Corden (1966 and 1971), Humprey (1969), Balasa and associates (1982), and the excellent review for ERP and NRP for Indonesia by Warr (1992).

⁴ For an excellent review see Warr (1992a).

The World Bank's method incorporated export taxes, and used a direct comparison between domestic and international prices in estimating the NRP for the goods subjected to NTB, while Pangestu and Boediono (1986) did not take this into account. As a result, Pangestu and Boediono (1986)'s NRP estimates were under-estimated for imports in the case where quantitative controls were present, and the NRP and ERP of exportables was higher than the World Bank's estimates, owing to the exclusion of the effect of export taxes.

In the main, Fane and Phillips (1991), and Fane and Condon (1996) employ the same method. Whereas, Wymenga's (1991) estimates for 1989 is essentially an updating of Fane and Phillips' (1991) estimates for 1987. Therefore this thesis does not specifically discuss Wymengga's (1991) method.

The difference between Fane and Phillips (1991) methodology and that used by The World Bank and Pangestu and Boediono (1986) is the direct comparison of prices in Jakarta and Singapore for those commodity groups for which quantitative controls were considered significant. Although The World Bank also employed a direct comparison between domestic and international prices for goods subjected to NTBs, it is not clear which prices were compared. The World Bank also appeared to use the Corden method in estimating non-traded goods for decomposition of non-tradable intermediate goods (Warr, 1992a), while Fane and Phillips (1991) attempted to estimate the hypothetical prices of non-traded goods under free trade, which coincides with the method suggested by Humprey's (1969) in earlier theoretical model.

It is not the purpose of this chapter to discuss all of these methods in detail. Because this thesis employs The World Bank, and particularly Fane and Phillips (1991) and Fane and Condon (1996) ERP and NRP for estimating the determinants of trade protection in Chapter 7, it is important to discuss their methods.

Fane and Phillips (1987 and 1991) divided the tradable sectors into the categories of import competing and export competing. However, problems may emerge from these tradable classifications. It is possible some of the sectors selected as being mainly import competing

could also contain substantial exporters. Because of this, Fane and Condon (1996) provided three cases of estimating NRP and these will be discussed briefly.

Fane and Phillips (1991) point out that, the NRP for an importable goods industry is calculated as the sum of the import duty and import duty surcharge, while for exportable goods, the NRP is minus the export tax (- tx). In the case where quantitative controls or non-tariff barriers are significant, the NRP is estimated directly by comparing domestic and international prices. Goods that do not enter international trade due to government regulations which restrict trade are treated as traded goods subject to NTB's. Fane and Phillips (1991) and Fane and Condon (1996) distinguish between products for which NTB's were not substantially restrictive and products for which they were. The former refers to products which could be imported by a general importer (IU), while the latter refers to products which could only be imported by holders of an importer license such as PI, AT and IT (see the discussion in Section 3.4.1, Chapter 3).

As noted, Fane and Condon (1996) presented three cases of estimating NRP:

Case 1: Item *i* is a general type or an item which is not exported (type-G) and sector *j* is an import competing sector

$$(4) \text{NRP}(i, j) = \text{NRPd}(i, j) * \frac{1 - e(j)}{1 + e(j) * 0.01 * \text{NRPd}(i, j)}$$

Where $\text{NRP}(i, j)$ is the NRP *i* on sector *j*

$\text{NRPd}(i, j)$ is the NRP on domestic sales of item *i*.

$e(j)$ is the ratio of exports of goods and services of sector *j* to total output of sector *j* at assisted prices ($e(j)$) is taken from I-O Table).

In this estimate, the NRP on export sales is assumed to be zero.

If item i is not subjected to NTB, then $NRPd(i,j)$ is equal to the sum of the percentage rate of tariff and the surcharge on item i in sector j ($tm(i,j)$). If NTB applies to item i , then $NRPd(i,j)$ is equal to whichever is the higher out of $tm(i,j)$ and $pcm(i,j)$.

Case 2: Item i is type-G and sector j is an export competing sector

In this case $NRP(i,j)$ is assumed to be zero. The intuition behind this assumption is that export competing domestic firms can sell their product domestically at the world price. Therefore, an import tariff or NTB, would provide no protection.

Case 3: Item i is export competing (type-X)

If there is no export NTB on this item, then $NRP(i,j)$ is set equal to minus the percentage rate of export tax ($-tx$).⁵ If NTB applies to export item i , and $pcm(i,j)$ is less than ($-tx$), then $NRP(i,j)$ is equal to $pcm(i,j)$. For example, suppose export i is subject to an NTB, the export tax is 20% ($-tx = -20\%$), and the $pcm(i,j)$ is -25% , meaning that the domestic price is 25% below the world price. Because -25% is less than -20% , the $NRP(i,j)$ would be -25% . However, if $pcm(i,j)$ is -10% , then $NRP(i,j)$ would be set equal to -20% .

Once $NRP(i,j)$ is defined, the average percentage NRP for sector j ($NRP(j)$) can be calculated, defined in terms of the percentage the NRP for each code item (Harmonised System (HS)) in the sector as:

$$(5) NRP(j) = \frac{\sum_i x(i,j) * \frac{NRP(i,j)}{100 + NRP(i,j)}}{\sum_i \frac{x(i,j)}{100 + NRP(i,j)}}$$

Where $NRP(j)$ is the NRP for sector j .

$X(i,j)$ is gross output, at assisted prices, of item i in sector j

⁵ Fane and Condon (1996) provide lists of export tax.

The example presented in Table 5.1, helps clarify the estimate of NRP(j) according to the Fane and Phillips (1991) method.

Table 5.1: Example of NRP estimates, based on Fane and Phillips' method

I-O	Sector	Value of Output (Rp. Million)	Nominal Rate	Deflated value	Weight	Contribution to total nominal rate	Tariff rate	Price comparison	Rate used
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
62	Sugar/refined sugar	774,074	70	4,553	1.000	70.00	0	70	70
	Total (NRP j)	774,074		4,553		70.00			
125	Batteries								
	Dry cell batteries	104,766	60	655	0.733	44.00	60		60
	Accumulators	32,715	60	204	0.229	13.74	60		60
	Pulp separators	3,151	60	20	0.022	1.32	60		60
	Accumulators Plates	1,809	30	14	0.016	0.47	30		30
	Total (NRP j)	142,441		893	1.000	60.00			

Source: Fane and Phillips (1987: 95).

Notes Column (2) is obtained from (8). If the good is not subjected to NTB, tariff rate in (6) is used. Whereas, if the good is subjected to NTB, price comparison (7) is used, as in the case of sugar. Column (3) is calculated as (1)/(100+(2)). Column (4) is share of deflated value (3) of each sub-industry divided by the total. Column (5) is calculated as (4) * (2), which are NRP for average NRP for each sub-industry. The NRP for industry (NRP j) is sum of each sub-industry's contribution to the total nominal rate (5).

As noted, once the NRP is estimated, the conversion factor (equation 3) can be calculated, and by using this conversion factor, the value added at free trade prices can be estimated. An example in estimating ERP is presented in Table 5.2.

Besides the comparable set of NRP and ERP, Fane and Phillips (1991) and Fane and Condon (1996) provide estimates for the real effective rate of protection (RERP). The RERP is defined as 'the corresponding increase in its real value added per unit, where real value added is obtained by deflating nominal value added by the nominal wage.' (Fane and Condon, 1996:35). Formally, it can be written as:

$$1+RERP=(1+ERP)/(1+w)$$

where: w is the 'wage effect'.

One of the advantages of the RERP, as argued by Fane and Condon (1996), is that it allows for the effects of protection on the general price level, and hence on the real exchange rate, which are not covered by the ERP.

Table 5.2: Example of ERP calculations

I-O code 1985	Sector	Output Rp. billion (1)	Value added		ERP (%) (4)
			Assisted price (%) (2)	Free trade price (%) (3)	
62	Noodles etc.	98	23.2	15.3	51.8
125	Batteries	163	20.2	-7.0	600

Source: Fane and Phillips (1991)

Notes:

1. The output data (1) are estimates of gross output in Rp. Billion at domestic (assisted prices) in 1987.
2. Column 2 is value added per unit of gross output (as percentage) at actual (or assisted) prices.
3. Column 3 is value added per unit of gross output (as percentage) at estimated free trade prices.
4. ERP (column 4) is percentage excess value added at assisted prices (column 2) over value added at free trade prices (column 3). The data in the table are rounded to one decimal.
5. For sectors with negative value added at free-trade prices (see batteries) the calculated ERP is also negative although this sector is very highly protected. The calculated ERP therefore has been replaced at 600%, to indicate 'very high positive' assistance. A sector with calculated ERP which is positive and more than 600% has similarly been assigned an ERP of 600%.

5.2.3 Non-tariff barriers measurement

Regarding the NTB measurement, Fane and Condon (1996) provide estimates of percentage NTB coverage of gross output. The average NTB coverage of gross output of I-O sector j is defined as:

$$(6) \text{ NTB } j = \frac{\sum_i x(i, j) * \text{ntb}(i, j)}{\sum_i x(i, j)}$$

Where: $x(i, j)$ = gross output, at assisted prices, of item i in sector j ;

$\text{ntb}(i, j)$ = non tariff barriers of item i in sector j

$\text{NTB } j$ = Non tariff barriers in sector j

Similar to the case of NRP, NTB estimates can also be classified into three cases:

Case 1: Item i is type-G and sector j is an import competing sector

In this case $ntb(i,j)$ is equal to zero if no NTB applies on imports, and $ntb(i,j)$ is equal to 1- $e(j)$ if NTB applies on i .

Case 2: Item i is type-G and sector j is an export competing sector

In this case $ntb(i,j)$ is equal to zero if no NTB on exports applies on item i , and $ntb(i,j)$ is equal to 1 if NTB on exports applies on this item.

Case 3: Item i is type-X

In this case $ntb(i,j)$ is equal to zero if there is no NTB on exports for item i , or equal to 1 if NTB applies on exports of this item.

The hypothetical estimate for average NTB coverage of gross output of an I-O sector is presented in Table 5.3

Table 5.3: Hypothetical estimates for % NTB coverage of gross output

Sector	Gross output (in Rp. million)	NTB operating	% NTB coverage of gross output
Sub industry 1	70	Yes =100%	
Sub industry 2	30	No=0%	
Total industry	100		70%

Source: hypothetical figures

5.2.4 Some limitations of the Fane and Phillips (Fane and Condon) method:

It is important to discuss the limitations of Fane and Phillips (1991), and Fane and Condon (1996) method. Fane and Condon (1996) point to three major limitations of their estimate. First is the problem of "water in the tariff", meaning that the domestic price of a particular item is lower than the combination of import duties on it and its imported duty free-trade prices, making protection redundant. Fane and Phillips (1991) admit that their NRP estimates probably overstate the true NRP, because they make an inadequate allowance for water in the tariff. This is an important issue because there were some cases, as for textiles and garments, in which firms choose to export, even though they could sell their product domestically behind relatively high protection. Second, unavoidably the price comparisons between Jakarta and Singapore, which are used in estimating NTBs, are somewhat

unreliable, because of the difficulties in allowing for difference in quality, and transport, handling and storage costs. Third, the estimate of NRPs inevitably cannot capture the non-transparent protection, which probably the case, because many firms are widely believed to obtain credit or buy inputs at a subsidised price from state owned companies.

Regarding the puzzle of why some firms chose to export, even though they could sell under the protected domestic market, Fane and Phillips (1991) suggest three possible explanations. First, they argue that under the Bapeksta scheme (see the discussion in Chapter 3), a firm which exports can avoid import duties. Second, local firms may have monopoly power in the domestic market but not in the international market, therefore the marginal revenue between these two markets may be equal, even though the domestic price is higher than export prices. Third, the NRP is estimated based on I-O which covers many products, so that there is a possibility the item being exported is different from the one being sold domestically.

Nevertheless, as noted, subject to these limitations, Fane and Phillips (1991) and Fane and Condon (1996) are the most comprehensive and reliable estimates available for trade protection in Indonesia.

The previous discussion has shown the difference between Fane and Phillips (1991), and The World Bank and Pangestu and Boediono (1986) methods. The World Bank estimates are not fully comparable with Fane and Phillips (1991) and Fane and Condon (1996). This qualification is very important in analysing the change of protection over time. Fortunately, Warr (1992a) re-calculated Fane and Phillips' ERP and NRP to make it comparable with The World Bank's ERP estimate. The estimates from Warr (1992a) will be used in this chapter when making a direct comparison between the ERP and the NRP in 1975 with 1987.

5.3 The trend in trade protection 1975-95

Chapter 3 argued that trade protection increased during 1973-1985, and then significantly declined after 1985. This argument, is supported by trends in protection in Indonesia as will be shown in the following discussion.

Table 5.4 shows ERP estimates for 1975 based on The World Bank (1981) and Pangestu and Boediono (1986).

Table 5.4 ERP estimates, 1975-1980

Sector	World Bank	Pangestu and Boediono	
	1975	1975	1980
Exportables	-6	91	32
Importables	58	110	59
Import-competing sector	61	121	60
Non-import-competing sector	9	21	9
All tradables	39	115	56

Sources: World Bank (1981) ; Pangestu and Boediono (1986).

Notes: Sector is classified based on trade index classification (TIC) (Pitt, 1981), which is defined as:

$$t = (\text{imports} - \text{exports}) / (\text{production} + \text{imports} - \text{exports})$$

Where : $t < 0$ exportables ; $t > 0$ importables.

$0 \leq t \leq 0.8$: import competing sectors.

$t \geq 0.8$: non competing sectors.

The non-import competing sector refers to industries producing for domestic markets, in which imports dominate total sales.

As discussed previously, the level of ERPs are different between The World Bank (1981) and Pangestu and Boediono (1986), owing to the different treatment of export tax and quantitative controls. Nevertheless, both estimates show the same pattern. The ERP in importables, particularly in import competing sectors, is higher than in the exportables sectors. This suggests the trade regime favoured the importables sector, and, in particular the import competing sector. In addition, the least protected sector was the non-import-competing sector and not exportables. Both estimates also show that the ranges of ERP were very wide. The World Bank (1981) demonstrates that the range for 1975 was from 38% for the batik industry to 4315% for the tyres and tubes industry, whereas, for the same period,

Pangestu and Boediono (1986) show that the range was from -38% for small scale tea processing to 698% for glass and glass products.

Pangestu and Boediono (1986) demonstrate that the overall protection level fell significantly between 1975 and 1980, due to the reduction in tariffs and changes in import taxes that took place in 1979. Although there was a significant decline from 1975 to 1980, the ERP in the importables sector, particularly the import competing sector, was still higher than the average of all tradable sectors.

The World Bank updated their ERP estimates for 1978 for eleven sectors (Table 5.5). Table 5.5 shows that seven of these eleven sectors experienced greater protection in 1978 than in 1975. Whereas the ERP for those sectors which experienced a fall in the ERP from 1975 to 1978, remained above 100%. In addition to these estimates, The World Bank (1981) provided estimates of import duty and sales tax collection rates (the latter being the same method as average tariff).⁶ Based on their estimates in Table 5.5 and the import duty and sales collection rates, The World Bank (1981) argued that protection was greater in 1978 (before devaluation) compared with 1975. Furthermore, The World Bank (1981) shows that, during 1975-78, credit, import prepayments and MPO regulations became more protective.

Table 5.5 : ERP, 1975-1978

I-O	Sector	1975	1978
77	Spinning	56	71
78	Weaving	192	117
80	Batik	-35	-23
81	Knitting	331	403
83	Wearing apparel	110	124
91	Pulp, paper and cardboard	46	50
110	Tyres and tubes	4315	1415
111	Other rubber products	406	226
120	Cutlery, hand tools and general hardware	36	85
123	Other fabricated metal products	66	76
128	Accumulators and dry batteries	116	112

Source: World Bank (1981:21).

⁶ For further details see The World Bank (1981).

It is interesting to observe the trend of protection from 1975 to 1980. The World Bank argues that trade protection tended to increase from 1975 to 1978, whereas Pangestu and Boediono (1986) show a decline in ERPs from 1975 to 1980, owing to the reduction of tariffs and import sales taxes in 1979. As noted, although not directly comparable, both estimates employed similar methods and data sources, and so should complement each other. In fact, The World Bank only focused on the period prior to the 1978 devaluation, while Pangestu and Boediono (1986) covered the impact of tariff reform in 1979. The increase of protection from 1975 to 1978 (prior to the devaluation) and the decline in protection in 1980 can be explained as follows. The increasing oil price led Indonesia into a Dutch disease problem. As noted in Chapter 3, this may have led to an increase in demand for protection up to the 1978 devaluation, as supported by The World Bank estimates. However, the 1978 devaluation, was intended to protect the non-oil sector (see discussion in Chapter 3), and could have reduced the demand for protection, thus enabling the government to launch the 1979 trade reform. Thus, trade protection declined after 1979, as argued by Pangestu and Boeiono (1986). This issue, and the relationship between trade protection and the oil price and the real exchange rate will be examined econometrically in Chapter 6.

What about the period 1975-1987? As discussed in Section 5.2, Warr (1992a) provides a recalculation of Fane and Phillips' (1991) estimates for 1987, which enables a comparison with the 1975 World Bank estimates. The period 1975-1987 is important, owing to the fact that these years correspond with the commencement of the oil boom (1975) and the beginning of trade reform (1987). This thesis uses Warr's (1992a) ERP recalculations (presented in Table 5.6) to compare 1975 and 1987.

The ERP estimates in Table 5.6 distinguish between the 1975 and 1985 trade index classifications (TIC). These two different classifications are important, because, as argued by Warr (1992a), the changing pattern of TIC classifications could also bias the comparison between 1975 and 1985. The 1975 classifications enable a comparison between the weighted average of the ERP of the exportables, import competing and non-import-competing sectors in 1975 and 1987. Whereas the 1985 classifications allow a comparison

of the 1987 weighted average of the ERP for these industries according to the 1985 classifications, with the 1975 results for those same industries.

Based on both trade categories, Table 5.6 shows that sectors producing exportables were given lower protection compared with those producing importables. Table 5.6 also shows that there was a significant decline in the ERP for importables from 1975 to 1987. In addition, the dispersion of the average ERP between the export and import competing sectors was larger in 1975 than in 1987. This suggests that the distortionary impact of the structure of protection, and the degree that it favoured the import competing sector, decreased considerably from 1975 to 1987. Furthermore, the ERP declined significantly for all tradable sectors. This could be attributed to the trade liberalisation which began to take place in 1985. Interestingly, while the import competing sectors received the highest protection, the least protected sector was not exportables, but the non-import competing sector. Pangestu and Boediono (1986) also support this for 1975 and 1980.

Table 5.6: Aggregated estimates of ERP, 1975-1987

Sector	1975 ERP with 1975 international value added weight		1987 ERP
	1975 Trade categories	1985 Trade categories	
Exportables	-6	10	7
Importables	57	66	30
Import-competing	59	67	37
Non import Competing	19	25	0
All tradable	30	30	8

Source: Warr (1992a).

Notes: 1975 trade categories refer to classifications of exportables, import competing, and non-import competing sector based on the 1975 TIC classification. Whereas, the 1985 trade categories refer to those sectors based on 1985 TIC classifications.

Unfortunately, there is no ERP estimate available for the period between 1980 and 1985. In fact, as discussed in Chapters 3 and 4, these years marked the period of an ambivalent trade policy, when there was an increasing trend of protection especially between 1982-1985, as indicated by the spread of various quantitative restrictions on imports under the *Tata niaga impor*. Although there no ERP estimates are available, it can be argued intuitively that trade

protection increased during this period (Pangestu and Boediono, 1986; Hill, 1996; Pangestu, 1991).

After 1985, trade protection began to decline owing to the trade reforms undertaken from this year. Comparison of the Fane and Phillips (1991) estimates and Wymenga (1991) for 1989 suggests a small decline in the overall ERP of manufacturing from 1987 and 1989 (Wymenga, 1991).⁷

Fane and Condon (1996) point out that, from 1987 to 1995, the RERP for manufacturing, including oil, fell from 27% in 1987 to 11% in 1995.⁸ In the case of non-oil manufacturing, the RERP fell from 59% to 16% and for agriculture from 9% to 4%. The standard deviation of RERP for all tradable sectors fell from 42% to 26%; and for non-oil manufacturing, from 102% to 39% (Table 5.7). This suggests that the distortionary effects in the structure of protection, in all tradable sectors and in non-oil manufacturing, declined markedly over this period. In the import competing sectors the RERP significantly declined from 29% in 1987 to 11% in 1995.

However, it is important to interpret the reduction of RERP carefully. As discussed in Chapter 3, from 1987-1995, non-oil exports grew rapidly. As a result, several of the manufacturing sectors, classified as import competing by Fane and Phillips (1991), had to be reclassified as export competing sectors. Fane and Condon (1996) point out that this reclassification from an import competing to export-competing sector generally reduces its measured NRP (see discussion in Section 5.2). Therefore, the reduction of RERP could also be attributed to this reclassification of import-competing sectors. In fact, Fane and Condon (1996) identify three sources of reduction in measured RERP i.e. new forestry NRPs, new production weights and export reclassification, and trade reform. The new forestry NRPs have to be taken into account because Fane and Phillips (1991) were unable to obtain a price comparison for the NRP of the wood sector for the 1987 estimates. In Fane and Phillips

⁷ As noted, this thesis does not specifically discuss Wymenga's (1991) ERP estimates for 1989 because there was no significant decline from 1987-89. For details, see Wymenga (1991).

⁸ Here '1987' refers to period between the deregulation packages of January to December 1987 and '1995' refer to the period immediately after the package of May 1995 (see Fane and Condon, 1996)

(1991), the NRP was set assuming the average ad valorem equivalent to the various specific export tax on sawn logs. This assumption obviously underestimated the effect of government policy which banned log exports, creating the potential for an even greater impact on the levels of reduction in the NRP measured.

Table 5.7: Change in RERP 1987-1995

Sectors	RERP 1987 (%)	Sources of reductions in measured RERP (% points)			RERP 1995 (%)
		New forestry NRP's	New production weights and export sector reclassification	Trade reforms	
Agriculture (excl. forestry, fishing and hunting)	9	0	-1	6	4
Forestry, fishing and hunting	-14	22	-4	2	-34
Mining and quarrying (including oil and gas)	-13	0	-1	-5	-6
Manufacturing (including oil refining and LNG processing)	27	-5	8	14	11
Manufacturing (excluding oil and LNG)	50 ^{a)} 102 ^{b)}	-7	11	39	16 ^{a)} 39 ^{b)}
All tradables (excluding oil and gas)	16	0	3	10	2
Import-competing sectors	29	-1	-2	22	11
Export-competing sectors	-13	2	6	-7	-13
All tradable sectors	4 ^{a)} 42 ^{b)}	0	1	3	0 ^{a)} 26 ^{b)}

Notes: ^{a)} RERP

^{b)} the standard deviation of RERP, reported as the standard deviations of the percentage rates of protection across input-output sectors within the broad aggregates of (1) all tradable industries (2) all non-oil manufacturing.

Sectors with negative value added at free trade prices or with RERP in excess of 600%, were excluded in calculating the standard deviations of RERP.

Source: Fane and Condon (1996, Table 2-3).

The other source of reduction is trade reform. The technical explanation about the sensitivity analysis for these three sources of reduction in measured RERP is beyond the scope of this thesis.⁹

Table 5.7 demonstrates that during 1987-1995, the trade reforms contributed 39% and 22% to the reduction of RERP of non-oil manufacturing and the import competing sectors, respectively. This suggests that various trade reforms reduced the RERP substantially during the period 1987-1995.

Although, Fane and Condon (1996) have taken into account some of the effect of NTBs in their RERP estimates, it is interesting to see how the coverage of NTBs changed over time. This is particularly important, owing to the fact that there was a shift in the pattern of protection from tariffs to NTB.

Table 5.8 presents the estimates of the percentage of NTB coverage of gross output based on Fane and Condon (1996) and the World Bank (1995). Unfortunately, The World Bank did not provide a detailed explanation of how they estimated the NTBs. Nevertheless, these two methods show to have the same declining trend in NTBs.

Table 5.8 shows that, in 1986, the coverage of NTBs (measured as a percentage of 1987 production protected by restrictive import licensing) in agriculture was 69% (or 64% according to Fane and Condon (1996)). The NTBs coverage was reduced substantially to 35.5% in 1995 (45% according to Fane and Condon (1996)). Similar to agriculture, the manufacturing sector (excluding oil refining) experienced a substantial reduction in coverage of NTBs. Table 5.8 shows that, according to The World Bank estimate, the coverage of NTBs of gross output for non-oil manufacturing declined from 46% in 1986 to 30.3% in 1995. Fane and Condon (1996) point to a decline for the same sector from 80% in 1986 to 24% in 1995. This demonstrates that there was a substantial decline in the percentage of NTB coverage of gross output.

⁹ For detailed and technical explanations, see Fane and Condon (1996).

However, it is worth noting that the reduction of NTBs for both agriculture and manufacturing was relatively small after 1990. This suggests that trade reform for reducing NTBs made little progress during the 1990s. Restrictive import licensing requirements continued to protect more than a 30% share of non-oil manufacturing production. NTBs were particularly apparent in agriculture sectors. This is particularly true, because trade restrictions still applied to some important commodities regulated by Bulog up to 1995, including wheat flour, soybeans and soybean meal (World Bank, 1995).

However, regardless of the slowdown in trade reform during the 1990s, Table 5.8 shows that, NTBs declined substantially from 1986 to 1995.

Table 5.8 Coverage of Non-tariff barriers, 1986-1995
(% of 1987 production protected by restrictive import licensing)

Sectors	1986	1986 ^{a)}	1990	1991	1992	1993	1994	1995	1995 ^{a)}
Agriculture (excluding forestry, hunting and fishing)	69	64	39.1	35.5	35.5	35.5	35.5	35.5	45
Manufacturing (excluding oil refining)	46	80	31.7	31.1	31.4	31.2	30.6	30.3	24

Source: World Bank (1995:41)

^{a)} Fane and Condon (1996)

To sum up, this section shows the ups and downs in trade protection in Indonesia, and provides evidence that protection tended to increase during the oil boom period and then substantially decline after the various trade reforms of the mid 1980s. This invites the question as to what factors determined trade of protection over time, and why trade reform took place during the economic crisis of the mid 1980s. These questions will be examined further in Chapter 6.

5.4 Summary

This purpose of this chapter is to review the methodology of estimating the ERP, the NRP and NTB's in Indonesia. In addition, this chapter compared the World Bank and Fane and Phillips (1991) methods for estimating trade protection.

This chapter shows that the level of protection substantially declined from 1975-1995. The ERP and NRP were both relatively high in 1975 compared with 1987, and had declined further by 1995.

The World Bank's ERP estimates for some sectors and their study on collection rates of custom duties and import sales taxes suggest that protection increased from 1975-1978 (prior to devaluation). However, Pangestu and Boediono (1986) point out that trade protection declined in 1980, owing to the tariff reform of 1979.

During the period 1975-1987, sectors producing exportables received lower protection than those producing importables. In addition, there was a significant decline in the ERP for importables from 1975 to 1987. Nevertheless, it is worth noting that, the dispersion of the average ERP between the export and import competing sectors was larger in 1975 than in 1987. This suggests the distortionary effect significantly declined during this period.

Although trade protection in 1987 was lower than in 1975, the reverse was true from 1982 to 1985, when the government introduced various NTBs through *tata niaga impor*. After the ambivalent period during 1982-85, protection declined significantly from 1987-1995, owing to various trade reforms from the mid 1980s.

This chapter also shows that, in terms of the reduction of NTBs, trade reform made little progress during the 1990s. Restrictive import licensing requirements continued to protect large shares of non-oil manufacturing production, particularly in the agriculture sectors. The high point of trade reform was during 1986-89, when the trend in the direction of increasing protection was halted and reversed.

Chapter 6

The determinants of trade protection over time

6.1 Introduction

The discussion in Chapter 5 regarding the ups and down in trade protection in Indonesia between 1975 to 1995 raises the question of what factors determined these variations in the trade protection regime over time. There are no previous studies available on this topic for Indonesia, making this a new area of study. As previously noted in Chapter 2, all of the studies available for Indonesia are mainly focused on the inter-industry variations in protection, and ignore the determinants of trade protection over time.

Although the discussion in Chapter 4 provides valuable insights into the determinants of trade protection over time, some questions remain unanswered. This chapter attempts to fill the gap in examining the determinants of trade protection over time, by focusing on the aggregate picture. The micro picture will be discussed in Chapter 7. More specifically, this chapter observes the relationship between import protection, the real oil price and the real exchange rate (RER). The export side is not examined, since the database is rather poor, and restrictions and taxes generally lower than in the case for import barriers.

There are two issues to be addressed in this chapter. The first is the determinants of import protection in Indonesia over time, from 1974 to 1994. As previously noted in Chapter 2, the cycle of trade protection approach suggests that protectionism is likely to be strongest when a country's economic position is weak. Liberalisation of the trade sector can be expected during good economic times. Therefore, the second issue to be addressed is why Indonesia's experience does not fit this theory.

The chapter is organised as follows: Section 6.2 provides a brief review of the theoretical framework and the hypothesis of the relationship between the demand for import protection, an oil boom and the exchange rate. Section 6.3 addresses the econometric techniques; Section 6.4 discusses the econometric results for the determinants of import tariffs; Section 6.5 provides a qualitative analysis to enrich understanding of the determinants of trade protection. The final section examines why Indonesia liberalised its trade regime during the economic recession of the mid 1980's.

6.2 Theoretical framework and hypothesis

6.2.1 The real effect of Dutch disease on specific factors in non-oil tradeables

An increase in the oil price has two impacts on the economy of the oil exporting country. First it increases oil revenues. Second it harms the non-oil traded sector. This phenomenon is known as Dutch disease or de-industrialisation. Corden and Neary (1982) labelled the first effect the resource movement effect, where the boom in the extractive (oil) sector causes the marginal productivity of general factors to grow and be attracted away from other sectors. The second effect they labelled the spending effect, where greater real income from the boom increases expenditure on various goods, subsequently increasing the price of non-traded goods (without affecting the price of traded goods which is determined by the international market). This results in an increase in the price of non-traded relative to traded goods. To reduce the demand for non-traded goods, the relative price of traded to non-traded goods must fall. This is referred to as real appreciation, or appreciation of the real exchange rate. When the exchange rate is fixed, adjustment takes place via a rise in the price of non-traded goods. If the exchange rate is flexible, adjustment occurs through a combination of nominal exchange rate appreciation and increases in the price of non-traded goods. The real appreciation of the exchange rate attracts resources from the non-oil traded sector into the non-traded sector. Consequently, production falls in the non-oil traded sector, while production in the non-traded sector rises as the factor shifts. This squeezing in the non-oil traded sector is called "Dutch disease" or de-industrialisation.

What is the effect on specific factor income in the non-oil traded sector? Borrowing from Corden and Neary (1982) and Vousden (1990), this section examines the impact on specific

factor income. Let L_N , L_T , L_M , represent the various functions of the demand for labour in the initial situation. L_N is the labour demand for non-traded; L_T is the labour demand for two traded goods (oil and non oil traded); L_M is the labour demand for the non-oil traded sector. Laterally adding to the initial labour demand for the oil sector obtains L_T , making this the labour demand schedule for the two traded sectors combined. The wage rate (in terms of non-oil traded (M)) is measured on the vertical axis, while total labour in the economy is given on the horizontal axis $O_N O_T$. Labour input is measured by the distance from O_N for non-traded and the distance from O_T for traded. Other things being equal, labour demand is a decreasing function of the wage the relative to the price of outputs in that sector.

Let VMP_{L_M} be the value or marginal product of labour in sector M, and VMP_{L_N} in sector N. The labour demand schedule represents the value of the marginal product of labour (VMP). Both VMP can be presented in terms of price M (PM), which reflects the real VMP in terms of PM. This can be written as:

$$(1) \quad \frac{VMP_{L_N}}{P_M} = \left(\frac{P_N}{P_M} \right) MP_{L_N} = p MP_{L_N}$$

$$(2) \quad \frac{VMP_{L_M}}{P_M} = \left(\frac{P_M}{P_M} \right) MP_{L_M} = MP_{L_M}$$

Where $p = P_N/P_M$

$VMPL_N$ = Value of marginal product of L_N

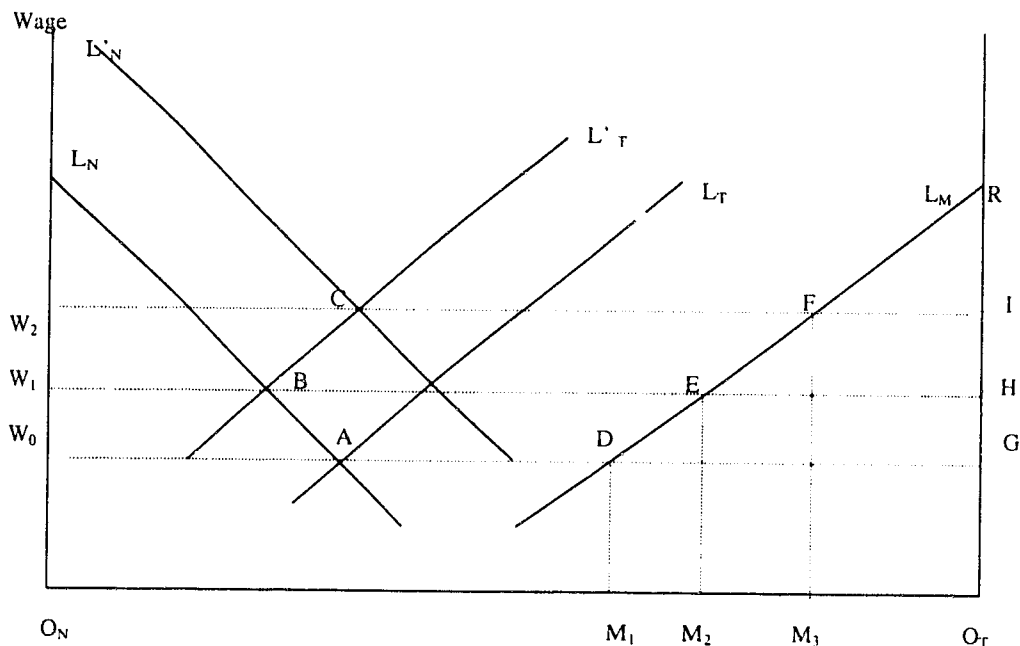
$VMPL_M$ = Value of marginal product of L_M

P_N = price of non traded goods

P_M = price of non oil traded goods

Figure 6.1 helps to analyse the effect of Dutch disease on specific factor income. Initial equilibrium occurs at A where L_N intersects L_T at wage rate W_0 .

Figure 6.1
Effects of the oil boom on the labour market



The boom in the oil sector is equivalent to an increase in the productivity of labour for that sector. This shift is from L_T to L'_T . The new equilibrium is now at point B where the wage is W_1 . However, the spending effect will increase the price on non-traded relative to the traded sector, thus labour demand shifts from L_N to L'_N . The final equilibrium is at point C where the wage is equal to W_2 .¹

The impact on the return in specific factor M can be explained using the specific factor hypothesis. The explanation is as follows: The shift of L_N to L'_N reflects the increase of pMP_{LN} . This is consistent with the fact that p will increase due to the increase in P_N at a given level of P_M .

¹ In this graph it is assumed that C is to the right of A, so that employment and also production in sector N increases, but point C could also be to the left of A, so that employment and also production of N decreases. Regardless, the important finding is that employment (and so output) in sector M decreases.

This study assumes that the quantities of the specific factor are fixed both in non-oil traded (K_M) and non-traded (K_N). Hence the direction in the change in the aggregate return indicates the direction of the change in the return per unit of the factor (Vousden, 1990). The assumption of constant return to scale in the specific factor hypothesis implies that the total factor reward in each sector just uses up the value of output, where the value of output is given by the area under the relevant VMP curve up to the labour employed in the sector. Subtracting the sector's wage bill (wage multiplied by quantity of labour employed) yields the return to the specific factor. The initial return to the specific factor K_M (denoted by r_M) is RDG ($RDM_1O_T - GDM_1O_T$). The final equilibrium is at C, where the wage is equal to W_2 . The total payment to K_M in terms of M falls from area RDG to RFI. Thus r_M/P_M falls. It is known from the previous discussion that P_M/P_N also falls. Since both r_M/P_M and P_M/P_N fall, r_M/P_N must also fall (see equation 3).

$$(3) \quad \frac{r_M}{P_N} = \left(\frac{r_M}{P_M} \right) \left(\frac{P_M}{P_N} \right)$$

Therefore the real return of the specific factor K_M falls unambiguously. This is consistent with Corden and Neary's (1982) findings. The decrease of profitability or specific factor return on sector M will induce demand for import protection. Thus, it can be expected that an increase in oil revenue due to an increase in the oil price will induce demand for import protection for non-oil traded goods (M).

6.2.2 Depreciation and trade liberalisation

The demand for protection is also closely associated with the real exchange rate. Corden (1997) and Rodrik (1998) argue that the macroeconomics effect cannot be ignored when a country with a wide-ranging system of tariffs and non-tariff barriers implements trade liberalisation. Corden (1997) also argues that, if the real exchange rate does not change and total real expenditure stays constant, the reduction in import protection will shift demand towards imports while the output of import competing industries will decline and the current account will deteriorate. These effects will create pressure for the rejection of trade liberalisation. In other words, Corden (1997) is saying the exchange rate must either be devalued, or allowed to depreciate sufficiently. The implication is that trade liberalisation should normally be a part of a policy package which includes adequate depreciation. This

argument can be formally explained as follows. Assume a small country with three categories of goods, i.e., exportables (X), importables (M) and non tradables (N). X and M combined are described as tradable goods. Let P_m^* be the price of imports, and P_x^* the price of exports. Under small country assumption both are assumed to be given. The price of N is P_N . The nominal exchange rate is denoted by e , which is defined as domestic currency per unit of foreign currency. For simplicity, assume a single tariff applied to M. The rate is t and there are no export taxes or subsidies. Thus, the price of imports can be defined as:

$$(4) P_m = e P_m^*(1+t)$$

And the domestic price of exports as:

$$(5) P_x = e P_x^*$$

The switching ratio, S , is defined as a ratio of the relative domestic price of tradables to non-tradables. Where the price of tradables is a weighted average of P_m and P_x , the weight is given as α and $(1-\alpha)$, respectively. Amongst other things, the weights depend on the shares of M and X in domestic consumption and production. Here the switching ratio determines the current account and the excess demand-supply situation in the market for non-tradables.

The switching ratio can be written as:

$$(6) S = [\alpha e P_m^*(1+t) + (1-\alpha) e P_x^*] / P_N$$

In a more realistic world, some given rates of inflation abroad, can be assumed causing P_m^* and P_x^* to continuously increase and some level of rate of inflation in P_N . As Corden (1997) suggests, it is therefore more useful to introduce a real exchange rate (R). Defining R as the real exchange rate, holds the terms of trade constant, so that P_m^* and P_x^* always rise to the same extent, and p^* can be written as the foreign price level. Thus obtaining:

$$(8) R = e p^* / P_N$$

Substituting equation (8) into (6) obtains:

$$(9) S = R(\alpha t + 1)$$

Taking derivative and holding S constant obtains:

$$(10) \frac{\partial t}{\partial R} < 0$$

Therefore, in order to keep S constant – a reduction in t (tariffs) require a real depreciation (rise in R), where as the change in R not only depends on e but also on the changes in p^* and P_N . In other words, a rise in R (real depreciation) enables t to decline. Thus, real depreciation reduces the pressure for import protection.

6.2.3. Hypotheses in the case of Indonesia

The Dutch disease framework has been widely used in explaining the oil boom phenomenon in Indonesia by Corden and Warr (1981), Pangestu (1986) and Warr (1992b) amongst others. These studies argue that Dutch disease occurred in Indonesia in the late 1970s, when the oil boom resulted in squeezing the non-oil traded sector. Although these studies provided evidence of Dutch disease, they did not explicitly focus on the Dutch disease effects on the demand for import protection. Fane (1996) and Corden and Warr (1981) briefly outline the impact of Dutch disease on the demand for import protection, without specifically focusing on the issue.

As previously discussed, the impact of Dutch disease on factor incomes, as previously discussed, can be explained using the specific factor hypothesis. Prior to the *era reformasi* (political and economic reform era) in 1998, Indonesia's trade unions did not possess strong bargaining power so that it is assumed that the pressure for protection would come from capitalists with more bargaining power. Therefore, the specific factor in the previous theoretical framework refers to capitalists in the non-oil traded sector.

The hypotheses are developed as follows (the full hypotheses and the causality test are presented in Table 6.3).

6.2.3.1 Change in real oil price and change in average tariff

There are two possible causalities between the change in real oil price and the change in average tariff.

- a. As suggested by the theoretical framework of the impact of Dutch disease on specific factor income, a positive relationship can be expected between the increase in real oil price and the average tariff. In addition, as noted in Chapter 3, the oil

boom in 1973-1981 enabled the Indonesian government to finance a number of highly subsidised projects and adopt an import substitution strategy through high levels of tariff protection. However, the subsequent plunge in both the oil price and oil revenue in the mid 1980's forced the government to begin liberalising the economy. This is consistent with the hypothesis that a positive correlation can be expected between a change in the real oil price and a change in the average tariff.

- b. Considering the real oil price is exogenous, it can be expected that a change in the average tariff will not cause a change in the real oil price.

To summarise, this study hypothesises that an increase in the real oil price will lead to an increase in average tariff (rejecting the hypothesis that a change in real oil price does not cause a change in the average tariff) (H1).

An increase in the average tariff will not have a significant impact on the oil price (accepting the hypothesis that a change in average tariff does not cause a change in real oil price) (H2).

6.2.3.2 Change in RER and change in average tariff

There are two possibilities of causality between the change in average tariff and the change in the RER.

- a. As discussed in the theoretical framework, trade liberalisation should normally be part of a policy package which includes adequate exchange rate depreciation. Depreciation of the real exchange rate (RER) will increase exports and indirectly protect domestic goods from imports, leading to less pressure for average tariff. So, a negative relationship can be expected between a change in the RER and a change in the average tariff.
- b. An increase in the average tariff could improve the trade balance, which, in turn, appreciate the RER. Here a negative relationship can be expected between the change in average tariff and the change in the RER. In other words, depreciation in the RER will reduce the demand for tariffs.

Therefore, **this study** hypothesises that an increase in the RER (depreciation) reduces the average tariff (rejecting the hypothesis that a change in the RER does not cause a change in the average tariffs) (H3).

An increase in the average tariff reduces the RER (rejecting the hypothesis that a change in the average tariff does not cause a change in the RER) (H4).

Since **this study** only focuses on the relationship between the real oil price, RER and the average tariff, the relationship between the oil price and RER (H5 and H6) is not discussed here.

6.3 Econometrics techniques and data

As discussed in Chapter 2, tariff endogeneity suggests that tariffs are a result of the interaction of demand for and supply of tariffs. The Vector Autoregression Model (VAR) is particularly suited for this type of application. Krol (1996) argues that the VAR can help determine whether a macroeconomic condition, such as slower growth in GDP, influences tariff change. And, if the reverse is true, whether tariffs promote economic growth or have a macroeconomic effect, the VAR enables the causality test of this alternative view to be set up. However, it would be unrealistic to conclude that all of the determinants of import protection can be captured by this model. While the complexity of the political economy cannot be entirely captured in this model, it can at least provide valuable insight into the political economy story behind the relationship among these variables.

Bohara and Kaempfer (1991) suggest using the Vector Autoregression Model (VAR) to examine data for two reasons: First, the level of protection could be both endogenous and exogenous, and a structural regression model with pre-established causality may be misspecified. Second, the political process is sometimes slow to respond to pressure, implying an uncertain lag structure lies behind relationship among time series variables.

The VAR model allows flexibility in selecting the lag structure and deals with causality. Furthermore, simulation of the VAR, and the impulse response function (IRF) calculation could give more insights regarding the sign of the causality effects.

In standard form, the VAR is considered a system of dynamic, linear equations driven by the error terms as:

$$(1) Z_t = B_0 + \sum_{i=1}^p B_i Z_{t-i} + U_t, U_t \sim NIID(0, \Omega), t \in T$$

Where Z_t is a $k \times 1$ stochastic vector,

B_0 is $k \times 1$ vector of constant coefficients,

B_i is a $k \times k$ matrix of constant coefficients and

U_t is a $k \times 1$ stochastic vector, normal, independent and identically distributed (NIID) etc. with a zero mean and Ω variance-covariance matrix

This dynamic VAR model is called an unrestricted VAR, since no linear restrictions are imposed. Nevertheless, because this study focuses on the relationship between both the real oil price and real exchange rate and the average tariff, the linear restriction will be imposed on the grounds of the previous theoretical framework prediction. In addition, the statistical basis for imposing the restrictions is validated by the Granger causality test. Once restrictions are imposed they are tested by the Wald test to ensure their validity. If evidence is found of some causality between those variables then the variables which are statistically not caused (statistically not Granger caused) by the rest of the variables can be eliminated. Therefore, the unrestricted dynamic VAR can be reduced into restricted VAR which contains less variables. In such a case, the equation system cannot be estimated separately and needs to be estimated by the seemingly unrelated regressions (SURE) method (Spanos, Andreou, Syrichas, 1997). In fact, the restricted VAR helps avoid the problem of over parameterisation, which is likely to occur in the unrestricted VAR (Spanos, Andreou, Syrichas, 1997).

Once the causality test is established, the causality direction can be traced using the IRF. Since the objective of this section is only to see the causality directions between the average tariff and some macroeconomic variables, it will focus only on the unit root test, the Granger causality and the IRF.

6.3.1 Unit root tests

The unit root tests are used in this study to make sure the time series data are stationary. Employing the unit root tests is an interesting subject in econometrics, because a unit root tests has carried a major implication in macroeconomic data. If the structural variables have unit roots, it can be expected that the shocks on those variables will be permanent. For example, consider the model (Maddala, 1992: 581)

$$(2) Y_t = Y_{t-1} + \varepsilon_t, \text{ where } \varepsilon_t \text{ is a zero mean stationary process.}$$

If there is a shock C in ε_t in time period Y_T , then Y_{T+1}, Y_{T+2}, \dots all increase by C , so the effect is permanent. In this case, the model has unit roots. However with the model:

$$(3) Y_t = \alpha Y_{t-1} + \varepsilon_t, \text{ where } \alpha < 1$$

the effects of the shock fade away over time. In this case the model does not have unit roots. Therefore it is very important to test whether the series has $\alpha=1$ or $\alpha<1$, or whether or not there is a unit root.

The unit root tests can be examined by both Dickey Fuller and the Augmented Dickey Fuller tests (ADF).²

The specification for the Dickey Fuller unit root test is:

$$(4) Y_t = \alpha_0 + \alpha_1 Y_{t-1} + \alpha_2 \Delta Y_{t-1} + u_t$$

In the ADF test, the unit root test can be presented as:

$$(5) \Delta Y_t = \alpha_1 Y_{t-1} + \sum_{j=1}^k \alpha_j \Delta Y_{t-j} + u_t, \text{ where } j=1, 2, \dots, k$$

If α_1 from equation 5 is significantly different from zero then it can be said that Y_t is stationary or does not have unit roots.

6.3.2 The Granger causality test

Maddala (1992) points out that the Granger causality test departs from the premise that the future cannot cause the present. If A takes place after B, it can be concluded that A cannot cause B. Whereas, if A takes place after B, it does not necessarily imply that B causes A.

² For further technical explanation see Enders (1995), Maddala (1992).

Granger develops some tests for causality. For an empirical test for causal direction, let y_t and x_t be a stationary time series with zero means. The simple model can be presented as:

$$(6) \quad x_t = \sum_{i=1}^k \alpha_i x_{t-i} + \sum_{i=1}^k \beta_i y_{t-i} + u_t$$

$$(7) \quad y_t = \sum_{i=1}^k \delta_i y_{t-i} + \sum_{i=1}^k \phi_i x_{t-i} + v_t$$

Where u_t and v_t are two uncorrelated white noise series. The null hypothesis that x_t does not cause y_t corresponds to $\phi_i = 0$ (for $i=1,2,\dots,k$).

In order to determine the order of lag (p) of the approximating autoregression, Akaike Information Criterion (AIC) and Schwartz Bayesian Criterion (SBC) are used.³

$$(8) \quad \text{AIC}(p) = T \log |\Sigma| + 2N$$

$$(9) \quad \text{SBC}(p) = T \log |\Sigma| + N \log(T)$$

Where: T = number of observations

$|\Sigma|$ = determinant of the variance/covariance matrix of residuals

N = total number of parameters estimated in all equations

The order p is chosen so that both the AIC or SBC criteria is minimised.

6.3.4 The IRF

To acquire understanding about the direction of the relationship between x_t and y_t , the IRF method is employed. The IRF is a methodology introduced by Sims (1980), which allows the time path of the various shocks on the variables in the VAR systems to be traced out (Enders, 1995).

³ For further technical explanation see, Enders, 1995.

Equations (10) and (11) can be used for illustration. If the Granger causality test produces a result that y_t does not Granger cause z_t , while z_t does Granger cause y_t , then β_1 in equation (11) will not differ from 0, while α_2 in equation (10) will be different from 0. Therefore, a shock in ε_{z_t} will have an effect on e_{z_t} (equation 13) while the effect on e_{y_t} is transmitted via ρ_{12} which is a correlation coefficient between e_{y_t} and e_{z_t} . The effect on e_{y_t} will then be transmitted to y_t . (equation 10)

$$(10) y_t = \alpha_0 + \alpha_1 y_{t-1} + \alpha_2 z_{t-1} + e_{y_t}$$

$$(11) z_t = \beta_0 + \beta_1 y_{t-1} + \beta_2 z_{t-1} + e_{z_t}$$

The error terms can be decomposed as follows:

$$(12) e_{y_t} = \varepsilon_{y_t} + \rho_{12} \varepsilon_{z_t}$$

$$(13) e_{z_t} = \varepsilon_{z_t}$$

6.3.5 Data and period of estimation

Several data sets are employed in this study. As discussed earlier, this chapter focuses on the aggregate picture, while the emphasis of the ERP and NRP estimates is on the industry level. Therefore, it is more appropriate to employ aggregate data such as the average tariff. The average tariff (AVT) is defined as total import duty divided by total import c.i.f. The total import duty data are drawn from quarterly realisation of the government budget (unpublished), from the Department of Finance, while import c.i.f are taken from International Financial Statistics (IFS) data tape).

It is worth noting that, unlike the ERP and NRP, the average tariff cannot capture the NTBs, which, as noted, obviously played an important part in trade protection in Indonesia. Unfortunately, the ERP, NRP and NTBs for Indonesia are not available in a time series form. Given this limitation, it is almost impossible to have a consistent time series in the econometrics estimate.

Without incorporating NTBs, the average tariff can only be a partial explanation of the determinants of trade protection. Thus, to fill the gap and enrich understanding of the determinants of trade protection in Indonesia from 1970-1995, the econometric analysis will be supplemented with a qualitative assessment in Section 6.5.

Other variables are:

Real oil price is defined as: $POIL = (CPOIL * e) / CPII$

Where: $CPOIL$ = Crude petroleum price in (in \$) drawn from the IFS data.

e = nominal exchange rate (Rp/\$)

$CPII$ = Consumer price index of Indonesia

The real exchange rate is calculated as:

$RER = e * (CPIUS / CPII)$

Where: $CPIUS$ = consumer price index of US

In fact, various alternatives estimates of the RER, including the Morgan Guarantee Trust Company series, were attempted in this model, although the results were less convincing than the above RER definition.

The theory does not provide guidance regarding the form of these variables. To guarantee the stationary condition, and to capture the impact of the change of the variables, they are transformed into log form.

Where:

$LAVT$ = Log average tariff (in %)

$LPOIL$ = Log real oil price (in Rp)

$LRER$ = Log Real exchange rate (Rp/US\$)

In order to gain some insight about Indonesia's tariffs policy from the oil boom period to the years of economic reform, the period of estimation selected is from quarter two in 1974 to quarter four in 1993. All data are quarterly.

6.4 Econometric results

6.4.1 Unit root tests

Table 6.1 presents the unit root test of all variables. The Table shows that there is no reason to reject that there is unit root at order zero (I_0). However, the first difference test shows that the unit root null hypothesis is rejected for all variables at the first difference. Therefore, following Krol (1996) and Bohara and Kaempfer (1991), this test suggests that the VAR should be specified in the first difference.

Table 6.1: Unit root tests for various variables

Variables	ADF test*)	ADF *) (first difference)
LAVT	-2.27	- 9.55**
LRER	-0.719	- 4.67**
LPOIL	- 1.93	- 6.45**

90% critical value for ADF = -2.58

*) include constant but not trend

**) significant at 5%

6.4.2 Determining the lag order

Table 6.2 presents the calculation of AIC and SBC value. The order p is chosen based on the smallest AIC or SBC value. This Table shows that lag 2 provides smallest AIC and SBC.

Table 6.2: Calculation of AIC and SBC value

	1 Lag	2 Lags	3 Lags	4 Lags	5 Lags	6 Lags
AIC	-909.04	-1184.63	-885.59	-807.79	-716.91	-620.96
SBC	-894.52	-1160.44	-851.73	-764.25	-663.69	-558.07

6.4.3 Unrestricted VAR model

Based on the unit root tests and the AIC and SBC tests, this study defines the form of the trivariate VAR model:

$$\begin{bmatrix} DLAVT \\ DLPOIL \\ DLRER \end{bmatrix} = \begin{bmatrix} \alpha_0 \\ \beta_0 \\ \delta_0 \end{bmatrix} + \begin{bmatrix} \alpha_1 & \alpha_2 & \alpha_3 & \alpha_4 & \alpha_5 & \alpha_6 \\ \beta_1 & \beta_2 & \beta_3 & \beta_4 & \beta_5 & \beta_6 \\ \delta_1 & \delta_2 & \delta_3 & \delta_4 & \delta_5 & \delta_6 \end{bmatrix} \begin{bmatrix} DLAVT_{t-1} \\ DLAVT_{t-2} \\ DLPOIL_{t-1} \\ DLPOIL_{t-2} \\ DLRER_{t-1} \\ DLRER_{t-2} \end{bmatrix} + \begin{bmatrix} \epsilon_1 \\ \epsilon_2 \\ \epsilon_2 \end{bmatrix}$$

Where : DLAVT : change in average tariff
 DLPOIL : change in real oil price
 DLER : change in real exchange rate

6.4.4 Granger causality tests

Based on the AIC and SBC results, the appropriate lag order for the Granger Causality test is employed. Table 6.3 presents the full hypotheses and the Granger causality test. The Granger Causality test is calculated based on the Wald test. Since this study focuses on the relationship between tariffs and both the real exchange rate and the oil price, it only focuses on the hypothesis H1 to H4.

H1-H2 shows that a change in the real oil price does cause a change in the average tariff, while a change in the average tariff does not cause a change in the real oil price. This result supports the hypothesis that there is causality between a change in the real oil price and a change in the average tariff, in which the former causes the latter.

H3-H4 shows that a change in the real exchange rate does cause a change in the average tariff, while a change in the average tariff does not cause a change in the real exchange rate. Therefore H3-H4 supports the hypothesis that there is causality between a change in the RER and a change in the average tariff, in which the former causes the latter.

Hypotheses H5-H6 shows there is causality between a change in the real exchange rate and a change in the real oil price and vice versa.

Table 6.3:
Summary of the results: Chi-square statistics for various hypotheses

Hypothesis	$\chi^2^{(*)}$	Remarks
H1 Change in the real oil price does not cause a change in average tariff.	19.50	Rejected ^a
H2 Change in average tariff does not cause a change in the real oil price.	0.025	Not rejected
H3 Change in real exchange rate does not cause a change in average tariff.	4.66	Rejected ^b
H4 Change in average tariff does not cause a change in the real exchange rate.	0.001	Not rejected
H5 Change in the real oil price does not cause a change in the real exchange rate.	5.32	Rejected ^b
H6 Change in the real exchange rate does not cause a change in the real oil price.	9.05	Rejected ^a

^a)Significant at 5%
^b) Significant at 10%
^{*})Calculated based on Wald test.

6.4.5 Restricted VAR and impulse response function

6.4.5.1 Restricted VAR

Given the result of the Granger causality test this study can impose linear restrictions on the model. The Restricted VAR is:

$$\begin{bmatrix} DLAVT \\ DLPOIL \\ DLRFR \end{bmatrix} = \begin{bmatrix} \alpha_0 \\ \beta_0 \\ \delta_0 \end{bmatrix} + \begin{bmatrix} \alpha_1 & \alpha_2 & \alpha_3 & \alpha_4 & \alpha_5 & \alpha_6 \\ 0 & 0 & \beta_3 & \beta_4 & \beta_5 & \beta_6 \\ 0 & 0 & \delta_3 & \delta_4 & \delta_5 & \delta_6 \end{bmatrix} \begin{bmatrix} DLAVT_{t-1} \\ DLAVT_{t-2} \\ DLPOIL_{t-1} \\ DLPOIL_{t-2} \\ DLRER_{t-1} \\ DLRER_{t-2} \end{bmatrix} + \begin{bmatrix} \varepsilon_1 \\ \varepsilon_2 \\ \varepsilon_2 \end{bmatrix}$$

Following Enders (1995), since the right hand side variables were no longer identical, the equation can be re-estimated with seemingly unrelated estimation (SURE). The regression result is presented in Table 6.4, showing that the coefficient of the regression results is significant for DLPOIL_{t-1} and DLPOIL_{t-2} and the sign is consistent with the hypothesis (positive). Furthermore, the coefficient of DLRER_{t-1} is also consistent with the hypothesis (negative). Nevertheless, since the individual coefficients in the estimated VAR models are

often difficult to interpret, it is suggested IRF should be used to interpret the results (Gujarati, 1995)

Since the SURE estimation is appropriate under non-diagonal error covariance, it is important to test the hypothesis that the covariance matrix is diagonal. A likelihood ratio (LR) test and Breusch Pagan Lagrange multiplier (LM) are employed. The LR test is 26.5 with 3 degrees of freedom (DF), while LM test is 22.97 with 3 DF. These two tests show that the null hypothesis that the covariance matrix is diagonal is rejected at the 5% level. Thus, both the LR and LM tests give support to the employment of SURE to estimate the above equations.

Table 6.4: Restricted VAR results

Independent Vars.	Dependent variables		
	DLAVT	DLPOIL	DLRER
DLAVT _{t-1}	-0.475 (-4.42) **	-	-
DLAVT _{t-2}	-0.105 (-1.07)	-	-
DLPOIL _{t-1}	0.85 (3.96) **	-0.05 (0.06)	-0.06 (1.72)*
DLPOIL _{t-2}	0.438 (1.85)*	-0.14 (-1.73)*	-0.05 (-1.48)
DLRER _{t-1}	-1.16 (-1.9)*	0.37 (1.61)*	0.006 (0.09)
DLRER _{t-2}	-0.644 (-1.04)	0.63 (2.8) **	-0.02 (-0.24)
Constant	0.002 (0.04)	-0.084 (-0.51)	0.29 (0.27)
System R-2	0.48		
Test for diagonal covariance matrix	Likelihood Ratio (LR) test (χ^2): 26.5 **		
	Breusch-Pagan Lagrange Multiplier (LM) test (χ^2): 22.975 **		

Estimated using SURE

t ratio in parentheses

**) Significant at 5%

*) Significant at 10%

6.4.5.2 The IRF results

Shock on the oil price equation

The IRF results support the hypothesis that an increase in the real oil price will increase the average tariff. This result is consistent with the Dutch disease effect discussed earlier, and

confirms the previous analysis that the Indonesian government tended to adopt an import substitution policy during the oil-boom period, by way of increasing the average tariff. The cumulative IRF shows that one unit shock (measured by one standard error) in change in the real oil price increased a change in the average tariff by 0.76 after 1 period, and 0.41 after 4 periods, and, finally, after 8 periods by 0.21 (Table 6.5). These figures provide evidence that an increase in the real oil price led to an increase in the average tariff, implicitly showing that the government could afford a higher level of protection during the oil boom.

As noted, this result is contrary to the cycle of trade protection approach, which says the protection tends to increase in a recession period. The protection in Indonesia was higher during the oil boom period and lower when the economy was in crisis as a result of the collapse in the oil price in the mid 1980's. This finding is consistent with Fane's (1996) argument that the 1986 collapse in the oil price raised the profitability of the non-traded sector by depressing the price of the non-traded sector, resulting in less demand for the average tariff.

However, these results have to be juxtaposed against the fact that, despite a gradual decline in the oil price after 1982, there was evidence of an increase in NTB's between 1982-1985. Unfortunately, since this model only focuses on the average tariff data the results cannot capture the NTBs, and should be read carefully. To fill the gap, the qualitative analysis will be employed to discuss this issue later in this chapter.

Table 6.5
Cumulative Impulse-Response-Function (IRF) response to
one unit standard deviation shocks

Shock To	Response In	Cumulative IRF up to		
		1 period	4 periods	8 periods
DLPOIL	DLAVT	0.76	0.41	0.21
DLRER	DLAVT	-1.15	-0.51	-0.82

One period is one quarter

Shock on the real exchange rate equation:

The IRF provides supporting evidence for the hypothesis that depreciation of the RER (increased in DLRER) decreases the average tariff. This is consistent with the hypothesis that trade liberalisation should normally be part of a policy package which includes adequate real exchange rate depreciation, to increase exports and indirectly protect domestic goods from imports. As a consequence, the lobbying pressure for tariffs will decrease. The cumulative IRF shows that an increase of a one unit shock (measured by one standard error) in the change of RER (means depreciation) decreases the average tariff by 1.15 after 1 period, and by 0.51 after 4 periods (Table 6.5).

However, this result has to be juxtaposed against the fact that not all of the rupiah devaluations, except for the one in 1986, can be directly associated with trade liberalisation. Although followed by tariff reform in 1979 (see discussion in Chapter 5), the 1978 devaluation failed to create a background for sustainable trade reform. As pointed out in Chapters 3,4 and 5, trade protection tended to increase in the early 1980s. This raises the question of why the 1978 devaluation failed to provide background for sustainable trade reform, and will be discussed in greater detail in Section 6.5.

The overall VAR results provide support for the hypotheses that there is a positive relationship between the real oil price and the average tariff, and a negative relationship between the real exchange rate and the average tariff. However, these results have to be interpreted carefully, since this model does not capture the NTBs which obviously played an important role in import protection in Indonesia. Fane and Condon (1996) show that in 1986 the percentage NTB coverage of gross output extended to 52% of all tradable sectors and 80% of non-oil manufacturing. In addition, the complete story of the political economy of import protection cannot be entirely captured in this model. As discussed in Chapter 4, the determinants of trade protection in Indonesia, including import protection over time, are closely associated with the struggle over trade policy between technocrats, economic nationalists and other contending groups. Therefore, to assess the determinants of import protection over time in a comprehensive fashion, these VAR results should be combined with the analysis in Chapter 4. Subject to these limitations, the VAR results provide a

reasonable degree of support for tariff endogeneity and the relationship between tariffs and some macro variables, such as the oil price and RER.

The limitations of the VAR model, underlining the importance of the qualitative analysis of the determinants of trade protection over time in Indonesia presented in the next section.

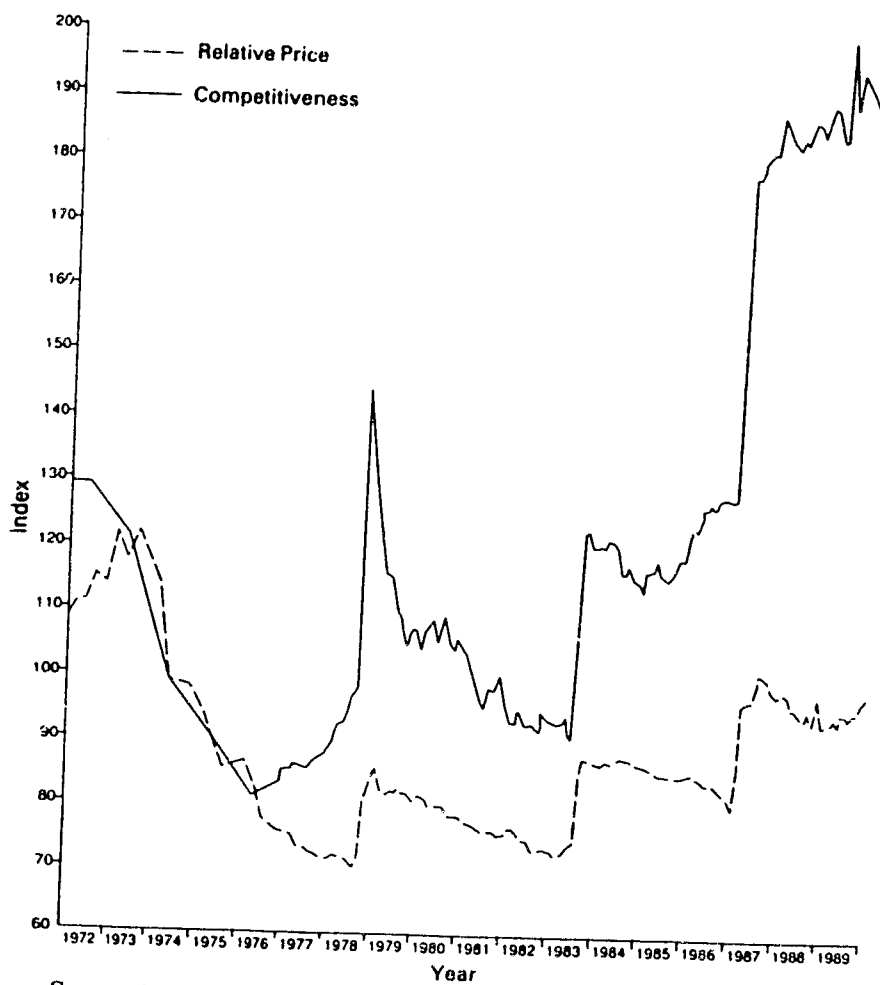
6.5 The determinants of trade protection over time: a qualitative analysis

A useful starting point to discuss the relationship between the RER, oil price and trade protection is to look at the trend in the relative price of tradable to non tradable goods.

Figure 6.2 depicts Warr's (1992b) estimation of the price ratio of tradable to non-tradable goods in Indonesia (the dashed line marked 'competitiveness should be disregarded'). This figure shows that following the first oil boom in 1973-74, consistent with the Dutch disease phenomenon, the price ratio of tradable to non-tradable declined steadily until 1978. As discussed in Chapter 5, the period 1974-1978 witnessed increasing levels of protection. The World Bank (1981) reported that the level of protection unambiguously increased from 1975 to the period prior 1978 devaluation. Furthermore, Warr (1984) states that by late 1978, the profitability of the import competing sector had declined significantly. This is consistent with the hypothesis of the impact of Dutch disease on the demand for trade protection, in which an increase in the oil price will reduce the profitability of the non-oil traded sector, and create more pressure on the demand for trade protection.

In November 1978, the government devalued the rupiah by 50% in order to assist the non-oil traded sector. Pangestu and Boediono (1986) argue that this was part of the protectionist policy and Warr (1984) also supports the argument that a protectionist motive was relatively clear in the 1978 devaluation compared to the 1983 devaluation. Subsequently, a supplementary policy package for tariff reduction, liberalising the import prepayments requirement and an export certificate scheme was launched in 1979. These appear to have been a reduction in the import substitution bias (Pitt, 1991). In 1979, the domestic tariffs of

Figure 6.2
Indonesia: the tradable/non-tradable price ratio
1971-1989



Source: Warr (1992b)

one thousand goods and services were significantly reduced, by 50% for most goods (Pangestu and Boediono, 1986). Pangestu and Boediono (1986) also point out that the 1978 devaluation was an ideal background to reduce tariff barriers, as indicative of the 1979 tariff reductions. These were indications that the government intended to reduce the excessive protection by undertaking broad tariff reductions and unifying the structure. This was consistent with the hypothesis that real exchange rate depreciation should normally be part of trade liberalisation.

However, this argument is only partly true, because as pointed out by Pangestu and Boediono (1986) protection tended to increase from the early 1980s. This invites the question of why the 1979 trade reform was halted, although the government had devalued the rupiah in 1978. This can be explained as follows. After the rupiah's devaluation in November 1978, the relative price of tradable to non-tradable goods surged upwards. However, as can be seen from Figure 6.2, the relative price increase was quickly eroded, declining to its previous level by 1982. Pangestu (1986) points out that this was due to the inflationary aftermath of the devaluation and the second oil boom in 1979. After the devaluation in 1978, and the second oil boom in 1979-80, the money supply grew substantially and, subsequently, inflation was also high. The increase in inflation resulted in the increase of the price of non-traded goods, thereby reducing the profitability of the non-oil traded sector. As a result, demand for trade protection began to increase from the early 1980s. This helps explain why trade protection increased, even after government devalued the rupiah in 1978. It was true that the price of oil gradually began to decline in 1982, yet it could not reverse the declining trend of the price ratio of tradable to non-tradable goods. Hence, the impact of the oil price decline did not fully compensate the fall of profitability in the non-traded sector.

By early 1983, the ratio of traded to non-traded goods had declined to roughly its value prior to the 1978 devaluation (Warr, 1992b). This reduced profitability of the non-oil traded sector and induced demand for protection. This is consistent with Pangestu and Boediono (1986) and Hill (1996) that there was evidence of increasing trade protection from 1982 to

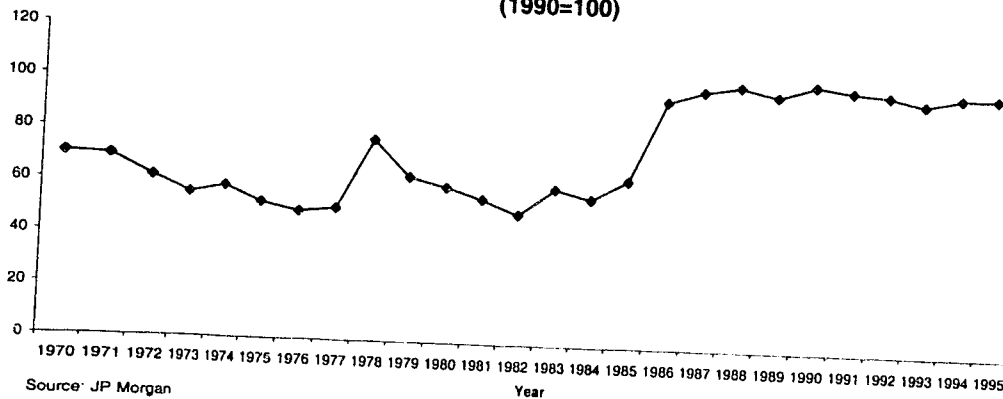
1985. As noted, in 1982 the government introduced *Tata Niaga Import*, which is basically trade protection in the form of NTBs.

The Indonesian government undertook another rupiah devaluation in March 1983. Warr (1984) argues that a protectionist motive seem to have played a role in both the 1978 and 1983 devaluations, although it would appear to have been stronger in 1978. The key difference between the 1978 and 1983 devaluation was in the terms of trade movement.⁴ The rupiah's devaluation in 1983 surged the price ratio of traded to non-traded goods upwards. Moreover, the subsequent decline of the price ratio during 1983-1985 was slower than in 1978-83, and its rate was clearly above that observed prior to the 1983 devaluation. This made it possible for the government to introduce the first package of trade liberalisation in 1985. In fact, the oil price continued to decline, abruptly dropping in the first quarter of 1986. The drop in the oil price led Indonesia into a serious current account deficit forcing the government to undertake another rupiah devaluation in 1986.

The combination of the drop in the oil price and the rupiah's devaluation raised the price ratio of traded to non-traded goods. This raised the profitability of all other non-oil traded sectors by depressing the price of non-tradable relative to the price of these other tradable sectors. The increase in the price ratio of traded to non-traded after 1986 is confirmed in Figure 6.2 which also shows that the price ratio after 1986 was relatively high compared with 1978-1985. These combinations enabled the government to launch further trade liberalisation measures after 1986. Of course, as mentioned earlier, the trade reform in the mid 1980s cannot be entirely attributed to the oil price and RER, as other factors, such as the increasing role of the technocrats and the declining political power of economic nationalists, also contributed to the reduction in import protection (see Section 6.6).

⁴ This issue is beyond this thesis, for further explanations see Hill (1996).

Figure 6.3
Indonesia, real effective exchange rate, 1970-1995
(1990=100)



As shown in Figure 6.3 the Indonesian government succeeded in maintaining “competitiveness” during the 1990s. “Competitiveness” in Figure 6.3 is based on JP Morgan real effective exchange rates adjusted for inflation rates with 1990=100.⁵ This figure helps provide an indication that the ability to maintain “competitiveness” enabled the government to reduce the levels of trade protection.

This qualitative analysis reinforces the previous VAR results, suggesting that given the limitations, the VAR model still provided a reasonable degree of support for the relationship between the average tariff, the RER and the oil price.

6.6 Why Indonesia liberalised the trade regime during the 1980’s crisis?

Section 6.5 has analysed some of the determinants of trade protection over time in Indonesia from 1970-1995. As discussed earlier, major trade reform took place after the mid 1980s economic crisis. The interesting question in this regard is why Indonesia liberalised its trade

⁵ In fact, the “competitiveness” index should be interpreted with caution, as critically argued by Warr (1984) in pointing out that when the law of one price does not hold, the “competitiveness” index could give a distorted picture of the pattern of the relative price effects of devaluation. Nevertheless, considering that from 1990-1995, there was no devaluation and Indonesian inflation was relatively stable, this “competitiveness” index could provide a guide for Indonesian “competitiveness”. Discussion on “competitiveness” itself is beyond this thesis. An excellent review is available from Warr (1984).

regime during the crisis, whereas the cycle of trade protection approach suggests that protectionism is strongest when a country's economic position is weak. (Frey, 1985).

Chapter 4 details how the role of technocrats became increasingly important during the period of decline in the oil price, while the role of economic nationalists relatively declined. In addition, there was pressure from the so-called "liberal epistemic community" for economic liberalisation in general, and trade reform in particular. Nevertheless, these explanations focus mainly on the political struggle over trade policy within the government and leave at least two questions unanswered. First, if trade liberalisation was undertaken owing to pressure from technocrats, why was it sustained after 1993, even when several of Habibie's allies were appointed to the new cabinet coinciding with the departure of the main technocrats, such as Ali Wardhana, Sumarlin and Emil Salim? Second, the increasing role of the technocrats cannot fully explain why the opposition from losers, such as import competing industrialists or license holders was so weak in opposing the reforms. In fact, the argument in Chapter 4 overlooks the role of crony capitalists or the distributive consequences of reform.

The limitations of the analysis of the tug of war between the technocrats and economic nationalists leads this study to list some other possible explanations regarding why Indonesia liberalised the trade regime during the economic crisis of the mid 1980s. All of these possible explanations will be discussed as below, including a greater reliance on market forces, the "crisis" hypothesis and the distributive consequences of the reform on various economic groups.

6.6.1 More greater reliance on market forces

The worldwide belief in market forces is perceived as one factor influencing economic liberalisation in many countries during the 1980's. This trend was supported by two developments: first, the important role of the idea of trade liberalisation. Second, the influence of multilateral institutions such as The World Bank and the IMF.

Trade reform in Indonesia can obviously not be entirely disassociated from this global economic trend. This is supported by the fact that trade reform took place in some developing countries, including Nigeria, Morocco, Pakistan, Argentina and Indonesia at more or less in the same period of time.⁶ This suggests there was a common perception that a greater reliance on market forces could lead to a better economic performance. This is also supported by Fane (1996) who argues that one of the factors which contributed to the change in economic policy direction from import substitution towards deregulation and trade liberalisation in the mid 1980's was a growing worldwide belief that reliance on market forces could produce a better economic performance than an interventionist regime. He added that, although the fast growing East Asian economies had obviously not been laissez faire, they had been less interventionist and more open to international competition. Thus, increasing attention given to East Asia's success in international trade provided a powerful influence for Indonesia to pursue trade liberalisation. Various conference and studies done by The World Bank and the IMF, emphasised the importance of market mechanisms and disseminated the idea of trade liberalisation to various countries, including Indonesia. This coincided with the decline in the oil price in the mid 1980s. Hill (1996) points out economists at the University of Indonesia attempted to shape the political agenda by initiating debate on a "high cost economy" (a phrase to describe the non competitive nature of the economy, owing to government intervention and trade protection). Prawiro (1998) also admits the trade reform in Indonesia was not particularly unique. He argues that by undertaking trade reform, Indonesia was on the forefront of a consensus that was emerging among economists and policy makers around the world, namely, that a greater reliance on the market could lead to a better economic performance.

Furthermore, Rodrik (1998) argues that the World Bank and the IMF became very powerful in dealing with governments in developing countries during the economic crisis of the 1980's. For example, the mounting foreign debt in Indonesia was also viewed as an explanation for the important role of The World Bank and the IMF during that period. There is probably some truth in this argument. However, as noted, the initiative for reform also

⁶ For details, see Rodrik (1998).

came from the technocrats.⁷ As discussed earlier in Chapter 4, the role of The World Bank and the IMF was indirect and did not simply dictate trade policy in Indonesia.

6.6.2 "Crisis" hypothesis

The other possible explanation is the "crisis" hypothesis. As discussed in Chapter 2, the "crisis" hypothesis argues that economic reform, including trade reform, is initiated by an economic crisis. The "crisis" hypothesis is widely employed in some studies in Indonesia (Pangestu, 1996; Azis, 1994; Sjahrir and Brown, 1992). They argue that exogenous events, such as the decline in the oil price and appreciation of the yen, provided the political will for substantive economic liberalisation to take place. Supporters of deregulation label this situation as 'good times mean bad policy and bad times mean good policy'. The explanation is as follows: after 1982, the oil price began to decline gradually, and falling abruptly in 1986 from US\$28 to US\$10 per barrel. Since around 60% of government revenue and more export revenue came from oil, this caused Indonesia's current account balance to deteriorate and led to a shortfall in government revenue. The appreciation of the yen also played an important role, since around one-third of Indonesia's foreign debt was denominated in yen. The combination of the plunging petroleum price and the yen appreciation led Indonesia into a serious current account deficit and a government revenue short fall. Azis (1994) points out that the increasing debt payment due to the appreciation of yen and the rise in the world interest rate left the government no option but to seek to earn more foreign exchange revenue. This argument is also supported by Wardhana (1989), who claims that economic growth and development required export growth from non-oil manufacturing and the agriculture sector to pay for imports and service debt. Economic growth could be achieved through a competitive domestic market. Protectionist policies and government control were unfavourable for a competitive domestic market. From this viewpoint, reform was perceived as a government response to overcome Indonesia's economic crisis and increase foreign exchange revenue by promoting non-oil exports.

⁷ Interview with Emil Salim (5 January 1999), Mohamad Sadli (30 September, 1998) and Peter Rosner from Harvard Institute for International Development (HIID) (13 October 1998).

However, this "crisis" hypothesis gives only a partial explanation for the economic liberalisation in Indonesia. The "crisis" hypothesis should be looked at carefully for at least three reasons. First, while it is true trade liberalisation began in 1985-86, the Indonesian government had already undertaken various measures, such as banking reform, the 1983 devaluation, re-phasing government projects, and tariff and custom reforms even before the 1986 oil crisis. Therefore, as argued by Williamson and Haggard (1994), reform was motivated more by an attempt to pre-empt the crisis. Second, the "crisis" hypothesis suggests trade reform was mainly driven by the government. This overlooks the distributive consequences of trade reform. In other words, this view does not take into account the various reactions from interest groups or crony capitalists. In fact, as discussed in Chapter 4, there was evidence that the role of crony capitalists had become increasingly important since the 1980's. This implies that any analysis of trade reform in Indonesia during the economic crisis should also take into account the reaction of crony capitalists or interest groups. Third, as Rodrik (1998) argues, if the reform was initiated by the crisis, how can the relatively sustainable reform following the economic crisis be explained, because once the crisis was over pressure for trade reform should diminish. These issues will be discussed in greater detail in the next section.

6.6.3 The distributive consequences of the reform

The limitations of both the "crisis" hypothesis and the role of the technocrats in explaining the winners and losers in trade reform leads this thesis to emphasise the distributive consequences of reform among various economic groups. As discussed in Chapter 2, the distributive consequences framework argues that, support for and objection to trade reform is determined by the distributional impact among various economic groups.

Table 6.6 summarises the expected winners (W) and losers (L) of trade reform in Indonesia in the mid 1980s. The description and policy stance for each group has been discussed in Chapter 4.

Table 6.6 Expected winners and losers in trade reform during the 1980s crisis

Group	Expected result
Exporters	W
Import competing	?
Crony capitalists	?
Government	
- Ministry of Finance	W
- Pro high tech technologist.	L
- Ministry of Industry	L
- <i>Pertamina</i>	L

Notes: W: winner
L: loser
(?): not clear

6.6.3.1 The government agencies

It is true that trade reform led the government, particularly the Ministry of Finance, to lose import duty revenue. However, the shortfall in government revenue also reinforced the incentive to switch from NTBs to tariffs and from tariffs to consumption taxes (Fane, 1996). One of the arguments for preferring tariffs to NTBs was that tariffs would generate government revenue to replace that which previously was collected from import licenses holders. The same logic applies to the switch from import duties to consumption taxes, such as the Value Added Tax (VAT) introduced in 1984. The switch from tariffs to consumption taxes allowed the government to increase revenue (Fane, 1996). This argument implicitly suggests that the Ministry of Finance benefited from trade reform.

On the other hand, the adverse fiscal shocks due to the collapse in the oil price made pro high-tech technologists, in the Ministry of Industry and *Pertamina* became losers. As discussed in Chapter 4, the adverse fiscal shocks owing to the collapse of oil price not only reduced the ability of the government to subsidise the economic nationalists projects, but also reduced the influence of *Pertamina* by reducing its contribution to government revenue.

6.6.3.2 Exporters, import competing sectors and crony capitalists

Trade reform unambiguously provided economic gain for exporters, because they could access their inputs at international prices, which were lower than domestic prices. The alteration of the trade regime to outward oriented created new and relative strong constituencies for trade reform i.e. exporters. This became evident, as in the case of textiles, in the mid 1980s, when exporters lobbied for low levels of trade protection in upstream industries.⁸ The increasing role of the exporters in the Indonesian economy, as one of the major contributors to economic growth, and their support for trade reform, helps explain why trade liberalisation was sustained after the economic crisis, even when the role of technocrats began to decline between 1992-1995.

While exporters were unambiguously gaining from trade reform, it might be expected that the import competing sector would oppose trade reform. This argument is important, since the role of import competing industrialists cannot be ruled out due to the important role of crony capitalists in those sectors (see the discussion in Chapter 4). But why was the resistance from losers relatively weak?

Recall the discussion in Section 6.5, there are two possible explanations. First, the impact of the fall in the oil price on the profitability of import competing sectors. Second, the impact of the real exchange rate on the profitability of import competing sectors.

The fall in the oil price to below \$10 in 1986 raised the profitability of all other tradable sectors by depressing the price of non-tradables relative to the price of these other tradable sectors. This argument is consistent with that made by Fane (1996). The raised profitability of the non-oil tradable sector enabled the government to reduce protection in this sector without reducing its profitability on average. This could explain why opposition from the import competing sector industrialists to trade liberalisation was not strong, even when Indonesia had a current account deficit problem in 1986. Furthermore, the 1986 devaluation indirectly protected the import competing sectors. Thus, the combination of the drop in the oil price and the rupiah's devaluation raised the price ratio of traded to non-traded goods

⁸ This issue will be discussed in greater detail in Chapter 9.

and left it relatively high compared with the period 1978-1985. This helps explain why resistance was relatively weak, and why the government successfully launched various trade reforms after 1986.

The other possible explanation of why the opposition of crony capitalists was not strong is that trade liberalisation did not touch their core business because once it did, the trade liberalisation became more difficult.⁹ The best illustration for this argument is the two years it took from 1986 for the technocrats to abandon the plastics import monopoly owned by Bambang Trihatmodjo and the steel import monopoly of PT Giwang Selogam owned by Liem Sioe Liong (see discussion in Chapter 4). This is supported by Simandjuntak (1989) and Sjahrir and Brown (1992) who argue that plastics and steel products remained untouched by trade reform until the 1988 November deregulation package, owing to the owners' political power. In fact, Prawiro (1998) admits there was a tug of war when the technocrats proposed to abolish the plastics and steel monopolies, the policy maker reached an agreement to give temporary "spare time" for both monopolies to prepare for the time when they would be operating without protection.¹⁰

The previous discussion demonstrates that there are several possible explanations of why Indonesia liberalised its trade regime during the economic crisis. First, the reverse effect of the Dutch disease raised the profitability of the non-oil tradable sectors, which enabled the government to reduce protection without reducing profitability. In addition, the 1986 devaluation indirectly protected import competing sectors, enabling the government to launch various trade reforms after 1986. Second, trade reform was undertaken in order to both pre-empt and overcome the economic crisis. Third, as discussed in Chapter 4, there was evidence of the increasing role of technocrats in the decision making process. The fall in government revenue, owing to the collapse in the oil price and the increase in the burden of the government's foreign debt due to the rise of interest rates and appreciation of Yen in the 1980s boosted the political power of the technocrats and reduced the influence of

⁹ Interview with Anton Gunawan via e-mail (3 August, 2000).

¹⁰ Prawiro's statement, can provide invaluable insight because, as a Coordinating Minister for the Economy, Finance, Industry and Development Supervision during this period (1988-1993), he involved in the decision making process for abolishing both plastic and steel monopolies.

economic nationalists. Fourth, greater reliance on market forces, due to the general global economic trend, particularly in East Asian countries, contributed to the pressure for trade reform in the mid 1980s. Fifth, the pressure from the public or so-called "liberal epistemic community" (see discussion in Chapter 4). All of these factors complemented each other and made a contribution to trade reform in the mid 1980s

6.7 Summary

In the light of the determinants of import protection over time, the econometric results support the hypothesis that an increase in the oil price in the 1970s enabled the Indonesian government to adopt an import substitution strategy through high levels of protection. The results also support the hypotheses that pressure for import protection tends to increase during an oil boom period. As for the real exchange rate, the econometric results support the hypothesis that trade liberalisation should normally be part of a policy package which includes adequate real exchange rate depreciation. Adequate depreciation of the real exchange rate will increase exports and indirectly protect domestic goods from imports, leading to less pressure for import protection.

In addition, this chapter shows that the decision to liberalise the trade regime after 1985 was influenced by more than one factor. These included the worldwide belief in greater reliance on market forces, the economic crisis, the distributive consequences among the various economic groups and the three adverse terms of trade shocks in the collapse in the oil price, the rise in the world interest rate and the appreciation of the yen to the US dollar.

Although the econometric results provide satisfactory findings, they have to be juxtaposed against some limitations, such as the limitation of the average tariff in capturing the NTBs, which played an important role in import protection in Indonesia. Moreover, the time series analysis of the average tariff cannot provide an explanation for the changing pattern of the inter-industry variation of protection. For a better understanding and robustness, this study delves into cross section analysis within the manufacturing sector, and focuses on some case

studies in particular industries. The results of cross section analysis within the industry and the industry case studies will be presented in the subsequent chapters.

Chapter 7

The determinants of trade protection in the Indonesian manufacturing sector

7.1 Introduction

This chapter focuses on the determinants of trade protection in the Indonesian manufacturing sector. As discussed in Chapter 5, there were large inter-industry variations in protection among Indonesian manufacturing industries. These differences persisted even after the implementation of significant trade policy reforms over the past decade. Obviously, there is no simple explanation of the inter-industry variations in protection, nevertheless, as discussed in Chapter 1, it is worth asking why did some industries receive more protection than others and were these variations simply random in nature or systematic? Did the political power of crony capitalists or interest groups influence trade protection in the Indonesian manufacturing sector?

This chapter attempts to answer these questions and provide a picture of the determinants of the ERP and NRP in Indonesian manufacturing in 1975, 1987 and 1995, corresponding to the early phase of the oil boom, the early post oil boom and the years of the economic reform phase, respectively. In addition, this chapter examines the determinants of NTB's but only for the years 1986 and 1995, owing to data availability. Nevertheless, both years also correspond to the early post oil boom and the years of the economic reform phase.

The chapter is organised as follows: Section 7.2 reviews the theoretical framework for

inter-industry variations in protection; Section 7.3 develops hypotheses and econometric model formulations; Section 7.4 presents and discusses the econometric results

7.2 Theoretical framework

Chapter 2 provides a review of theoretical framework for the determinants of trade protection. This study will focus specifically on the three principal approaches: the interest group variant model; the national policy model; and the Grossman and Helpman (G-H) model. As discussed in Chapter 1, this thesis treats the G-H model distinctly, because it provides a consistent theoretical background for empirical analysis, and because it has become state of the art in the recent literature of the political economy of trade protection.

7.2.1 The interest group variant model

The interest group variant model is actually an extended interest group model which incorporates Indonesia's patrimonialism pattern. As noted, in Chapter 4, discussion on the determinants of trade protection in Indonesia, particularly at industry level, should incorporate a crony capitalists aspect in the analysis.

This extended model postulates that industry protection is the result of interest groups and crony capitalist pressure. Implicitly, the structure of protection depends on the cost benefits and of building a personal relationship (in the case of crony capitalists) or lobbying (in the case of interest groups). This model assumes trade protection generates profits and rental income.

Parallel to Anderson (1980), the interest variant group model also sees the analysis of protection as a political market comprising demand and supply, where the demand originates from industries seeking protection and the supply is granted by government. From the demand side, interest groups or crony capitalists will invest until the marginal cost of establishing a personal relationship or lobbying equals the expected marginal gain from these activities. From the supply side, it is assumed politicians are motivated

by self-interest that is maximising their personal wealth or to maximise client loyalty (see Chapter 2).

Milner and Greenaway (1994) define the demand for protection as a function of the benefit minus cost in making the effort to obtain protection.

$$(1) R = B - (F + V)$$

where : R = net rents

B = gross benefits from protection

F = Fixed costs of obtaining protection

V = Variable costs of obtaining protection

t = tariff

t_p = prohibitive tariff

t_m = monopoly tariff

Where :

$$(2) \partial B / \partial t > 0 \quad \forall t < t_p, t_m$$

and

$$\partial^2 B / \partial t^2 < 0$$

The marginal benefits of increased protection are positive up to the prohibitive tariff (t_p) or monopoly tariff (t_m), but total benefit increases at a decreasing rate.

It seems reasonable to argue :

$$(3) \partial V / \partial t > 0$$

and

$$\partial^2 V / \partial t^2 > 0$$

The marginal cost of obtaining protection is positive and increases at an increasing rate, since other industry groups or consumers become increasingly resistant as the protection levels increase. F can be thought of sunk costs associated with lobbying.

Hence, the optimal level of protection is:

$$(4) \quad \partial R / \partial t = 0$$

and $\partial^2 R / \partial t^2 < 0$ (to ensure maximum)

7.2.2 The national policy model

This model assumes government has a particular policy preference for maximising the aggregate welfare of society. This preference is formed by some ideological or analytical framework, which may transcend personal interest. Furthermore, government may take the view that there are particular market failures which need to be avoided or overcome, or there may be other goals which deserve a higher priority than short run maximisation. In addition, the preference can also be formed by government objective for increasing the country national esteem. Examples often discussed in the context of developing countries include the pursuit of industrialisation; arguments based on infant industry notions; or the development of technological competence (Corden, 1997). Non-economic objectives usually refer to some distributional considerations, such as employment creation or regional development. In these cases protection will be granted in accord with sectoral priorities consistent with this perception of 'national interest'.

7.2.3 The G-H model

As noted, the G-H model become state of the art concerning recent political economy analyses of trade protection, because it provides an empirical parameter based upon a coherent theoretical foundation. The main idea behind the G-H model is widely known and well established: specific factors in an industry will form a lobby that manages to increase the domestic price for the goods from which they earn a profit. On the other hand, G-H assumes politicians take advantage of trade policies as a source of income to fund election campaigns. In this model lobbies represent industry interests. The lobby groups offer election campaign contributions in exchange for trade protection. In response, the government sets trade policy to maximise a weighted sum of aggregate social welfare and the anticipated total contribution from interest groups. This suggests

trade protection is the result of bargaining between government and various lobby groups.

In particular, G-H predicts that, provided industries can lobby effectively, trade protection should be higher in industries with low import penetration. Whereas, in industries which cannot lobby effectively, protection is likely to increase when import penetration increases. In addition, G-H predicts that sectors characterised by higher import demand elasticity should receive less protection.

7.2.3.1 Formal framework

After explaining the intuition behind the G-H model, it is useful to present the formal framework, borrowed from Grossman and Helpman (1994) and Goldberg and Maggi (1997 and 1999).

For the purpose of the analytical framework, the G-H model assumes a small economy with identical individual preferences. Each individual maximises utility given by:

$$(1) U = c_0 + \sum_{i=1}^n u_i(c_i)$$

Where x_0 is the consumption of the numeraire good 0, and x_i is the consumption of good i , $i=1,2,\dots,n$, and u_i is increasing concave function. With these preferences, an individual spending on amount E consumes $x_i=d_i(p_i)$ of good i , $i=1,2,3,\dots,n$ (where the demand function $d(\cdot)$ is the inverse of $u_i'(x_i)$) and for good 0, $x_0 = E - \sum_i p_i d_i(p_i)$ of the numeraire good. The indirect utility takes the form:

$$(2) V(p, E) = E + s(p)$$

Where $p = (p_1, p_2, p_3, \dots, p_n)$ is the vector of domestic price of the non numeraire goods and $s(p) = \sum_i u_i[d_i(p_i)] - \sum_i p_i d_i(p_i)$ is the consumer surplus of these goods.

The individual demands for good i are derived from Roy's identity:

$$a_i(p_i) = -\frac{\partial s(p)}{\partial p_i}$$

There are $n+1$ inputs: labour and 1 sector specific input for each sector. Good 0 is produced from labour only with constant returns to scale and an input-output coefficient equal to 1. G-H also assumes that the aggregate supply of labour is large enough to guarantee a positive supply of this good. Therefore, the wage rate equals one in competitive equilibrium. Each non-numeraire good (i) is produced from labour and a sector specific input. The technology is assumed under constant returns-to-scale and various specific inputs are available in inelastic supply.

With the fixed wage at 1, the return on the specific factor i will depend only on p_i . This reward is denoted by $\pi_i(p_i)$.

And by using Hotelling's lemma we obtain, $y_i = \frac{\partial \pi_i(p_i)}{\partial p_i}$, or $\pi'_i(p_i) = y_i(p_i)$,

where $y_i(p_i)$ is domestic output of good i .

G-H assume that government chooses specific trade taxes (import tariff) and subsidies. These policies drive a wedge between domestic and world prices. A domestic price in excess of the world price implies an import tariff for good that is imported and an export subsidy for one that is exported.

If government imposes an import tariff or export subsidy on the non numeraire good i ,

domestic prices would turn out to be $p_i = p_i^*(1+t_i)$, or $t_i = \frac{(p_i - p_i^*)}{p_i^*}$

where p_i^* is the international price (exogenous under small country assumption) and t_i represents the import tariff if the good is imported (or the export subsidy if the good is exported).

The tariff revenue is evenly paid to each individual in lump-sum fashion, and if the revenue is negative, it is financed by the lump-sum taxes.

The net revenue from all taxes and subsidies, expressed on per capita basis, is given by:

$$(3) \quad r(p) = \sum_i (p_i - p^*) \left[d_i(p_i) - \frac{1}{N} y_i(p_i) \right]$$

where N measures the total (voting) population .

Summing indirect utilities over all individuals, and observing that aggregate gross welfare is the sum of labour income, the return to the specific factors and tariff revenue, we obtain the gross welfare of the society:

$$(4) \quad W = l + \sum_{i=1}^n \pi_i(p_i) + N[r(p) + s(p)] \quad , \text{ where } l \text{ is total labour income}$$

G-H argue that individuals derive income from wages and government transfers and possibly from the ownership of some sector-specific input. It is assumed that the claim on a specific input is indivisible and non-tradable (e.g. claims on specific human capital) (Grossman and Helpman, 1994). Obviously, the owners of a specific input used in producing good i will understand that their income is tied to the domestic price. These individuals will have a direct stake beyond their general interest as consumers in the tax or subsidy in trade policies that affect any domestic price (Grossman and Helpman, 1994). Therefore, G-H predict that various owners of a specific factor used in industry i , with a common interest in protection or subsidies, may form a lobby to attempt to raise the domestic price to gain benefits from it.

In addition, the G-H model simply assumes some specific factor owners are able to organise a lobby, while those in other sectors remain unorganised. In these remaining sectors the owners of specific factors perceive themselves as too small to be able to influence policy. Hence, the unorganised factor owners refrain from making a political contribution (Grossman and Helpman, 1994).

Now, suppose that in some subset of sectors $L \subset \{1, 2, \dots, n\}$, the owners of specific factors are able to organise a lobby, while in the remaining sectors the owners of specific factors remain unorganised. L is the set of organised interest groups. Now, let α_i be the fraction of people who own specific factor i . Assume that each individual owns a unit of labour and one specific factor. Lobby i 's aggregate well-being would be obtained by summing up all the indirect utilities of the individuals who belong to lobby i :

$$(5) \quad W_i = l_i + \pi_i(p_i) + \alpha_i N[r(p) + s(p)], \text{ where } l_i \text{ is total labour income for good } i.$$

Lobby i 's objective is given by $W_i - C_i$, where C_i is the contribution paid to the government. The government's objective function is a combination of welfare and contributions:

$$(6) \quad G(p) = \sum_{i \in L} C_i(p) + aW(p)$$

Where a denotes the government's valuation of welfare relative to contributions ($a \geq 0$). The government values contributions that can be used to finance government campaign spending or other direct benefits to the officeholders (Grossman and Helpman, 1994). In the original model, G-H assumes that the interaction between government and lobbies follows the form of 'menu action' from Bernheim and Whinston (1986). Using the Bernheim and Whinston (1986) "menu action", G-H argue that lobbies offer government contribution schedules in the first stage of the game, in seeking to maximise the well being of their members. The schedules of contributions are subject to the degree of protection granted to different sectors. In the second stage, the government sets trade policy to maximise its own welfare, by trading off social welfare against these contributions. To solve the Bernheim and Whinston (1986) "menu action", requires a complex game theoretic model solution.¹ Fortunately, Goldberg and Maggi (1999) provide a simpler mechanism which gives exactly the same outcome as the Bernheim and Whinston (1986) "menu action", i.e. the Nash bargaining game.

¹ This subject is beyond this thesis; for a detailed explanation see Bernheim and Whinston (1986), and for its application in the G-H model, see Grossman and Helpman (1994).

Following Goldberg and Maggi (1999), this thesis employs the Nash bargaining game in solving the interaction between government and lobbies. Under the Nash bargaining solution, the government selects trade policies in order to maximise the joint welfare of all parties involved (government and lobbies).

Following Goldberg and Maggi (1999) joint welfare is:

$$(7) \quad \Omega = aW + \sum_{i \in L} W_i$$

Goldberg and Maggi (1999) point out that the contributions equilibrium depends in a delicate way on the specifics of the decision-making process and parameter values. However, they added, that neither model (menu auction and Nash bargaining solution), provides a simple prediction regarding contributions.

By substituting (4) and (5) into (7) we obtain:

$$(8) \quad \Omega = (a + \alpha_L)l + \sum_{i=1}^n (a + I_i)\pi_i + N[r(p) + s(p)](a + \alpha_L)$$

Where $\alpha_L \equiv \sum_{i \in L} \alpha_i$ denotes the share of population that owns some specific factor and engage in lobbying. I_i is the dummy variable, which is equal 1 for $i \in L$ and 0 otherwise.

Using $\pi_i'(p_i) = y_i(p_i)$ and $d_i(p_i) = -\frac{\partial s(p)}{\partial p_i}$, we obtain the first-order condition for tariff t_i :

$$(9) \quad \frac{\partial \Omega}{\partial t_i} = \frac{\partial \Omega}{\partial p_i} = (a + I_i)y_i(p_i) + (a + \alpha_L)[(p_i - p_i^*)M'_i - y_i(p_i)] = 0$$

Here $M_i = Nd_i(p_i) - y_i(p_i)$ denotes net import demand function, where $M'_i = \frac{\partial M_i(p_i)}{\partial p_i}$

As noted, $y_i(p_i)$ is the supply function of good i , which represents domestic output for good i .

Re-arranging (9) finds:

$$(10) (p_i - p_i^*) = \frac{I - \alpha_L}{a + \alpha_L} \frac{y_i(p_i)}{-M'_i}$$

And knowing that $t_i = \frac{(p_i - p_i^*)}{p_i^*}$, the equilibrium for tariffs can be written as:

$$(11) t_i = \frac{I - \alpha_L}{a + \alpha_L} \frac{y_i(p_i)}{-p_i^* M'_i}$$

And given that import demand elasticity is $e_i = -\frac{M'_i}{M_i} * p_i$ and $z_i = \frac{y_i(p_i)}{M_i(p_i)}$, equation (11) can be re-written a in terms of import elasticity and import penetration ratio:

$$(12) \frac{t_i}{t_i + 1} = \frac{I_i - \alpha_L}{a + \alpha_L} \left(\frac{z_i}{e_i} \right) \quad \text{for } i = 1, 2, \dots, n$$

Where $z_i = y_i/M_i$ or the ratio of domestic output of i to import of good i .

e_i is the import demand elasticity of good i , and t_i is the ad-valorem tariff on good i .

The equation (12) can also be re-written as:

$$(13) \frac{t_i}{t_i + 1} = \gamma \frac{z_i}{e_i} + \delta I \frac{z_i}{e_i}$$

Where $\gamma = \frac{-\alpha_L}{a + \alpha_L}$ for $I_i=0$ and $\delta = \frac{1}{a + \alpha_L}$ for $I_i=1$

In other words, for organised sectors (where $I_i=1$), the term of $\frac{I_i - \alpha_L}{a + \alpha_L}$ is positive, but it is negative for unorganised sectors ($I_i=0$).

It is worth noting two extreme cases: first, if all industries are organised ($I_i=1$ for all i) and each citizen is represented by some lobbies ($\alpha_L=1$) free trade prevails in all markets. In this case, various interest groups neutralise one another, so that industry's demand for protection is compensated by opposing interest groups which lobby for low domestic price. Second, if all citizens do not belong to any interest group ($\alpha_L=0$) and no sector is represented by lobby (for which $I_i=0$), no trade protection will be applied to sectors which are not represented by a lobby (Goldberg and Maggi, 1999; Grossman and Helpman, 1994).

Obviously, these two extreme cases are unlikely to happen, thus it is sensible to assume that $0 < \alpha_L < 1$.

As noted, $a \geq 0$, thus, if $0 < \alpha_L < 1$, and $I_i=1$, we obtain $\gamma + \delta > 0$.

The G-H model argues that, for organised sectors, the larger the share of domestic output to total imports (z_i/e_i), the higher the level of protection (t_i). The larger the share of domestic output to total imports, implies the higher the stakes for the industry, making it more profitable to have high tariff, whereas (for a given import demand elasticity) the loss for the economy is less if the volume of imports is lower.

In fact, the positive relationship between protection and the inverse of the import penetration ratio (or negative relationship between protection and the import penetration ratio) seems odd to the standard comparative advantage explanation. According to the standard comparative advantage, the industry with strong comparative advantage could have a high ratio of domestic output to total import, but not necessarily need protection. This prediction is supported by empirical studies such as those by Anderson (1980) and Treffler (1993). However, Goldberg and Maggi (1999) demonstrate the G-H model is compatible with these previous empirical studies (the standard model), which argued a positive relationship between trade protection and the import penetration ratio (or a negative relationship between trade protection and an inverse of the import penetration ratio). The standard model introduced import-penetration and other political economy

variables additively on the right hand side of the equation, whereas the G-H model captures these two variables in interactive fashion. This thesis uses the Goldberg and Maggi (1999) explanation, and compares the two models.

The G-H model:

$$\frac{t_i^* e_i}{t_i + 1} = (\gamma + \delta) \frac{y_i}{M_i}, \text{ where } \gamma + \delta > 0 \text{ for organised sectors, and}$$

$$\frac{t_i^* e_i}{t_i + 1} = \gamma \frac{y_i}{M_i}, \text{ where } \gamma < 0 \text{ for unorganised sector.}$$

Whereas, the standard model:

$$\frac{t_i^* e_i}{t_i + 1} = \phi \frac{y_i}{M_i} + \psi Z_i, \text{ where } \phi < 0, \text{ and } Z_i \text{ is the other political economy variable}$$

This amounts to imposing the undue restriction that the coefficient of $\left(\frac{y_i}{M_i}\right)$ be the same across the two sectors (organised and unorganised), implying that the expected estimate of ϕ is some average of γ and $(\gamma + \delta)$. Because γ and $(\gamma + \delta)$ have opposite signs, this average can be negative for certain configurations of data, whereas if the correct interactive specification is employed, $(\gamma + \delta)$ is positive.

In fact, Helpman (1997) shows that a number of the political economy models, including Hillman (1982), and Findlay and Weliz (1982), support the G-H model prediction if they are developed in the specific factor framework. In addition, as discussed in Chapter 2, empirical studies by Goldberg and Maggi (1999) and Gawande and Bandyopadhyay (2000) confirm the G-H prediction for the case of the U.S. In addition, empirical findings by McCalman (2000) supported G-H prediction for the case of Australia.

The G-H model also argues that sectors with a high import elasticity of demand will receive less protection. The intuition behind this result is the more elastic the import elasticity of demand, the larger the political cost from creating a dead weight loss. Clearly this is a standard Ramsey pricing consideration. By using the Johnson (1960)

simple approximation of the Dead Weight Loss (DWL) of tariffs as a percentage to GNP, the relationship between trade protection and import demand elasticity can be explained as follows:

$$\frac{DWL}{Y} = \frac{1}{2} r^3 \eta_M \alpha$$

Where $r = \frac{t_i}{t_i + 1}$, α is the fraction of GNP spent on imports and η_M is the import demand elasticity.

To make this consistent with the previous analysis, and following Gawande and Bandyopadhyay (2000), this equation can be re-written as:

$$\frac{DWL}{y} = \frac{1}{2} \left(\frac{t_i}{t_i + 1} \right)^2 \frac{1}{z} e$$

Where DWL/y is the dead weight loss as a fraction of total domestic output, $1/z$ is the import penetration ratio as a fraction of domestic output, and e , is import demand elasticity.

The relationship between DWL/y and e can be examined as:

$$\frac{d(DWL/y)}{de} > 0$$

This equation suggests that DWL/y increases with higher import demand elasticity. This shows that the more elastic the import demand elasticity, the larger DWL/y , making greater the political cost that government has to bear from creating a dead weight loss. The implication that sectors with high import demand elasticity will get less protection is true, since the government will prefer to raise contributions from sectors where the cost is small.

7.2.3.2 Modification for the case of Indonesia

How does the G-H model fit for Indonesia? Does the model need some modifications? To answer these questions, this section attempts to discuss the underlying features of the model and how it fits the case of Indonesia.

The G-H model argues that the government values contributions from lobbies, because they can be used to finance campaign spending or other direct benefits to officeholders. This implies the government sets trade policy to maximise its own welfare, given the political contributions schedules offered by the lobbies. Or, in other words, trade policy (protection) is selected based on bargaining between the government's objectives and interest groups. This is suitable for democratic countries, but does not entirely fit the case for Indonesia during the Soeharto era, owing to its different political features.

To make it fit for Indonesia this thesis has to incorporate Indonesian political features. Chapter 4 shows that from the 1970s decision-making took place under a patrimonial system. In addition, particularly from the 1980s the decision making process was relatively centralised and was personalised around Soeharto. Given these political features, trade protection was allocated based on personal bargaining and the relationship between the policy maker and the client business. The client business, or crony capitalists, provided contributions to support the policy maker's favoured program, to fund political activities, to increase the policy maker's personal wealth, and to finance GOLKAR campaign spending. In return, the client business, or crony capitalists acquired trade protection. Although still in their infancy, there is evidence that the role of interest groups also began to play a bigger role after the mid 1980s (see discussion in Chapter 4).

Considering these political features, some modifications of the G-H model are needed. In their original model, Grossman and Helpman (1994) suggest employing data on campaign contributions from the U.S. Political Action Committee (PAC) as a proxy for the organised lobby. The sector with a positive contribution would be treated as $I_i=1$ otherwise 0 (I_i refers to the dummy for the organised lobby). As this was not the case

for Indonesia, this thesis incorporates a different dummy variable for defining the organised lobby.

As discussed, the decision making process was generally – but not always – personalised around Soeharto, particularly from the 1980s (though an exception applies to some sectors including textiles, see discussion in Chapter 9). Therefore, it is more suitable to introduce a dummy for crony capitalists instead of for an organised lobby. In addition, to capture the possibility of pressure from the emerging interest groups, the G-H model also needs to be extended by incorporating variables from the interest group variant models. Therefore, this thesis employs two specifications of the G-H model. First, the original G-H model with a modification, replacing the dummy for organised lobby with a dummy for crony capitalists. This model is called the standard G-H model. Second, the standard G-H model is extended into a larger specification by adding some variables according to the interest group variant model. The larger specification of the G-H model is not strictly derived from the G-H theoretical framework above, but is more ad-hoc.² This model is called the extended G-H model. The specification of the extended G-H model will be discussed in the next section.

7.3 Econometric model formulation, hypotheses and data

This section attempts to develop the hypothesis and specify the equations for explaining the inter-industry variations of protection in Indonesia. As noted in Chapter 1, the thesis examines a number of independent variables relevant to these three models, and each of the industry levels of protection is regressed against them. The dependent variables are the ERP, the NRP, and NTB's coverage of gross output. The definition the measurement methods of these variables have been discussed in Chapter 5.

² A similar method was also employed by Goldberg and Maggi (1999) and by Gawande and Bandyopadhyay (2000).

Greenaway and Milner (1994) argue that the political economy model usually focuses on the NRP because this is the level where lobbying is mainly directed. This is partly true from the government viewpoint, owing to consumers' concerns about the NRP (Corden, 1997). However, Anderson (1980) argues that, if industry groups are well informed and rational, ERP is the most appropriate endogenous variable which needs to be explained. This is also supported by Corden (1997:63-64):

'If the effective protective rate on product is increased, one would normally expect factors of production 'intensive' in the activity concerned to gain in real income'.

Both Anderson (1980) and Corden (1997) suggest that ERP is the most appropriate endogenous variable from the industry's viewpoint, while Corden (1997) argues the NRP is more appropriate from the government viewpoint.

Considering these arguments, it might be expected that the NRP is more appropriate for the national policy model, in which government preferences plays a central role, while ERP is more appropriate for the interest group variant model and the G-H model. Nevertheless, to investigate the Anderson (1980) and Corden (1997) arguments, this study employs both ERP and NRP as endogenous variables for the interest group variant model, the national policy model and the G-H model.

As discussed in Chapter 2, it is worth noting that, one of the limitations of the ad-hoc empirical model is that there is no clear division between the interest group model and the national policy model, in which there are number of examples where a particular variable might be relevant to both. Examples in our model include several variables such as value added per worker, and wage per employee. While confusing, this ambiguity is inevitable. It is preferable to accept this ambiguity, rather than dogmatically claim these variables can uniquely belong to one approach in preference to the other. Therefore, the selection of the independent variables has to be interpreted with caution.

7.3.1 The interest group variant model

- The ratio of number of firms in each industry to the total number of firms in the manufacturing industry (NFIRM)

Considering the benefits of lobbying for protection are available to all members, there is an incentive to become a free rider. Consequently, the cost per actual contributor is higher the larger the NFIRM, implying a negative relationship between NFIRM and the level of protection. In this study, NFIRM is defined as the ratio of the number of firms in each industry to the total number of firms in the manufacturing industry.

- Share of export to total output (EXP)

Export oriented industries realise an increase in domestic protection could lead to retaliation by foreign countries. Anderson and Baldwin (1987) argue that export oriented industries will tend to lobby against tariffs on their product for fear of retaliation by their trading partners. Therefore, they can be expected to support lower protection, implying a negative relationship between EXP and the level of protection.

- Average wage per employee (AWPE)

This variable is a proxy for human capital, and is ambiguous, in the sense that it could be relevant to both the national policy and interest group variant models. High AWPE implies more human capital intensive, while low AWPE indicates unskilled labour intensive. The expected sign for this variable is ambiguous. From the interest groups variant model viewpoint, lobbying activities may be easier to organise in more human capital intensive industry, since most of this industry tends to be characterised by a small number of firms (Bird, 1999), thus a positive relationship is expected between protection and AWPE.

Nevertheless, by allowing for the management and co-ordination of large employment activities through producer associations (interest groups), it is possible

that industry with low AWPE (unskilled labour intensive industry) may seek protection, suggesting a negative relationship between AWPE and protection. However, taking into account Indonesian political features, this negative relationship may be more relevant in the period after the mid 1980s, particularly the 1990s when the role of interest groups and began to increase.

In addition to the interest group consideration, AWPE might be invoked in using the national policy argument. This will be discussed shortly in the section of the national policy model.

- Value added per worker (VAWORK)

Similar to AWPE, this variable is ambiguous in the sense it could be relevant to both the interest group variant model and the national policy model.

High VAWORK implies high capital intensity. The interest group model predicts a positive relationship between protection and VAWORK, because it is likely that capitalists have more resources for lobbying. Thus, a positive relationship is expected between protection and VAWORK.

- Average size (AVGSZ)

Average size is defined as the ratio of employment in the industry divided by the number of firms. The higher the AVGSZ the larger the industry size. Lobbying is a costly activity and only easily affordable for large firms, so a positive relationship can be expected between AVGSZ and the level of protection.

- Concentration ratio (CR4)

CR4 is defined as the value added of the four largest firms as a percentage of total industry value added. For similar reason as average size, the relationship between CR4 and the level of protection is positive.

- Household consumer (HC)

Interest group theory suggests that the level of protection also depends on the opposition from anti protectionist groups. The most obvious anti protectionist group is consumers. A negative relationship can be expected between the level of protection and HC. However, considering consumers are not well organised and therefore not to be able lobby effectively the relationship could be weak. HC is defined as the share of gross output sold to the Indonesian consumer.

- Industrial consumer (IC)

Opposition to protection also comes from industrial consumers; who consume other industries products as inputs for their own industries. Industrial consumers are more likely to be effective, since it is easier for them to organise and to influence the political process. It implies a negative relationship between IC and protection. IC is defined as a share of industry gross output, which is sold to other industries. This relationship is ambiguous when the possibility of vertical integration is incorporated. In that case industrial consumer might not lobby for lower protection.

- Share of foreign ownership (SHFV)

SHFV is defined as the share of value added of foreign owned firms divided by the industry's value added. The motivation for foreign firms to negotiate entrance is protection from competition and fiscal incentive. Therefore, based on this "bargaining tariff argument" a positive relationship can be expected between SHFV and protection levels. However, if foreign investors are more interested in the export-oriented sectors, as was the case in Indonesia during the 1990's, then the relationship could be negative.

- Dummy variable for crony capitalists (DC)

As discussed earlier, crony capitalists tend to support government intervention and protectionist policy in order to secure economic privilege, and establish connections for business advantages. So, a positive relationship can be expected between the existence of rent seekers and the levels of protection.

Undoubtedly this variable is the most difficult to model accurately. Nevertheless, it is one of the most important, owing to the non-transparent and highly personalistic system in Indonesia. Neglecting this variable could lead to inadequate analysis.

This study uses 1 for industry influenced by crony capitalists and 0 otherwise. The method of defining the dummy for crony capitalists will be detailed in Section 7.3.4.2.

7.3.2 The national policy model

The independent variables are:

- Dummy for basic industry (DBI)

As discussed in Chapter 4, one of the industrial strategies in Indonesia during the 1970s was establishing basic industries. To achieve this, the government provided trade protection for basic industries. Therefore, a positive relationship can be expected between protection and basic industries, particularly for the period 1975 to the mid 1980s, when the Indonesian government began to develop industrialisation. Although what is meant by basic industry is not always clear in the Indonesian context, it is perceived as an industry that produces the goods needed in a developing country such as fertilizers, salt, cars, trucks, electronics, glass, etc. (Soehoed, 1967 and 1988 and see Appendix 8). The DBI is equal to 1 for basic industries and 0 otherwise.

- AWPE

As discussed earlier, AWPE is also relevant to the national policy model. From the national policy viewpoint, the expected sign of this variable is also ambiguous. A human capital-intensive industry (high AWPE) could contribute more to national esteem, thus a positive relationship is expected. However, as Pangestu and Boediono (1986) point out, in both the 1970s and the early 1980s the government granted protection to the unskilled labour-intensive industry (low AWPE) on the basis of equity concerns. Thus, a negative relationship can be expected between AWPE and protection.

- VAWORK

As noted, VAWORK is also relevant to the national policy model. In the national policy model, the government prefers capital-intensive industry, because it makes a higher contribution to national esteem, suggesting a positive relationship between VAWORK and protection.

- Share of Government Value added to total industry value added (SHGV)

This variable is defined as the share of government owned firms to each industry's value added. This is expected to be positive because the government will protect industry where their own firm is heavily involved.

- Ratio of domestic demand to the total output (DD)

This ratio is defined as the share of domestic demand to total output. The relationship between trade protection and DD is derived from Gillis, Perkins, Roemer and Snodgrass (1996). They point out that the underlying concept of import substitution is drawn from the identification of large domestic markets. The import substitution argument suggests that government should provide protection for domestic industry to replace imports with domestic products. Therefore, a positive relationship between protection and the ratio of domestic demand to total output in each industry is expected.

The summary of the hypotheses of the interest group variant model and national policy model is presented in Table 7.1

Table 7.1: Summary for the interest group variant and the national policy model hypotheses

Independent variables	Interest group variant model	National policy model
Share of foreign value-added to total value-added (SHFV)	+/-	
Number of firms (NFIRM)	-	
Concentration ratio (CR4)	+	
Dummy variable for crony (DC)	+	
Household consumption (HC)	-	
Industrial consumption (IC)	-/+	
Share of export to output (EXP)	-	
Average size (AVGSZ)	+	
Average wage per employee (AWPE)	+/-	+/-
Value added per worker (VAWORK)	+	+
Share of government in value-added (SHGV)		+
Share of domestic demand to total output (DD)		+
Dummy for basic industries (DBI)		+

7.3.3 The G-H model

For the G-H model the econometric specification is derived from equation (13) in the G-H model framework.

Then equation (13) can be transformed into an econometric model:

$$(14) \frac{t_i}{1+t_i} = \alpha_0 + \alpha_1 \frac{z_i}{e_i} + \alpha_2 t_i \frac{z_i}{e_i} + \varepsilon$$

With $\alpha_1 < 0$, $\alpha_2 > 0$ and $\alpha_1 + \alpha_2 > 0$

Where z_i = ratio of domestic output to total import of industry i .

I_i = dummy for crony capitalist, 1 for crony: industry, 0 otherwise

e_i = import demand elasticity of industry i .

For the crony industry ($I_i=1$), $\alpha_1+\alpha_2$ is expected to be positive. The intuition behind this is the larger the domestic output to total industry i imports, the more the crony capitalists will gain from high protection.

For the non-crony sector, α_1 is expected to be negative (because $I_i=0$). This demonstrates that the larger the domestic output to total industry i imports, the lower the level of protection given. This argument is clearly consistent with the standard explanation from the national policy model or the comparative advantage prediction that protection will be given to the sector with high-level import penetration.

The positive sign of α_2 shows where there is a distinct pattern of protection in crony versus non-crony sectors.

As noted, the G-H model is also extended to capture variables representing the interest group variant model. The extended G-H model can be written as follows:

$$(15) \quad \frac{t_i}{1+t_i} = \alpha_0 + \alpha_1 \frac{z_i}{e_i} + \alpha_2 I_i \frac{z_i}{e_i} + \alpha_3 HC + \alpha_4 IC + \\ \alpha_5 SHFV + \alpha_6 EXP + \alpha_7 AWPE + \alpha_8 NFIRM + \alpha_9 CR4 + \alpha_{10} VAWORK \\ + \alpha_{11} AVGSZ + \varepsilon$$

For both the standard G-H model and the extended G-H model, this study employs ERP, NRP and NTB. In addition, following the G-H functional form for the dependent variable (equation 14) the ERP, NRP and NTB were transformed into:

$$(ERP/(ERP+100))*100$$

$$(NRP/(NRP+100))*100$$

$$(NTB/(NTB+100))*100$$

Table 7.2 and 7.3 presents the summary of the hypotheses

Table 7.2: Summary of the hypothesis of the standard G-H model

Independent Variables	Coefficient	Expected Sign
z/e	α_1	-
$I*z/e$	α_2	+
	$\alpha_1+\alpha_2$	+

Table 7.3: Summary of the hypothesis of the extended G-H model

Independent Variables	Coefficient	Expected Sign
z/e	α_1	-
$I*z/e$	α_2	+
	$\alpha_1+\alpha_2$	+
HC	α_3	-
IC	α_4	-/+
SHFV	α_5	+/-
EXP	α_6	-
AWPE	α_7	-/+
NFIRM	α_8	-
CR4	α_9	+
VAWORK	α_{10}	+
AVGSZ	α_{11}	+

7.3.4 Data and variable measurement

7.3.4.1 Data

The database for estimating the econometric model is derived from

- The annual manufacturing surveys of medium and large scales establishments (defined establishments with 20 or more employees) for 1975, 1986, 1987 and 1995, published by the Central Board of Statistics (Badan Pusat Statistik or BPS).
- "Backcasted" annual manufacturing survey for 1975, 1986, 1987 and 1995 from BPS.
- The 1975, 1985 and 1995 Input-Output Tables (I-O) published by BPS.
- The estimates of trade protection (ERP, NRP) are derived from The World Bank (1981), Fane and Phillips (1991) and Fane and Condon (1996). The NTBs estimates are taken from raw data of NTB coverage by I-O sectors, supplied by George Fane from The Australian National University, Canberra (ANU)
- As discussed, the qualitative data for crony capitalists are derived from sources referred to Chapter 4 and fieldwork interviews.

The Central Bureau of Statistics (BPS) supplied this study with computer data tapes of annual manufacturing surveys for 1975, 1986, 1987 and 1995, containing data on establishments surveyed by BPS. The data are presented on the value of gross output, information on ownership (foreign, private and State), number of workers, raw materials, fuel, electricity, wages and salaries, indirect taxes, investment in buildings, machinery and motor vehicles and inventory.

In 1985, BPS changed survey field procedures and improved procedure in 1988 and 1990. As pointed out by Aswicahyono (1998), prior to 1985, field procedures were deficient in identifying new establishments and merely replaced establishments that

ceased operation. Thus, the number of firms between 1975-1985 remained more or less constant. To handle this problem, BPS undertook a new procedure via door-to-door enumeration, thereby discovering additional establishments. This resulted the number of establishments increasing sharply in 1985, 1988 and 1990. Recognising that most of these establishments had commenced before 1985, BPS decided to correct the under coverage by establishing statistical techniques to estimate the historical value of three variables (gross output, total number of workers, and value added) of the remaining newly discovered establishments. These variables are known as the "backcasted" annual manufacturing survey.³

7.3.4.2 Variable measurement

- Dummy variable for crony capitalists (DC).

The dummy for crony capitalists is defined based on the information in Chapter 4. For the reasons discussed earlier, the crony capitalist definition is confined only to Soeharto's family and their crony capitalist businesses. This study defines Soeharto's family and their crony capitalists based on the information presented in Tables 4.3 and 4.4 in Chapter 4. Furthermore, by using information in Section 4.5 (Chapter 4) and Appendixes 2, 3 and 4, the thesis lists the industries in which crony capitalists were dominant players, meaning that they owned the largest company or had a monopoly. If this criterion is fulfilled, the industry will be classified as a crony industry.

It is realised that the concordance problem might emerge. Rent seeking activities are firm specific rather than industry specific, meaning that trade protection is given to a specific firm rather than to the industry in general. Examples include the licence

³ This issue is beyond this thesis, and a detailed explanation of the annual manufacturing survey and "backcasted" annual manufacturing survey is covered in an excellent survey by Aswicahyono (1998) and Bird (1999).

awarded to PT Panca Holding (owned by Bambang, Sudwikatmono and Sigit) as sole agent for all plastics imports, the licence awarded to PT Giwang Selogam (owned by Liem Sioe Liong) as a monopoly for cold-rolled sheet, and the monopoly for producing wheat flour of PT Bogasari (owned by Liem Sioe Liong) (for details see Appendixes 2, 3 and 4, Chapter 4). Unfortunately, as noted, the ERP, NRP and NTB estimates are available at the industry level (I-O classification). Hence, it is inevitable that the trade protection estimates cannot be directly related to the importance of the crony firms at the industry level. One I-O sector could consist of more than one sub-industry (ISIC code). Ideally, this study needed data on the share of the crony firm output to the total industry, in order to trace the share of the crony's firm in each I-O classification. Unfortunately, BPS is not permitted to disclose the name of the company in either their annual manufacturing surveys or "backcasted" data, making it impossible to trace the share of each crony's firm to total industry. As an alternative, this study has used the qualitative description in Chapter 4, as a proxy for the crony's influence in each I-O code.

As noted, one I-O classification could consist of more than one industry (ISIC code). The following example shows how this study has treated the problem: In the case of milk products (I-O 53) in 1987: PT Food Specialties Indonesia (owned by Soeharto's son, Bambang) was one of three companies which held a licence for the government contract of milk powder, and Liem Sioe Liong owned one of the largest companies for condensed milk, and fresh and liquid milk (PT Indomilk). Thus, this study has defined this industry (the manufacture of powdered, condensed and preserved milk, (ISIC 31121)) as a crony industry.

However, it is worth noting the milk products (I-O 53) consisted of two sub-industries (ISIC 31121 and 31122). Thus, this study has calculated the share of output of each sub-industry (ISIC 31121 and 31122) to the total milk industry (I-O 53), and found crony sub-industry (ISIC 31121), indeed had the largest share. Therefore, considering Bambang and Liem's companies were dominant players in this industry (ISIC 31121), milk products (I-O 53) was defined as a crony industry.

Using this method, the crony industry has been defined for each I-O code.

The list of industries, the names of the cronies and their companies, and the share of the sub-industry - where crony capitalists were dominant players - to the total industry are available in Appendixes 5, 6, 7.

Inevitably, the selection of the crony capitalists and crony industries is somewhat speculative, because the company's production data and the documentation of Soeharto's crony capitalists are not publicly available in all cases. In addition, the definition of crony capitalists, which is confined only to Soeharto's cronies, is obviously a simplification of the phenomenon of Indonesia's crony capitalism. However, without this simplification and proxy, it would not be possible to estimate the relationship between trade protection and the influence of crony capitalists. Again, neglecting crony capitalists in the model would lead to an incomplete analysis of the political economy of trade protection in Indonesia.

The other problem that emerges from quantifying crony capitalists is the difficulty in modelling the direction of causality between crony capitalists and trade protection. Owing to the fact that this study employs cross section data and uses dummy variable for the proxy of crony capitalists, the Granger causality test cannot be employed to test the direction of causality. This makes difficult to test whether it is trade protection that attracts crony capitalists, or crony capitalists who beget trade protection. This limitation motivated the case study of the Indonesian automotive industry depicted in Chapter 8.

- Ratio of the number of firms to the total number of firms in the manufacturing industry (NFIRM) (in percent)

The number of firm is defined as the ratio of the number of firm in industry i divided by the total number of firms in manufacturing industry. Data is derived from "backcasted" annual surveys.

$$NFIRM_i = \frac{NF_i}{\sum_{i=1}^n NF} * 100$$

Where: $NFIRM_i$ is ratio of number of the firms in industry i

NF_i is the number of firms in industry i

$\sum_{i=1}^n NF$ is the total number of firm in the manufacturing industry

- Concentration ratio (CR4) (in percent)

CR4 is defined as as the value added in the four largest firms as a percentage of total industry value added.

$$CR4 = \frac{\sum_{i=1}^4 VA_i^j}{\sum_{i=1}^n VA} * 100$$

Where VA_i is the value added of industry i , where $j=1,2,3,4$. The data are derived from "backcasted" annual data.

- Household consumption (HC) (in percent)

HC is defined as the share of output sold to Indonesian consumers. Data are derived from Input-Output Tables.

$$HC = \frac{\text{household consumption (I-O 301)}}{\text{output value (I-O 600) - export value (I-O 305)}} * 100$$

- Industrial consumer (IC) (in percent)

IC is defined as the share of industry gross output sold to other industries. Because the "backcasted" annual data does not provide information about the raw materials used in the production process by establishment, this study acquired the

information from the annual manufacturing surveys, and converted this into the "backcasted" annual survey data. IC is calculated as follows:

$$\text{Share of inputs} = \frac{\text{value of raw materials from domestic source (from annual surveys)}}{\text{total gross input (from annual surveys)}}$$

To proxy raw material from the backcast data, we employ the following method:

$$\text{Raw materials} = \text{share of input} * \text{total input (from the backcast)}$$

By using this proxy we define IC as:

$$IC = \frac{\text{Raw materials (backcasted)}}{\text{Total input (backcasted)}} * 100$$

- The ratio of domestic demand to total output (DD) (in percent)

$$DD = \frac{C + GC + GFI + \text{Change in stocks}}{\text{Total output}} * 100$$

Where: C is household consumption (is taken from I-O 301)

GC is government consumption (is taken from I-O 302)

GFI is gross fixed investment (is taken from I-O 303)

Change in stocks (is taken from I-O 304)

Total output (is taken from I-O 600)

- Share of export to total output (EXP) (in percent)

EXP is defined as the share of the value of total exports of goods (I-O 305) divided by total output (I-O 600), expressed in percent. Data are derived from Input-Output Tables.

$$EXP = \text{Export of industry } i / \text{Total output of industry } i$$

- Share of foreign value added to total value added (SHFV)

SHFV for industry *i* is defined as the contribution of foreign owned firms to each industry's value added.

$$SHFV_i = \frac{FVA_i}{VA_i} * 100$$

Where: FVA_i is the value added of industry *i* produced by firms under foreign ownership, VA_i is value added of industry *i*. The definition of this ownership variable is developed by Aswicahyono and Hill (1995) as:

$$FO = F + FP + (1 - D1) * (GF + GFP)$$

Where : FO is foreign owned, F is wholly foreign owned, FP is a foreign-private joint venture, GF is government-foreign joint venture and GFP is a government-foreign-private joint venture. D1 is a dummy variable equal to one if the industry is sugar processing, fertiliser, basic metals and ship buildings, and 0 otherwise.⁴

- Share of government value added to the total value added (SHGV) (in percent)

SHGV for industry *i* is defined as the contribution of government owned firms to each industry's value added. SHGV is calculated using a similar method to SHFV.

$$SHGV_i = \frac{GVA_i}{VA_i} * 100$$

Where: GVA_i is the value added of industry *i* produced by firms under government ownership, VA_i is value added of industry *i*. The government ownership definition is developed based on Aswicahyono and Hill (1995) as:

⁴ A detailed explanation for D1, see Aswicahyono and Hill (1995).

$GO=100\%-P-FO$, where GO is government owned, P is private owned and FO is foreign owned.

- Value added per worker (VAWORK) (in Rp. million)

VAWORK is defined as value added divided by the number of employees in each industry.

$VAWORK = VA_i / NOE_i$, where NOE_i is number of employees in industry i . Both VA_i and NOE_i are taken from backcasted data.

- Average size (AVGSZ)

AVGSZ is defined as the number of employees divided by the number of firms in each industry, y .

$AVGSZ = NOE_i / \text{number of firms in industry } i$. Data are taken from backcasted.

- Average wage per employee (AWPE) (in Rp, thousand)

AWPE is defined as wages divided by the number of workers in each industry. Data derived from annual manufacturing surveys.

$AWPE = \text{Wages } i / NOE_i$. Wages i is wages for industry i

Since Backasted does not have the information of wages, both variables Wages i and NOE_i are taken from annual survey.

- Dummy for basic industries (DBI)

DBI is equal to one for basic industries, and 0 otherwise. The list of basic industries is presented in Appendix 8.

- Ratio of domestic output to total import (z) (in percent)

The ratio of domestic output, z , is defined as the ratio of the domestic output of sector i (I-O code 600) divided by the import of goods by sector i (I-O code 401).

$z_i = \text{Output of industry } i / \text{Import of industry } i$

Data derived from Input-Output Tables for 1975, 1985 and 1995.

- Import demand elasticity (e)

Unfortunately, there is no reliable estimate of import demand elasticity available for each Indonesian manufacturing sector. To handle this problem, this study employs the Hossain and Vousden (1999) estimates of the import demand elasticity for India.

Using another country's coefficients is quite common in economic modelling. For example, the Indonesian computable general equilibrium model, established by the Inter University Centre, University of Gadjah Mada (INDORANI), employs coefficients from the Australian ORANI model. Considering India is a small country (in terms of international trade), and less capital abundant like Indonesia, it seems reasonable to employ India's import demand elasticity as a proxy for Indonesia.

This study accepts the limitation in this approach, particularly because Hossain and Vousden's (1999) estimates on India's import demand elasticity are based on three digit SITC which are not fully comparable with the I-O classification. Thus, it is inevitable that the same elasticities were employed for some sectors. As a result, a bias in the econometric estimation might emerge. Because of this, sensitivity analysis has also been employed. This study compares the results from the specification in equation (14), in which the import demand elasticities are employed, to a specification where import demand elasticities are omitted. Omission of the import demand elasticity did not affect the results. The sign of all parameters remained unchanged, although the values are naturally changed. So, the sensitivity analysis produced results in favour of using the import demand elasticity from India as a proxy for import demand elasticity in Indonesia.

7.4 Econometric results

Various functional forms were investigated in the econometric specification. This study follows most of the literature on the subject, and assumes a linear relationship. In fact, trade protection theory, except for the G-H model, is silent on the econometric model specification, and does not provide any guidance as to whether the linear or log-linear form is most appropriate (in fact, the linear model was found to perform more convincingly). This study employs the ordinary least square (OLS) method. Furthermore, in order to avoid the heterokedasticity problem, common in the case of cross section analysis (Maddala, 1992), this study employs the OLS with Heterokedasticity-consistent covariance. As suggested by Pangestu and Boediono (1986), a simultaneous equation using the two stages least square method was also attempted. However the results were less convincing than those presented below.

We are also aware that there is a possibility of an exogeneity problem between trade protection and some independent variables, such as SHFV, and, particularly, the import penetration ratio ($1/z$). Treffler (1993), Goldberg and Maggi (1997) and Gawande and Bandyopadhyay (2000) have criticised empirical studies which do not treat import penetration as an endogenous variable. To observe the possibility of an exogeneity problem, and following Greenaway and Milner (1994), this study employs the Hausman test on specification error measurement, where all of the other independent variables were used as instrumental variables. The Hausman test shows that there was no evidence of an exogeneity problem at the 5% level. Realising that the Hausman test is sensitive to the choice of instrumental variables (Maddala, 1992), we also employ other instrumental variables which might be correlated with SHFV, such as CR4, HC, AWPE, EXP and SHGV.⁵ As for ($1/z$), this study employs CR4, NFIRM and AWPE as instrument variables.⁶ The Hausman test shows there is no evidence of an exogeneity

⁵ Bird (1999) points out that SHFV is a function of CR4, HC, AWPE and SHGV.

⁶ Gawande and Bandyopadhyay (2000) argue that $1/z$ is a function of CR4, NFIRM and AWPE.

problem (the results are presented in Tables 7.4 and 7.6). Therefore, the OLS with Heterokedasticity-consistent covariance method was preferred.

The sample size for 1975 was 47 manufacturing industries, producing 70% of manufacturing output. Some of the industries had to be dropped, owing to problem with concordance between the I-O codes (on which level of protection is calculated) and ISIC (on which most of the independent variables are calculated). The NRP and ERP estimates are available for 71 manufacturing industries, of which around 47 are exactly matched with our ISIC industries from the annual surveys. Nevertheless, this study still has a comprehensive selection of manufacturing activities, since most industries are still represented in this estimation.

The NTB estimates for 1986 are available for 87 manufacturing industries, of which around 56 matched with ISIC industry. In addition, one industry (processed tea, I-O 67) had to be dropped owing to zero import penetration ratios. The 55 samples in the econometric estimation cover 75% of total manufacturing output.

The sample size for 1987 was 59. Both ERP and NRP are available for 87 manufacturing industries, of which around 60 matched with our ISIC industries data. As for 1986, one industry (I-O 67) had to be dropped, owing to a zero import penetration ratio. This 59 sample size covers 74% of total manufacturing output.

For 1995, the sample size was 80. The ERP, NRP and NTB are available for 87 industries, of which around 81 matched with the ISIC industry data. One industry had to be dropped (cigarettes, I-O 72) due to a zero import penetration ratio. This sample size covers 90% of manufacturing output.

7.4.1 The interest group variant model

In the experimental stage, this study removed CR4, VAWORK and AVGSZ on the basis that these variables had little explanatory power (i.e. its t-ratios were extremely low). The econometric results for the ERP and the NRP are presented in Table 7.4.

The ERP

For ERP, in 1975, DC is significant at 10% or better. This supports the hypothesis that there was evidence of a relationship between crony industry and the ERP. The positive relationship suggests crony industry received a higher ERP than other industries. The rest of the variables are not significant, suggesting limitations of the interest group variant model in explaining the inter-industry variation of the ERP. This is consistent with the discussion in Chapter 4 that the role of interest groups was almost negligible in the 1970s. The link between the State and society took place via a patron-client relationship, as indicated by DC.

However, in 1987, the interest group model provides a considerable degree of support for the hypothesis. All of the signs are as hypothesised. Our variables are significant at 10% or better in four of the seven cases. The sign of SHFV is negative and significant, suggesting the involvement of foreign firms in the export-oriented sector. The IC variable has a positive sign and significant at 5%. This suggests a possibility of vertical integration, where the industrial consumer might not lobby for lower protection. This is particularly true for some sectors, including wheat flours, pulp and paper, and automotive.

DC performed strongly, showing the expected sign, suggesting the role of crony capitalists was important in influencing the determinants of ERP.

For 1995, the variables are significant at 10% or better in three of the seven cases. DC is significant and consistent with the hypothesis. SHFV is significant and now has a positive sign. This sign is contrary to the hypothesis, because for 1995 a negative relationship between SHFV and ERP was expected, owing to the high involvement of foreign investors in export-oriented sectors. EXP has a negative sign and is significant at 5%. This supports the hypothesis that industry with a high export share tended to be less protected. Although these results provide some degree of support for the interest

Table 7.4: The interest group variant model: ERP and NRP as dependent variables

Variables	ERP					NRP						
	1975	t-stat	1987	t-stat	1995	t-stat	1975	t-stat	1987	t-stat	1995	t-stat
Constant	104.4	1.92 ^b	203.6	2.6 ^a	-6.48	-0.14	29.19	3.38 ^a	31.57	4.42 ^a	3.63	0.49
DC	333.1	1.904 ^b	107.6	1.82 ^b	95.6	2.0 ^a	2.48	0.14	8.89	1.95 ^b	1.87	0.45
HC	-0.07	-0.304	-0.55	-1.61	-0.01	-0.06	-0.01	-0.5	-0.011	-0.22	0.008	0.36
IC	1.17	1.22	2.79	2.43 ^a	0.96	1.49	0.59	2.95 ^a	0.22	1.73 ^b	0.06	0.68
NFIRM	-3.34	-1.39	-19.6	-1.80 ^b	1.66	0.27	-1.23	-1.76 ^b	-0.86	-0.67	-0.58	-1.0
SHFV	1.51	1.34	-38.6	-4.05 ^a	1.91	2.67 ^a	0.35	1.78 ^b	-3.37	-3.54 ^a	0.29	3.34 ^a
EXP	0.86	0.48	-0.75	-0.49	-1.54	-2.39 ^a	-0.13	-0.51	-0.24	-1.55	-0.28	-4.1 ^a
AWPE	0.1	0.73	0.01	0.28	-0.004	-1.05	0.01	0.69	0.001	0.42	-0.0002	-0.45
R ²	0.23		0.2		0.24		0.15		0.24		0.34	
R adj	0.1		0.09		0.16		0.007		0.17		0.28	
F-test	2.04 ^b		2.12 ^a		3.62 ^a		1.26		2.2 ^a		6.11 ^a	
χ ² for Hausman test	0.04		1.75		2.37		0.13		1.04		2.43	

Notes: ^a Significant at 5%.
^b Significant at 10%.
 For exogeneity test all of other independent variables were used as instrumental variables. The critical value for 5% is 3.84.

group variant model, the 1995 results are poor compared with the 1987 results, but can perhaps be attributed to general trade liberalisation which significantly reduced the ERP and the level of dispersion, so there was little to explain.

The overall econometrics results show that the interest group variant model provides support for the hypothesis in 1987, but less in 1995 and not in 1975.

One important question that emerges from these results is why there was significant trade reform even when crony capitalists became important in influencing trade protection from 1987 to 1995. The answer lies in the shift of crony capitalists from the import competing sector to the non-traded and exportables sectors. Examples include PT Kedaung Indah, (owned by Probosutedjo and Agus Nursalim), the largest producer of glass products in Indonesia since the 1970s, and PT Tjiwi Kimia (owned by Eka Tjipta Widjaja). In the 1980s, these firms were domestic oriented, but by the 1990s had become recognised as notable exporters (ECFIN, 1997). These examples are also supported by the change of trade classifications in some sectors. Pitt's (1981) trade index calculation in Appendixes 6 and 7 shows that around 95% of crony capitalists in 1987 were involved in importables and import competing sectors, with only 5% involved in exportables sectors. However, in 1995, around 70% of crony capitalists were involved in importables and import competing sectors, with 30% involved in exportables sectors. While it is true that crony capitalists activities were largely not involved in the dynamic and competitive export oriented sectors (Backman, 1999), by 1995 as noted, the percentage of crony capitalists involved in the exportables sector were larger than that in 1987. Manning (1998) states that the infamous three – Bambang, Tutut and Tommy – were concentrated in the non-tradable services, trade and natural resource sectors where classic rent seeking behaviour predominated. Manning's (1998) findings are supported by Iswandi (1998) who pointed out that Soeharto's family business, especially in the 1990's was concentrated in non-traded goods, such as infrastructure, hotels, property and trading. These findings suggest how trade liberalisation could take place when crony capitalists were continuing to grow.

The NRP

Similar to the ERP equation, at the experimental stage VAWORK, CR4 and AVGSZ were removed on the basis that these variables had very little explanatory power.

For 1975, our variables are significant for three out of six cases e.g. DC, IC and SHFV. The signs are also as expected. The positive sign for SHFV, suggests that trade protection was intended to attract foreign entry, as discussed in the hypothesis.

Nevertheless, it is important to bear in mind that the adjusted R^2 is very low i.e. 0.007, suggesting that the model cannot capture the variation of NRP in 1975. The F-test is also not significant, even at 10%. This poor result could be attributed to the fact that the role of interest groups was not as important as it was in the 1980's.

For 1987, DC, IC and SHFV are significant demonstrating a degree of support for the hypothesis. The results are obviously better, in terms of consistency with the hypothesis, when compared with 1975. The dummy variables as in the case of ERP performed strongly, displaying the expected sign and significant at 5%. This provides evidence that there was a positive relationship between the presence of crony capitalists and the NRP.

For 1995, both SHFV and EXP are significant, although the sign of SHFV is contrary to the hypothesis, as with ERP. Interestingly DC is not significant for 1995, contrary to both the ERP results and the discussion in Chapter 4.

In terms of consistency with the hypothesis the overall results for the NRP are less convincing than for the ERP. This is consistent with the argument in Anderson (1980) and Corden (1997) that the ERP is the most appropriate endogenous variable if industry groups are well informed and economically rational.

7.4.2 The national policy model

The ERP

In the experimental stage, we removed VAWORK from the model on the basis that this variable had very little explanatory power.

The econometric results are presented in Table 7.5. For 1975, our variables are significant at 10% or better in four of the five cases. (DBI, DD, AWPE and SHGV). SHGV is significant at 5%, but the sign is not consistent with the hypothesis. As pointed out by Basri and Hill (1996), the contrary sign of SHGV is probably due to the fact that they received protection in a less transparent form than trade barriers. The AWPE is positive and significant, supporting the hypothesis that government might support human capital-intensive industry due to its contribution to national esteem.

Overall, the national policy model performs well (in terms of consistency with hypotheses) compared with the interest group variant model for the determinants of the ERP in 1975.

The superiority of the national policy model in 1975, is also supported by the non-nested test. The non-nested test, based on both Akaike's information criterion (AIC) and Schwartz's information criterion (SIC), is in favour of the national policy model compared with the interest group variant model. This result is consistent with the discussion in Chapter 4 which suggests that the determinants of various policy during the 1970s, including trade protection, was very much State-centred, with a negligible role for interest groups.

The results are rather poor for 1987. None of the explanatory variables are significant. The adjusted R^2 is also very low (0.008) and the F-test is not significant, even at 10%. This suggests that the national policy model cannot satisfactorily explain the inter-industry variation of the ERP in 1987. This is contrary to the results of the interest group variant model which performed well for the ERP in 1987, as discussed above.

For 1995, our variables are significant at 10% or better in three out of four cases. Nevertheless, only DD has a sign as hypothesised, whereas SHGV and DBI are contrary to the hypothesis. The F-test is not significant at 10%. This suggests the national policy model also does not perform well for 1995.

Table 7.5: National policy model : ERP and NRP as dependent variables

Independent Variables	ERP						NRP					
	1975	t-stat	1987	t-stat	1995	t-stat	1975	t-stat	1987	t-stat	1995	t-stat
Constant	52.38	0.99	111.1	2.15 ^a	18.3	0.53	11.79	1.35	26.6	5.4 ^a	-2.04	-0.45
DBI	123.9	1.73 ^b	77.8	1.09	-46.0	-1.65 ^b	21.67	2.97 ^a	9.3	1.75 ^b	-1.61	-0.42
DD	1.10	1.87 ^b	0.005	0.02	0.92	1.74 ^b	0.28	2.49 ^a	0.01	0.40	0.17	2.92 ^a
SHGV	-3.19	-3.64 ^a	-1.32	-1.07	-0.58	-1.85 ^b	-0.44	-5.19 ^a	-0.12	-1.13	-0.11	-2.42 ^a
AWPE	0.23	1.98 ^a	0.041	0.97	0.005	0.92	0.03	1.27	0.001	0.50	0.009	1.31
R ²	0.24		0.07		0.08		0.29		0.09		0.2	
R adj	0.17		0.008		0.03		0.23		0.02		0.16	
F-test	3.74 ^a		1.22		1.85		4.99 ^a		1.45		5.09 ^a	

Notes: ^a Significant at 5%.
^b significant at 10%.

As noted, for 1987 and 1995, the results do not provide strong support for the national policy model hypothesis. However, for 1975, the national policy model seems to perform better than the interest group variant model. This implicitly suggests a national policy hypothesis is more applicable for 1975, which quite consistent with the discussion in Chapter 4.

The NRP

In the experimental stage we removed VAWORK for the same reason as before.

As for ERP, the national policy model provides a degree of support for the hypothesis for 1975. Both DBI and DD are consistent with the national policy hypothesis. Similar to case of the ERP in 1975, SHGV is significant but contrary to the hypothesis. Overall, the national policy model gives a better result in terms of consistency with the hypothesis compared with the interest group variant model. Both AIC and SIC results are also in favour of the national policy model.

For 1987, only DBI is consistent with the hypothesis. The F-test is not significant at 10%. This result suggests the national policy model provides a weaker result than the interest group variant model in terms of consistency with the hypothesis.

Similarly to 1987, the national policy also produces rather poor results for the NRP in 1995. Only DD is significant and consistent with the hypothesis.

As with ERP, the overall results for 1987 and 1995 suggest the national policy model does not perform well in explaining the inter-industry variations of NRP. However, the econometrics results reinforce the national policy model hypothesis for 1975.

7.4.3 The G-H model

The ERP

The econometric results for the ERP are presented in Table 7.6. The coefficients α_1 and α_2 are significant at 10% or better and consistent with the hypothesis for 1975, 1987 and

1995. The hypothesis that $\alpha_1 + \alpha_2 > 0$ are also significant at 10% or better for these years. Hence, the findings support the G-H model hypothesis that the relationship between ERP and import penetration depends on whether or not the sector is influenced by crony capitalists. The results demonstrate a distinct pattern of protection in the crony versus non crony sectors.

The overall results suggest that we are able to distinguish a pattern of protection in crony versus non-crony industry, as well as providing evidence that the role of crony capitalists continued to prevail in determining the level of protection within the manufacturing industry from 1975-1995. These results are consistent with the discussion in Chapter 4 regarding partimomialism.

However, the econometric results show that the adjusted R^2 are rather low, suggesting a lack of explanatory variables in the model. The F-tests are not significant for 1975 and 1995, although, as pointed out by Gujarati (1995), there should be more concern about the logical or theoretical relevance of the independent variables to the dependent variable and their statistical significance than the adjusted R^2 indicators. The low adjusted R^2 shows the limitation of the G-H model in explaining the variations of ERP for 1975 and 1995. These rather poor results could perhaps be attributed to trade protection being determined more by the national policy interest in 1975, with the role of crony capitalists, although important, relatively small when compared with 1987 and 1995.

Whereas, in 1995, although the role crony capitalists was at a peak, the role of interest groups had also begun to increase. The role of interest groups cannot be entirely captured in the standard G-H model which only emphasises the role of crony capitalists.

To capture the role of interest groups in influencing ERP, this study added some variables based on interest group hypothesis. Ideally, these empirical extensions should be guided by a theoretical model, suggesting the list of additional variables and the functional forms, as provided by the original G-H model. However, because the G-H model is silent in this particular case, this study employs variables from the interest group variant model.

Table 7.6: Grossman and Helpman model: ERP and NRP as dependent variables

Independent variables	ERP				NRP							
	1975	1987	1995	1975	1987	1995	1987	1995				
Constant	44.05 (9.2)	32.09 (3.2) ^a	48.85 (13) ^a	64.75 (7.0) ^a	20.1 (6.7) ^a	19.61 (2.2) ^a	23.72 (9.3) ^a	18.54 (3.5) ^a	22.5 (14.6) ^a	25.2 (5.7) ^a	8.91 (5.5) ^a	2.97 (0.4)
α_1	-0.001 (-3.16) ^a	-0.001 (-3.03) ^a	-0.02 (-1.95) ^b	-0.02 (-2.9) ^a	-0.009 (-4.0) ^a	-0.008 (-2.5) ^a	-0.06 (-4.2) ^a	-0.06 (-4.0) ^a	-0.003 (-3.8) ^a	-0.005 (-3.7) ^a	-0.005 (-3.6) ^a	-0.002 (-1.5)
α_2	0.002 (5.59) ^a	0.002 (6.07) ^a	0.06 (5.2) ^a	0.05 (3.7) ^a	0.08 (3.4) ^a	0.08 (3.6) ^a	0.019 (1.17)	0.03 (2.0) ^a	0.01 (4.1) ^a	0.01 (2.3) ^a	-0.01 (-0.31)	-0.005 (-0.21)
HC		-0.038 (-0.88)		-0.17 (-3.1) ^a		-0.002 (-0.06)		-0.015 (-0.77)		-0.01 (-0.44)		0.009 (0.38)
IC		0.73 (2.77) ^a		0.37 (2.58) ^a		0.12 (0.82)		0.44 (4.17) ^a		0.14 (2.27) ^a		0.06 (0.71)
SHFV		0.45 (2.31) ^a		-4.21 (-3.5) ^a		0.42 (3.2) ^a		0.22 (2.07) ^a		-1.92 (-3.9) ^a		0.29 (3.1) ^a
EXP		-0.05 (-0.18)		-0.34 (-1.54)		-0.38 (-3.2) ^a		-0.01 (-0.46)		-0.19 (-2.0) ^a		-0.28 (-4.7) ^a
AWPE		0.03 (1.40)		-0.002 (-0.56)		-0.002 (-2.5) ^a		0.0001 (0.8)		0.0002 (0.1)		-0.0005 (-0.28)
$\alpha_1 + \alpha_2 > 0$	32.9 ^a	33.2 ^a	29.7 ^a	6.74 ^a	9.1 ^a	10.24 ^a	12.56 ^a	5.5 ^a	8.32a	1.63	0.2	0.08
Wald test												
R^2	0.08	0.19	0.16	0.34	0.04	0.23	0.05	0.17	0.05	0.19	0.02	0.34
R adjusted	0.04	0.05	0.13	0.25	0.02	0.16	0.01	0.02	0.02	0.08	Neg.	0.28
F-test	1.99	1.16	5.57 ^a	4.36 ^a	1.86	3.5 ^a	1.33	1.41	1.60	2.06 ^b	0.9	6.0 ^a
χ^2 for Hausman test	2.8	2.47	1.13	3.26	0.7	0.01	0.8	0.025	0.77	2.14	0.5	3.31

Notes: ^a Significant at 5%.

^b significant at 10%.

t-ratio is in parentheses. Neg. is negative.

The coefficients of α_1 and α_2 were multiplied by 100 to improve presentation.

For exogeneity test all of other independent variables were used as instrumental variables. The critical value for 5% is 3.84.

At the experimental stage, we included all of independent variables from our interest group variant model. However, variables NFIRM, VAWORK, CR4, AVGSZ were dropped on the basis that these variables had little explanatory power. The results are also presented in Table 7.6.

For 1975, our variables are significant at 10% or better in four out of seven cases, and all are consistent with the hypothesis. The coefficient $\alpha_1 + \alpha_2$ is also significant and consistent with the hypothesis. IC and SHFV are also significant and consistent with the hypothesis. Nevertheless, it is worth noting that the adjusted R^2 increased only slightly from 0.04 to 0.05. In addition, the F-test is not significant, suggesting that the extended G-H model does not provide any additional explanatory power for explaining the inter-industry variation of ERP in 1975. This is consistent with the previous discussion, and the results of the interest group variant model, showing that trade protection in 1975 was determined more by national policy than interest groups.

In 1987, the extended G-H model provides support for the hypothesis. Our variables are significant at 5% or better in five out of seven cases, and all signs are as hypothesised. The adjusted R^2 increased significantly from 0.05 (the standard G-H model) to 0.25 (the extended G-H model) and the F statistic is significant at 5%. This shows that the additional variables significantly improve the model. These results are consistent with the discussion in Chapter 4 that the role of interest groups in influencing trade policy began to increase after the mid 1980s. Thus, as with the interest group variant model, the extended G-H model suggests that both crony capitalists and interest groups played an important role in influencing trade policy.

For 1995, the extended G-H model provides support for the hypothesis. The variables are significant in five out of the seven cases. However, the sign of SHFV is contrary to the hypothesis, as in other equations. The adjusted R^2 significantly increased from 0.05 to 0.16, and the F-test is also significant at 5%. This suggests the additional variables which represent interest group influence, significantly improved the fit of the model. Similarly to 1987, the results support the argument that the role of interest groups was increasing in influencing trade protection in 1995. In addition, similarly to 1987, these

results demonstrate the importance of crony capitalists and interest groups in influencing trade policy in Indonesia in 1995.

The NRP

Except for 1987, the NRP (Table 7.6), results are less superior compared to the ERP in terms of consistency with the hypothesis.

The coefficients α_1 are significant, for both 1975 and 1987, and consistent with the hypothesis. This suggests that for industries where crony capitalists were not dominant, the larger the import penetration the higher the level of protection given.

For 1975, the coefficient α_2 is not significant, so a distinct pattern of protection on crony versus non-crony sectors cannot be identified. This result supports our argument that in 1975 the role of crony capitalists was relatively less significant compared with in 1987.

The extended G-H model, does not improve the results significantly. Although some individual variables, such as SHFV and IC, are significant at 10% or better, the F-test is not significant, and the adjusted R^2 only increased marginally from 0.01 to 0.02.

For 1987, the extended G-H model provides support for the hypothesis. Our variables are significant at 10% or better in five out of the seven cases. Similarly to the results for ERP, this supports the hypothesis about the relationship between the NRP and crony capitalists, and there is a distinct pattern for protection on crony versus non-crony industries. However, unlike the case of ERP, the extended G-H model does not improve the standard G-H model significantly. The individual variables, such as IC, SHFV and EXP are significant, however the adjusted R^2 is rather low (0.08).

The results are rather poor for 1995. For the standard G-H model only one variable significant at 10% or better (α_1). The adjusted R^2 is negative, and the F-test is not significant. The extended G-H model increased the adjusted R^2 significantly, however, only two out the seven variables are significant. These results show that in general the NRP provides poor results for the G-H model. Again, this supports the Anderson (1980)

and Corden (1997) arguments that the ERP is the most appropriate endogenous variable from the pressure groups' viewpoint.

The coverage of NTBs to gross output

The econometric results for NTBs are presented in Table 7.7. This study employs both the standard G-H model and the extended G-H model. At the experimental stage, this study attempted to employ both the interest group variant model and the national policy model. However, the results were not convincing.

As noted, for NTBs the econometric estimates refer to the period 1986 and 1995. For 1986, the standard G-H model is consistent with the hypothesis. The coefficient α_1 , α_2 and $\alpha_1 + \alpha_2$ are significant and as hypothesised. The adjusted R^2 is rather low, however the F-test is significant at 10% or better. The overall results indicate a distinct pattern of protection in crony versus non-crony sectors. There is evidence, that for crony sectors, protection increased with the ratio of domestic output to total imports. This implicitly suggests that NTBs were given to industries influenced by crony capitalists. These results are consistent with the discussion in Chapter 4 of how crony capitalists benefited from trade protection in the form of NTB, such as monopoly. Examples include monopoly for wheat flour, steel, plastics and cement. The estimates supplied by Fane from ANU show that the NTB coverage of gross output of wheat flour accounted for 81% in 1986. As discussed in Chapter 4, from the 1970s PT Bogasari was awarded the monopoly to produce wheat flour. The other examples include iron and steel (the NTB coverage of the gross output accounted for 87%), and cement (NTB was 96%) in 1986. The major players in both industries were PT Giwang Selogam and PT Indocement, respectively, and both were owned by Liem Sioe Liong. The NTB coverage of gross output in the plastic and resin sector accounted for 80%. As noted, PT Panca Holding (owned by Bambang, Sigit and Sudwikatmono) was awarded the licence as sole agent for all plastic imports. These examples show some of the link between NTBs and crony capitalists. For detailed see Appendixes 2, 3 and 4 in Chapter 4.

Table 7.7: Grossman and Helpman model: NTB's as dependent variable

Dependent Variables	NTB		NTB	
	1986		1995	
Constant	30.61 (10.88) ^a	67.73 (6.07) ^a	3.71 (2.6) ^a	-8.28 (-1.24)
α_1	-0.01 (-2.21) ^a	-0.01 (-1.76) ^b	-0.002 (-2.2) ^a	-0.005 (-1.84) ^b
α_2	0.06 (5.59) ^a	0.06 (4.36) ^a	0.03 (0.84)	0.027 (0.61)
VAO		-65.26 (-2.37) ^a		0.13 (0.84)
IC		-0.31 (-2.24) ^a		0.22 (2.06) ^a
NFIRM		-1.12 (0.64)		0.04 (0.94)
AWPE		-0.004 (-1.28)		-0.000008 (-0.95)
$\alpha_1 + \alpha_2 > 0$	20.86 ^a	11.84 ^a	0.63	0.24
Wald Chi-Square				
χ^2 for test for Hausman test	0.67	0.008	0.68	3.6
R ²	0.08	0.2	0.03	0.1
\bar{R} adj	0.05	0.11	0.01	0.03
F-test	2.62 ^b	2.41 ^a	1.33	1.53

Notes: ^a) Significant at 5% .

^b) significant at 10% .

t-statistics in parentheses.

The coefficients of α_1 and α_2 were multiplied by 100 to improve presentation.

For exogeneity test all of the other independent variables were used as instrumental variables.

The critical value for 5% is 3.84.

In 1995, coefficient α_1 is statistically significant, while all other coefficients, including the test of $\alpha_1 + \alpha_2$, are insignificant. This suggests NTBs were given to the sector with a high import penetration ratio rather than to crony industries. This was particularly true in 1995, as NTBs mostly prevailed in sectors considered strategic for the people, such as milled polish rice (NTB coverage of gross output was 100%) and printing and publishing (80%). The insignificant coefficients of α_2 and $\alpha_1 + \alpha_2$ are consistent with fact that in the 1990s, trade liberalisation had significantly reduced NTB coverage of gross output in the manufacturing sector from 46% in 1986 to 30.3% in 1995 (Fane and Condon, 1996).

To capture the role of interest groups, the extended G-H model includes variables from the interest group variant model. At the experimental stage, some of the variables such, as HC, SHFV, NFIRM, CR4 and EXP, had to be dropped owing to a very low t-ratio. To gain a better result, this study also incorporates VAO (value added per output). In fact, as discussed in Chapter 2, VAO is a variable which is commonly used in the interest group model. Nevertheless, VAO is ambiguous in the sense that it could be relevant for both the national policy model and the interest group model. From the interest group model viewpoint VAO is expected to have a negative relationship with protection. Anderson (1980) argues that the lower the VAO, the larger the change in industries factors' return following a change in output or input prices. From the national policy model viewpoint, the relationship between protection and VA() should be positive because the government would tend to protect industry with a high value added (Pangestu and Boediono, 1986).

The results show all of the signs as hypothesised. The VAO is significant at 5% and negative, which is consistent with the hypothesis from an interest group viewpoint. Moreover, IC is significant and consistent with the hypothesis. The adjusted R^2 increased significantly from 0.05 to 0.11 and the F-test is also significant.

Moreover, as for the standard G-H model, the extended G-H model does not provide strong results for 1995. As discussed in Chapter 5, trade liberalisation had significantly reduced the NTBs coverage of gross output, so there was little to explain.

To summarise, the econometric results shows that trade protection in 1975 is better explained by the national policy model than by either the interest group variant model or the G-H model. However, for 1987 and 1995, both the G-H model and the interest group variant models provide support for the important role of crony capitalists and interest groups in influencing trade protection after the mid 1980s. These findings are supported by MacIntyre (1991 and 1994). The G-H model also shows a distinct pattern of protection between crony versus non-crony industry. The G-H model also provides support for the role of crony capitalists in influencing trade protection up to 1995.

Nevertheless, it is worth noting that the econometrics results have several limitations. First, there is a limitation to modelling cronyism, DC, accurately. Inevitably, the variable DC is speculative, owing to fact that there is no accurate or authoritative information regarding Soeharto's crony capitalists. Second, the econometrics results show that the adjusted R^2 are rather low. As discussed, Anderson (1980) points out that highly significant regression results cannot be expected, owing to the limitations of the model in capturing the complexity in the political economy of trade protection. In addition, strong econometrics results cannot be expected, owing to the limitation of the ERP, the NRP and the NTB in capturing all forms of trade protection. Third, the econometric results have a limitation in explaining the direction of causality between crony capitalists and trade protection. It is not clear whether trade protection attracted crony capitalists into a particular industry, or whether crony capitalists in a particular industry created trade protection. These econometrics limitations underline the importance of undertaking detailed industry case studies in conjunction with the econometrics approach. These will be presented in Chapters 8 and 9.

7.5 Summary

The purpose of this chapter was to investigate and elucidate the pattern of manufacturing protection in Indonesia and to distinguish a pattern of protection in crony versus non-crony sectors. The results are quite satisfactory and generally consistent with the hypothesis.

The econometric results for both the interest group and the G-H model provide evidence that the role of crony capitalists and interest groups were increasingly important in influencing trade policy in 1987 and 1995. On the other hand, the national policy model appears to give a better result for 1975 compared with both the interest group model and the G-H model.

In the light of the G-H model (both the standard and the extended G-H model), the results support the hypothesis that crony capitalists will manage to form a lobby to gain rent from protection. The important question to emerge from these results is how trade liberalisation could take place when the role of crony capitalists was growing ever stronger in Indonesia. This study argues there is evidence that crony capitalists became involved in some exportables sectors in the 1990's and concentrated in the non-tradable services, trade and natural resource sectors where classic rent seeking behaviour predominated.

Although, in general the econometric results satisfactorily support the hypotheses, there are some limitations in the model. The unexplained residual is quite significant. This could be attributable to the incomplete model specification and data limitation, such as the import demand elasticity estimate, and also the difficulties in quantifying the decision-making process. In addition, this study cannot completely verify that crony capitalists definitely acquired assistance in these cases because none of the documentation is publicly available. Nevertheless, it is still acceptable to conclude a strong possibility of rent seeking activities in these industries.

With these qualifications, and in order to enrich the understanding of the political economy of manufacturing protection in Indonesia this study has delved into industry case studies which will be discussed in subsequent chapter.

Appendix 5: List of crony industries, 1975

IO	Sector	Soeharto's family and cronies	Company / Sub-group	Sub-industry	Share of cronies sub-industries to total industry in each I-O	Size of cronies companies in sub industry	TIC	Classification
65	Wheat flour and other grain mill product.	Liem Sioe Liong	PT Bogasari	Wheat flour	81%	The largest in Indonesia	0.00	M,MC
68	Noodles etc.	Liem Sioe Liong	PT Indofood	Noodles etc.	100%	The largest in Indonesia	0.00	M,MC
114	Glass and glass products.	Probosutedjo	PT Kedaung Indah	Glassware and glass for construction	58%	The largest in Indonesia	0.36	M,MC
116	Cement.	Liem Sioe Liong	PT Indocement	Cement portland	79%	The largest in Indonesia	0.46	M,MC
132	Motor vehicles	Probosutedjo	PT Multi France (resigned in 1977)	Sole agent	100%	One of the largest in Indonesia.	0.33	M,MC
		Liem Sioe Liong	PT Centra	Sole agency				

Note: Share of crony sub-industries in the I-O: the share of the sub-industries to the total industry (based on I-O), where the crony firms were dominant players.

TIC is Pitt's index classification (Pitt, 1981).

$TIC = (\text{imports} - \text{exports}) / (\text{production} + \text{imports} - \text{exports})$.

Where : TIC < 0 exportables (X) ; TIC > 0 importables (M).

$0 \leq TIC \leq 0.8$: import competing sectors (MC).

$TIC \geq 0.8$: non competing sectors (NCM).

Appendix 6: List of crony industries, 1986 and 1987

IO	Sector	Soeharto's family and cronies	Company/ group	Sub-industry	Share of cronies sub-industries to total industry in each I-O	Size of cronies companies in sub industry	TIC	Classification
53	Milk products	Liem Sioe Liong	PT Indomilk	Condensed, fresh milk and milk powder	93%	The largest in Indonesia	0.13	M, MC
		Bambang	PT Food Specialties					
56	Refined vegetables and animal oil	Eka Tjipta, Liem Sioe Liong, Sigit	PT Bimoli and PT Filma	Cooking oil	91%	The largest in Indonesia	0.23	M, MC
59	Wheat flours	Liem Sioe Liong	PT Bogasari	Wheat flour	81%	The largest in Indonesia	0.00	M, MC
62	Noodles etc.	Liem Sioe Liong	PT Indofood	Noodles etc.	100%	The largest in Indonesia	-0.13	X
63	Sugar	Sigit, Probosutedjo, Yani Haryanto	PT Gunung Madu and PT Gula Putih Mataram	Refined sugar	100%	The largest in Indonesia	0.00	M, MC
84	Sawn processed wood	Bob Hasan	Nusamba	Sawmill	93%	The largest in Indonesia	0.86	M, NCM
85	Plywood	Bob Hasan	Nusamba	Plywood	97%	The largest in Indonesia	0	M, MC
90	Paper & paper board	Eka Tjipta Widjaja	PT Indah Kiat and PT Tjiwi Kimia	Pulp and Paper	69%	The largest in Indonesia	-0.03	X
93	Basic chemicals	Bambang, Tommy	Bimantara Humpuss	Chemicals. Petrochemical	65%	The largest in Indonesia	0.53	M, MC

95	Plastic resins	Bambang, Sigit, Panca Soedwikatmono Holding	Plastic resins	69%	Sole agent for import plastic materials		
107	Plastic products	Henry Pribadi Sigit	PT Argha Karya Prima Trias Sentosa	PVC Plastic packaging, cassettes tapes	53%	One of the largest in Indonesia	0.08 M, MC
108	Ceramics & earthenware	Probosutedjo and Agus Nursalim	Kedaung Industrial	Ceramic tile	62%	One of the largest in Indonesia	0.03 M, MC
109	Glass and glass products.	Probosutedjo	PT Kedaung Indah	Glassware and glass for construction	60%	The largest in Indonesia	0.36 M, MC
111	Cement & lime	Liem Sioe Liong	PT Indocement	Cement portland	79%	The largest in Indonesia	0.16 M, MC
113	Basic iron and steel	Liem Sioe Liong	Cold Roll Mill Indonesia	Steel rolling	99%	The largest in Indonesia	0.15 M, MC
128	Motor vehicles excluding motor cycles	Liem	Suzuki Indomobil	Assembly and components	100%	One of the largest in Indonesia	0.32 M, MC
129	Motor cycles	Liem	Suzuki Indomobil	Assembly and components	100%	One of the largest in Indonesia	0.45 M, MC

Note: Share of sub-industries in the I-O: the share of the sub-industries to the total industry (based on I-O), where the crony firms were dominant players.

TIC is Pitt's index classification (Pitt, 1981).

Definition of TIC as for Appendix 5

Appendix 7: List of crony industries, 1995

IO	Sector	Soeharto's family and cronies	Company/ Group	Sub-industry	Share of cronies sub industries to total industry in each I-O	Size of cronies companies in sub industry	TIC	Classification
51	Dairy products	Liem Sioe Liong	PT Indomilk	Condensed and fresh milk	93%	The largest in Indonesia	0.1	M,MC
		Bambang	PT Food Specialties	Milk powder				
58	Wheat flours	Liem Sioe Liong	PT Bogasari	Wheat flour	81%	The largest in Indonesia	0.00	M, MC
56	Refined vegetables and animal oil	Eka Tjipta and Liem and Sigit	PT Bimoli PT Filma	Cooking oil	91%	The largest in Indonesia	0.23	M, MC
61	Noodles etc.	Liem	PT Indofood	Noodles etc.	100%	The largest in Indonesia	-0.01	X
62	Sugar	Sigit, Probosutedjo, Yani Haryanto	PT Gunung Madu and PT Gula Putih Mataram	Refined sugar	100%	The largest in Indonesia	0.05	M,MC
66	Soybean products	Tommy, Liem Sioe Liong, Bob Hasan	PT Sarpindo	Soyabean	100%	The largest in Indonesia	0.02	M,MC
82	Sawmill and preserved wood	Bob Hasan, Prajogo Pangestu	Nusamba Barito	Timber	93%	The largest in Indonesia	-0.16	X
83	Plywood	Bob Hasan	Nusamba	Plywood	97%	The largest in Indonesia	-1.4	X
88	Pulp	Eka Tjipta Widjaja	PT Indah Kiat and PT Tjiwi Kimia	Pulp and paper	100%	The largest in Indonesia	0.25	M,MC

89	Paper & paper board	Eka Tjipta Widjaja	PT Indah Kiat and PT Paper Tjiwi Kimia	Pulp and Paper	69%	The largest in Indonesia	-0.18 X
92	Basic chemicals	Bambang, Tommy	PT Bimantara Humpuss	Chemicals. Petrochemical	65%	The largest in Indonesia	0.47 M,MC
107	Plastic products	Henry Pribadi, Sigit	PT Argha Karya Prima PT Trias Sentosa	PVC Plastic packaging, cassettes tapes	53%	One of the largest in Indonesia	0.01 M,MC
108	Ceramics & earthenware	Probosutedjo and Agus Nursalim	Kedaung Industrial	Ceramic tile	62%	One of the largest in Indonesia	-0.06 X
109	Glass and glass products.	Probosutedjo	PT Kedaung Indah	Glassware and glass for construction	60%	The largest in Indonesia	-0.06 X
111	Cement	Liem Sioe Liong	PT Indocement	Cement portland	79%	The largest in Indonesia	0.08 M,MC
128	Motor vehicles excluding motor cycles	Liem Sioe Liong	Suzuki Indomobil	Assembly and components	100%	One of the largest in Indonesia	0.42 M,MC
129	Motor cycles	Liem Sioe Liong	Suzuki Indomobil	Assembly and components	100%	One of the largest in Indonesia	0.11 M,MC

Note: Share of sub-industries in the I-O: the share of the sub-industries to the total industry (based on I-O), where the crony firms were dominant players.

TIC is Pitt's index classification (Pitt, 1981).

Definition of TIC as for Appendix 5.

Appendix 8: List of basic industries:

Industry group	Products
Food processing, etc.	Fertiliser Salt
Agricultural machines, vehicles etc.	Cars, trucks, buses, tractors Rolling stock, Batteries, Tyres, Valves Petrol Engine
Textile chemicals	Caustic soda Rayon Bleaching powder
Other basic	Engineering and tools Electrical ware Incandescent lamps Cement Oxygen Paper Glass (bottles) Radio and TV sets Sewing machines Dry batteries Printers Steel Sulphur

Source: Soehoeu, 1967 and 1988.

Chapter 8

Case study 1: the Indonesian automotive industry

8.1 Introduction

Chapter 7 employed econometric analysis to examine the determinants of trade protection in the Indonesian manufacturing sector. Although consistent with the interest group variant model, the G-H model and the national policy model hypotheses, the econometric results still have some limitations, such as producing a low R^2 and an inability to exactly determine the causality between crony capitalists and the level of protection.

Nelson (1996) argues that, although the political economy of trade protection can seemingly be explained by the simplest short-run, profit-seeking political economy model, the reality is considerably more complex. He points out that case studies can provide a more complete picture of the political economy of trade protection.¹ Therefore, in order to supplement and enrich understanding of the determinants of protection in the Indonesian manufacturing sector, this thesis also emphasises qualitative analysis by delving into case studies. This discussion focused on the period 1970-1995.

This chapter looks at the Indonesian automotive industry which is notorious for high protection and known to have powerful rent seekers. Since its earliest development, the government has heavily supported this industry with trade protection, including both tariff and non-tariff barriers. This raises two questions:

¹ Excellent case studies in trade protection are available in Krueger (1996).

1. **Why** did the automotive industry receive more protection than the average of the **manufacturing** sector?
2. **What** was the interaction between government, industry interests, owners, and **foreign** capitalists involved in shaping trade protection in this industry? And, **what** was the causality between rent seekers and trade protection?

The chapter is organised as follows. Section 8.2 presents the general characteristics of the Indonesian automotive industry compared with other Asian countries. Section 8.3 provides an overview of the industry's development and structure during 1966-1995; Section 8.4 highlights the major players; Section 8.5 discusses the determinants of trade protection; in the automotive industry.

8.2 The general characteristics of the automotive industry

The automotive industry in general, but particularly in developing countries, attracts more government intervention than other manufacturing industry. Indonesia has been no exception in this regard and has maintained above average protection.

Aswicahyono, Basri and Hill (2000) and Abrenica (1998) show four models of development. The first is the "Northern Asian model", and includes Japan and Korea, where the industry was initially developed behind trade protection, foreign technology was actively imported, and international efficiency levels were eventually achieved. The second model is countries, such as Hong Kong and Singapore that abandoned the industry, although continuing to produce some components. The third model is a group of countries, including Malaysia, Taiwan and Thailand that maintained high levels of protection before gradually becoming more internationally oriented. Substantial differences exist in this model. For example, by applying a national car policy Malaysia was more protectionist for some periods, while a highly developed and export oriented components industry evolved in Taiwan. The fourth model contains a group of countries that remained under high levels of protection up until the 1990s, and only began to liberalise recently, with, Indonesia and The Philippines as the major examples.

Some comparative indicators for the Asian automotive industry in 1995 as presented in Table 8.1. This Table shows that, in terms of sales, production and exports, Indonesia lagged behind the other Asian countries, with the exception of The Philippines. In terms of makers, Indonesia, as well as China and The Philippines, experienced problems in market segmentation. This can be seen from the comparison between production and the number of makers. With 388,000 production units in Indonesia there were 13 makers. The average maker produced around 30,000 units, which was very low, particularly when compared with Korea's 525,000 units.

Table 8.1: Comparative indicators for the Asian auto industry, 1995

Country	Sales (000) Units ^{a)}	Production (000) Units	Exports (000) Units	Market Share (%) ^{b)}	Makers (no.)	Top3 ^{c)} (%)	Pop. / Vehicle (no.)	Japan ^{d)} (%)
Indonesia	384	388	6	10	13	63	50	95
China	1,424	1,435	19	52	130	37	125	24
India	629	610	42	69	13	72	172	36
Korea	1,556	2,626	1,079	74	5	89	4	n.a
Taiwan	542	406	1	23	11	49	5	58
Malaysia	286	309	16	79	10	71	n.a	92
The Philippines	128	124	0	56	16	69	42	88
Thailand	572	483	10	29	14	64	18	90

Notes: sales, production and exports are in thousands of units.

a) Sales refer to sales in the domestic market and include imports;

b) 'Market share' refers to passenger car sales as a percentage of total vehicles sales;

c) 'The top 3' refers to the share of production of the three largest assemblers;

d) 'Japan' refers to the share of Japanese manufacturers in the domestic market.

Source: Adapted from Abrenica, (1998), Tables 1-3

8.3 The development of the Indonesian automotive industry

8.3.1 Policies and regulations of the automotive industry, 1966-1996

Initial development of the Indonesian automotive industry began in the Dutch colonial era with the establishment of General Motor Corp. in Jakarta in the late 1920's. Subsequent to Indonesian independence, General Motor Corp. was nationalised and converted into PN (State owned company) Gaya Motor.

However, systematic intervention in the automotive industry began once the New Order government came to power in 1966. The objective of establishing an automotive industry in Indonesia changed dramatically when the high demand for transportation equipment pushed the government in to allowing imported cars of any type - Complete Built-Up (CBU) and Complete Knock-Down (CKD). The result was in a huge increase in imports that eliminated most local producers. In 1964, there were ten local assemblers actively operating, but, by 1968, only four had survived. The remaining domestic assemblers demanded government protection (Chalmers, 1996). In January 1968, Sumitro Djohadikusumo (the Minister of Trade, 1968-1973) introduced a measure to prohibit the import of particular luxury cars, to save foreign exchange reserves. At the same time, a new consensus emerged inside the bureaucracy to develop the domestic automotive industry by giving protection to national assemblers.² Foreign investors would be allowed to participate as long as local partners owned a major share. This economic nationalism marked the development of the Indonesian automotive industry from early in the Soeharto era.

The major government regulations imposed on the Indonesian automotive industry over the period 1969 to 1996 are presented in Table 8.2. Prior to 1969, the main activity of the automotive industry was importing CBU vehicles. However, in 1971, the government moved towards full domestic manufacturing by prohibiting the import of CBU for commercial cars in Java and Sumatra. Subsequently, in 1974, following the *Malari* (see discussion in Chapter 4), import restrictions were extended to include passenger cars and applied across the entire country. As a result, all imports had to be in the form of CKD. In addition, in 1976, to encourage development of the domestic components industry, the government established a deletion program, which obliged car producers to gradually move to domestically produced components under a government schedule. For example, the industry was targeted to use domestically produced glass parts by 1978, chassis by 1979, and engines by 1984 (Shauki, 1999; Witoelar, 1983).

² Interviews with Suhari Sargo (20 October, 1998 and 4 November, 1998), Herman Latief (26 January, 1999 and 1 March, 2000) and Sumitro Djohadikusumo (29 March, 1999).

Table 8.2: Major regulations in the Indonesian automotive industry, 1969-1996

Regulations	Date	Contents	Purpose
Ministry of Trade and Ministry of Industry	16 th January 1969 and 12 th March 1969	Imports of motorcars in both CBU and CKD condition are allowed to be made only by sole agents and trademark holders	Developing motor vehicle assembler industry
Ministry of Trade	1st April 1969 and 5th June 1969	Prohibiting imports of motor vehicle in CBU condition	Protecting domestic motor vehicle products
Ministry of Finance	21 st July 1976	Setting the 0% import duty for commercial cars and 100% for passenger cars.	Promoting commercial car production
Ministry of Industry	2nd August 1976	Target schedule for using domestically produced components (deletion program)	Encouraging development of the components industry in order to reach a full manufacturing automotive industry in 1984
Ministry of Industry	1979, 1983, 1986 and 1987	Rescheduled the target schedule for deletion program.	Encouraging development of the components industry in order to reach a full manufacturing automotive industry in 1986
Government regulation package on the automotive industry	10th June 1993	Replacing the deletion program with an incentive program. Opening the automotive market to imports in CBU condition	Encouraging the development of the components industry
Government regulation package on automotive industry	23rd May 1995	Releasing new tariff line	Preparation for free trade and commitment to AFTA and WTO
Presidential Instruction No. 2/1996	19 th February 1996	Issuing a new National Car program	Development of domestic full manufacturing car

Source: Ministry of Trade and Industry.

Manufacturers who failed to comply with this schedule would be penalised through a 100% import duty on any imported components which could otherwise be domestically produced (Aswicahyono, Anas and Rizal, 1999; Shauki, 1999).

At the same time, the government also intentionally created favourable conditions for the development of commercial vehicles, by imposing a zero import tax rate for commercial

CKD, while imposing a 100% import tax and 20% value added tax for passenger cars. This was intended both to encourage the development of a commercial vehicle industry and discourage the production of passenger cars. The impact of this policy is reflected in the average number of passenger cars sold between 1981-92 – fewer than 30,000 units per annum (LPEM, 1993).

This ambitious 1976 deletion program was not particularly successful, mainly because the components industry failed to achieve economies of scale, and also because of the resistance to this program from both the major local firms and the Japanese principals. As a result, the program was briefly suspended in 1978. A new schedule was set in 1979, but proved equally difficult for the industry to meet, causing it to be revised yet again in 1983 and 1986.

In 1993, an incentive program was introduced to replace the deletion program. This was basically another type of local content scheme but with a more market friendly approach. Unlike the deletion program, instead of setting a target year, the government used fiscal policy as an incentive in conjunction with the tariff rate. The higher the degrees of local content, the lower the tariff rate. The government also allowed imports of CBU in 1993, but under very high tariffs (200%). Although the incentive program was more market friendly, it still met with little success.

In 1995, the government released a new import tariff line for the automotive industry. Initially, the May 1995 deregulation was perceived as a starting point for a more market oriented direction. However, in 1996, the government launched a national car policy program aimed at the full domestic production of a "national car". This meant the firm had to be 100% Indonesian owned, use an Indonesian brand name, and use 100% local components (Aswicahyono, Basri and Hill, 2000). To support this program, the government provided a full exemption from all import duties and waived the luxury car tax. This policy immediately triggered criticism from both the domestic and international communities, and the government was forced to withdraw the program in 1998.

8.3.2 Structure of production

The Indonesian automotive industry comprises three distinct sub-industries, passenger cars, commercial cars and components. Unfortunately assembly data provided by the Central Board of Statistics (BPS) do not distinguish between passenger cars and commercial cars. This study uses GAIKINDO's (the Indonesia automotive industry association) data to highlight the structure of production in commercial and passenger cars.

8.3.2.1 Commercial and passenger cars (assembly)

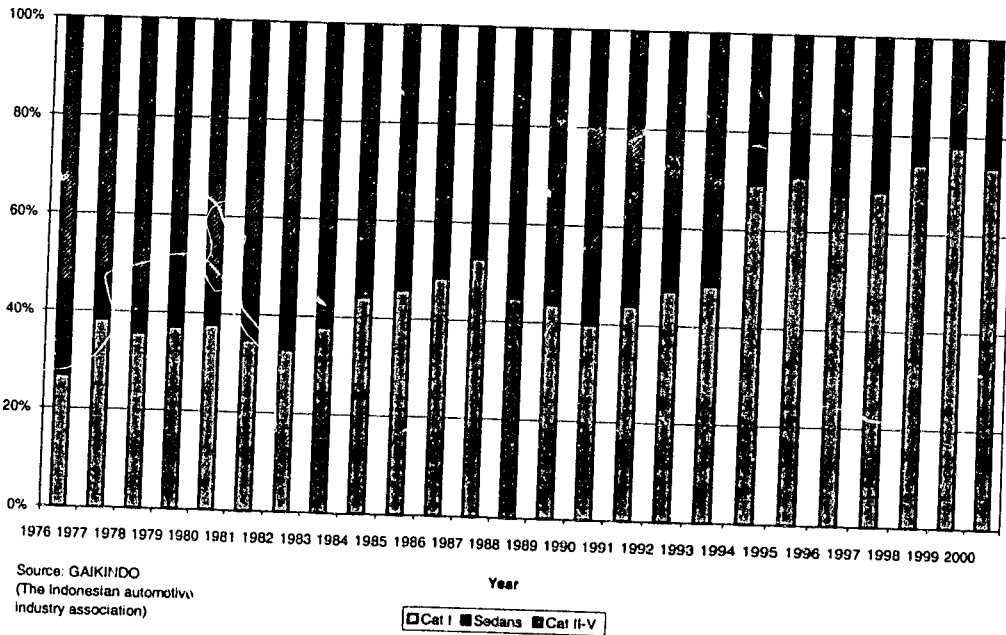
Figure 8.1 shows that from the mid 1970s up to the mid 1990s, commercial cars (category I-V) continued to dominate production.³ Commercial cars in category I had a 27% share of production in 1976 and this continued to increase to more than 71% by 1995. The rapid expansion of commercial cars in category I can be attributed to a design which allows ease of modification into minibuses and passenger vehicles. This type of vehicle can carry more people than passenger cars, an important feature considering the large size of the average Indonesian family (Aswicahyono, Anas and Rizal, 1999).

Due to taxes and import duty policy, sedans accounted for only around 19% of production in 1976, declining further to 10% by 1977, and only accounting for about 10% by 1995. As noted, the relatively small share of sedans in total production was due to the 1977 imposition of a different treatment of tax and import duty imposed by the government in 1977, with a 100% import tax and a 20% value added tax for passenger cars. The resulting cheaper prices for commercial cars, increased demand. In addition, the relatively simple design of commercial cars made larger production runs possible.

³ Commercial cars comprises of 5 categories:

1. Gross vehicle weight ≤ 5 tons.
2. Gross vehicle weight > 5 and ≤ 10 tons.
3. Gross vehicle weight > 10 and ≤ 24 tons.
4. General purpose vehicle.
5. Gross vehicles weight > 24 tons.

Figure 8.1 Production by category, 1976-2000



8.3.2.2 Components

Development of the components sector commenced in the 1970s. By 1975, there were already about 30 companies making paint, tyres, radiators, storage batteries, bodies and chassis (Chalmers, 1996). The following year, a systematic effort to increase development of the components sector via a deletion program was launched. This created moderate expansion in the industry until the recession of the mid 1980s. Within three years of the slight slow down caused by the recession, production once again expanded rapidly (Aswicahyono, Basri and Hill, 2000). By the early 1990s, production had increased even further and, the sector had begun to shift towards export orientation, even though its share was almost negligible in relation to total manufacturing exports. These trends are set out in Table 8.3.

Table 8.3: Production of selected components 1978/9-1996/7 *) (thousand unit)

Components	1978/9	1983/4	1988/9	1996/7
Diesel engine	0	0	48	85
Petrol engine	0	0	20	235
Cabin	0	0	115	187
Chassis	0	132	122	317
Rear body	0	0	48	112
Seat & seat frame	0	132	381	778
Axle	0	0	120	143
Clutch system	0	0	120	573
Transmission	0	0	126	309
Shock absorber	208	1,303	757	1,816
Brake system	0	0	292	430
Wheel rim	0	0	696	2,043
Fuel tank	0	132	135	470
Radiator	52	42	144	457
Exhaust system	107	132	234	1,533
Filter element	2,400	1,416	2,989	11,900
Piston	0	270	718	1,471
Fuse	2,000	14,272	22,972	33,900

Source: *Lampiran Pidato Kenegaraan* (appendix of Presidential speech), various issues.
 *) Fiscal year, 1 April, 19(t) to 31 March 19(t+1)

Although overall demand for automobiles was high, due to the relatively small size of Indonesia's domestic market and the large number of brands, demand for each brand was low. In addition, the import content remained high and protection continued up until 1998. As a consequence the automotive industry failed to achieve the deletion program's specified target schedule for local components, forcing the government to revise the schedule (Aswicahyono, Anas and Rizal, 1999). The local content ratios for 1994 and 1995 are shown in Table 8.4. This Table shows that none of the passenger car brands assembled in Indonesia had a local content as high as the 60% the government target.

Table 8.4: Local content ratios, 1994-1995

Commercial vehicles	1994	1995	
	unweighted average	Unweighted Average	Range
Category I	32	40	5-48
Category II	34	34	23-24
Category III	33	32	29-35
Category IV	20	20	2-31
Sedan	15	11	5-42

Source: Directorate General of Steel, Engines and Electronics Industry.

Universal components can be used for all brands, while in-house components can only be used for specific brands. Instead of producing universal components, the Indonesian components industry tended to produce in-house or in-group components, resulting in vertical interfirm linkages and subcontracting networks. The proliferation of this type of components industry was not only a result of government policy, but was driven by foreign investment preferences, because any decision by an assembly car producer to invest in the domestic components industry was subject to the approval of the foreign principals.

The pattern of development in the Indonesian components industry suggests that trade protection in this sector was initially triggered by a nationalist ambition to develop a strong components industry. This subsequently attracted rent-seekers to reap the rents from trade protection.

8.3.3 Trade protection

Trade protection estimates for ERP and NRP are available for 1971, 1975, 1987, 1989 and 1995, whereas the estimates of the NTB coverage of gross output are only available for 1986 and 1995. Although these estimates are not directly comparable, owing to the different methods of estimation (see Chapter 5), they still provide a reasonable guide to protection in the Indonesian automotive industry. Table 8.5 shows that the automotive industry continued to receive high protection up to 1995. To gain more insight into trade protection in the automotive industry, it is worth comparing the ERP in this industry with average non-oil manufacturing in general. Fane and Condon (1996) show that for 1987 and 1995 the average ERP of overall non-oil manufacturing was 21% and 6%, respectively. These figures suggest that the ERP in the automotive industry was not only very high when compared with the manufacturing sector in general, but did not drop substantially after the mid 1980s. Trade reform did not significantly affect the automotive industry.

While Table 8.5 shows that the 1990s trade reform did eventually reduce the NTB coverage of gross output for the automotive industry, from 97% in 1987 to 0% in 1995,

this did not occur until 8 years after the first trade reform in 1985. And, despite this trend, the ERP in 1995 was still at 600%. The reason for this could be in the limitations of the Fane and Condon (1996) method in incorporating the effect of NTBs. As discussed in Chapter 5, the ERP and NRP estimates are subject to the reliability of the price comparisons.

Table 8.5: Trade protection in the automotive industry, 1975-1995

Trade protection	1971	1975*)	1987	1989	1995
Effective rate of protection (ERP)	525.7	717.7	600	600	600
Nominal rate of protection (NRP)	110	80	75	79	94
% NTB coverage of Gross Output			97.4*)		0

Source: 1971 : Pitt (1981: 208-9)

1975 : World Bank (1981:10-17).

1987: Fane and Phillips (1991: 123-5).

1995: Fane and Condon (1996:45-49).

Notes: These series are generally not directly comparable (see discussion in Chapter 5), except where the same author (Pitt/World Bank) or methodology (Fane and Phillips/Wymenga/ Fane and Condon) is involved

Detailed NRP calculations for the Indonesian automotive industry provided by Fane and Phillips (1987) and Fane and Condon (1996) are presented in Table 8.6. They estimated these figures by incorporating the effect of tariffs and licensing for the automotive assembly industry, and the effect of the local content scheme under the deletion lists prior to 1993. These figures provide a detailed guide to protection levels in the Indonesian automotive industry. They show that assembly was more protected than components in 1987, with 44% of the total automotive industry's NRP (75%) contributed by assembly. In addition, the contribution to the assembly industry's NRP for passenger cars (30.5%) was higher than for other cars assembled (general purpose cars and commercial cars). The highest contribution to the component industry's NRP was passenger cars (34%). These figures are consistent with the fact that passenger cars were more protected than commercial and general purpose cars (see Section 8.3.1). However, there was evidence that the NRP of the automotive industry increased to 94% in 1995. As can be seen from Table 8.6, 50% of the NRP is attributable to the components industry. However, as can also be seen from Table 8.5 this increase in the automotive industry's NRP in 1995

to be interpreted with caution, because the NTB coverage of gross output in 1995 was 0%.

Table 8.6: NRP for the automotive industry, 1987 and 1995

Year	Sector	Value Output Rp.mn. (2)	Nominal rate (%) (3)	Deflated Value Rp.million (4)	Contribution weight (%) (5)	Contribution to NRP (%) (6)	
1987	Motor vehicle						
	Passenger cars General Purpose	147,708	100	73,854	30.5	30.5	
	Cars Commercial	47,754	100	23,877	9.9	9.9	
	Vehicles	23,951	60	14,969.4	6.2	3.7	
	Passenger car parts	123,681	50	82,454	34.0	17.0	
	Passenger car bodies	41,494	100	20,747	8.6	8.6	
	Passenger car body component	19,423	50	12,949	5.3	2.7	
	Motor vehicle engines	4,324	60	2,703	1.1	0.7	
	Leaf spring	10,541	50	7,027	2.9	1.5	
	Oil cushions	5,478	50	3,652	1.5	0.8	
	Total	424,354		242,232	100	75	
	1995	Motor vehicle					
		Passenger cars General Purpose	147,708	100	73,854	30.5	30.5
Cars Commercial		47,754	100	23,877	9.9	9.9	
Vehicles		23,951	30	149,69.4	6.2	3.7	
Passenger car parts		123,681	100	61,840.5	34.00	34.0	
Passenger car bodies		41,494	100	20,747	8.60	8.6	
Passenger car body component		19,423	100	9,711.5	5.30	5.3	
Motor vehicle engines		4,324	40	3,088.6	1.10	0.4	
Leaf spring		10,541	40	7,529.3	2.90	1.2	
Oil cushions		5,478	40	3,912.9	1.50	0.6	
Total		424,354		219,530	100	94	

Source: Fane and Phillips (1987:95), Fane and Condon (1996, appendix, pp.26)

Notes: Contribution weights for 1995 are taken from contribution weights in 1987.

(4) is calculated as $(2) / [(100 + (3)) / 100]$

(5) is share of deflated value of each sub-industry (4) divided by total

(6) is calculated as $((5) * (2)) / 100$, where the NRP total is sum of these.

Industry NRP are in bold, figures are rounded into 0 decimal.

For detailed methods of calculation see Chapter 5.

In order to complement the above trade protection estimates, this study attempts to provide some comparative costs "guesstimates" for automobile production between Indonesia and other countries. These "guesstimates" are also subject to problem of a lack of an exact breakdown costs figures (which are almost impossible to obtain). According to Adirizal Sini from PT Astra, in the year 2000 the ex-factory price in Indonesia was about 1.2-1.3 times higher than the ex-factory price in Japan for a similar Toyota Corolla car. According to Jusmaliani and Ruky (1993), the comparative cost in 1993 for producing the Kijang in Indonesia and the Daihatsu in Malaysia was about 1.3 times higher (ex-factory price). As there are no costs figure available for Sini's estimate, it is preferable to focus on Jusmaliani and Ruky's (1993) estimates, which show that the major reason for the higher ex-factory price in Indonesia was the local components cost which were 2.1 times higher than in Malaysia.

There are no official figures available to show how much of the increase in the domestic components price was due to Indonesia's local content scheme. As pointed by Witoelar (1983), the primary complaint from producers was that the local content scheme raised the price of cars. The figure quoted by assemblers (final producers) in 1977 showed this increase varied between 12 to 25% (Witoelar, 1983). Owing to the lack of exact breakdown costs this cannot be verified, although a report from PT Garmak gives some hints as to the cost comparison between local and imported components for 1981. Table 8.7 presents this comparison and shows that, with the exception of rubber parts, all domestically produced components were more expensive than imported components.

To summarise, right up to 1995, the level of protection in automotive industry was far higher than for the manufacturing sector in general. In addition, the automotive industry remained untouched by the trade reform of the mid 1980s. This will be looked at in Section 8.5 in more closely.

⁴ Interview with Adirizal Sini (1 March, 2000).

Table 8.7: Cost comparison between local components and import components, 1981

Components	Local Price (Rp)	Import Price (in Yen)	Import price in Rp.
Shock absorber	8390	2,000	6,200
Leaf spring	60,000	7,600	23,560
Radiator	60,000	7,900	24,490
Wheel Rim	78,000	6,200	19,220
Fuel Tank	50,000	2,900	8,990
Glasses	60,000	6,200	19,220
Rubber Parts	13,150	12,100	37,510
Plastic Parts	46,350	-	-
Exhaust System	25,150	2,600	8,060
Seats	100,000	4,000	12,400

Source: PT Garmak, confidential report.
Yen 1= Rp 3.10

8.3.4 Factor proportions and concentration ratio

Table 8.8 shows the factor proportion in the assembly and components industries. The ratio of value added to employment (expressed as a percentage of the total non-oil manufacturing industry) was 1.16 higher than the industry average. This ratio increased to 9.0 in 1995, indicating that --in approximate terms -- the capital intensity of the assembly industry was almost 8 times higher than for the average non-oil manufacturing industry. The components industry also experienced capital deepening (the ratio increased from 1.24 to 2.07 in 1995). However, as noted, in 1975 the ratio of value added per employee in the components industry in 1975 (expressed as a percentage of non oil manufacturing) was higher than that of the assembly industry. This indicates that, although components experienced capital deepening, it was smaller than in the assembly industry.

Table 8.8 also shows that relative wages declined steadily between 1975 and 1995. Aswicahyono, Basri and Hill (2000) argue that this was probably a result of the increasing share of the more labour-intensive components sector.

Table 8.8: Factor proportions in the automotive industry, 1975-95

Year	Value added/ employment		Wages/employment ^{*)}
	Assembly	Components	
1975	116	124	208
1985	212	192	204
1990	947	262	200
1995	900	207	159

Note: The data are ratios, expressed as a percentage of that for all non-oil manufacturing. The wage/employment data are a weighted average of the assembly and components sectors. 1996 data for wage/employment refer to 1995.

^{*)} The data are weighted average of the assembly and components sectors.

Source: Aswicahyono, Basri and Hill (2000) and Aswicahyono, Anas and Rizal (1999).

The Indonesian automotive industry is known as a highly concentrated industry. From 1975, the concentration ratio (CR4) remained above 80% and had increased to more than 90% by 1996 (Table 8.9). On the other hand, the concentration ratio for the components industry was relatively low, because the structure of production in the components industry was more diverse and there were more firms.

Table 8.9: Concentration in the automotive industry (CR4s)

Year	Assembly	Components
1975	85	57
1980	81	61
1985	81	45
1990	83	61
1996	92	58

Note: The data refer to CR4s, i.e., the value added of the four largest firms as a percentage of the industry total.

Source: Aswicahyono, Basri and Hill (2000).

8.3.5 Market fragmentation

The automotive industry was hampered in achieving efficiency because of its extreme fragmentation, particularly for sedans. This was a direct result of the impact of government policy from the 1970s. Shauki (1999) argues that the government implemented the deletion program and imposed high trade protection in 1976, with the expectation that foreign firms would appoint a sole national agency. However, this proved not to be the case, and most of the eventual active establishments in the automotive industry were traders (importers) with very little experience in manufacturing or car assembly. While government policies forced importers to become manufacturers,

only the larger traders were able to make the switch, and this was mainly dependent on capital not technical expertise. By 1972, this policy had created 20 groups consisting of 59 assemblers and sole agents. Hill (1984) points out that, in 1983, when production was about 155,000 units, there were more than 40 assemblers associated with foreign firms from 12 countries, producing some 50 makes and 140 models. It is clearly apparent that this was excessive for a country with a market size of less than 300,000 units (de Montfort, 1991), and most could not survive.

In order to weed out inefficient producers, sole agents and assemblers were prohibited from transferring their licence to other parties. However, rather than shut down their assembly plants or companies, either the licence or the assembly plant itself, was sold to other parties. As a result, although declining in terms of ownership, the number of sole agents and assemblers did not diminish (Shauki, 1999).

By 1995, there were 15 assemblers and 22 sole agents. Despite their positions as independent entities, many were owned by only a few business conglomerates. For instance, Astra Group, the largest automotive producer, owned the sole agency for assembly of more than five makes (Shauki, 1999).

In the commercial car sector, the number of brands was relatively limited. For example, for each vehicle category I-III in 1990 there were five brands, while for category IV there were six brands, and for category V there was one. The government's attempt to reduce the number of brands was unsuccessful, due to the conflict of interest amongst government bodies as well as the strong influence of powerful businessmen eager to resist liberalisation (LPEM, 1993)⁵.

⁵ This information was also obtained from interviews with Suhari Sargo, 20 October, 1998 and 4 November, 1998.

8.3.6 International dimensions

As noted, the automotive industry in Indonesia is still in its infancy. Due to the various government interventions and continuing high trade protection some have labeled the Indonesian automotive industry as a 'permanent infant' industry.

Table 8.10 shows the share of imports in total intermediate inputs, in 1980-1995. For the components industry, the share was about 88% in 1980, and 89% in 1995. Parallel with the government regulation to protect the automotive industry, the share of imported intermediate inputs declined from 81% in 1980 to 30% in 1995,

Aswicahyono, Basri and Hill (2000) argue that components firms have not been subjected to the same pressure for local content as assemblers, so that their imported inputs share remained high and over time shifted into technologically more demanding products.

Table 8.10: Share of imported intermediate inputs (%)

Year	Components	Assembly
1980	88	81
1985	74	66
1990	82	48
1995	89	30

Note: Imported intermediate inputs as a share of total intermediate inputs.
Source: Aswicahyono, Basri and Hill (2000).

8.4 Major players and ownerships in the automotive industry

8.4.1 Government agencies

To achieve the development of the strong automotive industry in Indonesia the government intervened through the various regulations (see Section 8.3.1). Unfortunately, instead of creating a strong automotive industry, their intervention strategy attracted rent-seeking activities. As a result, the government-business relationship developed along the line of a complex patrimonial basis, which benefited both the client businesses and government officers. In addition, the government also

benefited from the various import duties and tax revenues, including the luxury tax and value added tax.

Prior to 1972, policy formulation for the automotive industry was under the control of both the Department of Trade and the Department of Industry.⁶ From 1972 to 1978, the automotive industry was under the full authority of the Department of Industry, and, in particular, the Directorate General of Basic Industries within that department. Chalmers (1996) points out that from 1972 to 1978 at least 21 decrees promoting local manufacturing were issued by the Ministry of Industry on the urging of the Directorate of Basic Industries. However, the formal responsibility for the industry became more fragmented by the end of 1970s, as two ministers took a strong interest in promoting automotive industry. They were Ir. A.R. Soehoed (Minister of Industry 1978-1983) and Dr. B.J. Habibie (Minister of Research and Technology, 1978-1998).

In April 1978, Habibie was appointed as Minister of Research and Technology, and at the same year he established the BPPT (The Agency for the assessment and application of technology).⁷ From 1978, both the Department of Industry and the BPPT were influential in the policy formulation process of the Indonesian automotive industry. This dispersion of authority, however, did not reduce the drive for promoting domestic automotive industry (Chalmers, 1996), while various government interventions and trade protection continued to prevail up to 1990s. The reason is obvious, both Soehoed and Habibie were supporters of government intervention and trade protection (see section 4.3 in Chapter 4).

To sum up, although there were various government agencies responsible for the policy formulation in the automotive industry, they tended to agree in developing a strong domestic automotive industry in Indonesia.

⁶ These two departments were merged into the Department of Industry and Trade in 1995.

⁷ For a detailed account of the BPPT, see Bishry and Hidayat (1998).

8.4.2 Patrimonialist owners and professionals

Discussion about major owners or local partners in Indonesia cannot be separated from patrimonialism or rent seeking activities. Since the 1950s, Indonesia's automotive industry has been influenced by patrimonialism and this prevailed until the end of the 1980s.⁸ The major business players who rose to prominence after the 1960s owed their initial business opportunities to these patrimonial ties. While this was particularly true during the 1970s and 1980s, as these first generation owners began to resign at the end of the 1980s, they were replaced by some professional managers, leading to the role of professionals becoming increasingly important during the 1990s.⁹ Even so, Soeharto family business interests entered the automotive industry during this period and Tommy Soeharto's company (Timor Putra Nasional (TPN)) was appointed to implement the national car policy program in 1996.

Considering this dynamic of change, this study now divides the pattern of ownership into two periods, the 1970-1980s and the 1990s.

8.4.2.1 Ownership in the 1970's and 1980s

In the early 1970s, several newcomers who had a close relationship with the military and the bureaucracy entered the automotive industry, including, PT Garuda Mataram, PT Krama Yudha and PT Astra International (hereafter Astra).

In 1971, PT Garuda Mataram succeeded in securing the licence for Volkswagen (VW). According to Chalmers (1996), its success should be attributed to the objective of the TNC German auto VW to seek a more capable and better-connected local agent. After direct negotiations with Soeharto, the agency was handed over from PT Piola to PT Garuda Mataram (owned by the military patronage business Yayasan Dharma Putra Kostrad).

⁸ For a detailed explanation about patrimonialist patronage, see Chalmers (1996).

⁹ Interviews with Suhari Sargo (20 October, 1998 and 4 November, 1998), Herman Latief (26 January, 1999 and 1 March 2000) and Adirizal Sini (1 March, 2000).

Another newcomer was Astra, owned by William Soeryadjaya, who was known to have ties with some military generals, including General Soerjo and also with Sumitro Djojohadikusumo. In addition, Robison (1977) identified William Soeryadjaya as one of the closest businessmen around Ibnu Sutowo (the first Presiden Director of *Pertamina*). This observation is supported by Yoon (1989) who describes the close relationship between William and Ibnu Sutowo in the early 1970s.

By the end of the 1960s, Astra had formed a good alliance with the bureaucracy, particularly with Ir. Suhartoyo, the Director General of Basic Industries and Chairman of the Board of the PN Gaya Motor. In 1969, Astra took over the majority share of PN Gaya Motor and converted this State owned company into PT Gaya Motor with Suhartoyo as Chairman of the Board.

At that time, Toyota was keen to expand its licence in Indonesia and approached Suhartoyo. As a result, PT Gaya Motor became the starting point for Astra link with Toyota. In 1971, PT Toyota Astra Motor was formed, with Toyota holding 48%, Astra 36% and PT Gaya Motor 15% (Chalmers, 1996). Suhartoyo was made Chairman of the Board for this new company, and one of the members of the Board of Directors was Moedahar from the Directorate General of Basic Industries.

The other important player in the 1970s was General Ibnu Sutowo. In 1970, his company, PT Star Motors, succeeded in securing the licence for Mercedes (Chalmers, 1996). At the same time, Mitsubishi was looking for a local partner in Indonesia. There was competition among several Indonesian businessmen, including Haejim Ning, to win this agency. However, considering the *Pertamina* connection offered better prospects, Mitsubishi approached General Ibnu Sutowo in 1970 (Chalmers, 1996). In 1971, General Sutowo, and his personal assistant Sjarnubi Said, established PT Krama Yudha, which secured the licence for Mitsubishi in 1972.

There were several other players, including Wahab Affan (indigenous businessman), Probosutedjo (Soeharto's half brother) and Liem Sioe Liong (conglomerate and one of

Soeharto's crony). In 1969, through his company Indokaya, Wahab Affan succeeded in securing the licence for Nissan. His success was reportedly due to the personal intervention of General Soedjono Hoemardhani (Chalmers, 1996).

In 1972, together with Astra, Probosutedjo held the licence for Renault and Peugeot (Chalmers, 1996), while in 1973 Liem Sioe Liong won the licence for Volvo and established PT Ismac, a joint company with the Jakarta regional government. Later in 1979, Probosutedjo owned PT Garmak Motor and Liem owned PT Indomobil. Table 8.11 shows the structure of ownership in the Indonesian automotive industry from the early 1970s to 1984.

Table 8.11: The structure of ownership, 1970s-1980s

YEAR	BRANDS			
	FIAT	BMW	HINO	MAZDA
Before 1970	NV Fiat Java (Ning and Dasaad)	PT Tjahaja Sakti (Ning and Yasin)	PT National Motor (Ning and Lubis)	PT National Motor (Ning and Lubis)
1973	PT Daha (Ning)			
1984		Astra	PT National Motor (60% Lien Sioe Liong)	PT National Motor (60% Liem Sioe Liong)
	TOYOTA	MITSUBISHI	CITROEN	HONDA
Before 1970	PT Daswa Motors (Yasin)	PT New Marwa Motors (Sutowo, Sjarnubi and Suwarma)	PT Alun (Tan Kiern Seng)	
1970		PT Krama Yudha (Sutowo and Sjarnubi)		Imora (Ang Kang Ho)
1971	Government /Astra (Toyota Astra Motor)			
1973				PT Prospect Motor (99% PT Imora Motor)
1980		Sjarnubi		

YEAR	BRANDS			
	SUZUKI	VOLVO	DAIHATSU	PEUGEOT
Before 1970	PT Azeyma Motor	NV Benua (Des Alwi)		PN Pembangunan (State owned company)
1971	PT Indonesia Motor Company (SOE)			
1972		PT Central Sole Agency (Liem Sioe Liong)		PT Multi France (Astra and Probosutedjo)
1973			PT Astra International	
1976	Indomobil Utama (Atang Latief)			
1982	Indomobil Utama (Liem Sioe Liong)			
YEAR	NISSAN (Datsun)	NISSAN UD	MERCEDES-BENZ	VOLKSWAGEN
Before 1970	PT Indokaya (Affan)	PT Indokaya (Affan)	PT Star Motors (Sutowo and Jusuf Gading)	PT Piola (Pangabebean)
1971		PT Imer UD (Koerwet)		PT Garuda Mataram (Kostrad)
1981	PT Wahana Wirawan (Pepabri)			
1982	PT Wahana Wirawan (Pepabri)		Jusuf Gading	
1984	Liem Sioe Liong			

Source: Chalmers, 1996, Appendix 4.

Notes: Names and figures in bracket denotes name of owners and, when information is available, their ownerships share.

SOE: State owned enterprise.

8.4.2.2 Ownership in the 1990's and the professionals

While the structure of ownership did not change markedly during the 1990s, and Astra, Indo Mobil, Krama Yudha and Imora were still the major players, there was an important development in the increasing role of professionals. As noted, professionals replaced

many of the first generation owners who resigned at the end of 1980's. This new group of professional managers realised trade liberalisation was inevitable, so that there was a need to increase efficiency by integrating the Indonesian industry into the world market. They argued that government policy in the automotive industry needed to be adjusted parallel with the dynamic change of economic strategy towards export orientation. There is evidence that for some components products, such as brakes, tyres, chassis and batteries Indonesia began to achieve international competitiveness. This motivated the professional managers to support trade reform.

The embryo of this group emerged after the mid 1980s, when they began to organise regular meetings to develop an industrial vision for Indonesia's automotive industry.¹⁰ Some of the major figures included Herman Latief from Krama Yudha (later chairman of GAIKINDO in 1991-1998), Adirizal Sini (Astra), Bambang Trisulo (Astra), Subronto Laras (Indomobi!) and Suhari Sargo.

Due to the economic liberalisation, interest groups began to emerge in the automotive industry after the mid 1980s, and particularly in the 1990s, leading to a more diverse policy input. One group with an influence on policy input was GAIKINDO. Unlike the patrimonialists, policy input from GAIKINDO was dominated by these professional managers and tended to support trade reform (Chalmers, 2000). In 1992, these professional managers in GAIKINDO formulated a detailed proposal for the 1993 automotive deregulation. The issue of why there was pressure for trade reform in the 1990s will be discussed in Section 8.5.

This emerging role for professionals did not entirely replace the patrimonialism pattern, as evidenced by several newcomers to the industry. Through his company Bimantara, Bambang Trihatmodjo, the second son of Soeharto, took over the licences for Mercedes-Benz and Hyundai. The last entrant was Kia-Timor Motors (owned by Tommy Soeharto)

¹⁰ Interviews with Suhari Sargo (20 October, 1998 and 4 November, 1998), Herman Latief (26 January, 1999 and 1 March 2000) and Adirizal Sini (1 March, 2000).

which held the licence for the national car. Table 8.12 presents data on the major automotive manufacturers in Indonesia in the 1990s.

Table 8.12: Major automobile manufacturers in Indonesia in the 1990s

Local capital	Local manufacturer	Joint venture	Contract ^a
	Toyota-Astra Motor	Toyota (49 %)	-
	Gaya Motor (GM)	-	Daihatsu, Isuzu, Nissan Diesel, BMW, Ford, Peugeot
	Pantja Motor	-	Isuzu, Nissan Diesel
Astra Group	Indomobil Suzuki International	Suzuki (49 %)	-
	National Assemblers	-	Mazda, Volvo, Nissan, Chrysler
	GM Buana Indonesia	GM (60 %)	Mazda, Hino
Krama Yudha Group	Krama Yudha Kesuma Motors	-	Mitsubishi
	Krama Yudha Ratu Motor	-	Mitsubishi
Imora Group	Prospect Motor	-	Honda
Bimantara Group	German Motor Manufacturing.	Mercedes Benz (33.5 %)	-
	Tricitra Karya	-	Hyundai
Starsauto	Starsauto Dinamika	-	Daewoo
Humpuss	Kia-Timor Motors	Kia (35 %)	-

Notes: ^a Contract meant local firm is licensed to produce, to the foreign firm's specifications.

1. The figures in parentheses after foreign-affiliated joint ventures represent equity stakes.

2. The years in recent activities are the years in which production commences

Source: Aswicahyono, Anas and Rizal, 1999

8.4.3 The TNCs (Trans national companies) or principals

Other major players are the principals (major overseas firms) or auto TNCs. Auto TNCs, particularly, the Japanese, have always dominated both components and assembly.

However, their equity share in part depended on whether they entered the industry during the relatively liberal era before the *Malari* affair in 1974, or after foreign investment deregulation of 1994 (Aswicahyono, Basri and Hill, 2000). The three major players in the assembly and components industry have always been jointly owned by the Japanese companies, i.e., Toyota, Mitsubishi and Suzuki.

As a major foreign investor, the Japanese companies played an important role in influencing trade policy and trade protection in the Indonesian automotive industry.¹¹ One example is the case of resistance to the deletion program in 1977-78. In 1977, the Japanese auto TNCs protested the schedule for the later years (Chalmers, 1996). The reason was because some of the local components were monopolised by particular companies. The Japanese TNCs, in particular rejected the deletion program for wheel rims, shock-absorbers, cabin and exhaust systems for the year of 1978, because some of these products were produced only by a maximum of two factories. In addition, wheel rims and exhaust systems were monopolised by one company and were subsidiaries of PT Udatin (owned by Eman). Furthermore, Astra protested that the "forced deletion" program would create monopoly for its rival PT Udatin and asked for postpone the schedule. By the end of 1977 it was quite clear that schedule for the following years could not be met by the industry because the major local firm decided not to use local components (Chalmers, 1996). As a response to these reactions and also the difficulties of the components industry to achieve its economic scale, the government briefly suspended the deletion program in November 1978, and in November 1979 it was reapplied with less ambitious targets.

8.4.4 The business associations

One of the leading business associations in the Indonesian automotive industry in the 1970s was GAAKINDO (The Association of Indonesian Automobile Assemblers). This association developed from a merger between GAKINDO (the automobile sole agent association) and GAM (the automobile assembler association), both established in 1969.

¹¹ This argument can be contrasted with the fact that Japanese investments are also sizeable in the textiles industry, yet their pressure for trade protection is relatively low, owing to the fact that textiles has been export oriented industry, particularly since the 1980s.

GAAKINDO's objective was to coordinate the relationship between assemblers and agents, and to represent the industry's view to government. However, Chalmers (1996) points out that while GAAKINDO was successful in coordinating the relationship between agents and assemblers, it was unable to establish a common industry position due to the superior influence of the strong patrimonial ties in the automotive industry.¹²

In 1985, GAAKINDO changed its name to GAIKINDO, and by the end of the 1980s, its role as a source of policy input had become increasingly important. This can be attributed to at least three factors. First, the structural change that had resulted in a greater reliance on the private sector, made GAIKINDO increasingly important. Second GAIKINDO had come under the control of professionals. Third, by the end of the 1980s, GAIKINDO had developed a close relationship with the Japanese principals.¹³

The other important business association is GIAMM (The Association of automotive components manufacturer) established in 1973. As Chalmers (1996) points out, unlike GAAKINDO, GIAMM had a stronger interest in local manufacture and tended to be more nationalist. This nationalist stance was stronger in the 1970s and 1980s when the government imposed the deletion program. However, as the export of components increased significantly in the 1990s it has become less nationalistic.

8.4.5 The multilateral institutions

The other important players in influencing trade protection in Indonesia are the WTO, APEC and AFTA. The role of multilateral institutions became increasingly important after Indonesia committed to implementing trade liberalisation under the AFTA, WTO and APEC framework. One of Indonesia's commitments to AFTA and APEC was the May 1995 trade deregulation, which substantially reduced tariffs, including those in the automotive industry. Prior to 1995, the Indonesian automotive industry was a closed sector, and the May 1995 package liberalised investment for the production of new cars

¹² Interviews with Herman Latief (26 January, 1999 and 1 March, 2000) supported Chalmers (1996) argument.

¹³ Interview with Suhari Sargo (20 October, 1998).

in this industry. The government has also set a target for a lower import duty in 2003. A maximum import duty of 40% will be imposed on imports of built up cars with a maximum import duty of 25% and 15%, respectively, on imports of CKD and components (Aswicahyono, Anas and Rizal, 1999). This trade deregulation initiative mainly came about as a result of Indonesia's commitment to AFTA.

As discussed in Section 8.3, May 1995 was regarded as the starting point for trade liberalisation in the Indonesian automotive industry, indicating that during the 1990s trade protection in Indonesia began to be constrained by free trade agreements.

8.5 The determinants of trade protection in the automotive industry

As discussed, the Indonesian automotive industry continued to enjoy high levels of trade protection. In analysing this, it is necessary to understand both the political and industry characteristics of the automotive industry compared with the rest of the manufacturing sector, and the dynamics of political economy factors over time.

8.5.1 Inter-industry comparison

Owing to the to the lack of data and the limitation of the quantitative model as noted in the Section 8.1, this study cannot employ the econometric models to explain the pattern of protection in the Indonesian automotive industry. Instead, the focus will be on a qualitative analysis of the relationship between the automotive industry's characteristics and trade protection using the hypotheses in Chapter 7 for both the interest group variant model and the national policy model.

The relationship can be developed as follows:

$$TP = f(\underset{+}{VAWORK}, \underset{+}{AVGSZ}, \underset{+}{CR4}, \underset{-}{NFIRM}, \underset{-}{EXP}, \underset{+}{IMP}, \underset{+/-}{AWPE}, \underset{+/-}{SHFV}, \underset{+}{rent-seekers})$$

Where: $TP = (TP_A / \bar{TP})$ is the ratio of trade protection (ERP, NRP and NTB) in the automotive industry to the average protection in all non-oil manufacturing, where

TP_A = trade protection (ERP, NRP, NTB) in the automotive industry

\bar{X}_i = average trade protection in the non-oil manufacturing

The ratios for the explanatory variable can be written as:

$$X_{ia} / \bar{X}_i$$

Where X_{ia} is the explanatory variables explaining the pattern of protection in the automotive industry (VAWORK, AVGSZ, CR4, NFIRM, EXP, DD, AWPE, SHFV)

\bar{X}_i = the average of all non-oil manufacturing for the same variable as X_{ia}

A ratio greater than 1 indicates that the particular variable is greater in the automotive industry than in the average non-oil manufacturing.

Table 8.13 shows that while protection in the automotive industry was generally four times higher than the industry average in 1975, there were some variables, such as capital intensity (VAWORK), and DD, that were similar to those in the manufacturing industry as a whole. These results are contrary to the interest group variant model hypothesis, which predicts that industries with high VAWORK and DD tend to be more protected.

However, all other variables, such AVGSZ, AWPE, CR4, EXP and NFIRM, are consistent with the interest group variant model hypotheses, which predicts that industries with a high concentration ratio, high average wage, large size, low export and small number of firms tend to be more protected. In addition, the variables AWPE and DD are consistent with the national policy model hypothesis. These results provide moderate support for both the interest group variant model and the national policy model, which argue that government tends to protect industry with both high domestic demand and high average wages.

For 1987 and 1995, both models provide strong support for the hypothesis that an industry with characteristics, such as high VAWORK, high CR4, low NFIRM and low EXP tends to have high levels of protection.

The other important explanatory variable in elucidating the pattern of protection in both the automotive and other industry is the role of rent seekers. The results in Table 8.13 support the argument that trade protection in the Indonesian automotive industry was not simply random in nature. This finding is consistent with Aswicahyono, Basri and Hill (2000) who conclude that both the national policy and the interest group variant model are relevant to understanding the nature and extent of protection.

Table 8.13: Trade protection and the automotive industry's characteristics

Dependent variables	Expected Sign	1975		1987		1995	
		Ratio	Category	Ratio	Category	Ratio	Category
ERP		4.5	High	2.4	High	11.3	High
NRP		2.3	High	2.8	High	10.1	High
NTB*)		n.a.		1.8	High	0	Low
Explanatory variables							
Capital Intensity (VAWORK)	+	1.1	Average	2.0	High	5.9	High
Size (AVGSZ)	+	2.5	High	2.7	High	1.9	High
Concentration ratio (CR4)	+	1.6	High	1.7	High	1.8	High
Number of Firm (NFIRM)	-	0.3	Low	0.1	Low	0.1	Low
Share export to total output (EXP)	-	0.01	Low	0.01	Low	0.2	Low
Average Wages (AWPE)	+/-	2.1	High	2.02	High	1.6	High
Ratio domestic demand to total output (DD)	+	1.3	High	1.6	High	1.7	High
Foreign Ownership (SHFV)	+/-	0.6	Low	1.7	High	2.1	High
Rent Seekers/Patrimonialists	+		Strong		Strong		Strong

Calculated from Statistik Industri, various years and Input-Output table, various years, BPS.

Note: *) NTBs in 1987 refers to NTBs 1986.

- a) Ratio is expressed as ratio of automotive industry over average non-oil manufacturing industry. If ratio is greater than 1, meaning that the particular variable in the automotive industry is greater than the average non-oil manufacturing industry.
- b) Average industry is calculated using simple average methods.

8.5.2 Causality between rent seekers and trade protection

As mentioned in Section 8.5.1, the role of the rent seekers is an important explanatory variable. This section attempts to observe the causality between trade protection and rent seekers.

As discussed in Section 8.3, by the late 1960s a new consensus had emerged inside the bureaucracy to develop the domestic automotive industry through giving protection to

national assemblers. One of the main reasons for this was the shortage of domestic **production** to meet demand.¹⁴ Hansen (1971) shows that the Indonesian automotive **industry** was meeting less than a quarter of the domestic demand, with average **production** from 1963-1968 of around 2,000 units per year, and imports for the same **period** around 10,000 units. From the Indonesian government's viewpoint, the **automotive** industry was a strategic industry which not only contributed to economic **growth** and employment, but would also introduce the country to high technology (Shauki, 1999). The government also argued that development of the domestic **automotive** industry could be justified in order to save foreign exchange reserves. Interestingly, a similar argument could be found in most ASEAN countries at that time (Chalmers, 1996). Thus, the "nationalist ambition" to develop a strong automotive **industry** was not unique to Indonesia. In fact, the argument that developing a strong **domestic** automotive industry can save foreign exchange reserves is not entirely **plausible**, at least in the longer term. This strategy most often results in an inefficient **industry**, uneconomic production runs and very small exports (Aswicahyono, Basri and Hill, 2000).

By the end of the 1960s the Indonesian government realised the industry was dominated by the **auto-TNC** companies. Therefore, success in developing in the industry was mainly **determined** by the government's success in persuading the auto-TNC's to cooperate. Shauki (1999) argues that, while the auto-TNC's were interested in investing in Indonesia it was **very** costly for them to invest in a complete production plant in such a relatively **small market**. Moreover, potential political instability in the early Soeharto years made it **more profitable** for them to export to Indonesia than to invest. One of the government **strategies** to reduce domination by the auto-TNC's was the 1969 regulation which required **all** auto-TNCs to appoint a sole agent in Indonesia. Hansen (1971) points out that the **sole** agent had to be an approved importer, and the enterprise owned nationally by **either private** or government entities. Moreover, the sole agent was responsible for **importing cars** in CKD form, assigning assemblers for the CKD units, and distributing

¹⁴ Interview with Sumitro Djojohadikusumo (29 March, 1999).

the cars (Shauki, 1999). As noted, in addition to this regulation, in 1971 the government imposed a ban on the import of CBU.

To understand the background of the "emerging" consensus in developing the Indonesian automotive industry, it is important to discuss the key figures behind the decision making process. Chalmers (1996) points to Sumitro Djojohadikusumo (the Minister of Trade, 1968-1973) and Mohamad Jusuf (the Minister of Industry 1968-1978) in particular. It was not surprising that Sumitro shared some sympathy for government intervention, because he was known as one of the architects of the protectionist *politik benteng* in the 1950s.¹⁵ Sumitro defined *politik benteng* as socioeconomic protection for indigenous Indonesians rather than industrial protection.¹⁶ He stated that, unlike "the Berkeley mafia" (a phrase for the technocrats), he considered government intervention or trade protection could be justified as long as it served the peoples' interests. In addition, he argued:

"If people say the market is more efficient than State intervention, I would like to ask, 'who controls the market?' We need government intervention or protection to balance the level playing field, so in that respect I agree to a certain degree with the national policy mode!"¹⁷

This statement provides insight into Sumitro's view of the importance of government intervention in the Indonesian economy in general, as highlighted by his 1968 measure to prohibit the import of particular luxury cars (Section 8.3). Nevertheless, it is worth noting that it is a mistake to classify Sumitro as a supporter for economic nationalism or patrimonialism because he also acknowledged the importance of the market approach and the global economy for Indonesian development. Later in the mid 1980s, he also shared more sympathy for the market economy approach. Nevertheless, Sumitro's

¹⁵ A policy which gave import licences to particular importers. To be eligible for these licence importers had to qualify for a minimum level of working capital and at least 70% of this had to be indigenous Indonesian (Pitt, 1991).

¹⁶ Interview with Sumitro Djojohadikusumo (29 March, 1999).

¹⁷ Interview with Sumitro Djojohadikusumo (29 March, 1999).

support for the development of the automotive industry was grounded on the commitment to protect national business.

Jusuf shared Sumitro's views on development of the automotive industry. However, as pointed out by Chalmers (1996), Jusuf was more passive in designing policy formulation for the Indonesian automotive industry, and allowed Suhartoyo, the Director General of Basic Industries, a relatively free hand. Suhartoyo was known as one of the proponents of the local content program, and, later in 1974, supported the import ban on CBU.

Thus, considering the views of Sumitro, Jusuf and Suhartoyo, it was predictable the strategy for developing the Indonesian automotive industry in the early 1970s would emphasise trade protection and government intervention. In addition, trade protection and various government regulations in the automotive industry should be understood as part of the import substitution strategy adopted by government from the 1970s through to the mid 1980s (see Chapter 3).

Nevertheless, State intervention was not the only determinant of trade protection in the Indonesian automotive industry. The government's measures to protect the industry attracted rent-seekers. As discussed earlier, all of the companies appointed as sole agents, that later became assemblers, had close links with high level government officers.

Although, there were some indications that selected assemblers had close ties with high level government officers, it is difficult to verify whether the appointment of some major domestic business groups as sole agent was based on rational economic criterion (such as technological skill and the capital to develop the industry), or whether it was due to patrimonialist ties. For example, Sumitro argued that selection of the sole agent was based on rational economic criteria, such as the company's potential capability for developing the industry. He pointed out that Astra was one of the most competent companies to be appointed sole agent at that time.¹⁸ Sumitro's argument that Astra was the most efficient assembler company in Indonesia in the late 1960s is supported by

¹⁸ Interview with Sumitro Djojohadikusumo (29 March, 1999).

Chalmers (1996). Nevertheless, it is also hard to deny that Astra was known to have very close ties with the Department of Industry, particularly Suhartoyo.¹⁹ A similar situation applied with PT Garuda Mataram, PT Krama Yudha, PT Star Motors and PT Indokaya, in the early 1970s, and PT Indomobil and PT Garmak in the late 1970s.

Therefore, the nationalist ambition to develop a strong domestic automotive industry attracted private domestic companies seeking to be nominated as sole agent. Most of these companies were owned by businessmen with ties to bureaucracy. This suggests the causality between trade protection and rent seekers in the early 1970s was in the form of the anticipated trade protection attracting rent-seekers.²⁰ In addition, the relationship between trade protection and rent-seekers has to be seen in the light of the fact that in the early 1970s, the main determinant of trade protection in the automotive industry was neither merely State domination nor pressure from rent-seekers, but the interaction between the two. Chalmers (1996) supports this, arguing that the interaction between rent-seekers and government created the development of the Indonesian automotive industry.

8.5.3 The dynamics of trade protection in the 1990s

Trade protection in the automotive industry remained high until deregulation in the 1990s. This not only generated profits for assemblers, but also provided government revenue from the various taxes and import tariffs. The automotive industry claimed that around 60% of the retail price for sedans went to the government (de Montfort, 1991).²¹ This mutual benefit led to the preservation of trade protection in the industry up until the end of the 1990s.

¹⁹ Interviews with Suhari Sarjo (20 October, 1998 and 4 November 1998).

²⁰ It is worth nothing that a case study on the national car policy, tells quite a different story that will be discussed in greater detail in Section 8.5.3.

²¹ Interviews with Ridwan Gunawan, 29 February 2000 and Adirizal Sini, 1 March 2000 supported de Montfort (1991) argument.

Nevertheless, as previously discussed, pressure for trade liberalisation also grew during the 1990s, not only due to Indonesia's commitments to APEC and AFTA but also to pressure from consumers, and many unprotected sectors. Surprisingly, this trend was supported by some of the key players in the automotive industry including Astra, which was previously known as protectionist. In the case of Astra, this can be attributed to their recognition that trade liberalisation was inevitable. Further, because Astra had captured around 50% of the domestic market, it was confident it would still be relatively competitive even if the government removed the import barriers.²² Pressure for deregulation in the 1990's was also relatively strong because pro-deregulation supporters, such as Herman Latief, Adirizal Sini and others dominated the automotive industry associations.²³

Abrenica (1998) points out that the Japanese auto-TNCs established production networks across the region by introducing Brand-to-Brand Complementation (BBC) in 1988 to take the advantage of various schemes in intra-ASEAN free trade. This scheme enabled the auto-TNCs to exchange parts produced by a subsidiary in one ASEAN country with those produced in another (Abrenica, 1998).²⁴ In addition, this BBC scheme was induced to regionalise the production activities of a number of Japanese auto-TNCs, including Toyota. Although the Indonesian government did not participate in the BBC scheme, the private sector, such as Astra and Krama Yudna responded to this scheme with great enthusiasm (Chalmers, 2000).²⁵ In addition, Chalmers (2000) points out that Astra began to use Toyota components produced in other ASEAN countries in 1990 and to export large-scale components in 1992. This demonstrates that Astra was well placed for trade liberalisation in the automotive industry.

²² Interviews with Suhari Sargo (20 October, 1998 and 4 November, 1998), Herman Latief, 26 January 1999 and 1 March 2000).

²³ Interviews with Suhari Sargo (20 October, 1998 and 4 November, 1998), Adirizal Sini (1 March 2000) and Ridwan Gunawan (29 February, 2000) and Bambang Trisulo (10 March, 2000).

²⁴ In fact, the BBC program met with little success, and it was replaced by ASEAN Industrial Co-operation (AICO) in 1996. Under AICO, the complementation agreement can take place between two companies not necessarily associated to a specific transnational interest (Abrenica, 1998).

²⁵ Interviews with Herman Latief (26 January, 1999 and 1 March, 2000).

However, the pressures for greater deregulation have to be juxtaposed against the ambiguity of both the government and automotive industrialists prior to 1992 with regard to their commitment to trade reform. The "forty days" June 1991 automotive deregulation is a valuable illustration of this. Through this package, the government allowed commercial cars in category I-V to be imported in the form of CBU. This policy was initially applauded by consumers, was even supported by automotive industry players. Nevertheless, the tight monetary policy undertaken by the government in 1991 led to a slow down in demand for cars. As a result, there was pressure on domestic producers from both sides: from the slow down in domestic demand owing to the tight monetary policy, and from the imported CBU commercial cars. This resulted in various complaints from both automotive industrialists and car retailers.²⁶ The government's response was to annul the June 1991 deregulation package that had only been in existence for forty days. The Minister of Industry, Hartarto, argued that the 1991 automotive deregulation package was cancelled owing to the low domestic demand. This illustration shows that both the government and automotive industrialists were not strongly committed in implementing bold trade reform.

8.5.4 The case of the national car policy

The national car program was another government effort to develop a domestic automotive industry that would make passenger cars available for a reasonable price. The seriousness of the government motive is evidenced by the fact that former President Soeharto himself instructed three ministers to coordinate steps for the development of a 'national car' industry with a 100% Indonesian owned producer, an Indonesian brand name and using entirely local components (Aswicahyono, Basri and Hill, 2000).

Chalmers (2000) argues that the background to the national car program was a revival of nationalist sentiment within the industry. There was concern in official circles that imports of more efficient vehicles would inundate Indonesia's automotive industry after implementation of the AFTA. During 1995, the national car project took shape and various companies, including Suzuki, Honda, Hyundai, Toyota and Kia Motor, all

²⁶ "Boleh impor dengan kuota nol" (free import with zero quota), *Tempo*, 21 July, 1992.

submitted proposals. The Presidential Decree was delivered in February 1996, and Chalmers (2000) points out that it was initially highly praised by local business commentators as a serious attempt to promote local industry.

To achieve the industry target, the government provided investors with a three year tax holiday in the form of a full exemption from all import duties and a waiving of the luxury car tax. The pioneer company was required to achieve a local content of over 20% in the first year, 40% in the second and 60% in the third. Despite the intense lobbying that took place from firms nominating as sole carrier for the national car program, shortly after releasing the proposal, the government appointed TPN owned by Tommy Soeharto (Soeharto's youngest son) as sole carrier. Even more striking was the fact that TPN had only recently been established and did not yet have a track record or even an automobile manufacturing plant. TPN proposed commencing full manufacture of the national car with assistance from South Korea Kia Motors Corporation. Because TPN did not have its own automobile plant, their proposal was to initially import Kia CBU from South Korea, for sale in Indonesia at lower prices, because of the duty and tax exemptions. It was extremely controversial that a proposal to develop a fully domestically produced national car should instead have been converted into a car to be entirely produced in South Korea at the initial stage! In addition, the government began pressuring State departments to buy these vehicles. In late 1997, bank loans amounting to US\$ 600 million were provided to TPN to finance construction of its own manufacturing plant (Chalmers, 2000).

Because it went directly against the spirit of Indonesia's commitment to free trade, this turn of events attracted a lot of criticism, not only domestically but also from the U.S., Japan and the European Community. These protests were not focused on the national car policy objective, but on the decision to provide privilege to the South Korea brand. Because Japanese cars dominated the Indonesian car market, Japan was the first country to react by filing a case with the WTO and The U.S. and European Union soon joined in filing this case. In 1998, the Dispute Settlement Body of the WTO concluded that the 1996 national car policy was against the WTO agreement and called on Indonesia to withdraw the program. It further called for the 1993 tax incentive for local content

achievement to be eliminated within 12 months of July 1998. The reason why TPN had violated Indonesia's commitment to the WTO has to do with Trade Related Investment Measure (TRIMS) that local content regulations had to be eliminated by 2000, with no new local content regulations to be introduced after a country had notified its existing measure (i.e. Indonesia notified in May 1995 and *Mobnas* (national car) was initiated in 1996). In addition, the national car policy violated non-discrimination, or Article 1 of GATT 1947.

The national car policy program highlights several important points. First, it demonstrates the conflict between Soeharto's patrimonialist patronage, other local major business, the WTO and the foreign principals in the automotive industry. This shows that the determinants of trade protection in this industry were no longer dominated by the State. It also demonstrated that the determinants of trade protection were complex, and shaped through bargaining and coalition building between the government, rent-seekers, interests groups, multilateral institutions and foreign capital.

Second, there was evidence that the role of Soeharto's patrimonialist patronage increased during the 1990s.²⁷ Interestingly, this took place when there was a slightly declining trend in general bureaucracy patrimonialist patronage combined with an increasing role for interest groups and business associations such as GAIKINDO. Therefore, the increasing role of interest groups has to be juxtaposed against this increase in Soeharto's patrimonialist patronage (see Chapter 4) and part in Section 8.5.1). It cannot therefore be concluded that the role of rent-seekers or patrimonialist patronage had been mainly replaced by interest groups or business associations by the 1990s.

Third, the national car policy program shows how rent-seeking activities or self-interest was justified by national policy preferences. In the case of the national car, the causality between rent seeking and trade protection took place in a situation where trade protection was given to the rent-seeker because of a personal connection with the President. This finding complements those of Aswicahyono, Basri and Hill (2000), that trade protection

²⁷ For further discussion on Soeharto's family involvement in the automotive industry see Chalmers (2000).

in the automotive industry attracted powerful rent-seekers, but that the rent seekers later went on to begot trade protection.

8.6 Summary

The purpose of this chapter has been to focus on the political economy of trade protection in the Indonesian automotive industry during the period 1970-1996. A better understanding of the political economy of manufacturing protection in Indonesia is gained in showing that the Indonesian government has been heavily involved in the automotive industry through various regulations and trade protection.

From the 1970s until the end of the 1980s, the structure of local ownership in the automotive industry was dominated by patrimonialist patronage. The ambitious nationalist policy to develop Indonesia's domestic automotive industry resulted in a high level of trade protection through non-tariff barriers, tariffs and local content schemes. This policy created rents which attracted rent-seekers into the industry. This interaction between national policy and self-interest shaped the policy of trade protection.

The major players in this interaction were the patrimonialist owners, the professionals, the government, business associations, foreign principals and multilateral institutions, including the WTO. The determinants of trade protection were shaped through complex interaction between all these participants.

In addition, inter-industry comparisons of trade protection between the automotive industry and the non-oil manufacturing sector show that, on average, the interest group variant model and the national policy model are both relevant in explaining the pattern of protection in the automotive industry during 1975-1995.

For the case of dynamic change over time, this study demonstrates that trade protection was shaped through interaction and bargaining between the government, automotive companies (local major players), foreign principals, business associations and multilateral institutions.

Our conclusion does not accord with the popular political economy studies on rent-seeking in Indonesia, indicating that economic policy, including trade policy, was very much State centered. This case study shows that the role of major local business players, business associations and multilateral institutions was relatively strong in determining the policy of trade protection in industry. In addition, there is evidence that the causality between rent-seekers and trade protection worked both ways. Rent-seekers influenced trade protection and vice versa. In the case of the national car policy, rent seekers created trade protection; meaning that trade protection was given to rent-seekers because of a personal connection with the President. In contrast, in the early 1970s, the national policy to develop an automotive industry through protection attracted rent-seekers.

Chapter 9

Case study 2: the Indonesian textile and garments industries

9.1 Introduction

This chapter focuses on the political economy of trade protection within the Indonesian textile and garment industries, especially during the period 1975-95. In contrast to the Indonesian automotive industry, where levels of protection were relatively high compared to the manufacturing industry in general, the textile industry is recognised for relatively low levels of protection after the mid 1980s, particularly for garments. The textile industry is also a good case study because it contains conflicting interest groups both for and against trade protection. Thus, the case of the textile industry helps enhance understanding of the political economy of trade protection in the Indonesian manufacturing sector.

For simplification, and unless otherwise indicated, throughout this chapter "textiles" will be used as a term for yarn and fibres (both classified as spinning) (SITC 266+651 or ISIC 32111), fabrics and other textiles (classified as weaving) (SITC 65, excluding 651, or ISIC 321 excluding 32111) and garments (SITC 84, or ISIC 32210).¹

¹ One of the difficulties with this classification is that as in most industries, Standard International Trade Classification (SITC) and International Standard Industry Classification (ISIC) adopt different concept and measures, so SITC cannot be fully comparable with ISIC.

As in all other countries, the Indonesian textile industry comprises three distinct sub-industries, ranging from upstream capital-intensive spinning and synthetic fibre, moderately labour-intensive weaving and fabric production, and downstream high labour-intensive garments industries. Although there are many sub-sectors, this case study will particularly focus on those three, as the most significant part of the textile industry in terms of share to total output.

This study attempts to answer three questions. Why did the Indonesian textile industry, particularly garments, receive less protection than other sectors in Indonesian manufacturing, particularly after 1987? How did the conflict between upstream and downstream, and various producer groups, take place, particularly after the mid 1980s? And, how did the export quotas allocation in the garments industry create rent-seeking activities?

Section 9.2 begins by comparing the textile industry in Indonesia with some other Asian countries; Section 9.3 traces the industry's development and its structure; Section 9.4 highlights the pattern of trade protection from 1975 to 1995; and, finally, Section 9.5 discusses the political economy of trade protection. The latter comprises three sub-sections: the pattern of trade protection in the Indonesian garments industry when compared to the average for non-oil manufacturing; the conflicts between upstream and downstream industries, and various producer groups; and rent-seeking activities in export quota allocations.

9.2 The Indonesian textile industry in comparative Asian perspective

9.2.1 The general characteristics of the textile industry

Textile is one of the most important industries in developing countries. The reason for this is obvious. The textile industry produces basic needs and is one of the leading export sectors in some developing countries, particularly – but not only – in Asia.² Hill (1992) points out that the prominence of the textile industry can easily be explained because it

² The dynamics of the textiles industry in Asia is well documented in Anderson (1992).

occupies a major portion of non-food budgets in low-income countries which in turn generates a large domestic market. In addition, the production technology is relatively standard, the industry is mostly labour intensive and scale economies are not particularly significant.

Another distinct feature of the textile industry which deserves mention is its intense international regulation (Hill, 1992). Much of the world trade in textile is administered by the MFA,³ which only allows exports from country members to certain levels, defined by international import quotas.⁴ The criteria of import quotas are determined by the exporter country's past performance and the its skill at international lobbying (Boenjamin and Mahyuddin, 1989). Initially, the MFA provides a stimulus for a country in the very early stages of export orientation. However, it can become an obstacle to their export growth in later development. As a result, each country joining the MFA has the joint objectives of maintaining international competitiveness and developing the capacity to manage and respond flexibly to the dynamics of changing international regulation arrangement (Hill, 1992).

9.2.2 The Indonesian textile industry from an Asian perspective

In 1975, Japan, Hong Kong and Korea supplied around 14% of the total world exports of textiles (Table 9.1). But after the mid 1980s China became a major exporter country. By 1995, China supplied around 15% of total world exports. Korea and Taiwan are also prominent, supplying around 5.7% and 5.8%, respectively, of total world exports in 1995.

In comparison, Indonesia's share in the world exports of textile was relatively low and only accounted for 2% in 1995.

³ It was agreed that the MFA would be gradually phased out through the implementation of the Agreement on Textiles and Clothing (ATC). On January 1st 2005, the MFA will be entirely phased out, and the textiles and clothing sector is to be fully integrated into the World Trade Agreement (WTA) at which the ATC ceases to apply. (Friends of the Earth International, 2001).

⁴ For a detailed explanation about the evolution of protection in textiles and garments, see Cline (1987).

Indonesia's share in world textile exports was higher than Malaysia, the Philippines and Singapore, and had almost reached the same share as Japan and Thailand by 1995. Indonesia's share in world textile exports also continued to rise after 1975, whereas some other Asian countries, like Hong Kong, Japan and Korea, experienced a declining share due to their loss of comparative advantage.

Table 9.1: Comparison of textile industries in some Asian countries

	1975	1980	1985	1990	1995
(% Value added share to total manufacturing)					
Hong Kong	46.5	40.1	38.9	35.4	26.3
Indonesia	15.2	12.8	12.2	12.9	15.4
Japan	7.4	6.1	5.1	4.4	3.7
Korea	20.8	18.2	14.9	10.2	8.8
Malaysia	6.8	6.6	4.8	6.4	5.0
Singapore	5.0	4.9	3.8	3.1	1.1
China		18.3	14.0	14.8	11.7
Taiwan	8.2	12.8	6.6	10.7	8.3
The Philippines	16.1	16.4	16.8	12.1	8.7
Thailand	19.3	n.a.	n.a.	29.7	n.a.
% Share of export of textile to total manufacturing exports					
Hong Kong	55.2	42.3	41.5	40.2	38.9
Indonesia	0.5	4.7	13.4	24.1	21.8
Japan	5.9	4.3	1.9	1.4	1.7
Korea	41.5	31.6	23.9	22.4	14.4
Malaysia	3.5	5.5	6.2	8.1	5.4
Singapore	5.7	5.2	4.6	5.1	2.7
China	33.0	39.8	48.0	37.8	33.7
Taiwan	34.9	29.5	27.7	21.1	15.9
The Philippines	5.0	12.0	13.1	18.1	16.0
Thailand	12.4	16.3	23.4	25.6	17.3
% Share to world exports (textile)					
Hong Kong	5.7	6.0	6.6	5.4	3.7
Indonesia	0.0	0.2	0.6	1.4	2.0
Japan	7.4	5.7	5.3	2.9	2.5
Korea	4.3	5.4	6.8	6.7	5.7
Malaysia	0.2	0.3	0.5	0.8	1.2
Singapore	0.6	0.8	0.9	1.2	1.0
China	7.2	4.9	8.4	9.1	15.2
Taiwan	4.0	5.9	8.0	6.6	5.8
The Philippines	0.2	0.4	0.3	0.4	0.9
Thailand	0.3	0.7	1.1	2.3	2.8

Notes: Textile industry, including spinning, weaving, garments.
n.a.: not available.

Source: Calculated from United Nation Industrial Development Organisation (UNIDO) data base.

Table 9.1 also demonstrates that from 1975-95, the share of Indonesia's textile value added to total manufacturing was higher than for Japan, Malaysia, Taiwan and Singapore. This indicates the importance of the textile industry to Indonesia compared with Japan, Malaysia and Singapore. Nevertheless, the share of Indonesian textiles to total manufacturing value added in 1990 was much lower than for Hong Kong and Thailand, with shares accounting for 35% and 30%, respectively.

In terms of the share of textiles exports to total manufacturing, Indonesia was relatively low compared with other Asian countries, such as Hong Kong, Korea, China, Thailand, the Philippines and Taiwan and even compared with Singapore, particularly in 1975 and 1980 (Table 9.1). However, from 1985, the share of Indonesian textile exports to total manufacturing increased significantly reaching 24% in 1990, surpassing Korea and the Philippines, and far higher than for Singapore. This indicates that Indonesia was a late starter in the textiles industry.

9.3 The development of the Indonesian textile industry

9.3.1 An overview of developments

Indonesian textiles have been in existence for a very long time. Initially, products were produced on a relatively small scale as part of household handicraft. At this stage, process still emphasised the arts and cultural purposes such as *ikat* weaving and batik. Although the industry gradually began to develop into commercial activities, it remained focused on the domestic market.

During the New Order period, particularly at the beginning phase of PELITA I in 1969, development of the textiles industry was carried out as a strategy to reduce textiles imports. This strategy was not unique to the textiles industry, but applied to manufacturing in general, including the automotive industry (see Chapter 8).

Table 9.2 presents the key features of the Indonesian textile industry.

Hill (1992) points out that factory weaving appeared in the 1920s, following the introduction of upright handlooms (*alat tenun bukan mesin* or *ATBM*). The weaving

industry expanded significantly during the New Order, owing to significant domestic investment. However, it is worth noting that the development of the power loom weaving sub-sector took place at the expense of the handloom sub-sector. Hill (1992) points out that when the New Order regime began to dismantle the yarn allocation systems and remove the trade barriers, ushering in a virtual technology revolution, the handloom sector began to shrink significantly.

Table 9.2: Key features of textiles and garments in Indonesia

Feature	Spinning (+Fibres)	Weaving	Garments
History	Mainly new	Many old firms	Very new (as factories)
Factor proportions	Moderately capital intensive	Labour-intensive	Very labour intensive
Scale economies	Significant	Moderate	Unimportant (except in international marketing)
Ownership	Significant foreign and government	Mainly domestic private	Almost all domestic private
Vertical integration	Common in spinning (spinning-weaving)	Not widespread (except very large mills)	Rare
Size distribution	Very large firms dominate	Mainly large and medium firms	Many small and medium firms
Sales orientation	Mainly domestic (for "direct" sales)	Both export and domestic	Mainly exports
Location	Mainly West Java	Mainly West Java; Central Java sizeable	Mainly Jakarta, Botabek-Bandung; Bali rising importance

Source: Hill (1992:6)

The spinning industry began to expand in the early 1970s, owing to significant investment, particularly foreign investment. Furthermore, this expansion can be attributed to high import protection and particularly to strong domestic demand that explains why, until recently, the spinning industry was directed into the domestic market.

From the late 1970s the synthetic fibre industry began to grow rapidly, as a result in part of the government's policy to promote the downstream utilisation of energy resources,

particularly petroleum (Hill, 1992). The resulting expansion led to increased foreign investment in the synthetic fibre industry since the 1990s (Pangestu, 1997).

Owing to strong domestic demand and growing opportunities in the world markets, a significant garments industry began to emerge in the late 1970s. As pointed out by Pangestu (1997), the subsequent export orientation of the garments industry in the mid 1980s can be attributed to a combination of sluggish domestic demand as a result of economic recession, the comparative advantage of low labour costs, an unutilised quota, and various incentives, including Sertifikat Ekspor (see discussion in Chapter 3).

9.3.2 Production, factor proportions and exports

9.3.2.1 Production

As noted, the domestic textiles industry began to expand after 1969, due to the impact of the open door foreign investment strategy, and trade protection. Production expanded, and the real value of approvals for both domestic and foreign investment peaked in the early 1970s (Hill, 1992). In addition, the import protection policy forced traders and wholesalers to transform themselves from importers into manufacturing producers (MacIntyre, 1991).

9.3 Production of selected textile products, 1968-1994/95

Product	Unit	1968 ^{a)}	1973/74 ^{b)}	1978/79 ^{b)}	1983/84 ^{b)}	1988/89 ^{b)}	1993/94 ^{b)}	1994/95 ^{b)}
Textiles/ textiles cloth	Million metres	316.0	926.7	1,576	2,347.2	3,503	7,878.5	8,001
Yarn	Thousand bales	130.0	316.2	837.3	1,562	2,712.3	4,933.7	5,171
Garments	Million Dozen				22.3	39.1	92.9	96

^{a)} Refer to calendar year, January to December.

^{b)} Refer to fiscal year, April, 1 19(t) to March 31 19(t+1).

Source: *Lampiran Pidato Kenegaraan* (Appendix to the Presidential speech), various issues.

Table 9.3 shows that from 1968 to 1973/74 production of textiles/textiles cloth increased significantly from 316 to 926 million metres. Production continued to increase, reaching 8,000 million metres in 1994/95. Similarly, although yarn production was only accounted

for 130,000 bales in 1968, but by 1994/95 it had reached 5,171,000 bales. As for the garments industry, in 1983/84 production was 22.3 million dozen pieces and, by 1994/95, had increased to 96 million dozen pieces. In fact, within 5 years (from 1983/89 to 1993/94) garments production grew by 19% per annum. This was obviously higher than the previous period of 12% per annum. This demonstrates that the significant growth in garments production took place after mid 1980s, and this can be attributed to various trade reforms and an export orientation strategy.

9.3.2.2 Value added, employment and factor proportions

The textiles and garments industries continues to be a major contributor to manufacturing value added and employment. Table 9.4 shows that, in 1975, both industries contributed around 9.7% of manufacturing value added, and generated around 23% of employment. The value added share to total manufacturing continued to increase, reaching around 15% in 1995, with employment increasing slightly to 24%.

In 1975, the value added share of the textiles industry (without garments) to total manufacturing accounted for 8.9%, and by 1995 had reached 11.6%. Whereas, the value added share to total manufacturing for garments increased remarkably from 0.8% in 1975, to 3.4% in 1995. The value added share of the spinning industry to total manufacturing also increased significantly from 1.7% in 1975, to 5.2% in 1995, whereas weaving declined slightly from 4.9% in 1975 to 4.5% in 1995. Within the textiles industry weaving was recognised as the largest sector in terms of both value added and employment. However, it was over taken by garments during the 1990s.

Table 9.4 shows the factor proportions in the textile industry. Similarly to Chapter 8, this study employs value added per employee (VAWORK) as a proxy for the factor proportion. In 1975, the VAWORK for the textile industry only accounted for 41% of total manufacturing. VAWORK steadily increased, reaching 146% of total manufacturing

Table 9.4: Value added and employment in textiles and garments

Sector	1975			1980			1985			1990			1995		
	% of total			% of total			% of total			% of total			% of total		
	N	V	VAWORK	N	V	VAWORK	N	V	VAWORK	N	V	VAWORK	N	V	VAWORK
Textiles (321)	21.7	8.9	40.9	19.5	9.6	49.4	17.2	9.5	55.5	15.4	9.5	61.3	14.9	11.6	146.5
Spinning (32111)	2.9	1.7	57.2	4.1	3.2	77.9	3.7	2.9	78.0	3.6	3.2	87.5	3.6	5.2	68.3
Weaving (32112)	12.1	4.9	40.2	10.2	4.9	48.2	6.9	4.7	53.5	6.9	4.4	63.5	6.5	4.5	39.8
Garments (32210)	1.9	0.8	39.1	3.3	2.9	86	5.8	3.5	61.0	9.4	7.9	86.2	9.2	3.4	78

Notes: 321, 32111, 32112 and 32210 are International Standard Industrial Classification (ISIC). Percentage data refer to % of total manufacturing output and employment for textiles, spinning, weaving and garments industries.

N: is employment and V is value added.

VAWORK is value added per employee

Source: BPS.

in 1995, suggesting that capital intensity increased more than threefold from 1975 to 1995. The increased capital intensity can be attributed to the increase in the value added share of the capital intensive, spinning industry in total manufacturing (from 1.7%, in 1975, to 5.2%, in 1995). The VAWORK for garments was 39% in 1975, and increased rapidly to 78% by 1995. Although the capital intensity increased significantly from 1975 to 1995, it was still below average manufacturing, indicating that garments is a labour intensive industry.

9.3.2.3 Exports

Until the early 1980s the Indonesia's manufacturing sector was generally inward oriented. This also applied to both the textiles and garments industries. Nevertheless, the amazing transformation that took place in the textiles and garments industries after 1979 caused exports to rapidly increase after 1982 (Figure 9.1).

Figure 9.1 shows that labour-intensive garments produced the largest exports, while the highly capital-intensive fibres industry generated the smallest. Hill (1992) points out that exports generated about 90% of output growth in the garments industry during the 1980s, and absorbed all of the output during the period of reform during 1985-88. Whereas, for yarns and fabrics, exports only generated 7% of output growth during 1980s and 25% during the reform phase in 1985-1988.

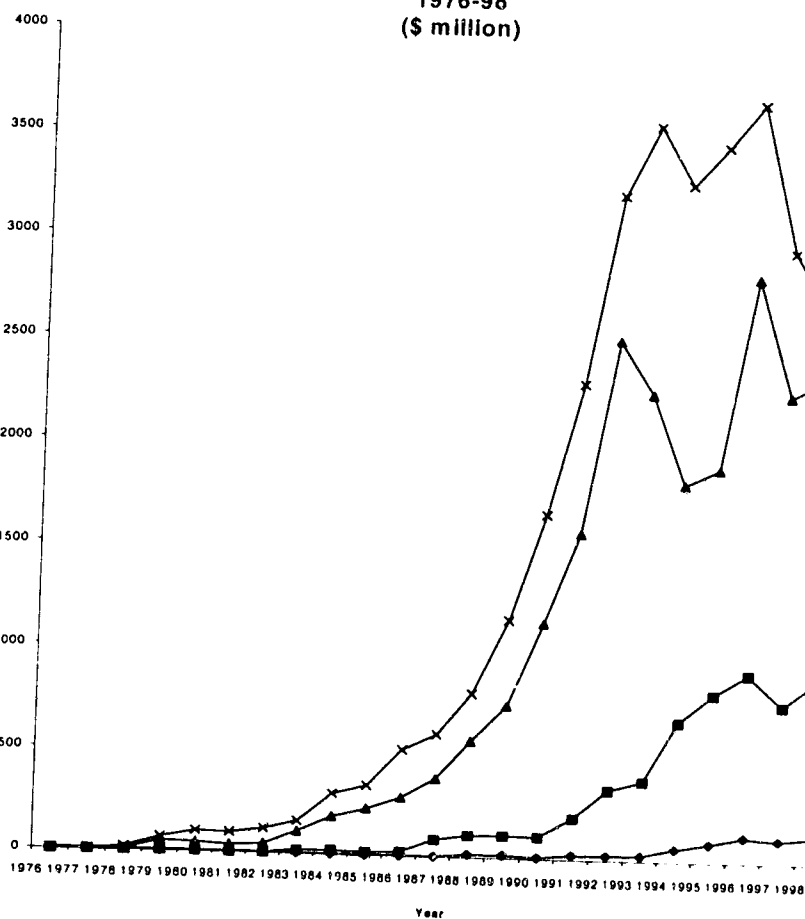
As pointed out by Hill (1992), two factors contributed to the strong export growth in the textiles and garments industries. The first, was exchange rate management, and the second trade reform.

Indonesia was relatively successful in exchange rate management during the 1980s, contributing to the strong performance of textiles and garments exports. As noted in Chapter 3, the government responded decisively to the declining terms of trade by undertaking devaluations in 1983 and 1986. Both devaluations significantly benefited non-oil tradable goods, including textiles and garments. Hill (1992) points out that the net effect of the exchange rate regime on costs varied among firms. However, even for the

most import-intensive operation (such as garments using only imported cloth), local costs only accounted for 30-40% of the total, conferring a significant competitive advantage.

Various trade reforms also contributed to the strong performance of Indonesian textiles and garments exports. The first notable trade liberalisation measure for the textile industry was the May 1986 package, which enabled export-oriented firms to have inputs at the international price under the Bapeksta scheme (see discussion in Chapter 3). Hill (1992) points out that almost one-third of the garments industry came under the facility of Bapeksta in 1988 and this was even higher for textiles.

Figure 9.1: Exports of textiles and garments, 1976-98 (\$ million)



Source calculated from IEDB- ANU

Legend: Fibres (diamond), Yarn (square), Fabrics (triangle), Garments (cross)

In addition, the switch towards export orientation can be attributed to sluggish domestic demand following the end of the oil boom, as well as to various attractive incentives, such as a subsidised interest rate and export certificates (Pangestu, 1997).

The other important issue in Indonesian exports of textiles is the MFA. Indonesia became a member of the MFA in 1979. As noted, it is possible Indonesia benefited from the MFA in the initial stages, owing to the lack of competitiveness in the world market. Membership of the MFA guaranteed a market. However, after the mid 1980s, as Indonesian textile exports increased rapidly and became internationally competitive the export quotas administered by the MFA became obstacles. The importance of the MFA was particularly apparent in the initial stage. Penetration of the non-quota constrained market (non MFA) increased as Indonesia became internationally competitive in the world market. Table 9.5 shows that in 1989, 59% of Indonesian textile exports were directed to quota-constrained markets (32% of which was the U.S.A.). This percentage had continued to decline by 1994, as Indonesian textiles exports began to be directed to non-quota countries. However, the quota constrained markets (MFA market) captured about half of Indonesian textiles exports.

Table: 9.5: Textile exports, 1989-1994
(as percentage of the Indonesian total exports textiles)

Quota constrained markets	1989	1990	1991	1993	1994
European Economic Community (EEC)	26.6	31.4	33.3	26.7	28.1
The United States of America	31.5	24.3	15.4	18.8	19.6
Others	1.2	2.8	2.2	1.6	1.5
Total quota country	59.3	58.5	50.9	47.1	49.2
Non quota country	40.7	41.5	49.1	52.9	50.8
Total	100	100	100	100	100

Source: Pangestu (1997: 53).

To ensure full utilisation of Indonesia's MFA quotas, the government established an export quota allocations system. The system was prone to rent-seeking activities and manipulation. The government attempted to increase the system's efficiency in 1987, through rationalisation of the textiles exports quota allocations. Although there was some

improvement, quota allocations remain a major problem to the present day. This issue will be discussed in detail in Section 9.5.

9.4 Trade protection

Section 9.3 demonstrated that the import protection embarked on by the government in the 1970s resulted in rapid growth in the textiles industry. However, this was not accompanied by increasing efficiency in the industry. This inefficiency is evident from the negative value added created by trade protection. Four sub-industries, weaving, other textiles goods (excluding garments), knitting, and carpet, experienced negative value added in 1971 (Table 9.6).

Table 9.6: Estimates of ERP for textiles and garments (%), 1971-1995

Sector	1971	1975	1987	1989	1995
Spinning	134.3	56	120.0	57.8	-6
Weaving	-IVA	191.7	195.1	217.3	-4
Textiles goods (excluding garments)	-IVA	297.6	94.4	84.9	-1
Knitting	198.6	331.5	24.9	3.5	-2
Garments	-IVA	110.0	39.1	16.5	-1
Carpet, rope, etc.	n.a	101.4	44.0	50.6	-6
Other textiles	n.a.	n.a	-8.6	6.8	n.a. ^{a)}

Source: 1971: Pitt (1981: 208-9)

1975: World Bank (1981:10-17).

1987: Fane and Phillips (1991: 123-5).

1995: Fane and Condon (1996:45-49).

Notes: These series are generally not directly comparable (see discussion in Chapter 5), except where the same author (Pitt/World Bank) or methodology (Fane and Phillips/Wymenga/ Fane and Condon) is involved

^{a)} In 1995, other textile was captured in the Carpet, rope, etc. classification.

"n.a." indicates estimates not prepared for this sector. "-IVA" indicates that value added was negative at international prices.

Table 9.6 presents the estimates of ERP from 1971 to 1995. Although these estimates are not directly comparable (see notes in Table 9.6), owing to the different methods of estimation, they still provide a rough guide to protection in the textile industry. Spinning experienced high protection, and was always above 50% from 1971 to 1989, showing that the trade regime favoured upstream industry. This is not particularly surprising.

because the highly protected industry was the sector where Indonesia lacked a comparative advantage.

In 1995, the ERP significantly declined, and all sectors experienced negative ERP. As noted in Chapter 3, the decline in the levels of protection was not particularly unique to the textiles industry, and applied to the manufacturing sector in general (see Chapter 5). This can be attributed to the various trade reforms from 1985-1995. As demonstrated by Fane and Condon (1996), trade reform contributed to a 48% reduction in the RERP for textiles, clothing and footwear from 1987 to 1995 (the RERP in 1987 was 78%, but in 1995 was -9%).

It is particularly interesting to compare the ERP in the upstream spinning industry with the downstream garments industry from 1987. Table 9.6 shows that the divergence between those two was sizeable, although it declined significantly 1987-95. In 1987, spinning enjoyed high ERP (120%), while the rate for garments was 24.9%. The high dispersion shows that the trade regime discriminated in favour of the upstream spinning industry against the downstream garments industry. According to Wymenga (1991) and Thee and Pangestu (1994), until 1989, Indonesia's foreign trade regime was adversely affected by firm incentives for exports. Although exporters were exempted from all duties and regulation owing to the Bapeksta scheme (see discussion in Chapter 3), they received a negative ERP as their non-tradable intermediate inputs still had to be purchased at prices above the international level (Table 9.7). In addition, Wymenga (1989) argues that textiles and garments producers selling in the domestic market were favoured over exports, owing to an ERP of more than 100% (Table 9.7).

**Table 9.7: ERP for textiles and garments producers (%)
by sales destination in 1989**

Sector	Total sales	Domestic sales	Export sales
Textiles	84.9	109.4	-2.0
Garments	16.5	101.4	-1.3

Source: Wymenga (1991:140)

There is a puzzle here. Why did firms choose to export, even though they could sell in the protected domestic market? As discussed in Chapter 5, Fane and Phillips (1991) suggest some possible explanations. First, they argue that under the Bapeksta scheme, a firm which exported could avoid import duties. However, as also argued by Fane and Phillips, the Bapeksta scheme can only provide a partial explanation, because it could only give exporter an ERP of zero percent, whereas the ERP on domestic sales is generally large and positive. Second, the ERP is based on I-O which covers many products, so that it is possible items being exported were different from the ones being sold domestically. The qualification for the ERP for weaving suggests that the figure needs to be carefully interpreted.

To enhance the understanding of trade protection in the textiles industry, it is important to look closely at the trade protection policy over time in this industry.

As noted, in the 1970s, there were various government regulations designed to protect textiles. Table 9.8 summarises the major trade protection and trade reform measures. In 1970, the government imposed an import ban for batik and sarongs, in order to protect the traditional product. In the same year, the government also imposed an import ban for lurik and unbleached cotton. In 1974, parallel to the spirit of the import substitution strategy, the government prohibited the use of merchant letters of credit for importing textiles and obliged textiles importers to use a regular letter of credit. This was obviously part of protectionist policy to discourage textiles imports. With a merchant letter of credit, importers were allowed to pay only 40% of the total import in advance, whereas with a regular letter of credit, textiles importers had to pay 100% of the import purchase in advance (Wibisono, 1987). Furthermore, Wibisono (1987) points out that, in 1975, imported textiles had to be financed by *devisa umum* (market rate foreign exchange), whereas, prior to 1975, textiles importers could use *devisa kredit* (non market rate foreign exchange). Another attempt to discourage the import of textiles was made by raising check prices for some textiles products in 1975. In addition, the government raised the MPO. All of these measures were obviously directed at discouraging textiles imports.

Table 9.8: Major trade protection and trade reform measures in the textile industry, 1970-1995

Year	Description of trade protection
1970	Import ban was imposed for batik and sarong, <i>lurik</i> and unbleached cotton.
1974	The import cotton weaving yarns from 12 to 42 single and double (type of cotton) were imported solely by the government. All other cotton yarns could be privately imported.
1974	The use of merchant letters of credit for most imported woven and knit fabrics, wearing apparel and made up textiles was prohibited. However, in 1977, the use of merchant letters of credit was prohibited for all imports, and there was no more discrimination between textiles imports in particular.
1975	Import of all textiles with aid foreign exchange (<i>devisa kredit</i>) was prohibited. There was rebate of between Rp. 20 and Rp. 45 per dollar of import using foreign exchange aid depending on the origin of the aid and origin of the import. Check-prices on low quality textiles and weaving yarns were raised 20%, and those for high quality clothing materials were raised 50%. One month after this regulation, check-prices for textiles, except weaving yarns, were raised an additional 25%.
1977	Import of most woven and knitted fabrics, wearing apparel, discontinuous polyester and made-up textiles goods required a 200% import prepayment and a 100% prepayments of customs duties. These prepayments were revoked in December 1978.
1978	Export certificates were introduced. However, in 1986 this scheme was replaced by Duty Drawback (P4BM). (see discussion in Chapter 3).
1987	Export credits for textiles was abolished as a consequence of the 1985 agreement on Code on countervailing duties.
1980	Export certificate was replaced by duty drawback system (Bapeksta).
1986	Import cotton, polyester fibres, dyes, and some other materials for textile production were liberalised.
1987	Rationalisation of textiles exports quota allocations. Export quota allocations are published in the media by company and allocation size.
1987	The government introduced a deregulation package which liberalised 227 categories of basic, intermediate materials, including finished garments, were permitted.

Source: World Bank, 1981; Wibisono, 1987; Pangestu, 1991.

As discussed in Chapter 3, the government introduced the export certificate scheme (SE) in 1978, together with a low interest rate for exports credit, including textiles exports. The subsidy for textiles was abolished in 1987, owing to an agreement on the Code on countervailing duties in 1985. (see discussion in Chapter 3). To briefly describe the SE scheme, exporters, including textiles exporters, were exempted from all import duties for intermediate goods and raw materials. Exporters paying the

duties and tariffs were entitled to receive their taxes payment in the form of an export certificate. The SE system, was open to abuse, as some exporters over-valued invoices and falsified exports to gain a rebate in the form of SE. In 1983, to overcome the problem the government tightened the inspection of exports to certain destinations, particularly Singapore, Malaysia, Hong Kong and Taiwan (Pangestu and Boediono, 1986; Wibisono, 1987). In addition, SE created an implicit subsidy. It was eventually replaced with a new, improved, duty drawback system in 1986 (see discussion in Chapter 3).

Commencing in 1985, the government introduced various trade reforms for the textiles industry. In 1986, after being the subject of various debates and conflicts between various interest groups, cotton, polyester fibre and dyes imports were liberalised (MacIntyre, 1991; Wibisono, 1987). This issue will be discussed in Section 9.5. In 1987, the government introduced a deregulation package which liberalised 227 categories of basic and intermediate materials, including finished garments. The trade reforms continued in the 1990s resulting in a significant decline in the ERP by 1995, as previously discussed.

9.5 The political economy of trade protection

9.5.1 Inter-industry comparison: the case of garments

As discussed earlier, the level of ERP in the garments industry was relatively low after the mid 1980s. This invites the question as to why the garments industry received less protection than the manufacturing industry in general. Assessment of the garments industry is particularly important, because it is a major contributor to Indonesian textiles exports.

By employing a similar method to Chapter 8 (see discussion in Section 8.5.1), this thesis attempts to compare the garments industry with manufacturing in general.

Table 9.9 shows that, although the ERP in the garments industry was relatively high in 1975, it was about average for the manufacturing sector in general. This suggests there was no particular attention given to this sector when compared with other sectors.

However, after 1987, the ERP in the garments industry was relatively low compared with manufacturing in general. Some industry characteristic variables in Table 9.9 provide hints for explaining this feature. EXP, CR4, and VAWORK were low compared with average manufacturing. In addition, variables NFIRM for both 1987 and 1995 were relatively high when compared with Indonesian manufacturing in general. These findings reinforce the interest group variant model hypothesis that the level of protection tends to be low in an industry that has high exports levels, is less concentrated and highly labour intensive and has a high number of firms. The high EXP appears to be an important explanation, because it implicitly suggests the garments industry tended to become less protected as it became more export oriented. This is particularly true for the case of garments after the mid 1980s. In addition, taking into account that garments is a downstream industry, it was likely that garments producers would lobby for low levels of protection for the textiles upstream industry to acquire a low cost of production, in order to maintain their own competitiveness in the world market.

Although there were some indications of relationship between the trade protection and the EXP, it is heroic to conclude that the low level of protection can be entirely attributed to the exporters' lobby. The government's objective for enhancing efficiency in the export sector through various trade reforms also contributed to the low levels of protection. Therefore, in order to find a more convincing explanation, this thesis looks closely at the conflicts between the upstream and downstream garments industry, and at the garments industry's lobby for low levels of protection in the upstream textiles in order to maintain their own competitiveness in the world market. This is particularly apparent in the case of protection for dyestuffs.

Table 9.9 : Trade protection and garment industry characteristics

Dependent Variable	Expected Sign	1975		1987		1995	
		Ratio	Category	Ratio	Category	Ratio	Category
ERP		0.69	Average	0.48	Low	-0.01	Low
Independent Variables							
EXP	-	0.02	Low	7.46	High	2.36	High
NFIRM	-	2.17	High	4.97	High	8.85	High
VAWORK	+	0.38	Low	0.41	Low	0.27	Low
CR4	+	0.36	Low	0.44	Low	0.31	Low
AWPE	+/-	0.22	Low	2.06	High	5.71	High
AVGSZ	+	0.03	Low	0.74	Average	0.27	Low
DD	+	2.26	High	0.38	Low	0.06	Low

Calculated from Statistik Industri, various years and Input-Output Table, various years, BPS

Notes:

- Ratio of ERP is expressed as ratio of the ERP in garments industry to the average ERP of manufacturing sector
- Ratio of each independent variables are expressed as ratio of each independent variables in the garments industry to average of the same variables of manufacturing sector, defined as: X_i/X_m , where i is garments industry and m is average manufacturing, X is the industry characteristics (EXP, NFIRM, VAWORK, CR4, AWPER, AVGSZ, DD).
- Average industry is calculated using simple average.

9.5.2 The conflict between upstream and downstream industries, and between group producers

In the mid 1980s there were disputes between upstream and downstream industries regarding trade protection. These took place when the government imposed import protection for dyestuffs and cotton, and allowed some companies to access polyester fibre at international prices (Wibisono, 1987; MacIntyre, 1991). Detailed accounts of these conflicts, and an analysis of how government decisions could be influenced by extra State actors such as interest groups, are available in Wibisono (1987) and MacIntyre (1991). This section does not focus on the question of how interest groups influenced government policy, but on the contrast with the automotive industry, because the textiles industry comprised many conflicting interest groups who were both for and against trade protection. In these conflicts, as suggested by the interest group variant model (see Chapter 7), textile exporters and consumers in the downstream industries, which

benefited from free trade, lobbied for low levels of protection on inputs, whereas producers in the upstream industries lobbied for high protection.

9.5.2.1 The case of dyestuffs

Wibisono (1987) shows there was a conflict between dyestuffs producers and consumers in 1985-86. Dyestuffs is an important product in the finishing process for textiles, used to giving colour to grey (undyed) fabrics. The dyestuffs sector is considered to be upstream and highly capital intensive. Commencing in 1985, dyestuffs production was encouraged by the government. A new dyestuff factory, owned by PT Hoechst Cilegon Kimia in Cilegon, West Java, was established. The government's encouragement for developing domestic dyestuffs production was part of the implementation of the so-called *pohon industri* or industrial tree strategy.⁵

The dispute regarding the dyestuff sector began with a demand for import protection to enhance the domestic industry and attract foreign investors. The Indonesian dyestuffs producers association (APDYESI) argued that Indonesia's dyestuffs production matched domestic consumption, making imports unnecessary. They further argued that trade protection was required to protect the domestic industry from dumping from abroad. Two alternative policies were discussed with the Ministry of Industry. First, raising duties on imported dyestuffs from 5% to 30%. Second, imposing import quotas of 200 tons annually, much lower than the 1985 total of imported dyestuffs of 900 tons.

The Indonesian textile association (API) criticised this proposal, arguing that it would raise the cost of textiles production. The textiles producers argued that this policy would protect the large capital-intensive industry at the expense of small-scale labour intensive industry (Wibisono, 1987).⁶ Nevertheless, trade protection was implemented in March 1986, with some qualifications (Wibisono, 1989). API tried to prevent price increases in

⁵ A strategy which emphasises that the relationship between upstream and downstream should be balanced and the domination of large over small companies should be avoided.

⁶ 'API memprotes usul penentuan kuota impor zat warna tekstil' (API protested the import quotas proposal for dyestuffs), *Kompas*, 22 March, 1986

order to sustain the growth of textiles exports, APDYESI tried to appease textiles producers' concerns by expanding production, and the transactions between these two sectors were expected to be facilitated by Bank Indonesia.

Eventually, in October 1986, the government removed all import restrictions for some textiles raw materials, including dyestuffs.

Wibisono (1987) argues that this dispute demonstrated conflicts between producers and consumers of the upstream and downstream industry. However, this was only partly true, because conflict became evident in the mid 1980's, even though the upstream industry had in general enjoyed trade protection since the 1970's.

The explanation can be attributed to the type of trade regime. In the 1970's the trade regime was inward-oriented. Under this protective regime, downstream producers could pass on the upstream industry protection to domestic consumers, without really worrying about competition from imports. As a result, prior to the mid 1980s, downstream garments producers did not really complain about the effects of trade protection in the upstream industry.⁷ However, after the mid 1980s, Indonesia altered the trade regime towards export-orientation, and exports became a major source of growth. In the case of garments this of growth was driven by exports (Hill, 1992). As a result, protection for the upstream dyestuff industry potentially hampered the exports of the downstream textiles industry by raising production costs. As pointed out by textiles producers, the imposition of a 30% tariff on dyestuffs would raise the average costs of textiles production by 2%.⁸ Therefore, the APDYESI proposal to impose trade protection obviously met with resistance from Indonesian textiles producers. Moreover, opposition to this proposal can be attributed to the fact that, in 1985, the textiles industry was suffering both from an excess supply of production and protectionist policy imposed by importing countries (Wibisono, 1987).

⁷ Interview with Dr Tan Chuan Cheng, 9 March 2000 and Irwandy Muslim Amin, 9 March, 1999.

⁸ 'Kuota dan tariff bea masuk zat pewarna tetap dipertahankan (Quotas and import tariff for dyestuffs will remain unchanged), *Suara Karya*, 6 January 1986

This case study reinforces the interest group variant model that exporters will lobby for lower levels of protection on inputs. This did not happen in the 1970's because the sales orientation was mainly domestic and the role of interest groups relatively weak (see discussion in Chapter 4).

9.5.2.2 The case of polyester fibres

The case of polyester fibres provides a good example of how the reduction in protection of synthetic yarn created opposition from fibre maker producers. This conflict emerged in 1986, owing to the government policy to allow free imports for polyester fibres.

The story began with the protective trade regime for polyester fibres. Wibisono (1987) points out that in 1980 there was a dispute between the Minister of Industry, A.R. Soehoed with the Minister of Trade, Rahmat Saleh. Soehoed opposed the Ministry of Trade's decision which allowed imports of 5,000 tons of polyester fibres by arguing that domestic demand had been fulfilled by domestic fibre makers. Soehoed's decision was supported by the new Minister of Industry, Hartarto, who was appointed in 1983. In his 1985 letter to the Minister of Trade, Hartarto recommended zero quota for imported polyester fibre in 1985 and the first semester of 1986 (Wibisono, 1987). The reason behind this argument was to enhance the domestic fibre-making industry. However, in July 1986, the government allowed 7 spinners to import 3,750 tons of polyester.⁹ Those seven were PT Indo Rama Synthetic, PT Elegan Textile Industry (foreign company), PT Gokak Indonesia, PT Sunrise Bumi Textile (foreign company), PT Naitex Dua Spinning Mills, PT Kwalram Indonesia and PT Patal Indonesia Baru. The decision of the Ministry of Industry created resistance from the Indonesian synthetic fibre makers association (APSYFI), who had previously enjoyed trade protection. APFSYI attempted to oppose the policy through the media, by arguing that the government's decision to allow some spinners to import polyester fibres could hit domestic producers. They argued that domestic production in 1986 was 84,000 tons, while domestic demand was about 85,000 tons, and the shortage of 1,000 ton could be met by using the excess supply of polyester

⁹ 'Izin pengimporan serat polyester pukul produksi DN' (Permit to import polyester fibre hits domestic producers), Suara Karya, 22 August, 1986.

production from the previous year.¹⁰ On the other hand, the Ministry of Industry argued that imports were necessary because domestic demand in 1986 was 88,000 tons, while domestic production was only 75,500 tons. This shows a disparity of data between the Ministry of Industry and APSFYI.

APSYFI admitted that the May 1986 package allowed fibres producers to access polyester fibres at international prices, thereby promoting exports. However, they argued, that most of the sales orientation of the spinning companies was in the domestic market, so that there was no rationalisation for allowing the imports. In addition to the various media campaigns, some fibres maker producers, who were executives of API and also directors of PT Centra Bina Tekstil Indonesia (CBTI), used their power to slow down the approval of import documents (Wibisono, 1987). This was made possible because PT CBTI had previously been granted a licence for the sole import of polyester fibres. In response, two foreign companies (PT Sentra Bumi Tekstil and PT Elegan Textile Industry) cancelled their \$23 million additional investment. PT CBTI reacted to this by bringing up the issue of nationalism, arguing that while Indonesia needed more foreign investment it should not be at the expense of the domestic textiles industry.¹¹

The conflict sharpened at the end of August 1986, when the government planned to open imports for polyester fibre in order to meet domestic demand.¹² The debate for and against protection for polyester fibre continued. Eventually the government suggested a compromise solution by providing an import surcharge for only polyester and filamen. Eventually, through the October 1986 deregulation package, CBTI's licence to import polyester fibres was removed, and imports of polyester fibres was permitted for general importers (Pangestu, 1987).

¹⁰ 'Izin pengimporan serat polyester pukul produksi DN (Permit to import polyester fibre hits domestic producers), *Suara Karya*, 22 August, 1986.

¹¹ 'CBTI blamed for cancellation of Indian textile investment', *Jakarta Post*, 26. August, 1986.

¹² 'Demi stabilitas dan pengembangan keran import serat polyester dibuka' (For stability and development, polyester fibre import is allowed), *Suara Karya*, 29 August, 1986

This case shows the conflict between the consumers and producers of polyester fibres owing to the distributive consequences of trade reform. The polyester fibres consumers were early supporters of trade reform, since they directly benefited from it. Whereas producers of import competing polyester fibre opposed trade reform. This case provides a strong degree of support for the interest group variant model (see Chapter 7) and Rodrik's distributive consequences of trade reform argument (see Chapter 2).

9.5.2.3 The case of cotton

The case of cotton shows the conflict between two interest groups i.e. the joint secretariat of spinners (SEKBERTAL) and API. This sub-section does not attempt to describe the conflict or the industry politics in great detail, but aims to show how trade protection imposed by the Ministry of Trade was successfully challenged by an interest group (Sekbertal).¹³

The conflict began in December 1985, when the Ministry of Trade obliged Indonesian spinners to buy all domestic cotton. Spinners in the API met Junior Minister Hasrul Harahap in January 1986, and reached an agreement that spinners would buy domestic cotton (Wibisono, 1987). In addition, API proposed a fibres import monopoly for a trading enterprise (PT CBTI) as a part of a programme to develop the local cotton industry, by requiring spinners to source 10% of their cotton locally. The burden of buying domestic cotton was only forced on domestic cotton users, who were oriented themselves on the domestic market, and not on textiles exporters whose fabrics were generally made from synthetic yarn (Wibisono, 1989). The domestic spinners rejected this formula and suggested the burden of buying domestic cotton be shared among all spinners, including synthetic spinners. This was rejected by API, and the original plan was applied. In response, domestic spinners, led by Aminuddin, organised a lobby group, known as SEKBERTAL, to oppose PT CBTI (Wibisono, 1989). Later this dispute widened to garments producers, who were also unhappy with the API proposal for imposing a levy on garments exporters for industry promotion (MacIntyre, 1991; Hill,

¹³ The detailed account on the conflict between API and Sekbertal is excellently analysed by MacIntyre (1991). This topic is beyond this thesis.

1992). Via a highly professional media campaign, SEKBERTAL attacked both API and PT CBTI and succeeded in winning the support of the Ministry of Industry. The problem eventually attracted the attention of the President. MacIntyre (1991) points out that after meeting with President Soeharto in August 1986, the Minister of Industry announced that the structure and composition of PT CBTI should be reformed. Eventually, after a series of debates, the Director General for Foreign Trade made the decision that PT CBTI was to be reformed, and the Board expanded from ten (previously all from API) to twenty two. Under the new structure, ten members of the Board would be from the original CBTI and twelve from SEKBERTAL (MacIntyre, 1991). The problem eventually eased when the government introduced the October 1986 and January 1987 deregulation packages, cancelling the PT CBTI import monopoly. The monopoly import licences were given to several State Owned companies, including PT Cipta Niaga and Sarinah and to individual spinners (Wibisono, 1989).

This case study shows how consumers (spinners) opposed trade protection on domestic cotton by organising collective action.

These three case studies on dyestuffs, polyester fibres and cotton show that the textile industry was comprised of many conflicting interest groups both supporting and opposing trade protection. This conflict weakened the pressure for protection and enabled the government to implement trade reform in the textiles industry, as evidenced by the significant reduction in trade protection from 1987 to 1995 (see discussion in Section 9.4).

9.5.3 The allocation of export quotas

Section 9.3.3.3 demonstrated that export quotas became significant after the mid 1980s, owing to the rapid expansion of Indonesian textiles exports. As a result, exports quotas became a constraint and led the government to establish a quota export allocation system. Export quotas were allocated by the Department of Trade according to an 80:14:6 formula, indicating, respectively, past export performance, newcomers and weak economic groups. The criteria of past export performances was consistent with the

practice in neighbouring countries (Hill, 1992). Export quotas could be cancelled or transferred to another company if exporters do not perform.

One of the problems of the Indonesian export quota allocations system is that licences are invitation to print money (Hill, 1992). The case of export quota allocations reinforces Krueger's (1974) political economy of rent-seeking activities argument that export quota licences are valuable commodities that attract competition to obtain them. An interesting illustration is provided by Irwandy Muslim Amin, the Secretary General of API, for the case of quota category 340 (shirt, not knit). The official quota price for this item in 1998 was \$21 per dozen and the export price was \$23 per dozen. If company A is only entitled to an export quota of 4,000 dozen, but is willing to export 5,000 dozen, it can buy quota from another company (B). If company B has a quota of 1,000 dozen, it can "sell" its quota to A, providing A exports, this quota under the name of B, in order to maintain B's quota holder entitlement for the following year. Thereafter company B, exports its 1,000 dozen export products to a non-quota country at a price below \$23 (say \$10). By selling its quota, and exporting to non-quota country at a price of \$10, company B can create income of \$31,000 (\$21,000 from selling quota and \$10,000 from export revenue). Whereas, if company B utilises its quota, it can only earn \$23,000.¹⁴ This shows how the export quota licence can be used as a licence to print money. Thus, the acquisition of quota is very profitable, and leads to competition to obtain quota. As pointed out by Hill (1992), a similar example occurred in the case of jeans. Quotas for jeans were sold (generally illegally – a sale through the largely moribund bourse pre-empting a cut in the quota holder's entitlement for the following year) for upwards of \$20 per dozen (industry sources report a peak price of \$27 in 1989/90). Under this situation, an export quota allocation is prone to malpractice and corruption, particularly if there is a lack of transparency in the allocation system, as is the case in Indonesia.

The export quota allocation system has been the subject of criticism, owing to the lack of transparency and administrative irregularities.

¹⁴ Interview with Irwandy Muslim Amin, 9 March, 1999. A similar case is also presented by Irwandy Muslim Amin in 'Kuota tekstil masih tak lepas dari manipulasi' (Textile quotas are still manipulated), *Kompas*, 27 November, 1998.

The Department of Trade rarely published a complete list of quota holder, even though, according to the July 1987 deregulation, export quota allocations should be published in the media by company and allocation size. This was a particular problem for the allocation of export quota for newcomers and weak economic groups. There is no clear guideline regarding the 14% and 6% component of the export quota allocation. According to the government regulation, the export quotas can be transferred into a company which has a better export performance. However, in practice, the criterion of "better performance" is obscure, and prone to "judgement" by decision makers and influence from rent-seeking activities.¹⁵ Hill (1992) points to widespread allegations of firms with satisfactory export performance having their quotas cut back substantially. On the other hand, there were cases where companies obtained additional quotas without any clear explanation from the government, as in the case of PT Karwel and PT Texmaco, in 1993. The government allocated export quotas to PT Karwel and PT Texmaco of 35,000 dozen for each company. Because there was no clear criterion, this invited criticism from the Federation of Indonesian textiles industry (FITI). The Directorate General for International Trade, Algamar Kamaruzaman, argued that export quota allocations were given to both companies in return for their help in financing the Indonesian Trade Consulate in the U.S. However, FITI argued that the value of quotas was no less than Rp. 8.8 billion (\$424,000), obviously much higher than \$70,000.¹⁶ Added to the existing suspicion of business communities in relation to the export quotas allocation system, these new allocations for PT Texmaco and PT Karwel created strong mistrust. Furthermore, Hill (1992) argues that the lack of transparency forced exporters to spend much time lobbying government officials.

The absence of any clear guidance regarding quota allocations served to create mistrust regarding government officials. Some exporters complained that some export quotas were allocated to companies who did not have productive capacity.¹⁷ Administrative

¹⁵ Interview with Benny Soetrisno, 16 March, 1999 and 12 April, 2001.

¹⁶ 'Misteri kuota tekstil' (The mystery textile quotas), *Tempo*, no 16, 1993.

¹⁷ 'Dilema kuota' (The dilemma of quotas), *Tempo*, no 13, 1986; 'Kuota tekstil masih tak lepas dari manipulasi' (Textile quota are still manipulated), *Kompas*, 27 November, 1998.

irregularities also became evident when a number of garments manufacturers lost their export licences and five officers from the Department of Trade were dismissed owing to the manipulation of garments exports quotas to the United States (MacIntyre, 1991).

It is clear that, due to lack of transparency and administrative irregularities, export quota allocations in Indonesia were prone to rent-seeking activities. This provides support for Krueger's (1974) political economy of a rent-seeking society where licences are valuable commodities and there is a competition to obtain these licences.

9.6 Summary

This chapter shows the development of the textiles industry as one of Indonesia's important manufacturing industries. Indonesia was a late starter in the textiles industry. As a result, from the 1970s to the mid 1980s, the share of Indonesian textiles exports to total manufacturing, was relatively low when compared with some Asian countries. However, from 1985, this share began to increase significantly.

Textiles exports grew significantly owing to exchange rate management and various trade reforms after the mid 1980s. The pattern of textiles exports, strongly reinforces the standard neo classical factor proportion theory, as the most labour intensive sectors, garments grew significantly, whereas the capital intensive yarn and fibres sectors grew in a minimal manner.

In terms of trade protection, the textiles industry experienced significant changes in trade protection over time. Commencing with high levels of protection in the 1970s, owing to an import substitution strategy, the levels of protection declined significantly in 1995, due to a shift towards an export oriented strategy.

In contrast to the automotive industry, where levels of protection were relatively high compared to the general manufacturing industry, the textiles industry, and particularly garments, have had relatively low levels of protection, particularly after the mid 1980s.

This implicitly suggests the garments industry tended to become less protected as it became more export oriented.

In addition, this chapter points to several key findings. First, that the textiles industry comprised many opposing interests in relation to trade protection, that resulted in weakened pressure for protection and enabled government to implement trade reforms. Second, the export quota allocation system was prone to rent-seeking activities, owing to a lack of transparency and administrative irregularities. The case of export quotas allocation in Indonesia provides support for the argument that licences are valuable commodities that create competition to obtain them.

Chapter 10

Summary and conclusions

10.1 Introduction

The purpose of this thesis was to examine and explain the determinants of trade protection over time in Indonesia, both in aggregate picture and across the manufacturing sector. This study draws on the political economy of protection literature which has so far mainly focused on the developed countries. It includes some modifications to portray a model specification more suitable for the Indonesian institutional context. The results are generally satisfactory and comparable with those of other studies. Furthermore, to supplement and enrich understanding of the determinants of trade protection in the Indonesian manufacturing sector, this thesis delves into case studies of the Indonesian automotive and textiles industries.

10.2 Main findings

Chapters 4 to 9 show that trade protection in Indonesia was not simply random in nature. These results support previous findings by Pangestu and Boediono (1986) and Basri and Hill (1996), that political economy factors were important determinants of the pattern of protection in Indonesia from 1975 to 1995. The results also support the views of Crouch (1979) and most other political scientists on Indonesia, that the linkages between business and the State took place via a patron-client relationship, as well as providing evidence that interest groups began to emerge and gain in influence after the mid 1980s, as suggested by MacIntyre (1991) and Wibisono (1987).

Using the political economy approach, this thesis shows that economic variables, such as

oil prices and the real exchange rate, the struggle between technocrats and economic nationalists, crony capitalists, interest groups, and multilateral institutions all helped determine trade protection over time in Indonesia. With regard to inter-industry variations in protection in the manufacturing sector, this thesis also shows that trade protection levels were strongly influenced by Soeharto's family and his cronies (Soeharto's crony capitalists) interest groups and national policy preferences for social concerns and developing the Indonesian manufacturing sector.

The industry case studies show two different trade protection patterns. The Indonesian automotive industry, notorious as a highly protected industry with powerful rent seekers all unanimously lobbying for protection prior to the 1990s, and the Indonesian textiles industry, recognised as having relatively low levels of protection, particularly after the mid 1980s, and comprising many conflicting interest groups.

The political economy approach

Chapter 4 documents both the struggle over economic and trade policy from 1966 to 1995, and how the ups and down in the levels of protection were influenced by conflicts between technocrats, economic nationalists, patrimonialists (crony capitalists), interest groups, multilateral institutions and the so-called "liberal epistemic community". These changes in protection over time are an illustration of the struggle amongst these groups. Economic nationalists played a dominant role during the oil boom of 1973-1982, the technocrats dominated trade policy after 1985, and the tug of war between these two groups led to an ambivalent policy direction during 1982-85. Although there were also conflicts over the direction of trade policy during the oil boom period in 1973-1982 between the technocrats, who tended to support a market oriented strategy, and the economic nationalists, who advocated a more interventionist approach, both tended to agree on the adoption of an import substitution strategy and government intervention. This resulted in high levels of trade protection. Following the collapse of the oil price, the technocrats became increasingly important, particularly from 1985 to 1993. However, the role of the crony capitalists around Soeharto also gained in influence, and pressures also began to emerge from various interest groups. Despite a swing of the pendulum in the

policy making process, from a protectionist to a more market oriented approach with the role of private sector becoming increasingly important, economic policy was still State-centred, and the link between State and society existed mainly via a patrimonial/rent seeking or corporatist system.

Chapter 6 deals with the determinants of trade protection over time. This is a new area for study, as there are no previous studies on this topic for Indonesia. The findings in this chapter provide valuable insights into the determinants of the levels of import protection over time, explaining that they were influenced by changes in real oil prices and the real exchange rate. Using a VAR model, this chapter showed a positive significant relationship between the real oil prices and the average tariff. This was confirmed by the Granger causality test and IRF, providing evidence that pressure for import protection actually increased during the oil boom period. In addition, the econometric results show there was a significant negative relationship between the real exchange rate and the average tariff. This result was confirmed by the Granger causality test and the IRF, suggesting that depreciation in the real exchange rate led to a lessening in pressure for import protection. Both findings are established in economic theory and consistent with similar studies for developed countries.

These findings enrich our understanding of the dynamics of trade protection in Indonesia. Previous studies explained that the change in trade protection was a result of conflicts between technocrats and economic nationalists. Trade reform was mainly seen as the impact of the government's responses to the economic crisis, often phrased as "good times mean bad policies; bad time mean good policies". These arguments were partly true, but overlooked the distributive consequences of trade reform. An important question to emerge from the previous studies was: if the deregulation process is interpreted as a triumph of the technocrats over the economic nationalists, why was trade liberalisation sustained even after 1993, when several of Habibie's protégés were appointed to the new cabinet coinciding with the departure of the leading technocrats? Neither can the increasing role of technocrats fully explain why opposition to trade reform from import competing industrialists or licence holders was relatively weak. In investigating the

answers to these questions this study found that the declining oil price in the mid 1980s raised the profitability of non-oil manufacturing. Moreover, in 1986 rupiah was devalued by more than 40%. Both factors raised the profitability of the non-oil tradable sector, enabling the government to reduce protection in this sector without reducing its profitability on average. This could explain why opposition to trade liberalisation from the import competing sector industrialists was not particularly strong, even though Indonesia had a sizeable current account deficit in 1986. Trade reform was sustained during the 1990s, owing to good exchange rate management, and the fact that trade reform created new constituencies, including exporters. These empirical findings are consistent with Fane (1996).

This thesis draws the conclusion that the decision to liberalise the trade regime after 1985 cannot be entirely attributed to the increasing role of the technocrats and the "crisis" hypothesis. Other factors, such as the worldwide belief in greater reliance on market forces, the distributive consequences amongst various economic groups and three adverse terms of trade shocks – the collapse in the oil price, the rise in the world interest rate and the appreciation of the yen to the US dollar - also contributed to trade reform.

Chapter 7 examined inter-industry variations of protection in the manufacturing sector. The econometric results, both for the interest group variant model and the G-H model, provided evidence that Soeharto's crony capitalists and interest groups were increasingly important in influencing trade protection in 1986, 1987 and 1995.

The interest group variant model

A number of variables generated results consistent with the interest group variant model, such as the number of firms, industrial consumption, household consumption, share of export to total output and foreign ownership. The ERP appears as the most appropriate endogenous variable. This supports the Corden (1997) and Anderson (1980) arguments. The variable which incorporates the patron-client, or crony, influence in trade policy (dummy for crony capitalists) performs strongly for all of those years. The number of firms, household consumption and foreign ownership are negative and significant for

1987, while industrial consumption is positive and significant. In the 1995 equation, the share of exports to total output is negative and significant. These results suggest that the interest group variant model provides satisfactory results for both 1987 and 1995.

The national policy model

This model provides a better result for 1975 than the interest group variant model and the G-H model. A number of variables, such as the dummy for basic industries, the ratio of domestic demand to total output and the average wage, are positive and significant. The non-nested test based on both Akaike's information criterion and Schwartz's information criterion favour the national policy model over the interest group variant model. Consistent with Corden's (1997) argument, the NRP appears to be the most appropriate endogenous variable for the national policy model.

The G-H model

The results show there was a distinguishable pattern of protection in industries under crony capitalist influence versus the others, and provide evidence that the role of Soeharto's crony capitalists continued to the levels of protection within the manufacturing industry from 1975-1995.

Similar to the interest group variant model, the ERP appears to be the most appropriate endogenous variable. The findings of this study support the G-H model hypothesis that the relationship between ERP and the inverse of import penetration depends on whether or not the sector was influenced by crony capitalists. This result shows that this relationship is negative (or positive for the import penetration ratio) and significant for the sector where crony capitalists were not dominant. In other words, this result suggests that the positive correlation between protection and import penetration, documented in previous empirical studies of the political economy of trade protection, applies only to sectors where crony capitalists were not dominant. Consistent with G-H theoretical prediction, within the sectors where Soeharto's crony capitalists were dominant, the result suggests a positive and significant correlation between protection and the inverse of import penetration ratio (or negative correlation for the import penetration ratio).

These results are consistent for 1975, 1987 and 1995. The results demonstrate a distinct pattern of protection in crony versus non-crony sectors.

For the case of NTB, the standard G-H model is also consistent with the hypothesis, where the inverse of import penetration ratio is negative and significant. For the sectors under the influence of Soeharto's crony capitalists, the relationship is positive and significant. However, the G-H model only provides weak support for the case of NTB in 1995, owing to the trade liberalisation which significantly phased out NTBs in the manufacturing sector.

It should be noted that the econometric results are subject to various limitations, as indicated by low adjusted R^2 , suggesting a lack of explanatory variables in the model. The F-tests are not significant for 1975 or 1995. These econometric qualifications motivated this study to extend the standard G-H model to incorporate variables from the interest group variant model. The extended G-H model produced better econometric results.

For the ERP equations, a number of variables such as household consumption, industrial consumption, foreign ownership and the share of exports to total output, are significant and produced sign consistent with the hypothesis. The inverse import penetration ratios for non-crony sectors are negative and significant for 1975, 1987 and 1995. Moreover, the inverse import penetration ratios for the crony sector are positive and significant for all of these years. Industrial consumption and foreign ownership appear to have a positive and significant relationship with ERP for 1975. For 1987, household consumption and foreign ownership are negative and significant, whereas industrial consumption is positive and significant. For the ERP equation in 1995, the share of exports to total output is negative and significant, suggesting low protection for the high export-intensive sector.

The extended G-H model for the case of NTB in 1986 also provides support for the hypothesis. The inverse import penetration ratio for non-crony sectors is negative and significant, whereas for crony sectors it is positive and significant. Additional explanatory variables, such as the share of value added to output, and industrial consumption are negative and significant. However, for 1995, the extended G-H model

only provides weak support for the NTB equation. The same reasoning applies to the case of the standard G-H model (see discussion above).

The econometric results in Chapter 7 support the view of most political scientists on Indonesia that the decision-making process, including trade policy, during the New Order, and particularly from 1974 to the mid 1980s, was in the hands of the State. The influence of business as a political force was limited, and the linkages between business and the State took place via patron-client relationships. However, there was evidence that interest groups could organise themselves and pursue their own purpose after the mid 1980s. This chapter also presents evidence that Soeharto's crony capitalists grew in influence after the mid 1980s.

The case studies

The two case studies provide further insights into the political economy of trade protection in Indonesian manufacturing.

The Indonesian automotive industry

In the automotive industry there are two important findings. First, the nationalists' policy ambition of developing Indonesia's domestic automotive industry resulted in high levels of trade protection. This policy attracted rent-seekers into the automotive industry. In addition, there is evidence that Soeharto's family became involved in the industry during the 1990s and succeeded in acquiring special government protection, as shown in the case of Timor Putra Nasional. These findings suggest that the causality between rent-seekers and trade protection worked both ways. Rent-seekers both created trade protection and vice versa. In the case of the national car policy, the rent seeker created trade protection, while in the early 1970s the national policy to develop an automotive industry through protection attracted rent-seekers. This relationship supports previous findings from Aswicahyono, Basri and Hill, (2000) that trade protection in the Indonesian automotive industry was determined by both national policy and interest groups.

In contrast to the popular political economy studies on rent-seeking in Indonesia, which argue that economic policy, including trade policy was very much State-centred, these case studies indicate that the role of major local business players, foreign principals, business associations and multilateral institutions was relatively strong. In addition, there is evidence that various trade reforms in the automotive industry in the 1990s were supported by the Indonesian automotive industry association for several reasons: Recognition that trade liberalisation was inevitable; with enhanced ability to compete with foreign competitors; domination by the pro-deregulation group in the Indonesian automotive industry association; and support from major key players in the industry in order to take advantage of the production network across ASEAN countries.

The Indonesian textiles industry

The case study in the Indonesian textiles industry provides insight into the other spectrum of the political economy of trade protection. In contrast to the automotive industry, where levels of protection were relatively high compared to the manufacturing industry in general, the textiles industry, particularly garments, experienced low levels of protection particularly after the mid 1980s. These relatively low levels of protection can be attributed to the high share of goods being exported in the Indonesian garments industry. Thus, the case of the garments industry reinforces the interest group variant model that the garments industry tended to become less protected as it became more export oriented. In addition, there is evidence that exporters in the downstream garments industry lobbied for low levels of protection in the upstream industry, as in the case of dyestuffs where the lobby from the downstream industry successfully minimised the pressure for protection from the upstream industry.

Conflict between producers and consumers in the downstream industry also occurred in the case of cotton and polyester fibres. In both cases, the pressure from consumers of the downstream industry successfully removed the trade protection. The October 1986 deregulation package removed the import monopoly of polyester fibres from PT CBTI, and placed the import of polyester fibres under the general importer category. Success in pressuring for trade reform was also apparent in the case of cotton. After various

disputes, and following a highly professional media campaign, SEKBERTAL successfully removed the import cotton monopoly from PT CBTI in 1987.

The case of dyestuffs, polyester fibres and cotton shows how conflict took place between interest groups who supported and opposed trade protection. These various conflicts resulted in a lessening of the pressure for trade protection, particularly after the mid 1980s. As a result, when the government liberalised the trade regime, there was no strong and coherent opposition.

This case study also showed that the export quota allocation system in the Indonesian textiles industry was prone to rent-seeking activities, owing to the lack transparency and administrative irregularities. The case of export quota allocations reinforces Krueger's (1974) notion of the political economy of rent-seeking society, that licences are valuable commodities creating competition to obtain these licences.

10.3 Policy implications

This author is more than willing to assert that crony capitalists and interest groups have been the major obstacles to trade liberalisation in Indonesia in the past. However, taking into account the importance of exporters and their contribution to the Indonesian economy, and the huge depreciation of the real exchange rate after the economic crisis of 1997-98, it is less likely that there will be any major reversion to high protection in the future. In addition, owing to the IMF agreement, following the economic crisis in 1997, much trade protection has been phased out, as Indonesia is required to eliminate all trade restrictions by the end of the IMF's economic recovery program. Under these circumstances, the Indonesian government does not have the luxury to be choosy. Furthermore, the trade reform of the last decade has successfully created many proponents, including exporters, academics, media and government officers.

Nevertheless, it would be imprudent to conclude that this binding to trade liberalisation will automatically lead to less pressure for trade protection. While it is true that under the

current economic crisis in Indonesia the pressure for liberalisation is considerable, it should be remembered that, although relatively small, there are indications that liberalisation are being blamed as the cause of the crisis. In addition, resistance to market reform from protectionist policy groups cannot be underestimated. These groups are still prevalent and hold some key positions both in the government and in the business sector. This has the potential to create future difficulties for any further trade liberalisation. Furthermore, although the downfall of Soeharto in May 1998 resulted in a major change of the political setting towards a more democratic system, this does not mean patrimonialism or rent seeking activities have been eliminated. Patron-client relationships continue, and the increasing role of extra State actors, owing to the transition to a democratic system, has enabled various interest groups to organise lobbies, not only for trade reform, but also for trade protection. For example, pressure for trade protection appeared in the case of sugar last year (2000), and there has already been pressure this year to delay commitment to the AFTA agreement for trade reform by the year 2003.

This tug of war between pro and anti trade reform groups can be expected to continue and to involve extremely complex bargaining and coalition between rent-seekers, interest groups and the various government agencies.

10.4 Implications for future research

Although the results found here have generally been satisfactory and comparable with those of other studies, there are several areas requiring further research. These can be classified into data improvement, methodology and future research with special reference to the current economic crisis and a political system in transition towards a democratic system.

Data improvement: Obviously, data availability is a major limitation of this study. Owing to the limitation of information and especially to the lack of public documentation for all cases, the selection of crony capitalists and their role in industry is somewhat speculative. However, the failure to introduce Indonesia's crony capitalists aspect in previous study has led to inadequate analysis of the political economy of trade protection. The accuracy

of the information regarding crony capitalists needs further improvement in order to obtain a more comprehensive a definition. In addition, the binary classifications (1 and 0) on crony and non-crony capitalists do not adequately reflect the complexity of the levels of crony capitalism within the Indonesian manufacturing sector. Obviously these are issues for which more research is needed. Moreover, the provision of enterprise data, with company names, would enable researchers to more accurately observe the role of crony capitalists in each industry.

With regard to the determinants of trade protection over time, the variable average tariff obviously cannot capture the impact of NTBs, which clearly were an important part of trade protection prior to the reform in 1998. To gain a better understanding of the change in protection over time, the availability of time series estimates of NTB estimates is obviously necessary for future research.

Methodologies: The econometric results of this study, for inter-industry variations, as well as those in other studies, show that the unexplained residual is significant. It is likely that the unexplained elements are the product of incomplete model specification, data limitation and non-quantitative influence in the policy decision-making process. The latter refers to influences that are personalistic and non-transparent in nature. These limitations suggest modelling could be improved in various directions. Additional explanatory variables might be included, when or if the essential data become available. The limitation of the econometric model also underlies the importance of industry case studies in future research.

The implementation of the model using cross-sectional data, also has limitations because it is based on the comparative static model. In some cases the political processes are slow to respond to pressure. This implies that an uncertain lag structure lies behind the relationship among the variables. Therefore, the dynamic model which covers both time series and cross section analysis may provide a better insight for the determinants of trade protection.

Future research on the different political settings: the current economic crisis and the political transition towards a democratic system obviously change key features in the decision making process. In the future it would be valuable to make a comparative study of the determinants of trade protection prior to the downfall of Soeharto and the era *reformasi* (political and economic reform era). This suggests the need for further studies of the determinants of trade protection, with special reference to the current.

Appendix 9

Interviews with business figures, association representatives, academics and government official

No	Name	Position	Date of interview
1.	Ir. Irwandy Muslim Amin	- Secretary General of API (Indonesian Textile Association)	9 March, 1999.
2.	Prof. Sumitro Djojohadikusumo	- Founder of the Faculty of Economics, University of Indonesia. - Minister of Trade, 1968-1973. - Minister of Research and Technology, 1973-1978. - Professor at the Faculty of Economics, University of Indonesia	29 March, 1999.
3.	Anton Gunawan, SE, MA	- Former Research Director of Institute for Economic and Social Research, Faculty of Economics, University of Indonesia.	3 August, 2000.
4.	Ir. Ridwan Gunawan	- Chairman of the Indonesian motor assembler. - Senior Vice President of PT Astra International.	29 February, 2000.
5.	Ir. Herman Z Latief	- Chairman of GAIKINDO (Indonesian Automotive association), 1991-1998 - President Director of PT Krama Yudha.	26 January, 1999 and 1 March, 2000.

No	Name	Position	Date of interview
6.	Prof. Suhadi Mangkusuwondo	<ul style="list-style-type: none"> - Former Director General of Foreign Trade, Department of Trade. - Professor at the Faculty of Economics, University of Indonesia. 	1 February, 1999.
7.	Dr. L. Peter Rosner	Resident advisor, Harvard Institute for International Development.	13 October, 1998.
8.	Prof Mohamad Sadli	<ul style="list-style-type: none"> - One of the leading members technocrats. - Minister of Manpower, 1971-73. - Minister of Mining and Energy, 1973-78. - Professor at the Faculty of Economics, University of Indonesia. 	30 September, 1998.
9.	Prof. Emil Salim	<ul style="list-style-type: none"> - One of the leading members technocrats. - Deputy Chairman of National Agency Planning, 1971-73. - Minister of Transportation, 1973-78. - Minister of Environment, 1978-93. - Professor at the Faculty of Economics, University of Indonesia. 	5 January, 1999.
10.	Ir. Suhari Sargo	Automotive commentators	20 October, 1998 and 4 November, 1998.
11.	Ir. Adirizal Sini	Director of PT Toyota Astra Motor.	1 March, 2000.
12.	Ir. A.R Soehoed	Minister of Industry, 1978-83.	30 December, 1998.

No	Name	Position	Date of interview
13.	Benny Soetrisno	Chairman of API President Director of PT Apac Inti Corpora (Textiles and Garments manufacturer)	16 March, 1999 and 17 April, 2001.
14.	Dr. Tan Chuan Cheng	President Director of PT Heera Multi Impex (garment manufacturer).	9 March, 2000.
15.	Ir. Bambang Trisulo	Chairman of GAIKINDO, 1998- now	10 March, 2000.

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