

**EVALUATING CAPITAL ALLOCATION
WITH
FACTOR SHARE ALTERING ELASTICITY OF SUBSTITUTION**

PRASAD VSN TALLAPRAGADA



**DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES
INDIAN INSTITUTE OF TECHNOLOGY DELHI
MAY 2024**

© Indian Institute of Technology Delhi (IITD), New Delhi, 2024

**EVALUATING CAPITAL ALLOCATION
WITH
FACTOR SHARE ALTERING ELASTICITY OF SUBSTITUTION**

by

PRASAD VSN TALLAPRAGADA

DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

submitted

in fulfilment of the requirements of the degree of doctor of philosophy

to the



INDIAN INSTITUTE OF TECHNOLOGY DELHI

MAY 2024

DECLARATION

I hereby declare that the work presented here in the thesis has been carried out by me towards the partial fulfilment of the requirement for the award of a PhD from the Department of Humanities and Social Sciences, Indian Institute of Technology Delhi. The work contained herein is my own and is a presentation of my original research work. Wherever quotations for others are involved, every effort has been made to indicate this clearly with due reference to the Economics. The content of this report, in full or in parts, have not been submitted to any other institute or university for the award of any degree.

Prasad VSN Tallapragada

2016HUZ8534

Certificate

This is to certify that the thesis entitled **Evaluating Capital Allocation with factor share altering Elasticity of Substitution** being submitted by **Prasad VSN Tallapragada** to the Department of Humanities and Social Sciences, Indian Institute of Technology, for the award of **Doctor of Philosophy** is a record of bona fide work carried out by him under our supervision. In our opinion, the thesis has reached the standards of fulfilling the requirements for submission relating to the degree.

The contents of the thesis have not been submitted in part or full, to any other university or Institute for the award of any other degree or diploma.

Dr. Saptarshi Mukherjee
Associate Professor
Economics
Department of Humanities and Social Sciences
Indian Institute of Technology, Delhi

Dr. Ambuj Sagar
Vipula and Mahesh Chaturvedi
Professor of Policy Studies
School of Public Policy
Indian Institute of Technology, Delhi

Acknowledgements

First and foremost, I wish to profusely thank my research supervisors Dr. Saptarshi Mukherjee Associate Professor in Economics and Dr. Ambuj Sagar, Professor in Public Policy. Their constant guidance and mentorship have bestowed me with a robust academic rigour that propelled me to undertake substantive research. I profoundly appreciate their contributions in terms of time and scholarly inputs to make my doctoral work and experience productive. The zeal they have for research was indeed inspiring.

I am grateful to Dr. William Hogan and Dr. John Holdren, my Professors at Harvard University, who taught me the philosophical moorings of economic enquiry, and immensely contributed to expanding my academic and professional horizons.

I am thankful indeed to other faculty members of the Department of Humanities and Social Sciences in economics at Indian Institute of Technology (IIT) Delhi, in particular, Dr. Debasis Mondal, Associate Professor in Economics, who shaped my approach to research as a student of economics in the area of my chosen field of Economics and Dr. Ankush Aggarwal, Dr. Abhijit Banerjee, Dr. Saurabh Paul – all in the Economics discipline at the IIT-Delhi who gave me unstinted encouragement. My time at IIT-Delhi was made memorable due to many friends, who have become a part of my life. I express my gratitude to the IIT-Delhi library, administrative and supporting staff for their meticulous services. Last, but certainly not the least, I thank my entire family for all their love, support and encouragement.

I am grateful to my father – Justice T.H.B. Chalapathi- whose continued benevolence moulded me and whose rigor, impeccable achievements and formidable reputation, set an arduous benchmark for me. He and my father-in-law, Sri Sarvepalli Krishnamurthy, motivated me to believe in myself and that God is always my companion in this eternal journey. Their inspiration and guidance, which I will always cherish, will continue to spur my academic and other lifelong endeavours.

Blessings of Lord Venkateswara and Goddess Padmavathi bestow me with every breath of my existence – that has now embarked on a fascinating foray into research in economics.

Prasad VSN Tallapragada

Abstract

Allocation of capital, being a finite resource, needs to adopt a well calibrated approach to ensure that the targeted economic priorities are achieved in an optimal manner. Factor shares of income reflect the potential economic priorities more sharply than the overall output and the underlying technical change determines this, given the incident elasticity of substitution. Increase in capital's share of income- with capital augmenting technical change - would increase capital productivity but could lead to job less growth. Increase in labour's share - with labour augmenting technical change - would lead to increased wages while increasing production costs, fetters the competitiveness of the economy. Hence, capital allocation must be nuanced to support the desired factor's share in income and the underlying technical change. In the face of technical change that is not conducive for the economic objective sought - such as increasing capital growth or increasing wages- policy changes may have to accompany calibrated capital allocation.

Drawing upon received wisdom and theoretical analysis, the study demonstrates that both magnitude and direction of technical change impact the elasticity of substitution. Changes in policies and capital allocation should be aligned with the elasticity of substitution to achieve the targeted economic priorities. At any given point of time, though Capital and Technical change are exogenous, they impact endogenous processes and growth. The study further demonstrates that once capital and policy interventions (external factors) are introduced, they are assimilated in the elasticity of substitution and become endogenous thus illustrating how externalities get subsumed in endogenous growth models. Capital and Technical change or Policy are non-rival inputs and are controlled variables till they are introduced and become random once they are introduced, depending on the incident elasticity of substitution. Hence, they need to be calibrated with the underlying elasticity of substitution for maximizing outcomes- wealth or profit or welfare- in terms of factor returns. Elasticity of Substitution is driven by imperfect competition for returns between factors. Thus, the conjunctive impact of technical change and elasticity of substitution, therefore, gives us a measure to evaluate effectiveness of capital allocation in achieving economic priorities. This is an extension to endogenous models. Anchored in these theoretical underpinnings, this study develops a model with a decision framework incorporating a proposed Induced Substitution Factor and a Measure of Effectiveness of Capital Allocation to facilitate informed economic decision making. The study further examines the application of this model in different economic settings.

Key Words: Technical change, Elasticity of Substitution, Factor shares of Income *JEL Classification:* B4; E6

सार

सीमित संसाधन होने के कारण, पूंजी का आवंटन एक सुनियोजित तरीके से किया जाना चाहिए ताकि लक्षित आर्थिक प्राथमिकताओं को सर्वोत्तम रूप से प्राप्त किया जा सके। आय के कारक शेयर, समग्र उत्पादन की तुलना में, आर्थिक प्राथमिकताओं में बदलाव को अधिक तेज़ी से दर्शाते हैं। यह बदलाव अंतर्निहित तकनीकी परिवर्तन द्वारा निर्धारित होता है, जो प्रतिस्थापन की आकस्मिक लोच को भी प्रभावित करता है। पूंजी में वृद्धि और तकनीकी परिवर्तन के परिणामस्वरूप पूंजी के हिस्से में वृद्धि होगी, जिससे पूंजी उत्पादकता में वृद्धि होगी। हालांकि, यह रोजगार में कमी भी ला सकता है। श्रम में वृद्धि और तकनीकी परिवर्तन के परिणामस्वरूप श्रम के हिस्से में वृद्धि होगी, जिससे मजदूरी में वृद्धि होगी। हालांकि, उत्पादन लागत में वृद्धि अर्थव्यवस्था की प्रतिस्पर्धात्मकता को नकारात्मक रूप से प्रभावित कर सकती है। इसलिये आय में वांछित कारक के हिस्से और अंतर्निहित तकनीकी परिवर्तन को प्राप्त करने के लिए पूंजी आवंटन को सावधानीपूर्वक समायोजित किया जाना चाहिए। यदि तकनीकी परिवर्तन किसी वांछित आर्थिक उद्देश्य, जैसे कि पूंजी वृद्धि या मजदूरी वृद्धि, के अनुकूल नहीं है, तो नीतिगत परिवर्तनों को क्रमिक पूंजी आवंटन के साथ जोड़ा जा सकता है।

प्राप्त ज्ञान और सैद्धांतिक विश्लेषण के आधार पर, अध्ययन से पता चलता है कि तकनीकी परिवर्तन की परिमाण और दिशा दोनों प्रतिस्थापन की लोच को प्रभावित करते हैं। नीतियों और पूंजी आवंटन में परिवर्तन को लक्षित आर्थिक प्राथमिकताओं को प्राप्त करने के लिए प्रतिस्थापन की लोच के साथ जोड़ा जाना चाहिए। किसी भी समय, हालांकि पूंजी और तकनीकी परिवर्तन बहिर्जात होते हैं, वे अंतर्जात प्रक्रियाओं और विकास को प्रभावित करते हैं। अध्ययन आगे बताता है कि जब पूंजी, नीतिगत हस्तक्षेप (बाहरी कारक) लागू किए जाते हैं, तो वे अर्थव्यवस्था में चीजों को आपस में बदलने की क्षमता (प्रतिस्थापन की लोच) का हिस्सा बन जाते हैं और इस प्रकार आंतरिक कारक बन जाते हैं। यह दर्शाता है कि बाहरी कारक कैसे अर्थव्यवस्था के अंदरूनी विकास मॉडल में शामिल हो जाते हैं। पूंजी और टेक्नोलॉजी में बदलाव या नीतिगत हस्तक्षेप - ये सभी गैर-प्रतिस्पर्धी निवेश होते हैं और इन्हें नियंत्रित किया जा सकता है जब तक इन्हें लागू नहीं किया जाता। एक बार लागू करने के बाद ये अनियमित हो जाते हैं, जो अर्थव्यवस्था में चीजों को आपस में बदलने की मौजूदा क्षमता (प्रतिस्थापन की लोच) पर निर्भर करता है। इसलिए, अधिकतम लाभ (धन, मुनाफा या कल्याण) प्राप्त करने के लिए इन्हें अर्थव्यवस्था की मौजूदा लोच के साथ तालमेल बिठाना आवश्यक है। यह लोच विभिन्न कारकों के बीच प्रतिफल पाने के लिए होने वाली अपूर्ण

प्रतिस्पर्धा से उत्पन्न होती है। इस प्रकार, तकनीकी बदलाव और लोच का संयुक्त प्रभाव हमें पूंजी आवंटन की प्रभावशीलता को मापने का पैमाना देता है, जो आर्थिक लक्ष्यों को प्राप्त करने में सहायक होता है। यह अंतर्जात मॉडल का विस्तार है। इन सैद्धांतिक आधारों पर, यह अध्ययन निर्णय लेने की एक रूपरेखा वाला मॉडल विकसित करता है, जिसमें "प्रेरित प्रतिस्थापन कारक" और "पूंजी आवंटन की प्रभावशीलता का माप" शामिल है। यह मॉडल सूचित आर्थिक निर्णय लेने में मदद करता है। अध्ययन आगे विभिन्न आर्थिक परिस्थितियों में इस मॉडल के उपयोग की भी जांच करता है।

Contents

Certificate	ii
Acknowledgments	iii
Abstract	iv
संक्षेप	v
Contents	vii
List of Figure	
List of Tables	
Symbols	
Abbreviations	
Chapter 1: The Capital Allocation Problem.....	1
1.1 Economic priorities and factor shares in Income.....	1
1.2 When and how does stranding creep into an economy?.....	2
1.3 A quantitative examination of Stranding.....	4
1.4 Capital allocation and Technical change.....	5
1.5 The moot questions.....	6
Chapter 2: Literature review.....	7
2.1 Technical change and Elasticity of Substitution	7
2.2 Elasticity of substitution as an engine of growth	7
2.3 Technical change in the transition to the Balanced Growth Path.....	8
2.4 Production function and Elasticity of Substitution.....	9
2.5 Mechanisation Framework.....	9
2.6 Policy and elasticity	9
2.7 The endogenous growth approach	10
2.8 Financial services and growth.....	10
Chapter 3: Capital induced Structural Change.....	12
3.1 Exploring the linkages between Capital, Factor shares of Income, Technical change and Elasticity of Substitution.....	12
3.2 Magnitude of Technical change.....	13
3.3 Direction of technical change	14
3.4 Intuitive analysis.....	15

3.5	Mathematical proofs.....	16
3.6	MRTS and EoS	17
3.7	Hicks and Harrod	17
3.8	Anchoring the framework in Solow, Kaldor, Kuznets and in Romer's endogenous growth model.....	19
3.9	Examining the question of Long term versus Short term –evaluating structural change in the Short-term - Balanced Growth Path	20
3.10	The conjunctive impact of Technical change and Elasticity of Substitution	22
3.11	The mechanization framework	23
3.12	Induced Substitution Factor and Normalized Elasticity of Substitution	24
3.13	Exogenous and Endogenous causes of economic growth.....	26
3.14	Exogenous and capital allocation efficiency in Financial Systems.....	26
Chapter 4:	Production Function.....	28
4.1	An analytical tool	28
4.2	Sustainability	30
4.3	Complementarity	30
4.4	Specificity	30
4.5	The CD production function.....	31
4.6	Significant features of Cobb-Douglas Production function	31
4.7	CES (Constant Elasticity of Substitution) Production function.....	31
4.8	Translog function.....	32
4.9	Fixed Coefficient function	33
4.10	Comparison of various Forms of Production Functions.....	33
4.11	Selecting appropriate functional Form.....	40
4.12	Revankar's Variable Elasticity of Substitution function	40
Chapter 5:	The Model.....	41
5.1	A Calibrated Approach	41
5.2	Exogenous changes in factor income shares.....	42
5.3	Measure of Effectiveness of Capital Allocation, Ω	43
5.4	The Decision Framework	44

Chapter 6: Methodology - Data –Analysis	46
6.1 Methodology	46
6.2 Capital Stock	48
6.3 Employment	49
6.4 Output.....	50
6.5 Analysis	50
6.6 Results	51
Chapter 7: Application of the model for different economic settings.....	52
7.1 India and four of its provinces	52
7.2 Other Applications	53
7.3 India – Primary sector.....	53
7.4 India-Secondary Sector	57
7.5 Indian Tertiary Sector	61
7.6 India Aggregate Economy.....	66
7.7 Haryana Primary Sector.....	71
7.8 Haryana- Secondary sector	75
7.9 Haryana-Tertiary Sector.....	78
7.10 Haryana-Aggregate.....	82
7.11 Punjab-Primary Sector.....	86
7.12 Punjab-Secondary Sector.....	89
7.13 Punjab-Tertiary Sector.....	92
7.14 Punjab-Aggregate	95
7.15 Gujarat-Primary Sector.....	98
7.16 Gujarat-Secondary Sector	101
7.17 Gujarat-Tertiary Sector.....	104
7.18 Gujarat-Aggregate	107
7.19 Maharashtra-Primary Sector.....	111
7.20 Maharashtra-Secondary Sector.....	114
7.21 Maharashtra-Tertiary Sector.....	118
7.22 Maharashtra-Aggregate.....	121

References.....	131
Appendix.....	135
Biodata	215

List of Figures

Figure-4.1	Global Production Function.....	29
Figure-4.2	Illustrative representation of various forms of Production Function with Isoquants.....	29
Figure-5.1	Decision Framework.....	44
Figure-7.1	Graphs India Primary (IP).....	54
Figure-7.2	Decision Framework of India Primary Sector.....	56
Figure-7.3	Graphs India Secondary (IS).....	58
Figure -7.4	Decision Framework of India Secondary Sector.....	59
Figure -7.5	Graphs India Tertiary (IT).....	62
Figure- 7.6	Decision Framework of India tertiary Sector.....	64
Figure-7.7	Graphs India Aggregate (IA).....	67
Figure- 7.8	Decision Framework of India Aggregate Economy.....	69
Figure -7.9	Graphs Haryana Primary (HP).....	71
Figure- 7.10	Decision Framework of Haryana Primary Sector.....	73
Figure-7.11	Graphs Haryana Secondary (HS).....	75
Figure-7.12	Decision Framework of Haryana Secondary Sector.....	76
Figure-7.13	Graphs Haryana Tertiary (HT).....	78
Figure-7.14	Decision Framework of Haryana Tertiary Sector.....	80
Figure-7.15	Graphs- Haryana Aggregate (HA).....	82
Figure-7.16	Decision Framework of Haryana Aggregate Economy.....	84
Figure-7.17	Graphs Punjab Primary (PP).....	86
Figure-7.18	Decision Framework of Punjab Primary Sector.....	87
Figure-7.19	Graphs- Punjab Secondary (PS).....	89
Figure-7.20	Decision Framework of Punjab Secondary Sector.....	91
Figure-7.21	Graphs- Punjab Tertiary (PT).....	92
Figure-7.22	Decision Framework of Punjab Tertiary Sector.....	93
Figure-7.23	Graphs Punjab Aggregate (PA).....	95
Figure-7.24	Decision Framework of Punjab Aggregate Economy.....	96
Figure-7.25	Graphs- Gujarat Primary (GP).....	98
Figure -7.26	Decision Framework of Gujarat Primary Sector.....	99
Figure -7.27	Graphs- Gujarat Secondary (GS).....	101

Figure -7.28	Decision Framework of Gujarat Secondary Sector.....	102
Figure-7.29	Graphs- Gujarat Tertiary (GT).....	104
Figure-7.30	Decision Framework of Gujarat Tertiary Sector.....	105
Figure-7.31	Graphs Gujarat Aggregate (GA).....	107
Figure-7.32	Decision Framework of Gujarat Aggregate Economy.....	109
Figure- 7.33	Graphs- Maharashtra Primary (MP).....	111
Figure 7.34	Decision Framework of Maharashtra Primary Sector.....	113
Figure-7.35	Graphs- Maharashtra Secondary (MS).....	114
Figure- 7.36	Decision Framework of Maharashtra Secondary Sector.....	116
Figure- 7.37	Graphs- Maharashtra Tertiary (MT).....	118
Figure 7.38	Decision Framework of Maharashtra Tertiary Sector.....	119
Figure 7.39	Graphs- Maharashtra Aggregate (MA).....	121
Figure- 7.40	Decision Framework of Maharashtra Aggregate Economy.....	122

List of Tables

Table-4.1	A Comparison of various production functions.....	39
Table-5.1	Decision Framework.....	44
Table-7.1	Decision Framework India Primary	56
Table-7.2	Decision Framework – India Secondary.....	60
Table- 7.3	Decision Framework India Tertiary.....	64
Table- 7.4	Decision Framework India Aggregate	70
Table-7.5	Decision Framework Haryana Primary.....	73
Table-7.6	Decision Framework Haryana Secondary.....	77
Table-7.7	Decision Framework- Haryana Tertiary.....	80
Table- 7.8	Decision Framework- Haryana Aggregate.....	84
Table-7.9	Decision Framework- Punjab Primary.....	88
Table-7.10	Decision Framework- Punjab Secondary.....	91
Table-7.11	Decision Framework- Punjab Tertiary	94
Table-7.12	Decision Framework- Punjab Aggregate.....	97
Table-7.13	Decision Framework- Gujarat Primary	100
Table 7.14	Decision Framework- Gujarat Secondary	102
Table-7.15	Decision Framework- Gujarat Tertiary.....	106
Table-7.16	Decision Framework- Gujarat Aggregate.....	109
Table-7.17	Decision Framework- Maharashtra Primary.....	112
Table-7.18	Decision Framework Maharashtra Secondary.....	116
Table 7.19	Decision Framework- Maharashtra Tertiary.....	119
Table-7.20	Decision Framework- Maharashtra Aggregate.....	122
Table- 7.21	A consolidated summary of computed indicators for India and the States covered under the study.....	124

Symbols

α Alpha

β Beta

γ Gamma

λ Lambda

ϵ Epsilon

η Eta

θ Theta

σ Sigma

ϕ Phi

ψ Psi

μ Mu

ω Omega

ρ Rho

ζ Zeta

Abbreviations

UN-United Nations

BGP-Balanced Growth Path

MPK- Marginal Productivities of Capital

MPL- Marginal Productivities of Labour

MRTS- Marginal Rate of Technical Substitution

VES- Variable Elasticity of Substitution

TFP- Total Factor Productivity

EoS - Elasticity of Substitution

NES- Normalised elasticity of substitution

GPF- Global Production Function

CES- Constant Elasticity of Substitution

CD- Cobb-Douglas

SAMC- Solow, Arrow, Minhas and Chenery

CRS- Constant Returns of Scale

CES- Constant Elasticity of Substitution

GSVA- Gross Sector Value Added

NSSO- National Sample Survey Office

PLFS- Periodic Labour Force Survey

GCF- Gross Capital Formation

ASI- Annual Survey of Industry

MECA- Measure of Effectiveness of Capital Allocation

SDG- Sustainable Development Goals

DSR- Direct Seeding of Rice

IS- India's secondary

BPO- Business Process Outsourcing

e-NAM- National Agriculture Market

TFP- Total Factor Productivity

CAD- computer-aided design

JIT- just-in-time

TQM- Total Quality Management

GST- Goods and Services Tax
FDI- Foreign Direct Investment
LPF- Local Production Function
GPF- Global Production Function
EUS-Employment Unemployment Survey
GPS- Global Positioning System
PM- Prime Minister
ICT- Information and Communication Technology
IA- India Aggregate
EoDB- Ease of Doing Business
MSME- Medium Small and Marginal Enterprises
CAD/CAM- Computer Aided Design/ Computer Aided Manufacturing
ITES- Information Technology Enabled Services
WBCIS- Weather Based Crop Insurance Scheme
CCDP- Crop Cluster Development Programme
STP- Sewage Treatment Plant

APPENDIX

1.	India Primary Sector	
1.1	Table India Primary (TIP-1).....	135
1.2	Table India Primary (TIP-2).....	136
1.3	Table India Primary (TIP-3).....	137
1.4	Table India Primary (TIP-4).....	138
2.	India Secondary Sector	
2.1	Table India Secondary (TIS-1).....	139
2.2	Table India secondary (TIS-2).....	140
2.3	Table India secondary (TIS-3).....	141
2.4	Table India Secondary (TIS-4).....	142
3	India Tertiary Sector	
3.1	Table India Tertiary (TIT-1).....	143
3.2	Table India Tertiary (TIT-2).....	144
3.3	Table India Tertiary (TIT-3).....	145
3.4	Table India Tertiary (TIT-4).....	146
4	India Aggregate	
4.1	Table India Aggregate (TIA-1).....	147
4.2	Table India Aggregate (TIA-2).....	148
4.3	Table India Aggregate (TIA-3).....	149
4.4	Table India Aggregate (TIA-4).....	150
5	Haryana Primary Sector	
5.1	Table Haryana Primary (THP-1)	151
5.2	Table Haryana Primary (THP-2)	152
5.3	Table Haryana Primary (THP-3)	153
5.4	Table Haryana Primary (THP-4)	154
6	Haryana Secondary Sector	
6.1	Table Haryana Secondary (THS-1)	155
6.2	Table Haryana secondary (THS-2)	156
6.3	Table Haryana secondary (THS-3)	157
6.4	Table Haryana Secondary (THS-4)	158

7	Haryana Tertiary Sector	
7.1	Table Haryana Tertiary (THT-1)	159
7.2	Table Haryana Tertiary (THT-2)	160
7.3	Table Haryana Tertiary (THT-3)	161
7.4	Table Haryana Tertiary (THT-4)	162
8	Haryana Aggregate	
8.1	Table Haryana Aggregate (THA-1)	163
8.2	Table Haryana Aggregate (THA-2)	164
8.3	Table Haryana Aggregate (THA-3)	165
8.4	Table Haryana Aggregate (THA-4)	166
9	Maharashtra Primary Sector	
9.1	Table Maharashtra Primary (TMP-1)	167
9.2	Table Maharashtra Primary (TMP-2)	168
9.3	Table Maharashtra Primary (TMP-3)	169
9.4	Table Maharashtra Primary (TMP-4)	170
10	Maharashtra Secondary Sector	
10.1	Table Maharashtra Secondary (TMS-1).....	171
10.2	Table Maharashtra secondary (TMS-2).....	172
10.3	Table Maharashtra secondary (TMS-3).....	173
10.4	Table Maharashtra Secondary (TMS-4).....	174
11	Maharashtra Tertiary Sector	
11.1	Table Maharashtra Tertiary (TMT-1).....	175
11.2	Table Maharashtra Tertiary (TMT-2).....	176
11.3	Table Maharashtra Tertiary (TMT-3).....	177
11.4	Table Maharashtra Tertiary (TMT-4).....	178
12	Maharashtra Aggregate	
12.1	Table Maharashtra Aggregate (TMA-1).....	179
12.2	Table Maharashtra Aggregate (TMA-2).....	180
12.3	Table Maharashtra Aggregate (TMA-3).....	181
12.4	Table Maharashtra Aggregate (TMA-4).....	182

13	Gujarat Primary Sector	
13.1	Table Gujarat Primary (TGP-1).....	183
13.2	Table Gujarat Primary (TGP-2).....	184
13.3	Table Gujarat Primary (TGP-3).....	185
13.4	Table Gujarat Primary (TGP-4).....	186
14	Gujarat Secondary Sector	
14.1	Table Gujarat Secondary (TGS-1).....	187
14.2	Table Gujarat secondary (TGS-2).....	188
14.3	Table Gujarat secondary (TGS-3).....	189
14.4	Table Gujarat Secondary (TGS-4).....	190
15	Gujarat Tertiary Sector	
15.1	Table Gujarat Tertiary (TGT-1).....	191
15.2	Table Gujarat Tertiary (TGT-2).....	192
15.3	Table Gujarat Tertiary (TGT-3).....	193
15.4	Table Gujarat Tertiary (TGT-4).....	194
16	Gujarat Aggregate	
16.1	Table Gujarat Aggregate (TGA-1).....	195
16.2	Table Gujarat Aggregate (TGA-2).....	196
16.3	Table Gujarat Aggregate (TGA-3).....	197
16.4	Table Gujarat Aggregate (TGA-4).....	198
17	Punjab Primary Sector	
17.1	Table Punjab Primary (TPP-1).....	199
17.2	Table Punjab Primary (TPP-2).....	200
17.3	Table Punjab Primary (TPP-3).....	201
17.4	Table Punjab Primary (TPP-4).....	202
18	Punjab Secondary Sector	
18.1	Table Punjab Secondary (TPS-1).....	203
18.2	Table Punjab secondary (TPS-2).....	204
18.3	Table Punjab secondary (TPS-3).....	205
18.4	Table Punjab Secondary (TPS-4).....	206

19	Punjab Tertiary Sector	
19.1	Table Punjab Tertiary (TPT-1).....	207
19.2	Table Punjab Tertiary (TPT-2).....	208
19.3	Table Punjab Tertiary (TPT-3).....	209
19.4	Table Punjab Tertiary (TPT-4).....	210
20	Punjab Aggregate	
20.1	Table Punjab Aggregate (TPA-1).....	211
20.2	Table Punjab Aggregate(TPA-2).....	212
20.3	Table Punjab Aggregate (TPA-3).....	213
20.4	Table Punjab Aggregate(TPA-4).....	214