

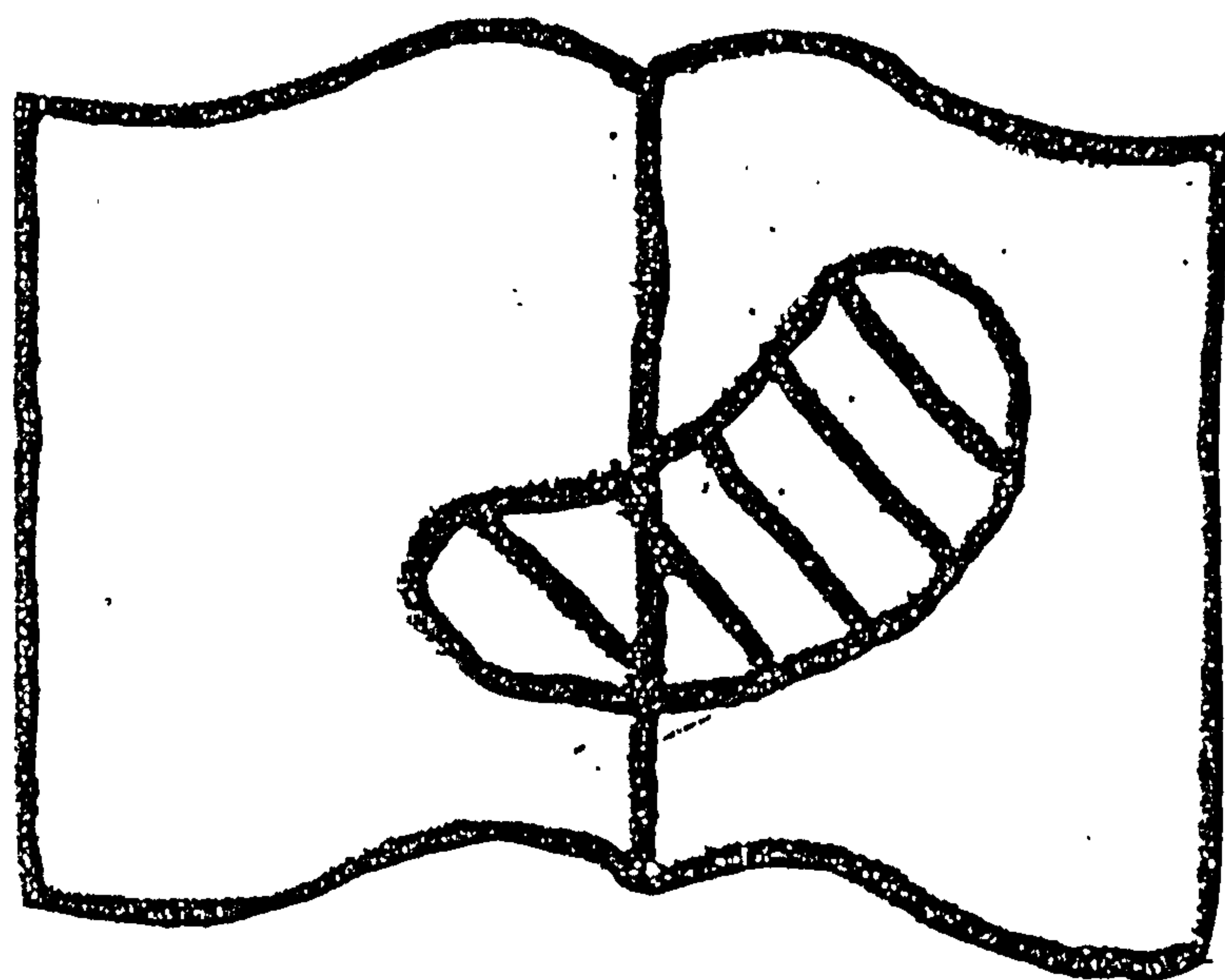
Foreign Direct Investment in Emerging
Industries in Conditions of Market
Imperfections: Telecommunications and
The Case of the
Regional Bell Operating Companies,
1984 – 1998.

JASON WHALLEY

Submitted in fulfilment of the degree of Doctor of Philosophy,
Department of Management Science,
University of Strathclyde,
Glasgow, November 1999.

Best Copy Available

Variable Print Quality



Dedicated to

Richard, Richard, Charles and Ellen.

DECLARATION OF AUTHOR'S RIGHTS.

© The copyright of this thesis belongs to the author under the terms of the United Kingdom Copyright Acts as qualified by University of Strathclyde Regulation 3.49. Due acknowledgement must always be made of the use of any material contained in, or derived from, this thesis.

ABSTRACT

By definition, companies in emerging industries engage in international investment activity with little, if any, past experience of overseas markets. The international environment is, however, characterised by uncertainty and information asymmetries that ensure investment activity is not without risk.

Starting from the premise that companies seek to minimise the degree of risk they are exposed to when internationalising a theoretical framework is proposed. Risk in internationalisation arises due to the presence of information asymmetries that give rise to uncertainty and detract from the frictionless flow of resources between markets. In the framework articulated, the gradual overseas expansion of the company reduces the information asymmetries faced. This framework incorporates the impact of asset specificity through recognising that some forms of knowledge are more readily transferable elsewhere than others.

This framework is applied to understand the internationalisation activity of a particular set of companies within an emerging industry, that is, to the regional Bell operating companies (RBOCs) in the telecommunications industry. The theoretical framework allows for a five-dimensional analysis of the international investment activity of the RBOCs. These five dimensions are: lines-of-business, psychic distance, international-domestic linkages, equity and organisational form. As part of investigating these dimensions the research developed an index of competitiveness within markets and a taxonomy for determining the risk associated with investments in different lines-of-business.

The research concluded that in each of these areas the international investment activity of the RBOCs has undergone change. In addition, the research also demonstrated the advantages that accrue from adopting a multi-dimension analysis of internationalisation. It was shown how, for example, the RBOCs have collaborated with other companies, ceding equity in the venture so that risks inherent to internationalisation were reduced. Collaboration with companies indigenous to the host country offset risk through negating the information asymmetries encountered. The use of collaborative ventures by the RBOCs also requires a new understanding of what is meant by MNEs.

TABLE OF CONTENTS.

Abbreviations.	<i>page</i>	XV
List of tables.		XVII
List of figures.		XXIII
Acknowledgements.		XXVII
Chapter One: Introduction.		
1.1 Introduction.		1
1.2 Structure of the thesis.		4
Chapter Two: Internationalisation.		
2.1 Introduction.		9
2.2 Market imperfections and internationalisation.		15
2.2.1 Internalisation.		18
2.2.1.1 Internalisation as the creation and replacement of markets		19
2.2.1.2 Frequent criticisms of internalisation		22
2.2.1.3 Conclusion.		24
2.2.2 Eclectic paradigm.		24
2.2.2.1 The eclectic paradigm under conditions of ‘Alliance capitalism’.		26
2.2.2.2 Criticisms of the eclectic paradigm.		28
2.2.2.3 Conclusion.		30
2.2.3 Transaction cost economics.		31
2.2.3.1 Transaction characteristics and governance structures.		34
2.2.3.2 The MNE and transaction cost economics.		38
2.2.3.3 Questioning the validity of transaction cost economics.		40
2.2.3.4 Conclusion.		43
2.3 Uppsala internationalisation models.		43
2.3.1 Early Uppsala internationalisation models.		45
2.3.2 The different mechanisms of market entry		48

2.3.2.1 The variety of market entry mechanisms	49
2.3.2.2 Joint-ventures	53
2.3.2.3 Wholly owned subsidiaries	59
2.3.2.4 Conclusion	60
2.3.3 Network or later Uppsala internationalisation models.	60
2.3.3.1 The network as an expansion mechanism.	61
2.3.3.2 Illustrating networks as expansion mechanisms.	64
2.3.3.3 Questioning the appropriateness of the network approach to internationalisation.	65
2.3.3.4 Conclusion.	67
2.3.4 Derived or 'innovation-related' internationalisation models.	68
2.3.4.1 Innovation related internationalisation models.	68
2.3.4.2 Some salient characteristics of innovation models of internationalisation.	78
2.3.5 Some problems with Uppsala internationalisation models.	79
2.4 Summary.	86
Chapter Three: American telecommunications.	
3.1 Introduction.	91
3.2 Early developments.	91
3.2.1 The Communications Act of 1934.	93
3.2.2 Increasing competitive pressures and continued investigation.	94
3.3 The Modified Final Judgement.	99
3.3.1 Provisions of the Modified Final Judgement.	101
3.3.2 Lines-of-business restrictions.	106
3.4 The Telecommunications Act of 1996.	110
3.4.1 Provisions of the 1996 Telecommunications Act.	110
3.4.1.1 The institutional landscape.	110
3.4.1.2 Geography and markets.	112
3.4.1.3 Structural separation.	114
3.4.1.4 Universal service.	115
3.4.1.5 Unbundling.	116
3.4.1.6 Manufacturing.	117
3.4.1.7 Replacement of previous regulatory efforts.	117
3.4.2 Developments subsequent to the 1996 Telecommunications	118

Act.	
3.4.2.1 The Eight District Court.	118
3.4.2.2 The funding and definition of universal service.	121
3.4.2.3 Section 271 and RBOCs failure to enter the long distance marketplace.	124
3.4.2.4 The 1996 Telecommunications Act as a Bill of Attainder.	127
3.4.2.5 RBOCs entry into the long distance market through marketing agreements with IXCs.	129
3.5. Summary.	132
Chapter Four: Model and methodology.	
4.1 Introduction.	133
4.2 A framework for understanding international investment activity.	133
4.2.1 Some implications of different types of knowledge.	134
4.2.2 Framework.	138
4.2.3 Other investigations of RBOCs investment activity.	140
4.2.4 Propositions.	143
4.2.4.1 Geographical.	143
4.2.4.2 Lines-of-business.	144
4.2.4.3 Organisational.	145
4.2.4.4 Risk.	145
4.3 Methods.	145
4.3.1 Sources of information.	148
4.3.1.1 Interviews.	150
4.3.2 The unit of analysis.	152
4.3.2.1 The unit of analysis adopted.	153
4.3.3 Methodology as an iterative process.	154
4.4 Summary.	158
Chapter Five: RBOCs domestic investment.	
5.1 Introduction.	160
5.2 Context: size and structure of the RBOCs.	161
5.2.1 Organisational structure.	163
5.2.2 Revenue structure.	166
5.3 BellSouth Corporation.	167

5.3.1 In-region.	169
5.3.2 Directory publishing.	171
5.3.3 Wireless investments.	173
5.3.3.1 Cellular.	175
5.3.3.2 Paging.	178
5.3.3.3 Mobile data.	181
5.3.4 Broadband services.	182
5.3.5 Conclusion.	184
5.4 US West Inc.	186
5.4.1 The diversification strategy.	188
5.4.2 The cellular strategy.	190
5.4.3 The broadband strategy.	193
5.4.4 The separation strategy.	196
5.4.5 Conclusion.	198
5.5 Bell Atlantic.	199
5.5.1 Diversification.	200
5.5.2 Multimedia.	202
5.5.2.1 Stargazer.	202
5.5.2.2 Tele-Communications Inc.	203
5.5.2.3 Building the full service network.	205
5.5.3 Cores lines-of-business.	208
5.5.3.1 Local telephone services.	209
5.5.3.2 Wireless.	212
5.5.4 Conclusion.	215
5.6 Nynex.	216
5.6.1 Financial and software diversification.	218
5.6.2 Multimedia.	220
5.6.3 Cellular expansion	223
5.6.4 Conclusion.	225
5.7 Ameritech.	226
5.7.1 Concentrating in-region.	228
5.7.1.1 Wireline.	228
5.7.1.2 Wireless.	231
5.7.1.3 Directory publishing.	234
5.7.2 Generating new revenue sources.	235

5.7.2.1 Security monitoring.	236
5.7.2.2 Cable-TV.	237
5.7.2.3 Venture capital.	238
5.7.2.4 Software investments.	239
5.7.3 Out-region expansion.	240
5.7.4 Conclusion.	241
5.8 SBC Communications.	242
5.8.1 Concentrating on the in-region network.	244
5.8.2 Investing in the wireless market.	247
5.8.3 Directory publishing and printing.	252
5.8.4 Out-region expansion.	254
5.8.5 Conclusion.	257
5.9 Pacific Telesis Group.	258
5.9.1 A dual edged sword – California.	262
5.9.2 The creation of PacTel Corporation.	264
5.9.3 ‘California First’ and the divestiture of AirTouch Communications.	265
5.9.4 Vulnerability.	268
5.9.5 Conclusion.	271
5.10 Bell system centred restructuring within the telecommunications industry.	272
5.10.1 SBC centred restructuring.	272
5.10.1.1 SNET.	274
5.10.1.2 Ameritech.	276
5.10.2 Bell Atlantic centred restructuring.	276
5.10.2.1 Nynex	276
5.10.2.2 GTE.	277
5.11 Summary.	279
Chapter Six: RBOCs international investment.	
6.1 Introduction.	281
6.2 BellSouth Corporation.	282
6.2.1 Geographical criteria.	283
6.2.1.1 Number of countries.	283
6.1.1.2 Geographical clustering.	284

6.2.2 The mechanisms of international expansion.	287
6.2.2.1 Cellular investments.	288
6.2.2.2. Start-ups.	288
6.2.2.3 Commitment deepening.	290
6.2.3 Financial evaluation.	291
6.2.4 Conclusion.	294
6.3 US West Inc.	295
6.3.1 The geography of international investments.	296
6.3.1.1 The number of countries.	296
6.3.1.2 The clustering of investments.	297
6.3.2 Operational characteristics of international investment activity.	299
6.3.2.1 A changing operational focus to the international investments.	299
6.3.2.2 Learning from cable-TV.	302
6.3.3 Organisational aspects of international investment activity.	304
6.3.3.1 The organisational form of international expansion.	304
6.3.3.2 Commitment deepening: the UK template and Russia.	307
6.3.4 Conclusion.	309
6.4 Bell Atlantic.	310
6.4.1 The geography of international investment activity.	310
6.4.1.1 The number of countries.	311
6.4.1.2 Geographical patterns within the host countries.	312
6.4.1.3 Why one plus one equals three.	313
6.4.2 Operational characteristics of overseas expansion.	314
6.4.2.1 Key or anchor investments.	315
6.4.2.2 Other investments.	320
6.4.2.3 A changing emphasis in the lines-of-business of investments.	321
6.4.2.4 Organisational dimensions of international investment activity.	323
6.4.3 Financial aspects.	325
6.4.4 Conclusion.	326
6.5 Nynex.	327
6.5.1 Client following.	327
6.5.2 Skill and competence driven international investment.	330
6.5.3 Headlong into Asia – TelecomAsia et al.	334
6.5.4 Conclusion.	336

6.6 Ameritech.	337
6.6.1 A changing geography of international investment activity.	338
6.6.1.1 Number of countries.	338
6.6.1.2 Increasing commitment towards Europe.	339
6.6.2 The operational focus of Ameritech.	342
6.6.2.1 Public telephone operators.	343
6.6.2.2. Other lines-of-business.	345
6.6.2.3 Organisational aspects of international investment activity.	347
6.6.3. Financial evaluation.	348
6.6.4 Conclusion.	349
6.7 SBC Communications.	350
6.7.1 Geographical criteria.	351
6.7.1.1 Number of countries.	351
6.7.1.2 Geographical clustering.	353
6.7.2 The lines-of-business of foreign investments.	359
6.7.2.1 Diverse lines-of-business.	359
6.7.2.2 Deepening and broadening of market commitment.	360
6.7.2.3 Investing in existing companies.	362
6.7.3 Financial evaluation.	363
6.7.4 Conclusion.	367
6.8 Pacific Telesis Group.	368
6.8.1 Geography.	369
6.8.1.1 Number of countries.	369
6.8.1.2 Clustering of countries.	370
6.8.2 Operational aspects of international investment activity.	372
6.8.2.1 Lines-of-business.	372
6.8.2.2 Organisational characteristics.	375
6.8.3 The financial and operational growth of Pacific Telesis International.	376
6.8.4 Conclusion.	378
6.9 Summary.	379
Chapter Seven: Geography, risk and the organisational form.	
7.1 Introduction.	382
7.2 Evaluating the impact of psychic distance on internationalisation.	384

7.2.1 Methodologies for the evaluation of psychic distance.	385
7.2.1.1 The Kogut & Singh index.	386
7.2.1.2 Country clusters of Ronen & Shenkar.	388
7.2.1.3 A measurement of the degree of internationalisation.	388
7.2.1.4 Methodology.	389
7.2.3 Initial analysis.	390
7.2.4 Further analysis.	393
7.2.4.1 Ameritech.	394
7.2.4.2 Bell Atlantic.	395
7.2.4.3 BellSouth Corporation.	398
7.2.4.4 Pacific Telesis Group.	402
7.2.4.5 SBC Communications.	403
7.2.4.6 US West Inc.	404
7.2.4.7 Conclusion.	405
7.3 Geography as a proxy for competition.	406
7.3.1 Competition within markets.	407
7.3.2 Measuring the degree of competition and liberalisation through a base index.	410
7.3.3 Analysis.	414
7.3.3.1 Ameritech.	414
7.3.3.2 Bell Atlantic.	415
7.3.3.3 BellSouth Corporation.	416
7.3.3.4 Pacific Telesis Group.	417
7.3.3.5 SBC Communications.	417
7.3.3.6 US West Inc.	418
7.3.4 Conclusion.	419
7.4 Organisational forms.	419
7.4.1 RBOCs international investment activity.	423
7.4.2 Ameritech.	424
7.4.3 Bell Atlantic.	425
7.4.4 BellSouth.	426
7.4.5 Pacific Telesis.	428
7.4.6 SBC Communications.	429
7.4.7 US West.	431
7.4.8 Conclusion.	435

7.5 Summary.	435
Chapter Eight: Lines-of-business.	
8.1 Introduction.	438
8.2 Classifying the international investments.	439
8.3 International investment activity by lines-of-business	441
8.3.1 Ameritech.	443
8.3.2 Bell Atlantic.	444
8.3.3 BellSouth Corporation.	445
8.3.4 Pacific Telesis Group.	446
8.3.5 SBC Communications	447
8.3.6 US West Inc.	448
8.3.7 The relationship between lines-of-business and capital investments.	450
8.3.8 Conclusion.	453
8.4 Evaluating the international – domestic interplay.	455
8.4.1 Internationalisation as the circumvention of domestic regulatory prohibitions.	455
8.4.2 Determining the interplay between domestic and international developments.	456
8.5 Summary.	462
Chapter Nine: Summary and conclusion.	
9.1 Introduction.	464
9.2. Individual profiles of the RBOCs.	467
9.2.1 Domestic.	467
9.2.2 International.	469
9.3 Geography and the organisational form.	471
9.4 Lines-of-business.	472
9.5 Synthesis	474
9.6 Theoretical contributions of the thesis	481
9.7 Future research areas.	485
9.7.1 Internet and electronic commerce.	485
9.7.2 The complexity of psychic distance.	486
9.8 Old Kent Road for Mayfair ...	487

Appendix A: The international investments of the RBOCs.

A.1 Ameritech.	493
A.2 Bell Atlantic.	494
A.3 BellSouth Corporation.	497
A.4 Pacific Telesis Group.	499
A.5 SBC Communications Inc.	501
A.6 US West Inc.	502

Appendix B: RBOCs descriptive data.

B.1 Ameritech.	506
B.2 Bell Atlantic.	507
B.3 BellSouth Corporation.	508
B.4 Nynex	509
B.5 Pacific Telesis Group.	510
B.6 SBC Communications Inc.	511
B.7 US West Inc.	512

Bibliography	513
---------------------	------------

ABBREVIATIONS.

ADC	Ameritech Development Corporation.
AT&T	American Telegraph and Telephone.
BANM	Bell Atlantic Nynex Mobile.
BAPCO	BellSouth Advertising & Publishing Corporation.
BIS	Business Intelligence Services Inc.
BOCs	Bell Operating Companies.
BOT	Build Operate Transfer.
BTO	Build Transfer Operate.
BSI	BellSouth International.
BST	BellSouth Telecommunications.
CAA	Creative Artists Agency.
CAPs	Competitive Access Providers.
CDMA	Code Division Multiple Access.
CD-ROM	Compact Disc-Read Only Memory.
CEE	Central and Eastern Europe.
CLECs	Competitive Local Exchange Carriers.
CPE	Customer Premises Equipment.
DoJ	Department of Justice.
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortization.
EDI	Electronic Data Interchange.
EU	European Union.
FCC	Federal Communications Commission.
FDI	Foreign Direct Investment.
FSA	Financial Security Assurance.
GATT	General Agreement on Tariffs and Trade.
GEIS	General Electric Information Services Inc.
ILECs	Incumbent Local Exchange Carriers.
IPO	Initial Public Offering.
ITU	International Telecommunications Union.
IMF	International Monetary Fund.
LATA	Local Access Transport Areas.
LOBS	Lines-of-Business.

M&A	Mergers and Acquisition.
MCCA	Mobile Communications Corporation of America.
MFJ	Modified Final Judgement.
MFN	Most Favoured Nation.
MNES	Multi-National Enterprise.
MSO	Multiple Systems Operator.
NAFTA	North American Free Trade Area.
NRAS	National Regulatory Authorities.
NTT	Nippon Telegraph & Telephone.
NYPSC	New York Public Services Commission.
NZ	New Zealand.
OECD	Organisation for Economic Co-operation and Development.
ONP	Open Network Provision.
OSS	Operational Support Systems.
PBX	Premises Based Switches.
PCS	Personal Communication Services.
PCN	Personal Communications Network.
PLC	Public Limited Company.
POPS	Points of Presence.
PUCs	Public Utility Commissions.
RBOCs	Regional Bell Operating Companies.
R&D	Research and Development.
RTDC	Russian Telecommunications Development Corporation.
SNET	Southern New England Telecommunications Corporation.
TBS	Turner Broadcasting Systems.
TCNZ	Telecom Corporation of New Zealand.
TDMA	Time Division Multiple Access.
TNCs	Trans-National Corporations.
TWE	Time-Warner Entertainment.
VDT	Video Dialtone.
WTO	World Trade Organisation.
WLW	Wer liefert was?
WWW	World Wide Web.

LIST OF TABLES.

Chapter One: Introduction.

Table 1.1: Generic strategies within the telecommunications industry	2
----------------------------------------------------------------------	---

Chapter Two: Internationalisation.

Table 2.1: Different schools of theoretical perspectives on MNEs	13
Table 2.2: Theoretical groups within the literature on MNEs and FDI	13
Table 2.3: Matching governance structures with commercial transactions	35
Table 2.4: Integration, markets and changes to corporate boundaries	38
Table 2.5: Four stage internationalisation by Swedish firms	45
Table 2.6: Forms of international market entry	50
Table 2.7: Bringing companies closer together	54
Table 2.8: Alliance characteristics	55
Table 2.9: The changing characteristics of joint-ventures	56
Table 2.10: Internationalisation and the network model	63
Table 2.11: Measures used to describe the network structure	67
Table 2.12: Stages in the export behaviour of Wisconsin SMEs	69
Table 2.13: Groups of pre-export activity	70
Table 2.14: A model of incremental internationalisation process of the firm	73
Table 2.15: Stages of export marketing development	74
Table 2.16: Levels of export marketing activities	77
Table 2.17: A brief summary of the evaluation from a falsifiability perspective	84
Table 2.18: A summary of the evaluation based on the explanation criteria	84

Chapter Three: American telecommunications.

Table 3.1: The RBOCs on divestiture	103
Table 3.2: LOB restrictions and release dates	109

Chapter Four: Model and methodology.

Table 4.1: A model of knowledge categories and transformation processes: types of knowledge	135
---------------------------------------------------------------------------------------------	-----

Table 4.2: Propositions and their corresponding location in the thesis.	144
Table 4.3: Key attributes of positivism and phenomenology	146
Table 4.4: The units of analysis	154
Table 4.5: Case study tactics for four design tests	157
Chapter Five: RBOCs domestic investments.	
Table 5.1: The regional Bell operating companies and other American telecommunications companies, March 30 1997	162
Table 5.2: The world's largest twenty-five telecommunications companies, 1998	163
Table 5.3: RBOCs network feature and productivity differences	171
Table 5.4: Significant wireless investments of BellSouth, 1984 – 1998	174
Table 5.5: Bell Atlantic capital expenditure, 1994 – 1997	210
Table 5.6: Value added services revenue growth	210
Table 5.7: Comparison of operating income source for Nynex, 1987 – 1994	220
Table 5.8: The multimedia and new technology investments of Nynex	221
Table 5.9: Joint-venture based expansion of Nynex's cellular business	225
Table 5.10: Ameritech's business unit by sector	227
Table 5.11: Capital expenditure	229
Table 5.12: Penetration of total access lines for selected vertical services	246
Table 5.13: RBOCs network feature and productivity differences	246
Table 5.14: The mergers, acquisitions and joint-ventures of SBC, 1984 – 1998	254
Table 5.15: Illustrating the unequal balance between Pacific Bell and the other subsidiaries within Pacific Telesis, 1994	262
Table 5.16: Creating the 'new' SBC Communications	275
Chapter Six: RBOCs international investments.	
Table 6.1: BellSouth's geographical expansion	284
Table 6.2: Asia/Pacific Rim investment cluster	285
Table 6.3: Latin American investment cluster	285
Table 6.4: European investment cluster	286
Table 6.5: International investment by line-of-business	288
Table 6.6: Australian investments	290

Table 6.7: Selected international operating details, 1992 – 1998	292
Table 6.8: The geographical expansion of US West	297
Table 6.9: The Asian investment cluster	298
Table 6.10: The east European investment cluster	298
Table 6.11: The west European investment cluster	298
Table 6.12: The organisational forms employed by US West	304
Table 6.13: The geographical expansion of Bell Atlantic	311
Table 6.14: European investment cluster prior to the acquisition of Nynex	313
Table 6.15: Other investments made by Bell Atlantic prior to the acquisition of Nynex	313
Table 6.16: How the acquisition of Nynex extended Bell Atlantic's international exposure	314
Table 6.17: A torrid affair – Bell Atlantic and Iusacell	317
Table 6.18: A changing focus to international investment	322
Table 6.19: Partners of international expansion	324
Table 6.20: Omnitel financial results	325
Table 6.21: The major reasons for internationalisation	328
Table 6.22: The extent of client following internationalisation for selected years	329
Table 6.23: International investments, 1990 – 1993	332
Table 6.24: Nynex's Asian adventure	334
Table 6.25: A burgeoning conglomerate – TelecomAsia	335
Table 6.26: The geographical expansion of Ameritech	339
Table 6.27: The European investments of Ameritech	340
Table 6.28: The non-European investments of Ameritech	340
Table 6.29: Expanding the European presence of Ameritech: indirect investments	342
Table 6.30: PTOs investments of Ameritech	343
Table 6.31: Evaluating financially Ameritech's investments	348
Table 6.32: The geographical expansion of SBC International	352
Table 6.33: Asia / Pacific Rim geographical cluster	353
Table 6.34: European geographical cluster	354
Table 6.35: Latin American geographical cluster	355
Table 6.36: Other international investments	355
Table 6.37: Investment grouped by type of partner	356

Table 6.38: New international ventures by year and type	360
Table 6.39: The Israeli investments of SBC International	360
Table 6.40: Reconciliation of equity investments, 1991 – 1998	366
Table 6.41: The geographical expansion of Pacific Telesis	370
Table 6.42: Asia / Pacific Rim investment cluster	371
Table 6.43: European investment cluster	372
Table 6.44: Selected financial information for Pacific Telesis International	377
Table 6.45: Selected operational information of Pacific Telesis Enterprises	377
Table 6.46: The lines-of-business favoured when investing overseas by the RBOCs	380

Chapter Seven: Geography, risk and the organisational form.

Table 7.1: The measurement of cultural characteristics for selected countries relative to the United States and based on Hofstede (1980)	387
Table 7.2: Country membership of psychic distance zones	388
Table 7.3: Geography, internalisation and RBOCs penetration of the index, 1984 – 1998	391
Table 7.4: The degree and pattern of the internationalisation of Ameritech, 1984 – 1998	395
Table 7.5: The degree and pattern of the internationalisation of Bell Atlantic, 1984 – 1998	396
Table 7.6: Nynex's Asian adventures	397
Table 7.7: The degree and pattern of the internationalisation of BellSouth, 1984 – 1998	399
Table 7.8: BellSouth's continued investment in Australia, 1987 – 1995	400
Table 7.9: The degree and pattern of the internationalisation of Pacific Telesis, 1984 – 1998	402
Table 7.10: The degree and pattern of the internationalisation of SBC Communications, 1984 – 1998	403
Table 7.11: The degree and pattern of the internationalisation of US West Inc, 1984 – 1998	405
Table 7.12: Illustrative examples of market conditions within Europe	409
Table 7.13: Base index criteria and weightings	411
Table 7.14: Index criteria and data for investment host countries	412
Table 7.15: Grouping host countries by dominant market characteristics	414

Table 7.16: Internationalisation and market characteristics: Ameritech	415
Table 7.17: Internationalisation and market characteristics: Bell Atlantic	415
Table 7.18: Internationalisation and market characteristics: BellSouth	416
Table 7.19: Internationalisation and market characteristics: Pacific Telesis	417
Table 7.20: Internationalisation and market characteristics: SBC	418
Table 7.21: Internationalisation and market characteristics: US West	419
Table 7.22: Different organisational forms for serving a foreign market	420
Table 7.23: Overview of the organisational forms used in the international investment activity of the RBOCs, 1984 – 1998	423
Table 7.24: Organisational form by psychic distance zone: Ameritech	425
Table 7.25: Organisational form by psychic distance zone: Bell Atlantic	426
Table 7.26: Organisational form by psychic distance zone: BellSouth	427
Table 7.27: Organisational form by psychic distance zone: Pacific Telesis	428
Table 7.28: Organisational form by psychic distance zone: SBC	430
Table 7.29: Organisational form by psychic distance zone: US West	432
Table 7.30: The principal investments of the RTDC in the Russian telecommunications market	433
Table 7.31: Comparing the different dimensions of RBOCs internationalisation	437

Chapter Eight: Lines-of-business.

Table 8.1: The distribution of RBOCs international investment activity by core, informed and non core activities	441
Table 8.2: The location of international investment activity by lines-of-business for Ameritech, 1984 – 1998	443
Table 8.3: The location of international investment activity by lines-of-business for Bell Atlantic, 1984 – 1998	444
Table 8.4: The location of international investment activity by lines-of-business for BellSouth, 1984 – 1998	446
Table 8.5: The location of international investment activity by lines-of-business for Pacific Telesis, 1984 – 1998	447
Table 8.6.: The location of international investment activity by lines-of-business for SBC, 1984 – 1998	448
Table 8.7: The location of international investment activity by lines-of-business for US West, 1984 – 1998	449

Table 8.8: Ameritech's international investments by lines-of-business.	451
Table 8.9: US West's international investments by lines-of-business, 1984 – 1998	453
Table 8.10: Differences in risk between the RBOCs	454
Table 8.11: A framework for evaluating the interplay between the domestic and international dimensions of RBOCs strategy	458

Chapter Nine: Summary and conclusion.

LIST OF FIGURES.

Chapter One: Introduction.

Figure 1.1: The structure of the thesis 5

Chapter Two: Internationalisation.

Figure 2.1: Specificity, replaceability and internalisation 42

Figure 2.2: The basic mechanism of internationalisation – state and change aspects 47

Figure 2.3: Network exchange 61

Figure 2.4: Two dimensional radical internationalisation 81

Chapter Three: American telecommunications.

Figure 3.1: The RBOCs *After 102*

Chapter Four: Model and methodology.

Figure 4.1: Market commitment, information and international investment activity 139

Figure 4.2: Multiple market entry international expansion 140

Figure 4.3: Predicted versus actual RBOCs diversification 141

Figure 4.4: Methodology as an iterative process 155

Chapter Five: RBOCs domestic investment.

Figure 5.1: Generic holding company service categories *After 165*

Figure 5.2: RBOCs revenue sources 167

Figure 5.3: BellSouth Corporation organisational structure *After 168*

Figure 5.4: Local telephone service revenues as a declining proportion of BellSouth revenue, 1984 – 1997 170

Figure 5.5: Rising subscribers and contribution to net income levels of BellSouth Cellular 178

Figure 5.6: BellSouth paging subscribers, 1986 – 1996 180

Figure 5.7: Domestic BellSouth strategies between 1984 and 1998 *After 185*

Figure 5.8: Domestic strategies of US West between 1984 and 1998 *After 187*

Figure 5.9: Disentangling US West: separating US West Communications *After 198*

Group from US West Media Group (MediaOne Inc) and the AirTouch transaction

Figure 5.10: The sources of Bell Atlantic revenue, 1994 - 1997	209
Figure 5.11: PCS PrimeCo subscriber growth	213
Figure 5.12: Domestic Bell Atlantic strategies between 1984 and 1998	<i>After</i> 216
Figure 5.13: Nynex organisational structure 1994	<i>After</i> 217
Figure 5.14: Revenue distribution and net income for Nynex, 1984 – 1996	217
Figure 5.15: Subscriber and revenue growth of Nynex Mobile Communications, 1984 – 1994	224
Figure 5.16: Domestic strategies of Nynex between 1984 and 1998	<i>After</i> 225
Figure 5.17: BOC derived revenues as a declining percentage of total revenues 1984 – 1996	229
Figure 5.18: Ameritech productivity improvements	230
Figure 5.19: Ameritech Cellular subscriber base growth	232
Figure 5.20: Domestic strategies of Ameritech between 1984 and 1998	<i>After</i> 242
Figure 5.21: Comparison of cumulative returns, 1984 – 1996	243
Figure 5.22: SBC Communications organisational structure 1996	<i>After</i> 243
Figure 5.23: Cellular's virtuous circle	248
Figure 5.24: SBC cellular revenue and subscriber growth, 1985 – 1998	251
Figure 5.25: Domestic strategies of SBC Communications between 1984 and 1998	<i>After</i> 258
Figure 5.26: Cellular revenue and subscriber growth, 1986 – 1994	261
Figure 5.27: Domestic strategies of Pacific Telesis between 1984 and 1998	<i>After</i> 271

Chapter Six: RBOCs international investment.

Figure 6.1: International strategies of BellSouth	<i>After</i> 294
Figure 6.2: The changing operational focus of US West	300
Figure 6.3: A maturing of international investment activity?	305
Figure 6.4: Comparing the organisation form for cable-TV and cellular investments	306
Figure 6.5: International strategies of US West	<i>After</i> 309
Figure 6.6: A growing Omintel subscriber base	319
Figure 6.7: International strategies of Bell Atlantic	<i>After</i> 326
Figure 6.8: International strategies of Nynex	<i>After</i> 336

Figure 6.9: International strategies of Ameritech	<i>After</i> 349
Figure 6.10: Equity in net income of affiliates, 1984 – 1996	364
Figure 6.11: International strategies of SBC Communications	<i>After</i> 367
Figure 6.12: A changing operational focus of Pacific Telesis International	373
Figure 6.13: International revenues and income before and after the AirTouch Communications – Pacific Telesis split	379
Figure 6.14: International strategies of Pacific Telesis	<i>After</i> 379
 Chapter Seven: Geography, risk and the organisational form.	
Figure 7.1: Factors influencing the determination of organisational strategy	383
Figure 7.2: The interplay between internationalisation and psychic distance: the case of Ameritech	<i>After</i> 395
Figure 7.3: The interplay between internationalisation and psychic distance: the case of Bell Atlantic	<i>After</i> 397
Figure 7.4: The interplay between internationalisation and psychic distance: the case of BellSouth	<i>After</i> 400
Figure 7.5: The interplay between internationalisation and psychic distance: the case of Pacific Telesis	<i>After</i> 402
Figure 7.6: The interplay between internationalisation and psychic distance: the case of SBC Communications	<i>After</i> 403
Figure 7.7: The interplay between internationalisation and psychic distance: the case of US West	<i>After</i> 404
Figure 7.8: The organisational form continuum	422
Figure 7.9: The changing equity distribution of Ameritech, 1984 – 1998	424
Figure 7.10: The changing equity distribution of Bell Atlantic, 1984 – 1998	425
Figure 7.11: The changing equity distribution of BellSouth, 1984 – 1998	427
Figure 7.12: The changing equity distribution of Pacific Telesis, 1984 – 1998	428
Figure 7.13: The changing equity distribution of SBC, 1984 – 1998	429
Figure 7.14: The changing equity distribution of US West, 1984 – 1998	431
Figure 7.15: Equity and financial investment levels for selected US West international investment activity	435

Chapter Eight: Lines-of-business

Figure 8.1: The changing composition of the international investment portfolio of BellSouth between 1984 and 1998	445
Figure 8.2: The changing composition of SBC's international investment portfolio, 1984 – 1998	447

Chapter Nine: Summary and conclusion.

Figure 9.1: Visualising RBOCs international investment activity	475
Figure 9.2: Ameritech	476
Figure 9.3: Bell Atlantic	477
Figure 9.4: BellSouth	477
Figure 9.5: Pacific Telesis Group	478
Figure 9.6: SBC Communications	479
Figure 9.7: US West Inc.	480

ACKNOWLEDGEMENTS.

Whilst the following elements of the thesis may have adopted “Oscar acceptance speech” like proportions, this stance here is one of brevity. I would to thank my supervisor, Professor Howard Williams, for his encouragement and for repeatedly pointing me in the right direction.

Gratitude is also expressed towards Professor Donald Lamberton and Professor Stanford Levin for their kindness in listening to, and then commenting on, various issues that contributed towards my understanding of issues contained within the thesis.

Finally, I would like to thank my mother and grandmother for their constant support over the years.

CHAPTER ONE: INTRODUCTION.

1.1 INTRODUCTION.

On January 15th 1999 AirTouch Communications and Vodafone Group PLC announced a merger that dramatically demonstrated how much the telecommunications industry has changed in recent years. Both AirTouch and Vodafone operate in the mobile communications industry, an industry that barely existed fifteen years ago. Furthermore, both AirTouch and Vodafone are relatively young companies, having been divested by their respective parent companies at the start of the 1990s. Notwithstanding their youth AirTouch and Vodafone are highly valued by the stock market, after all Vodafone did bid \$62bn to acquire AirTouch. Finally, both companies are international in scale and provide services around the globe through an intricate web of alliances and partnerships with other companies. AirTouch owns none of its international cellular businesses outright.

The merger between AirTouch Communications and Vodafone Group PLC underlined how far the traditional model of the telecommunications industry has collapsed. From the turn of the century the traditional model of telecommunications has tended to consist of a single operator, proscribed in its operational scope by national boundaries. These operators provided all elements of telecommunications service, and driven by the concept of universal service rolled out their networks to encompass the national space. This network supported a single service, namely, plain-old-telephone services (POTS). Each of the service providers purchased equipment from a limited number of manufacturers, often domiciled in the same country through what Cawson, Morgan, Webber, Holmes & Stevens (1990) describe as cartel like practices.

From the start of the 1980s the traditional model began to unravel, as what are now a familiar set of forces were set in motion. The legal and regulatory framework of the telecommunications industry has been radically restructured through privatisation, liberalisation and de-regulation. Liberalisation has facilitated the entry of new players into the industry, thereby shattering the monopoly organisation of the industry. Privatisation and de-regulation have vested a hitherto unknown degree of competition, innovation and

commercial orientation into the industry. The 1997 WTO Basic Agreement on Telecommunications is a testament to how far liberalisation has been accepted as common practice, as well as the commitment of governments to its continuation.

Technological advances, epitomised by digitalisation, have opened up the possibility for increased competition, declining costs as well as rapid service development. Moreover, the introduction of new services has increasingly relegated traditional telecommunications (POTS) to commodity like status. The most lucrative and fastest parts of the telecommunications industry are data and not voiced related. But as Fransman (1994) states technology is Janus-like: it is a threat as well as opportunity.

New technologies, and alterations to the regulatory framework, have increased the number of operators within the telecommunications industry. In perhaps what is the most visible break with the traditional model of telecommunications the industry is now occupied by an amazing array of companies. The United Kingdom now has more than 170 licensed operators. Moreover, these operators need not always have been telecommunications companies and can be from overseas as well. For instance, in France Bouyges, a construction company has joined with utilities and foreign telecommunications companies to form Bouyges Telecom. One of the earliest telecommunications companies to be privatised was Cable & Wireless in the UK, which in turn was a founder shareholder of International Digital Communications in Japan. International Digital Communications is a national and international long distance carrier that competes against the incumbent, NTT.

Table 1.1: Generic strategies within the telecommunications industry

	Established technologies	New technologies
Existing companies (outwith telecommunications)	E.g., Bouyges	E.g., Iridium.
New entrants	E.g., cellular companies	E.g., InterXion

Source: Whalley & Williams, 1998, pg7.

Cable & Wireless' participation in International Digital Communications is just one illustration of how liberalisation and privatisation have combined to integrate hitherto separate national markets. The scope and scale of foreign investments is shown in Elixmann (1998), Hausman (1993) and Noam & Wolfson (1997) among others. Established

telecommunications actors such as BT, as well as new entrants like Qwest, have all expanded outside their home markets. Through what Oh (1996) calls 'strategic global alliances' a handful of companies are intent on providing global seamless service, whilst beneath these alliances a plethora of national and regional partnerships is clearly evident. Telecommunications companies have formed alliances to expand their geographical scale, to gain access to skills and competencies that they do not possess, to retain existing customers and to take the fight to their competitor's home market. Alliances, at whatever scale, serve to integrate the telecommunications industry and to increase the complexity that companies must face in their day-to-day operations.

The end result of these changes is that the telecommunications industry has become more complex. With the loss of old certainties, the introduction of competition and continued technological advances companies operating within the telecommunications industry are exposed to considerable risk and uncertainty. This is particularly true of those companies with no prior international experience to draw on to help mitigate the risk and uncertainty faced. By definition, those telecommunications company without any prior international experience is the entire industry. Yet telecommunications companies cannot solely focus all their resources on the problems of international expansion, as they have to manage their national businesses as well. Moreover, telecommunications companies must also balance obligations in one market against those elsewhere. This is particular true of public telephone operators (PTOs) like BT, which was told by the UK regulatory that its global aspirations must not be detrimental to its domestic subscriber base.

Given that the telecommunications industry is more competitive and complex, and that as a result the risk and uncertainty of operating overseas is considerable, an obvious question that arises is why have companies expanded outside their home market? Furthermore, how have telecommunications companies expanded internationally? To these two questions can be added a third, namely, where have companies expanded to internationally? This thesis addresses these three questions through a detailed examination of the international investment strategies of the regional Bell operating companies, or RBOCs. The RBOCs provide a unique opportunity to examine how seven companies, all from the United States, with the same technological, managerial and cultural heritage and without any prior international experience, have expanded overseas in a complex and uncertain telecommunications industry. Thus, the RBOCs provide a laboratory in which the theoretical understanding of international expansion can be tested.

These questions are addressed through the use of a qualitative methodology, and not through quantitative methodologies such as internal rate of return and other investment analysis techniques. The insight that these techniques can provide into international investment activity is limited. International investment activity is more complex than these techniques suggest, in that factors other than, for instance, the ability of an investment to meet rate of return objectives, play important roles in determining whether or not an investment is undertaken. Moreover, many of the issues inherent to international investment activity that require consideration in any analysis do not readily or easily lend themselves to quantification. Therefore, by adopting a qualitative methodology a more sophisticated and complete understanding of RBOCs international investment activity is presented in this thesis.

1.2 STRUCTURE OF THE THESIS.

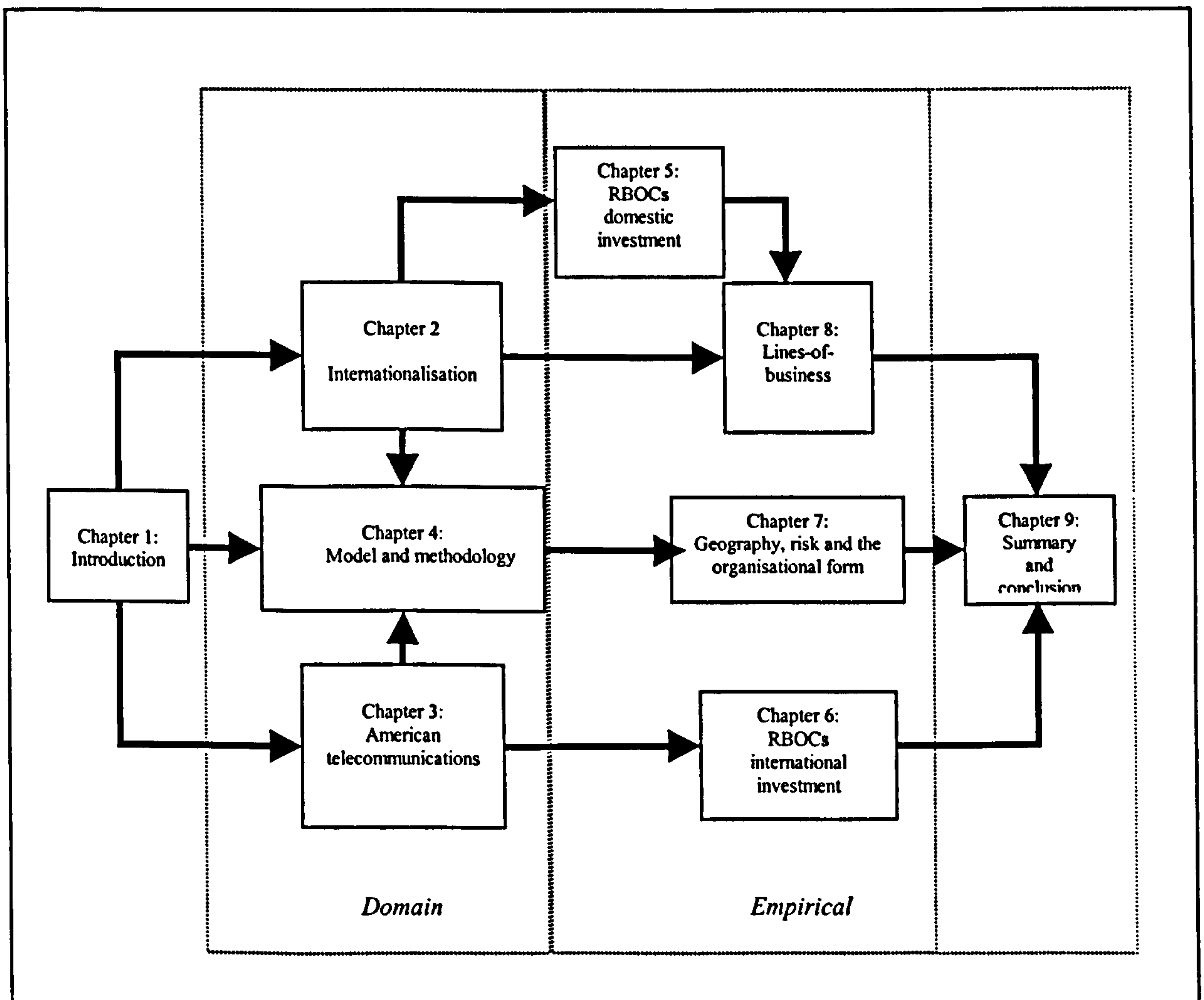
The thesis is divided into two parts: domain and empirical analysis. The first part of the thesis is comprised of three chapters. In Chapter Two theoretical perspectives on internationalisation are presented, whilst Chapter Three provides an overview of developments within the American telecommunications industry. Chapter Four proposes a theoretical framework and methodology for understanding RBOCs international investment activity since 1984.

The second part of the thesis is comprised of five chapters. In the first two chapters longitudinal case studies of RBOCs investment activity in the domestic (Chapter Five) and then international (Chapter Six) contexts are presented. Chapter Seven then examines the geographical and organisational dimensions of RBOCs international investment activity, and is followed in Chapter Eight by a study of the lines-of-business in which the RBOCs have invested. Finally Chapter Nine draws together the analysis through presenting a synthesis of the research findings and suggesting areas for future research. The relationship between the chapters is illustrated in Figure 1.1 (below).

Chapter Two, *Internationalisation*, is concerned with the theoretical understanding of international investment activity. After recognising that the global market is characterised by a series of imperfections this chapter recounts those theories that seek to understand multinational enterprises (MNEs) on this basis. The theoretical perspectives reviewed are internationalisation, the eclectic paradigm; transaction costs economics and Uppsala

internationalisation models. The term 'Uppsala internationalisation models' is used here to encompass three separate yet related groups of theoretical perspectives: early and network internationalisation models and innovation related models. The chapter concludes by drawing attention to the complementarity of one of the early internationalisation models, Johanson & Vahlne (1977), and asset specificity. Johanson & Vahlne (1977) conceptualise international expansion as being gradual and incremental, a theoretical stance that can be extended by asset specificity.

Figure 1.1: The structure of the thesis



Chapter Three, *American telecommunications*, provides an overview of the American telecommunications industry from the late nineteenth century until the end of 1998. The overview charts the major regulatory and industry developments within the American telecommunications industry, and demonstrates that this history is punctuated by a series of epochs. The first of these epochs, the 1934 Communications Act, ushered in a period of regulated monopoly in the form of AT&T. The 1934 Communications Act also created the Federal Communications Commission. Increasing competitive pressures resulted in the

second observable epoch: the 1984 Modified Final Judgment (MFJ). The MFJ broke AT&T into a competitive, long distance company and seven local monopolies, the so-called Baby Bells or RBOCs. Once again mounting competitive pressures, primarily due to technological advances, and an increasing incongruity between the regulatory framework and the nature of the industry, resulted in the third epoch: the 1996 Telecommunications Act. Through recounting regulatory and industry developments subsequent to the 1996 Telecommunications Act it is shown that rather than establishing a period of stability as envisaged, the telecommunications industry is increasingly characterised by uncertainty.

Themes addressed in the preceding chapters, that is, of the theoretical understanding of international investment activity and the American telecommunications industry, are brought together in Chapter Four, *Model and Methodology*. In this chapter a framework for understanding international investment activity is articulated that draws together Johanson & Vahlne (1977) and the transaction cost economics concept of asset specificity. This framework recognises that the market imperfections present in the international environment give rise to risk and uncertainty. These are mitigated through a gradual and incremental foreign expansion that enables the investing company to adjust to the vagaries of its new surroundings and to increase its level of foreign experience. The framework also recognises that due to cultural and other differences present not all experience gained is freely transferable to other locations. This results in commitment deepening within a single country, investment to similar countries or lines-of-business.

The empirical chapters examine RBOCs investment activity in three different but complementary ways. After highlighting the common organisational and revenue characteristics of the RBOCs Chapter Five, *RBOCs domestic investments*, details on an individual basis their domestic strategies. By adopting a longitudinal approach the narrative and analysis within each of the case studies demonstrate how investment activity has not remained constant since 1984. The analysis highlights those common strategies that are evident. For instance, each of the RBOCs has implemented a cellular strategy as well as sought to affect a multimedia strategy. It is also shown that some of the RBOCs have adopted differentiating strategies. For example, Ameritech has entered the cable-TV industry in-region whilst US West was at one time active in the real estate market. The 1996 Telecommunications Act heralded a wave of restructuring within the telecommunications industry, and this has not left the RBOCs untouched. The chapter concludes by detailing the

RBOCs related merger and acquisition activity undertaken since the passage of the 1996 Telecommunications Act.

On first glance it may appear somewhat paradoxical that a chapter on RBOCs domestic investment activity is included within a thesis ostensibly concerned with international investment activity. It is, however, necessary to detail the domestic investment activity of the RBOCs so that the validity of one of the propositions posed in Chapter Four can be evaluated. In other words, Chapter Five provides the context that enables Chapter Eight to ascertain the nature of the domestic – international investment activities undertaken by the RBOCs.

The empirical analysis of the RBOCs continues in Chapter Six, *RBOCs international investments*. In this chapter the international investment activity of each of the RBOCs is examined and salient characteristics highlighted through longitudinal case study analysis. By adopting a longitudinal case study approach to the analysis the dynamic of RBOCs investment activity is brought to the fore. The case studies demonstrate two things. Firstly, that the strategies implemented by the RBOCs have changed since they began to invest overseas. Strategies have not only changed in response to failure, but also in response to the opening up of new investment opportunities that have arose as liberalisation has become more commonplace. Secondly, the longitudinal case study analysis demonstrates that both similarities and differences are evident in the international strategies of the RBOCs.

Chapters Seven and Eight continue the analysis of RBOCs investment activity though in a somewhat different vein than that in Chapter Six. The principal differentiating factor is that these two chapters adopt a thematic approach to understanding RBOCs international investment activity. In the first part of Chapter Seven, *Geography, risk and the organisational form*, geography is interpreted in two different ways. The first interpretation understands geography in relation to psychic distance whilst the second relates geography to the competitiveness and liberalisation of host markets. Chapter Seven then goes onto examine the organisational forms employed by the RBOCs over the course of their international expansion. Common to both the geographical and organisational form parts of the chapter is a concern with how far the RBOCs have been risk averse when investing abroad.

The concern with risk is continued into Chapter Eight, *Lines-of-business*. In this chapter, a threefold taxonomy of the lines-of-business in which the RBOCs have invested is proposed. Depending on their operational distance from the core domestic lines-of-business the international investments were classified as core, informed or non-core. Least risk is associated with core lines-of-business, and conversely most risk is associated with non-core. Using this taxonomy the chapter examines the risk profile of the international investments made by the RBOCs. The analysis draws attention, however, to the fact that the initial taxonomy may be misleading, and that the considerable capital expenditure of some of the core lines-of-business investment result in their equation with considerable risk. Finally, Chapter Eight examines the relationship between the domestic and international investment strategies of the RBOCs. The aim here was to determine whether or not the RBOCs have used their international investments to circumvent domestic regulatory prohibitions.

Chapter Nine, *Summary and conclusion*, recounts the conclusions reached in the preceding empirical chapters as to the nature of RBOCs investment activity. Through reference to the theoretical understanding of international investment activity being risk averse a synthesis is presented that draws together the conclusions reached in Chapters Six, Seven and Eight. This synthesis clearly illustrates the complexity of international investment activity and how the dimensions used in the analysis of the RBOCs are inter-related. The second half of the chapter suggests areas for future research.

CHAPTER TWO: INTERNATIONALISATION.

2.1 INTRODUCTION.

A frequent feature of business publications is some form of corporate beauty contest, where companies are evaluated and subsequently ranked along numerous criteria such as market capitalisation, the depth and quality of management, brand recognition and so forth. Success, however it is measured, is lauded whilst failure is correspondingly chastised, and the widespread fascination with such contests has resulted in terms like "Fortune 500" becoming everyday parlance. One criterion that has attracted much attention is the degree to which companies are internationalised, whether this is in terms of assets, revenues or ownership. A broad consensus can be found across the business press that internationalisation, in whatever form it may take, is advantageous.

However, many business publications display a Janus like attitude to internationalisation. On the one hand it enables companies to enter new markets, gain revenues and profits and expand the range of services offered or goods produced. Internationalisation also exposes companies to increased risks, not only through trading in different socio-economic environments which may not be well as understood as needs be, but also by exposing the company to greater environmental volatility. A case in point here is Citibank, one of America's largest banks, that is also one of the most internationalised as well. In latter half of 1998 the bank came under criticism for both its exposure to the volatile Asian economies, as well as its willingness to serve the ruling elite of several of the markets in which it operates. Yet, when these very same markets were growing Citibank was lauded for its timely and astute internationalisation strategy.

In many respects the business press fascination with internationalisation is a relatively recent phenomena. This fascination is reflective of, but divorced from, a range of debates concerned with the wide reaching consequences of continued economic integration that has occurred due to the inter-related increases in foreign direct investment (FDI) and global trade. The last quarter of a century has witnessed unprecedented and dramatic increases in both FDI, and to a lesser extent

world trade.¹ Although world trade grew at between two and four percent over the period 1986 to 1993, both the growth rate and the sums involved are insignificant when compared to the forty percent growth rates and near \$100bn annual flows of FDI during the mid-1980s. In 1997 the International Monetary Fund (IMF) explained the dramatic growth of FDI with reference to multinational enterprises (MNEs), writing that:

[f]oreign direct investment flows mainly represent the expansion of the international activities of multinational enterprises, so that the surge in foreign direct investment is a reflection of the globalisation of business that has taken place in recent years. Worldwide flows of foreign direct investment began to surge in the mid-1980s, with the total flow of direct investment outward from the industrial countries more than quadrupling between 1984 and 1990.²

As literally defined MNEs have been active on the international stage for as long as international trade has been conducted. Cantwell (1989), Jones (1996) and Wallerstein (1991) variously demonstrate that international economic integration is not a new phenomenon, and that trading houses, such as the East India Company, integrated the British and other empires together. However, this form of international economic integration, and the MNEs that it engendered, are at odds with both developments within the present century as well as the implicit linking of MNEs with the Fords, Unilevers and Exxons of this world. Dunning, Cantwell & Corley (1986) show that since 1914 the scope and nature of FDI, as well as the associated MNEs, has changed. Prior to 1914 MNEs activity was mainly associated with the western industrial nations of Britain, Germany and France and was split between extractive industries and import substitution manufacturing activities. The MNEs that developed in this latter area co-ordinated the flow of resources between production units, and were largely associated with the need to circumvent barriers to trade, such as tariffs and import quotas, that were prevalent at this time.

It was not until the late 1940s that this pattern of FDI and MNEs origin altered, with the post-war military and political hegemony of America being mirrored economically. By 1960, America originated 49% of the FDI that was increasingly focused in other developed countries such as

¹ Bouma, 1996, pg44.

² International Monetary Fund, 1997, pg60.

Britain and Germany.³ Moreover, this investment was also manufacturing rather than extractive in focus. However, the composition of FDI, and the origin of MNEs, has not remained constant. The emergence of initially Japan and Germany as regional economic powerhouses, and then the rise of the Asian tiger economies such as Taiwan and Singapore, diversified the origin of both FDI and MNEs.

Notwithstanding this diversification the locus of investment has remained the Triad of Japan-United States-European Union (EU). The UNCTAD (1996) clearly shows that although the stock of FDI has risen from more than fourfold over the period 1980 – 1995, the Triad has increased its share of the inward FDI to 62%, and continues to originate more than 80% of the outward stock.⁴ In contrast the sectorial balance of FDI has undergone profound changes, moving away from extractive industries to manufacturing, and now increasingly towards tertiary activities.⁵ Bouma (1996) demonstrates this changing composition. Since 1970 the primary sector's (extractive and agricultural industries) share of FDI has declined, but so has the share accounted for by the secondary sector (manufacturing) whilst the share accounted for by tertiary activities (services) has increased.⁶ Significantly growth within the service sector has not been uniform. Sauvart & Jimmy (1987) demonstrate that within the sector two areas in particular have driven the rise in the sector's prominence; namely, financial services and infrastructure investments in transportation, communications and public utilities.

Associated with, and in parallel to, the increase in FDI and MNEs expansion are wide ranging and fundamental changes that have taken place within the political sphere. Although these changes are outside the scope of this thesis it is necessary to recognise their importance and impact on both internationalisation in general, and telecommunications in particular. Significant political developments include:

³ Dunning, Cantwell & Corley, 1986, pg34.

⁴ UNCTAD, 1996.

⁵ Bouma, 1996, pg55.

⁶ Bouma, 1996, pg55.

- The assertion of the capitalist hegemony. The fall of the Berlin Wall exemplified the failure of socialist regimes to provide for the needs of their populations, and underlined the supremacy of the free market as an organising mechanism.
- The international stage is increasingly characterised by a diversity of actors. On the one hand these include ‘traditional’ actors such as the nation-state, or international agencies like the United Nations or International Monetary Fund to which nation-states voluntarily surrender sovereignty to achieve a common goal. More recently these organisations have been joined by a range of new international actors that are often focused around a single issue. For instance, international charities and environmental groups.
- The simplified bipolar world of the Cold War has been replaced by a more complex multi-polar environment arrangement. In this more complex environment whilst the United States remains a military hegemon, its economic and political position is increasingly open to question.
- Directly related to the above point is the increasing prevalence of regional bodies, either political or economic in orientation, on the international stage. One of the most vigorous of the regional bodies to emerge in the post-WWII period, and perhaps the most successful, is the European Union (EU). Other regional bodies include, APEC and MERCOSUR.

Throughout the aforementioned changes the academic debate into internationalisation and MNEs has been ongoing. The diversity and scope of the debate is testified to through the broad nature of Agarwal (1980), Balasubramanyan (1994), Dunning, Cantwell & Corley (1986), Hertner & Jones (1986), Jenkins (1987) and Jones (1994) amongst others. Jenkins (1987), in the course of discussing internationalisation and uneven development, identifies four broad schools of theoretical perspectives on MNEs: neo-classical, global reach, neo-fundamentalists and neo-imperialist. Within each of these schools the theoretical perspectives adopt a common stand towards the essential characteristics of MNEs. The neo-classical school views MNEs as the “efficient allocators of resources internationally so as to maximise world welfare.”⁷ In contrast,

⁷ Jenkins, 1987, pg18.

global reach perspectives emphasis the oligopolistic nature of MNEs. The impact of MNEs on lesser-developed countries is evaluated by both the neo-imperialists, as well as neo-fundamentalists. These two schools are the antithesis of one another, with the former regarding the impact of MNEs as negative, and the latter as positive.

Table 2.1: Different schools of theoretical perspectives on MNEs

	Pro-MNE	Anti-MNE
Non-Marxist	Neo-classical	Global reach
Marxist	Neo-fundamentalists	Neo-imperialists

Source: Jenkins, 1987, pg17.

A more extensive review of the literature on the determinants of FDI can be found in Agarwal (1980). The diverse theories reviewed are structured into four broad categories, demonstrating in the process both the similarities as well as differences present within the literature. The four broad categories of theory identified are; those assuming perfect markets; those based on market imperfections; those concerned with the propensity to invest; those that deal with the determinants of the inflow of FDI.

Table 2.2: Theoretical groups within the literature on MNEs and FDI

Hypotheses assuming perfect markets	Hypotheses based on market imperfections
<ul style="list-style-type: none"> • Differential rate of return hypothesis • Portfolio hypothesis • Output & market size hypothesis 	<ul style="list-style-type: none"> • Behavioural hypothesis • Product cycle hypothesis • Oligopolistic reactions hypothesis • Internalisation hypothesis
Hypothesis on the propensity to invest	Determinants of the inflow of FDI.
<ul style="list-style-type: none"> • Liquidity hypothesis • Currency area hypothesis • Other determinant variables 	<ul style="list-style-type: none"> • Political instability • Incentives • Cheap labour

Source: Agarwal, 1980.

After reviewing a wide array of literature Agarwal (1980) concludes that “each of the proceeding hypothesis (theories) accounts only partially for the determinants of FDI.”⁸ Furthermore, despite the considerable investigation conducted over the years no general theory of internationalisation exists. It is axiomatic that differences will be present between those theories based on the assumption of perfect markets, and those on imperfect markets but differences also occur within

⁸ Agarwal, 1980, pg763.

each of the four broad categories identified. For instance, due to its derivation from the profit maximisation conceptualisation of a company the differential rate of return hypothesis argues that capital flows from those countries with low rates of return to those with higher yields. Although it does display similarities the portfolio hypothesis is different in that it takes into account the influence of risk on international investment, arguing that investment is positively related to the rate of return and negatively to the degree of risk. Finally, the output and market size hypothesis argues that investment is more likely the larger the company's sales within a market, and the larger the overall size of the marketplace. All of the theories cover different yet complimentary aspects of internationalisation under conditions of perfect markets, yet alone are incapable of offering a satisfactory explanation of internationalisation.

The theoretical diversity highlighted by Jenkins (1987) and Agarwal (1980) above, as well as the failing to date to develop a general theory of internationalisation, are testament to the continued and lively nature of the debate on internationalisation. Notwithstanding the contribution of those theories assuming perfect markets to the debate, the development of the intellectual debate, and therefore literature, has progressed in such a fashion as to show the general acceptance of internationalisation being motivated by the presence of markets imperfections. Market imperfections fragment the international space economy, creating uncertainties and transactional costs in the process that MNEs seek to mitigate through FDI. As noted by Dunning & Rugman (1985):

[t]oday it is widely recognised that the theory of FDI (i.e., international production) is primarily about the transfer of nonfinancial and ownership specific intangible assets by the MNE, which needs to appropriate and control the rate of use of its internalised advantages.⁹

Implicit within Perlmutter's (1969) three stage conceptualisation of MNEs development is the presence of asymmetries between markets, whilst Buckley (1990) asserts that the core theory of MNEs "is based on internalisation theory, the theory of location and competitive dynamics."¹⁰ As shall be shown in the following section market imperfections are at the heart of the

⁹ Dunning & Rugman, 1985, pg228.

¹⁰ Buckley, 1990, pg657.

internalisation perspective. The explanations of MNEs promoted by both Dunning (1993b) as well as Dicken (1992) favour market imperfections over other theoretical perspectives.

As a consequence of this leaning within the literature this chapter shall be structured in the following manner. The next section shall detail three of the principal theoretical perspectives on internationalisation that reflect this acceptance of market imperfections. These are internalisation, transaction cost economics (TCE) and the eclectic paradigm. The main tenets of each shall be outlined, and some of the problems encountered noted. Whilst these theoretical perspectives undoubtedly offer insights into the development of MNEs, they represent only one way in which to conceptualise MNEs. Another way, and one which implicitly recognises the environmental uncertainty in which companies operate, as well as the role of market knowledge – information – in shaping internationalisation, is represented by a group of models which conceive internationalisation to be an incremental and gradual process. In essence, this viewpoint argues that a company will adapt to a foreign environment incrementally, through a series of stages that are punctuated by periods of reflection and adjustment. Although these models are usually associated with Scandinavian, the literature is, however, considerably wider than this and includes contributions from the UK as well as America. A recounting of these models shall constitute the second section of this chapter.

2.2 MARKET IMPERFECTIONS AND INTERNATIONALISATION.

As stated above there is a general acceptance that market imperfections are the prime motivator in the development of MNEs. Market imperfections are the manifestation of two countervailing tendencies: firstly, the integration of the global economy through increased trade and FDI; and secondly, the resilience of the locality as exemplified through the nation state as the principal organising unit within international relations. The former of these trends integrates the global space economy, removing asymmetries in the process so that trading costs are reduced. Whereas in contrast, the second trend resists these forces and exerts the supremacy of the local or national over that of the inter or supra national. This resilience engenders asymmetries and trading costs. As Rugman (1980) states that the result of this is that:

[t]he world is characterised by imperfections in the goods and factor markets which act as barriers to the free trade of goods and services and inhibit private international financial investment. As a result neither factor price equalisation nor goods price equalisation has been observed.¹¹

Although Hymer was not the first to comment on the impact of market imperfections on MNEs, with Bain (1956) and Penrose (1956) both predating by several years, it is Hymer who is the more feted of the three. Dunning & Rugman (1985) write “the pioneering conceptual insight of Hymer was to break out of the arid mold of international trade and investment theory and focus attention on the MNEs per se.”¹² Yamin (1991) eulogises that “virtually without exception every subsequent attempt to explain DFI [direct foreign investment] and the TNCs [transnational corporation] has as its centre some sort of market failure.

According to Hymer (1976) there are two reasons why a company will seek control of an investment. The first explanation offered by Hymer (1976) is termed “direct investment” or “Type 1” investment, and relates to the prudent use of assets: Hymer (1976) states that:

[t]he investor seeks control over the enterprise in order to ensure the safety of his investment. ... If the entrepreneur has no funds of his own in the enterprise he controls, his incentive not to go into bankruptcy is lessened. This is especially important in international investment where there is an inherent conflict of interest between investors of different nationality over how much reserves are to be kept in a particular currency. There also appears to be considerably more distrust in international transactions than in the international and therefore more incentive for the capitalist to seek control.¹³

In the course of the discussion of Type 1 investment Hymer (1976) draws parallels with portfolio investment, noting that in both cases interest rates are important. This does not mean, however, that Type 1 and portfolio investment are interchangeable. Instead, Type 1 investment can be viewed as a continuation of portfolio investment which it replaces when the distrust of

¹¹ Rugman, 1980, pg365.

¹² Dunning & Rugman, 1985, pg228.

¹³ Hymer, 1976, pg23f.

foreigners and fear of expropriations are high.¹⁴ As Type 1 investment is similar to portfolio investment, and they both share the importance of interest rates, the same problems of empirical validation, risk and uncertainty are valid.

Hymer (1976) labels the second explanation for why a company will seek control of an enterprise “international production” or “Type 2” investment. In this case the company is motivated by the desire to remove a potential source of competition:

[i]t frequently happens that enterprises in different countries compete with each other because they sell in the same market or because some of the firms sell to other firms. If the markets are imperfect, that is, if there is horizontal or bilateral monopoly or oligopoly, some form of collusion will be profitable. One form of collusion is to have the various enterprises owned and controlled by one firm. This is one motivation for firms to control enterprises in foreign countries.¹⁵

International production or Type 2 investment may also be motivated by reason, however. The presence of imperfect markets ensures that alternatives such as licensing or selling overseas may not be the most appropriate way for a company to maximise the return on its investments.¹⁶ With respect to licensing two problems are explicitly mentioned by Hymer (1976). Firstly, that the licensing of the product to companies overseas does not maximise the level of joint profits, and secondly, that the precise use of the product and its level of production may not be controllable in all circumstances. This will undermine the level of profits accruing to licensee and licensor alike.¹⁷ More generally, Hymer (1976) argues that the greater the imperfections the more attractive international production becomes as a way of entering the foreign market. Therefore, the company seeks control of the foreign enterprise in order to secure the full returns on the skills and competencies that it possesses.

¹⁴ Hymer, 1976, pg24.

¹⁵ Hymer, 1976, pg25.

¹⁶ Hymer, 1976, pg25f.

¹⁷ Hymer, 1976, pg46-54.

Hymer (1976) shows, therefore, that companies may internationalise through one of two ways. Either the company may acquire potential competitors overseas or utilise its existing production advantages and establish a wholly owned foreign subsidiary.

The work of Hymer is often linked with that of Kindleberger in what some have called the “Hymer-Kindleberger Tradition.” At the core of this tradition is the argument that internationalisation is facilitated through the possession by the company of some specific advantage that enables it to overcome all of the difficulties associated with operating overseas. Kindleberger refined the list of advantages that a company may possess, proposing amongst others cheaper sources of finance, brand name, scale economies arising from vertical integration, transfer pricing and proprietary knowledge.¹⁸ It is also important to remember that for these advantages to facilitate internationalisation they must be in some manner transferable to the subsidiary. Buckley (1981) summarises the Hymer-Kindleberger tradition as follows:

... the H/K [Hymer-Kindleberger] approach suggests that an MNE must possess an internally transferable advantage, the possession of which gives it a quasi-monopolistic opportunity to enter host country markets. Barriers to trade and barriers which prevent host country firms from duplicating this advantage mean that direct foreign investment is frequently the preferred form of exploiting the advantage in foreign markets.¹⁹

2.2.1 Internalisation.

The internalisation perspective on internationalisation builds on the insight of Hymer (1976) that imperfect markets engender transaction costs. The wide ranging nature of market imperfections has already been alluded to, and is reinforced by Buckley & Casson (1991) who identify five different variants:

- The absence of a futures market that would enable time lagged activities to be coordinated with one another.

¹⁸ Kindleberger, 1969 cited in Buckley, 1981, pg71f and Agarwal, 1980, pg749.

¹⁹ Buckley, 1981, pg73.

- The abuse of a dominant market position as demonstrated through the raising of prices and so forth.
- An indeterminate or unstable bargaining situation brought about by a bilateral concentration of market power.
- Government intervention relating to the imposition of tariffs and other restraints on the flow of free trade.
- An asymmetrical relationship between buyer and seller leading to risk and uncertainty.²⁰

Internalisation is the result of a company's reaction to the presence of these imperfections on its business activities. The company will replace or augment the market where the benefits outweigh the costs of remaining within the market. When internalisation occurs across national boundaries FDI results. However, internalisation is not without costs as replacing or augmenting the market with managerial fiat has "higher resource costs and higher communications costs than a corresponding external market, and will be more prone to political interference."²¹ Internalisation will continue until, as Agarwal (1980) states, "the benefits and costs of internalisation are equalised at the margin."²²

2.2.1.1 Internalisation as the creation and replacement of markets.

As intimated two connotations to internalisation exist. In the first of these the company creates a market where none previously existed so that value can be placed on a particular externality, whilst in the second connotation a company replaces a contractual arrangement between two parties with common ownership.²³ Addressing both connotations of internalisation Buckley & Casson (1991) state that there are certain circumstances in which the urge to internalise is particularly strong, none more so than in the case of intangible assets such as knowledge. Knowledge, however it may be embodied, is problematic due to its public goods nature and ease of reproduction. If a company is to maximise its returns from a given piece of information,

²⁰ Buckley & Casson, 1991, pg37ff.

²¹ Buckley & Casson, 1991, pg41.

²² Agarwal, 1980,, pg753.

²³ Buckley, 1985, pg9.

which may for example be the fruits of R&D expenditure, then the piece of information can not be allowed outside of the organisational boundaries as others would then be able to gain access and benefit from it.

Such problems can be countered through the creation of markets internal to the company to which the duty of assigning value to hitherto unvalued intangibles such as knowledge is given. In doing so, not only does this attribute value to the knowledge but is also prevents others from opportunistically abusing someone else's labours:

..[t]he MNE will exploit its advantage in all available markets and will keep the use of information internal to the firm in order to recoup its initial expenditures on research and knowledge operations. Production by subsidiaries is preferable to licensing or joint ventures since the latter two arrangements cannot benefit from the internal market of an MNE. They would therefore dissipate the information monopoly of the MNE, unless foreign markets were segmented by effective international patent laws or other protective devices.²⁴

Hence, the public goods nature of knowledge, and the desire to avoid opportunistic behaviour by others, necessitates that internalisation occurs through wholly owned subsidiaries. Joint-ventures and other collaborative organisational forms are inappropriate as they present an occasion for opportunistic behaviour.²⁵ Furthermore, wholly owned subsidiaries are advantageous in other respects, which as identified by Buckley (1985) are:

...(1) increased ability to control and plan production and in particular to co-ordinate flows of crucial inputs; (2) exploitation of market power by discriminatory pricing (3) avoidance of bilateral market power (4) avoidance of potential government intervention by devices such as transfer prices.²⁶

²⁴ Rugman, 1980, pg369.

²⁵ Hennart, 1986, pg796.

²⁶ Buckley, 1985, pg10.

The second connotation to internalisation is the replacement of market based contractual relationships with common ownership. From Buckley & Casson (1991), Casson (1983 and 1992) and Jenkins (1987) it is possible to identify several explanations for this type of internalisation, with one being the desire to counter opportunistic behaviour in industries characterised by long term contracts, large capital investments and oligopolistic structures. In addition, bringing separate companies under common ownership allows for similar quality controls to be enforced, resources to be accessed and transfer pricing mechanisms to be initiated. To this Hennart (1986) adds that common ownership changes incentives structures, so that employees are rewarded on the basis to which they follow managerial edict and not solely the on wealth maximisation.

Thus, common ownership replaces the market with managerial fiat (hierarchy). In doing so the costs of trading in imperfect markets, that are also inefficient, are minimised and the output of all of the previously separate parties co-ordinated towards a shared goal. There are, however, several problems associated with common ownership, not least of which is that individuals within the company have a weaker incentive to maximise output than previously.²⁷ Problems are also to be found in relation to the measurement of worker output. Under the hierarchical arrangement management are unfamiliar with the individual tasks of employees, with the consequence that management are not in a position to determine whether workers are acting against the overall good of the company. Monitoring is particularly problematic in cases where workers are professional in nature. In these circumstances Hennart (1986) suggests that the best course of action is to ensure employees internalise company goals so that their interests become on in the same with that of the company.

More generally internalisation imparts a resource cost on the company through the division of a single external market with scale economies into many market that lack such scale economies. Furthermore, operating abroad also imposes a cost through the likelihood of encountering nationalistic tendencies and asset expropriation.²⁸ The separateness of these national markets

²⁷ Hennart, 1986, pg797.

²⁸ Kay (1983: pg307) quotes Rugman whom suggests that the presence of governmental intervention on the international trading environment is so great and profound that its removal would remove barriers to

impairs the opportunity to achieve scale economies. Without the flow of information the co-ordination of production within a MNE would not be possible. The flow of information within the MNEs engenders co-ordinations costs, not least due-in the processing of the information gathered so that decisions can be made. Consequently, communications costs are also more than in an external market:

...if the market is fragmented then overheads will tend to be higher if each internal market has its own communication system....[and] there is the problem of checking the accuracy of information supplied to the market, and ensuring that relevant information is not concealed.²⁹

Internalisation is scale neutral. If anything internationalisation, which compounds and expands the market imperfections, deepens the incentives for internalisation to occur. Casson (1981) remarks that:

[t]he rationale for the MNE is that it reduces transaction costs by buying up complementary assets located in different nations and integrating their operations within a single unit of control. In doing so it creates an "internal market" for the intermediate product. The concept of an internal market is particularly apt if administration within the firm is decentralized, with powers of control delegated to the managers of individual plants. In this case control over intermediate product actually changes hands as the product moves between plants, though ownership of the product does not.³⁰

2.2.1.2 Frequent criticisms of internalisation.

Three frequent criticisms of internalisation are cited by Rugman (1986). The first of these is that internalisation is tautologous, in that companies will internalise until the benefits of further internalisation is outweighed by the costs. Echoing this Buckley (1983) states that at its most

trade and allow international trade rather than FDI to be the predominant form of international economic relations.

²⁹ Buckley & Casson, 1991, pg42.

³⁰ Casson, 1981, pg18.

general no indication is given as to either the initiation or endpoint of internalisation and that only when additional variables are included can this shortcoming be overcome. Internalisation has also been questioned on the grounds that it is not scientific, for example, as Kay (1983) writes that:

...at this level [the MNE] internalisation does not satisfy the conditions of refutability that is required of a theory. Transaction costs can be brought in to explain all in-house corporate activity. The important question is, what do you say after you say internalisation?³¹

The third of the frequent criticisms cited by Rugman (1986) is that the inclusion of extra conditions to predict the exact changeover point of entry mode results in the transformation of internalisation into a company driven strategic decision making model. Even so it can not be disputed that it is still the initial market imperfection which leads to internalisation regardless of the extra explanatory variables that are required.³²

There are other criticisms apart from these. Buckley (1983) has noted that within the internalisation rubric market imperfections are taken as being exogenous to the company. However, market imperfections are also the product of the interaction of the company with the market.³³ For instance, market imperfections arise when product differentiation, which is clearly within the company's purview, is used in an effort to skew consumption in one direction or another. Kay (1983) bluntly states that it is stretching credibility to reduce the rationale for MNEs to the desire to create an internal pricing mechanism. In other words, internationalisation can be the manifestation of a multitude of motives of which one is internal pricing. Parry (1985) argues that the frequent dismissal of licensing as an inappropriate organisational form is erroneous, especially when the leakage of knowledge from employees is taken into consideration.

³¹ Kay, 1983, pg305.

³² Rugman, 1986, pg105.

³³ Buckley, 1983, pg45.

2.2.1.3 Conclusion.

Central to internalisation is the notion that companies seek to counter the presence and effect of market imperfections through the creation of internal markets. Internalisation occurs through either the creation of markets to assign value to hitherto unvalued assets such as knowledge, or through bringing disparate companies under common ownership. Whilst internalisation offers a powerful explanation of internationalisation it is not problem free, and through its ability to be included with other theoretical propositions can not claim to be a general theory. As Casson (1992) observes:

...internalisation theory does not provide a uniquely international theory of the firm. What it can do ... is provide the basis for a comparison of domestic and international business strategies. ... internalisation is indispensable to the examination of a wide range of phenomena but this does mean that it explains all phenomena (it obviously does not).³⁴

2.2.2 Eclectic paradigm.

Recognising that much of the debate concerning internationalisation and MNEs shared common ground, Dunning (1981) proposed a synthesis of the literature including industrial organisation theory, property rights and location theories. The resulting eclectic paradigm states that a company will internationalise when three conditions are satisfied:

1. It possesses net ownership advantages vis-a-vis firms of other nationalities in serving particular markets. These ownership advantages largely take the form of the possession of intangible assets, which are, at least for a period of time, exclusive or specific to the firm possessing them.
2. Assuming condition (1) is satisfied, it must be more beneficial to the enterprise possessing these advantages to use them itself rather than to sell or lease them to foreign companies,

³⁴ Casson, 1992, pg26.

that is, for it to internalise its advantages through an extension of its own activities rather than externalise them through licensing and similar contracts with independent firms.

3. Assuming conditions (1) and (2) are satisfied, it must be profitable for the enterprise to utilise these advantages in conjunction with at least some factor inputs (including natural resources) outside its home country; otherwise foreign markets would be served entirely by exports and domestic markets by domestic production.³⁵

Or, as alternatively stated by Dunning (1981 and 1993b):

[t]he greater the ownership advantages of enterprises...the more the incentive they have to exploit these themselves. The more the economies of production and marketing favour a foreign location, the more they are likely to engage in foreign direct investment.³⁶

In various subsequent writings Dunning (1988 and 1995a) has sought to refine the eclectic paradigm, though the three aforementioned conditions necessary for internationalisation remain at the heart of the paradigm. For example, one area that Dunning has sought to refine is the concept of ownership advantages with three different types being identified. These are: those arising from multinationality, those advantages a branch plant has over a de novo firm, and those advantages gained from mutlinationality.³⁷ Another refinement was Dunning's (1988) distinction between those ownership advantages derived from the ownership of assets, and those that are a result of the transactional efficiencies of the MNE's structure. The former relates to those advantages gained from the exclusive possession of income generating assets, whilst the latter is pertinent to those advantages derived from the ability of the MNE to organise the activities of separate though complimentary assets in different countries more efficiently than the market is capable of doing so.³⁸

³⁵ Dunning, 1981, pg79.

³⁶ Dunning, 1981, pg79; Dunning, 1993b, pg80.

³⁷ Dunning, 1981, pg80. For example: the ability to take advantage of the division of labour and the specialised that results, economies of scale through the parent's bulk buying, and the widening of opportunities respectively.

³⁸ Dunning, 1988, pg2.

2.2.2.1 The eclectic paradigm under conditions of 'Alliance capitalism'.

'Alliance capitalism' refers to the increased willingness in recent years of companies to enter into collaborative ventures with one another. Such collaboration has enabled strategic interests to be aligned, as well as access to hitherto foreclosed markets and resources gained. Dunning (1995a) acknowledges that the growth of this form of capitalism as an organising principle necessitates a rethink of the eclectic paradigm to ensure its continued relevance. To this end Dunning (1995a) includes Hirschman's (1970) distinction between 'exit' and 'voice' strategies in the analysis. The former of these strategies occurs when:

...customers stop buying the firm's products or some members leave the organization : this is the *exit option*. As a result, revenues drop, membership declines, and management is impelled to search for ways and means to correct whatever faults have led to exit.³⁹
[emphasis already given]

As Helper (1993) states the decision to move from one supplier to another is relatively straightforward, with the notion of substitution at its centre. Once difficulties are encountered one supplier is replaced by another on a like for like basis. In contrast are voice strategies where:

... any attempt at all to change, rather than to escape from, an objectionable state of affairs, whether through individual or collective petition to the management in charge, through appeal to a higher authority with the intention of forcing a change of management, or through various types of actions and protests, including those that are meant to mobilise public opinion.⁴⁰

The adoption of a voice strategy by a company "requires a great deal of creativity and hard work to find effective ways to get the message across."⁴¹ Therefore, if a voice strategy is to be implemented by a company it is necessary to establish communications between the relevant

³⁹ Hirschman, 1970, pg4.

⁴⁰ Hirschman, 1970, pg30.

⁴¹ Hirschman, 1970, pg43.

parties. As a result voice strategies require more resources, and are time consuming when compared to their exit counterpart. As a result voice strategies are more likely to occur where a limited number of alternative supply sources exist, not least because it is correspondingly more difficult for the company to replicate the straight forward direct substitution strategy utilised in exit strategies.

In the context of the eclectic paradigm Hirschman's (1970) distinction between exit and voice strategies is translated by Dunning (1995a) into internalisation and collaborative ventures respectively. Hence, in exit strategies the company replaces market failure with corporate fiat, whereas in voice strategies the company collaborates with others to negate the negative impact of market failure on the company.⁴²

Hirschman's (1970) distinction between voice and exit strategies results in all three components of the paradigm being altered. The ownership advantages are broadened, in recognition that alliance capitalism provides an additional mechanism through which a company can build and acquire transactional ownership advantages from the joint ownership of assets with others. Alliance capitalism also effects the locational advantages of a MNEs, with Dunning (1995a) writing that:

[t]here are essentially two main ways in which alliance capitalism may affect, or be affected by, the presence and structure of immobile assets. The first is that it may introduce new L-specific variables, or modify the value of those traditionally considered by location theory. The second is that the response of firms to economic geography may be different because of the impact that external alliances may have upon their competitive strengths and global strategies.⁴³

Collaborative ventures alter the resources which the company has access to, which in turn impacts on the locational dimensions of MNEs growth and development. These will change, with new investment possibilities occurring, existing advantages reinterpreted or access to existing locational advantages prohibited.

⁴² Dunning, 1995a, pg464.

⁴³ Dunning, 1995a, pg479.

The impact of alliance capitalism on both ownership and locational advantages is incorporated by Dunning (1995a) through the relatively straight forward mechanism of relaxing existing terms of the component. However, the rise of alliance capitalism poses a more serious problem when dealing with the internalisation component of the eclectic paradigm, not least because it would appear that alliance capitalism is the antithesis of internalisation. Either internalisation theory is concerned with de facto rather than de jure control, or inter-corporate alliances are treated as complimentary developments to hierarchy arrangements.⁴⁴ Dunning (1995) effectively squares the circle through relaxing several of the previously strict internalisation assumptions, so that the paradigm is able to incorporate non-hierarchical organisational forms of alliance capitalism.⁴⁵ This is achieved by arguing that collaborative ventures are complimentary to hierarchical ones, and will occur in only a limited number of quite specific circumstances:

...such [inter-firm] agreements, ...would probably be confined to very specific areas of a firm's value-added activities; and, noticeably, those that are outside its core competencies, need specialised proficiencies, can be closely monitored for quality control, and are too costly to produce internally.⁴⁶

2.2.2.2 Criticism of the eclectic paradigm.

The theoretical stances adopted by both Aliber (1970) and Koijma (1982) have been used to criticise the eclectic paradigm. Aliber (1970) argues that the key, defining characteristic of a MNE is its ability to finance international production through its domestic currency.⁴⁷ Such a

⁴⁴ Dunning, 1995a, pg473f.

⁴⁵ Dunning, 1995a, pg473.

⁴⁶ Dunning, 1995a, pg479.

⁴⁷ Aliber (1970) states that the key factor in explaining the pattern of FDI that has arose since 1945 is the existence of different currency areas. The existence of different currency areas allows for currency premiums and differences in the market's treatment of capitalisation rates. The former occurs when the yield of securities in one currency area is more than that in another due to the concern that the former's currency may depreciate for whatever reason, premiums exist to compensate the buyer for bearing the uncertainty that this causes. The latter is when a higher rate is given to an income stream, originating in

view stands in contrast with theories like the electric paradigm that take as their starting point some form of foreign investment. However, countering Dunning (1988) challenges the premise on which Aliber (1970) stands writing:

[Aliber] ... would appear to believe that the extraterritorial expansion of the per se raises no issues not already addressed by the theory of the domestic firm. Rather, the uniqueness of the MNE is the ability to dominate its geographically dispersed assets in different countries, and by so doing, to take advantage of structural or transaction imperfections in international capital and foreign exchange markets.⁴⁸

Furthermore, Dunning (1993b) argues that “capital is simply a conduit for the transfer of other resources rather than the *raison d’être* for direct investment.”⁴⁹

A somewhat different stance is adopted by Kojima (1982) who argues that trade is complementary and charges Dunning with supporting “giant and monopolistic MNEs,” perpetuating market imperfections even though “function integration through the free market must be superior from a macroeconomic economics point of view.”⁵⁰ In addition, Kojima (1982) also argues that the eclectic paradigm is incapable of delivering policy strategies that deal with the impact of FDI on both the originating as well as hosting countries.⁵¹

Dunning (1988) rebukes these charges through arguing that Kojima (1982), due to a reliance on neo-classical economics and perfect competition, fails to illustrate the essential characteristic of a MNE which is intermediate product production internalisation.⁵² Consequently, Kojima (1982) wrongly concludes that:

the host, when it is received by a source location firm rather than a host source. Without this difference FDI would have no incentive to occur as the rates would be equal with one another.

⁴⁸ Dunning, 1988, pg8.

⁴⁹ Dunning, 1981, pg76.

⁵⁰ Kojima, 1982, pg234f.

⁵¹ Kojima, 1982, pg235.

⁵² Dunning, 1988, pg10.

...the MNE can never be the most efficient agent for transferring resources across national boundaries, simply because its very existence implies a second-best transactional solution.⁵³

The eclectic paradigm has also been criticised on other grounds. It has been alleged that the paradigm adopts a “shopping list” approach to internationalisation where a large number and diverse range of advantages are liable to give rise to MNE development. Under the rubric of the paradigm internationalisation will result whenever the company possesses in turn ownership, locational and internalisation advantages. However, no greater insight into internationalisation, and especially the motives for the implementation of such a strategy on the part of the company is given other than the possession of the advantages. Thus, whilst any analysis of internationalisation is capable of highlighting features it does not cast light into the motives for such a move by the company, and offers what is in essence a static interpretation of internationalisation.

Despite the simplicity of the paradigm as a rubric for understanding internationalisation, alliance capitalism demonstrates the paradigm’s inflexibility as well as its foundation in hierarchical capitalism. Alliance capitalism, and the associated use of collaborative arrangements between companies, has become increasingly prominent in recent year. It is particularly prevalent within industries with high knowledge content and those considered to be strategic sectors of the economy such as pharmaceuticals and telecommunications. Within industries such as these collaboration is commonplace, and is not the exception or second best alternative as suggested by Dunning (1995a).

2.2.2.3 Conclusion.

The eclectic paradigm can be located in the uneasy space between the need for theoretical simplicity and the necessity for theoretical flexibility and adaptability. The simple rubric of the paradigm engenders a shopping list approach to internationalisation that does not take into account the context of the company’s domestic environment or its strategy. Furthermore, the

⁵³ Dunning, 1988, pg10.

rise of alliance capitalism challenges a central tenet of the paradigm and exposes the inflexibility of the theoretical stance, as well as the lack of explanatory power. Contrary to Dunning's (1995a) assertion alliance capitalism is not a second best alternative to hierarchical capitalism, but is instead the only way in a large number of circumstances that a company may gain access to resources and align its strategic interests with those of others.

2.2.3 Transaction cost economics.

Like the previous two theoretical standpoints transaction cost economics (TCE) has at its centre the impact of market imperfections on organisational governance structures. However, unlike the previous two theoretical perspectives TCE focuses on the transaction itself. Not only does this alter the level of analysis, facilitating a "microanalytical" stance but it also uses the transaction's characteristics to illustrate the impact of market imperfections on governance structures.

According to Arrow (1969) transaction costs are "the costs of running the economic system."⁵⁴ Rugman (1986) states that transaction costs arises due to limited human intelligence and honesty (or lack of it) imposing limitations on exchange relationships.⁵⁵ In terms of TCE those limitations that arise are the consequence three characteristics, which Williamson (1986) identifies when seeking to answer the question "what is transaction cost economics." As observed by Williamson (1986) such limitations are:

[t]ransaction cost economics assumes that human agents are subject to bounded rationality, whence behaviour is '*intendedly* rational, but only *limitedly* so'..., and are given to opportunism, which is a condition of self-interest-seeking with guile. Transaction cost economics further maintains that the most critical dimensions for describing transactions is the condition of asset specificity.⁵⁶ (*Emphasis already present*).

⁵⁴ Arrow, 1969, pg47 cited in Williamson, 1986, pg176.

⁵⁵ Rugman, 1986, pg110.

⁵⁶ Williamson, 1986, pg177.

Thus, at the confluence of bounded rationality, opportunism and asset specificity stands TCE. The lack of presence of any one of these three results in the simplification of contractual relationships between parties. However, where the confluence occurs what Williamson describes as the “full catastrophe” results:

[P]lanning is necessarily incomplete (because of bounded rationality), promise predictably breaks down (because of opportunism), and the pairwise identify of the parties now matters (because of asset specificity). This is the world of governance in which court ordering is no longer assumed to be effective. The institutions of private ordering this command centre stage. ... The organisational imperative that emerges in these circumstances is this: organise transactions so as to economise on bounded rationality while simultaneously safeguarding them against the hazards of opportunism.⁵⁷

Before the organisational imperative is detailed in the next section, bounded rationality, opportunism and asset specificity will be further commented upon. Bounded rationality occurs when an individual is unable to deal with all the information at hand. Williamson (1981) observes that “unlike economic man to whom hyper-rationality is often attributed, organisation man is endowed with less powerful analytical and data-processing apparatus.”⁵⁸ This should not be taken as suggesting that the reduced competencies displayed by individuals implies irrationality, for within the bounds of the limited capabilities possessed by individuals rational decisions result thus ensuring that they are “intendedly rational.”

As a result of bounded rationality the planning and co-ordination of activities is complicated. The information available to, and perhaps more importantly understood, by any one individual is limited, so that actions are taken on the basis of only partial information. These actions are however perfectly rationale given the information at hand. For example, a company may decrease prices to increase market share after reading that this is a valid strategy without realising that such an action squeezes profit margins.

⁵⁷ Williamson, 1986, pg178.

⁵⁸ Williamson, 1981, pg553.

As a result of bounded rationality opportunism arises when self interest enters into a commercial relationship:

[p]roblems of contracting are greatly complicated by economic agents who make false or empty, that is, self-disbelieved threats or promises, cut corners for undisclosed personal advantage, cover up tracks, and the like.⁵⁹

Opportunism, therefore, gives rise to uncertainty as to the fulfilment of obligations. Contracts may not be fulfilled, the goods and services delivered of less than satisfactory quality or prices raised without prior notice.

Combined bounded rationality and opportunism may lead to the implementation of self defeating strategies. The tragedy of the commons is an illustrative case in point. An individual farmer will exploit the under-grazing of common land to increase his own particular herd, especially if larger herds are associated with success or no repercussions can be envisaged. When this is repeated across a large number of farmers the ability of the common to support the extra livestock is questioned with overgrazing eventually occurring. Under these circumstances all common land farmers suffer, an eventuality not anticipated at the onset of the strategy due the farmers inability to perceive the wider implications of over grazing.

To many asset specificity is the central tenet of TCE and refers to a situation whereby it is hard to generate income from assets once their current use expires. That is, instead of the asset being capable of producing a multitude of revenue streams from different customers it is reliant upon a continuing relationship with a limited number of customers which may sometimes be singular.

Williamson (1981) identifies three different types of asset specificity: site, physical and human. The former of these refers to a situation where investments are made near one another to minimise transport costs. For example, a power station and coal mine are located near to one another to minimise transportation costs. In contrast physical asset specificity is concerned with the actual investment in specialised assets so that a specific contract can be fulfilled. Finally,

⁵⁹ Williamson, 1981, pg554.

human asset specificity occurs when “learning by doing” results.⁶⁰ Knowledge gained in the execution of a contract is pertinent only to that particular contract, and it can not be transferred elsewhere to be productively employed.

Williamson (1981) comments that, as a consequence of asset specificity:

... once an investment has been made, buyer and seller are effectively operating in a bilateral (or at least quasi-bilateral) exchange relation for a considerable period thereafter. Inasmuch as the value of specific capital in other uses is, by definition, much smaller than the specialised use for which it has been intended, the supplier is effectively “locked into” the transaction to a significant degree. This is symmetrical, moreover the buyer cannot turn to alternative sources of supply and obtain the item on favourable terms, since the cost of supply from unspecialised capital is presumably greater.⁶¹

Bilateral relationships can be defined by the degree to which they are idiosyncratic, with such an investment being characterised by its productive use dependent on the continuation of a particular set of exchange relationships. The more bilateral a relationship is, the higher the degree of idiosyncrasy of the associated assets and the greater the asymmetry within the relationship. Under these conditions opportunistic behaviour is likely.

2.2.3.1 Transaction characteristics and governance structures.

From Williamson (1986) it is possible to characterise transactions along three different dimensions: uncertainty, frequency and “the degree to which durable transaction-specific investments are incurred.”⁶² Each of these three dimensions presents a particular problem for the management of a company; uncertainty creates planning problems whilst infrequent transactions requiring idiosyncratic investments are liable to leave the company in possession of sub-optimal

⁶⁰ Williamson, 1981, pg555.

⁶¹ Williamson, 1981, pg555.

⁶² Williamson, 1986, pg105.

productive asset. Through their interaction these three characteristics determine the appropriateness of governance structures, in that a:

... transaction-specific governance structure is more fully developed where transactions are (a) recurrent, (b) entail idiosyncratic investment, and (c) are executed under greater uncertainty.⁶³

The relationship between idiosyncratic (asset specific) investments, uncertainty and frequency is illustrated in Table 2.3 (below). From this it can be observed that the market determines non-specific investment exchange relationships where one party is free to extricate itself if dissatisfied. In contrast the market is unable to protect parties in occasional mixed and idiosyncratic relationships, as opportunistic behaviour is likely to occur from one or both parties. This situation is resolved through resorting to contracts that are guaranteed by a third party. It is this third party which prevents one from opportunistically exploiting the other.

Table 2.3: Matching governance structures with commercial transactions

		Investment Characteristics		
		Non-specific	Mixed	Idiosyncratic
Frequency	Occasional	Market governance	Trilateral	Governance
	Recurrent		Relational	governance

Source: Williamson, 1986, pg117.

Williamson (1986) states that relational governance structures may be either bilateral or unified in character. Within bilateral governance structures companies are bound together through a contract. Thus, no common ownership of assets results. Central to the bilateral governance structure is that associated investment is not so idiosyncratic as to warrant each company producing the goods itself, yet it would be produced within the company in insufficient quantities to achieve scale economies to warrant the investment.⁶⁴ It is only when increased numbers are sought that scale economies will result.

⁶³ Williamson, 1986, pg122.

⁶⁴ Williamson, 1986, pg114f.

Instead the only way the cost savings associated with scale economies can be accessed is to source the good from outside the company. That is, by purchasing the good from an external source the company is able to enjoy cost savings through scale economies that producing internally would not offer. To ensure that sufficient goods are purchased, or that they meet the exact specifications of the buyer, a contractual approach to exchange relations is adopted. On the positive side there is incentive enough for both parties to maintain the relationship. For the purchaser there is the cost of switching supplier and obtaining the product elsewhere.⁶⁵ Furthermore, contractual rigidity and expense also inhibit the participating company's opportunistic behaviour thereby perpetuating the relationship. However, contract based exchange relations are not infallible, and are liable to break when "extraordinary events" occur.⁶⁶

As stated by Williamson (1986) "the incentives for trading weaken as transactions become progressively more idiosyncratic."⁶⁷ The reason articulated is that as the investment becomes increasingly idiosyncratic its use to other productive uses correspondingly declines, and scale economies become realisable by both producer and external buyer as well. The unified or common ownership of a productive asset has other advantages apart from the realisation of scale economies.

- One advantage from common ownership, is that the need to consult with others is no longer present. Co-ordination is, therefore, moved from the inter-company to intra-company domain.
- Following on from this, the common ownership that arises when activities are incorporated into a single company minimises the incentive for sub-optimal behaviour.

⁶⁵ From the purchaser's viewpoint other sources of the product will incur high setup costs and delays, whereas the producer will have to contend with the non-fungible nature of the idiosyncratic assets (Williamson, 1986, pg115).

⁶⁶ Interestingly Williamson (1986: pg116) does not defined with any precision what is meant by 'extraordinary.'

⁶⁷ Williamson, 1986, pg116.

Managerial fiat can resolve disputes as they arise, and obtain the necessary information so that appropriate decisions can be made.⁶⁸

- Hennart (199a) highlights information as a catalyst for common ownership. The information paradox, where value can not be ascribed to information until it is known, but once it is known it can be reproduced at will due to its public goods qualities, is the crux of the problem. Where information, however it is embodied, can not be adequately protected in the open marketplace the company will resort to integration to safeguard its investment.
- Another advantage of common ownership is that:

...[w]here single ownership entity spans both sides of the transaction, a presumption of joint profit-maximisation is warranted. Thus price adjustments in vertically integrated enterprises will be more complete than in inter-firm trading. And quantity adjustments of course, will be implemented at whatever frequency serves to maximise the joint gain to the transaction.⁶⁹

The boundaries of the company are determined by the extent to which the different stages of production are internalised to minimise transaction costs. Williamson (1981) provides three criteria through which the boundary of a company can be identified:

(1) common ownership of some assets is so obvious that economic assessment is not required; (2) some transactions are incapable of being efficiently supplied by the firm itself so they are outside the common ownership structure so reliance on the market is necessary; and (3) in the case of some transaction comparison is required with other ownership possibilities before the decision to integrate or not is made.⁷⁰

Hennart (1991a) shows that integration can be either backward or forward. Backward vertical integration occurs whenever raw materials and intermediate input markets are characterised by high transaction costs, whilst forward vertical-integration most commonly occurs when

⁶⁸ Williamson, 1981, pg559.

⁶⁹ Williamson, 1986, pg116.

⁷⁰ Williamson, 1981, pg557.

companies enter into the foreign distribution of goods and services. Although both of these will alter the company's boundaries they do so in different ways.

Table 2.4 (below) highlights some of the different markets which can be internalised by a company, as well as the different ways in which corporate boundaries can be altered. Depending on the market integrated the boundaries of the company will shift in different directions. Importantly, these moves are not mutually exclusive in that vertical integration can be as much motivated by intangible assets such as information as horizontal integration. Thus, the table should be regarded as illustrative and not definitive.

Table 2.4: Integration, markets and changes to corporate boundaries

Motivation for integration	Market internalised	Movement to the boundaries of the company
R&D intensive	Technology and managerial 'know-how'	Horizontal
Advertising intensive	Reputation	Horizontal
Distribution	Distribution and marketing	Vertical
Raw materials and components	Raw materials and components	Vertical
Investment capital shortcomings	Capital	Multi-directional

From: Hennart, 1991.

2.2.3.2 The MNE and transaction cost economics.

As the motives for vertical integration, namely the collective impact of bounded rationality, opportunism and asset specificity on exchange relations are scale neutral, they apply as much to the MNEs as the uni-national company. If anything, operating across national boundaries compounds the problems encountered as well as exposing the company to new difficulties. Differences in intellectual property rights between countries contributes to the problems faced when exporting information intensive goods and services, as there is no guarantee that the sole ownership of information granted through patents etc will be respected. With particular reference to technology Williamson (1986) draws on Arrow (1962), Williamson (1975) and Teece (1977) to identify three difficulties encountered in cross border transfers. These are recognition, disclosure and team organisation.⁷¹ Recognition is the difficulty to identify pertinent technologies that are developed abroad, whilst disclosure concerns the fundamental

⁷¹ Williamson, 1986, pg160.

paradox of information that has already been mentioned. Finally, team organisation relates to the co-ordination of activities across borders. When unforeseen developments, and the inherent inflexibility of contractual relationships, are coupled with increased frequency of transaction the governance structures are “apt to give way to direct foreign investment.”⁷²

The problems encountered in the conduct of international exchange relationships by companies can be countered through the extension of the M-form of governance structure internationally. Williamson (1986) asserts that “the MNEs is the use of the M-form structure to extend asset management from a domestic base to include foreign operations.”⁷³ Chandler (1969) distinguishes between two forms of organising companies, unitary (U-form) and multi-divisional (M-form). In the unitary form decision making is centralised around stages of production or their associated transactions. As long as the company remains specialised, either in a particular market or locality, it is possible for a relatively small number of executives to be familiar with all aspects of the company and make decisions on this basis. However, once the company expands, either geographically or in the range of goods and services produced, the centralised decision of the U-form becomes less appropriate. Chandler (1969) asserts:

...the inherent weakness in the centralised, functionally departmentalised operating company ... became critical only when the administrative load on senior executives increased to such an extent that they were unable to handle their entrepreneurial responsibilities efficiently. This situation arose when the operations of the enterprise became too complex and the problems of co-ordination, appraisal, and policy formation too intricate for a small number of top officers to handle both long-run, entrepreneurial, and short-run, operational administrative activities.⁷⁴

The limited informational processing/handling capabilities of executives, in conjunction with their bounded rationality is countered through the hierarchical division of responsibilities that occurs within the M-form of organisational governance. The division of the company along product or geographical lines reduces the amount of information needed to manage, and

⁷² Williamson, 1986, pg161.

⁷³ Williamson, 1986, pg159.

⁷⁴ Chandler, 1969, pg382f.

separates routine short term operational decision making from the long term strategic management of the company. As noted by Chandler (1969) and Williamson (1986) the M-form adds resource allocation and monitoring functions to the long term management responsibilities of senior executives. Collectively these functions determine the non-partisan allocation of resources across the company, and settle intra-company disputes as to location of investment and so forth.

Echoing the advantages of the M-form over its U-form counterpart, and drawing on the problems inherent to the transfer of information intensive goods and services, Williamson (1986) writes that asset management, improved co-ordination and control of intellectual property rights are the key attributes of MNEs:

a more harmonious and efficient exchange relation, ... better disclosure, easier reconciliation of differences, more complete cross-cultural adaptation, more effective team organisation and reconfiguration - predictably results from the substitution of an internal governance relation for bilateral trading under those recurrent trading circumstances where assets, of which complex technology transfer is an example, have a highly specific character.⁷⁵

2.2.3.3 Questioning the validity of transaction cost economics.

As has been demonstrated asset specificity is central to transaction cost economics. Kay (1992 and 1997) casts doubt on the role played by asset specificity in internationalisation by arguing that contrary to the Williamsonian position licensing and contracts are viable alternatives to international investment due to their specificity. Kay (1992) states that:

... it is the *non*-specificity of assets and problems of protection of property rights that is frequently cited as a major transactional problem contributing to the creation of multinational enterprise through internalisation.⁷⁶

⁷⁵ Williamson, 1985, pg294, cited in Kay, 1992, pg329.

⁷⁶ Kay, 1992, pg330.

Supporting this stance Kay (1992) quotes Contractor (1981) to argue that licensing is a valid international entry strategy when the licensee is dependent on the licensor for trademarks, technical assistance and so forth. Asset specificity ties both parties together whilst enabling the licensing party to remain dominant within the relationship thereby reducing, if not completely negating, the likelihood of opportunistic behaviour on the part of the licensee. In such circumstances international investment is not required.

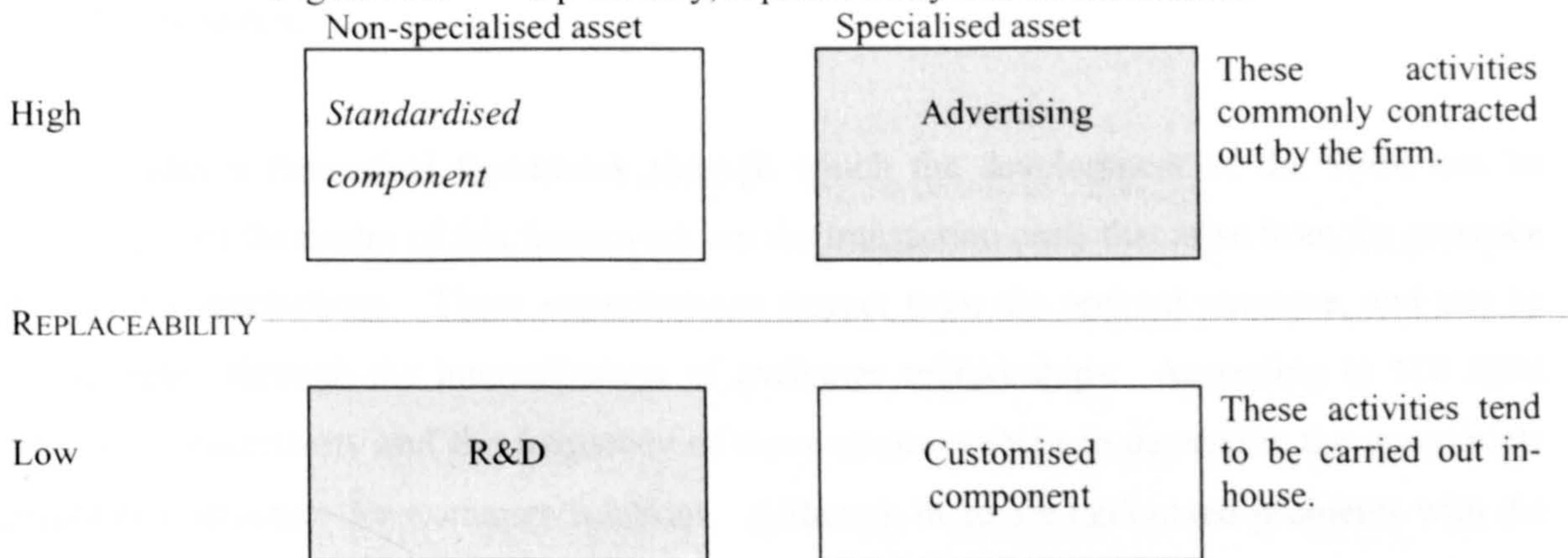
Kay (1997) also suggests that the boundary of the firm can not be solely determined by reference to the make or buy decision. Two examples, advertising and R&D are drawn upon to illustrate this point (see Figure 2.1). Advertising is conducted outside the company by an agency whilst R&D is to be found internally. The explanation offered is that of replaceability. Many advertising agencies are to be found so despite their possession of specialised assets they can be replaced by the client company if dissatisfaction arises. Under such circumstances the advertising agency will be left in possession of highly specialised but unproductive assets. In contrast R&D activities are conducted within the company, because they are capable of generating new products which may be put to unexpected though rewarding uses, or of being used by a multitude of different (competing) companies.⁷⁷ As Kay (1997) writes:

[t]o put it at its simplest, the firm may not worry too much if its advertising agency closes down since they [the company] may reasonably hope to find an acceptable substitute for its services. However, if its R&D team walks out of the door, most firms would have reason to worry. The question that matters in this context is not the *specificity* (and their value elsewhere and to other users) but the *replaceability* of assets (how easily alternative assets can be obtained if the current assets disappear).⁷⁸

⁷⁷ Kay, 1997, pg6.

⁷⁸ Kay, 1997, pg9.

Figure 2.1: Specificity, replaceability and internalisation



Source: Kay, 1997, pg10.

Under this logic the boundary of the company is determined by replaceability and not by asset specificity as traditionally understood. Undoubtedly Kay's (1997) argument is persuasive though the use of advertising as an illustrative example may be problematic. Advertising, like other consumer services such as banking, is characterised by a high degree of inertia where neither party is prepared to break the relationship until the advantages of doing so are considerable. In combination with asset specificity, especially when relating to knowledge, that arises from the relationship this serves to perpetuate the relationship. As a result the likelihood of the agency being replaced is correspondingly reduced.

Moreover, the R&D example illustrates another problem, namely, what is the asset? Is the asset the inventions from the R&D process or those who conduct the research? If it is the former then it is not necessarily the case that the lack of asset specificity forces internalisation on the company for a significant proportion of research can be conducted with contracts binding the two parties together. This is particularly common where the company wishes to access specialised knowledge necessary to the development of a product. Alternatively, if it is the case that those who conduct the research are the asset then the company is more likely than not to internalise so that the asset can not be appropriated by others. In this scenario R&D will be conducted within the company because their non-asset specificity would allow others to benefit. Such a distinction is not alluded to by Kay (1997).

2.2.3.4 Conclusion.

TCE provides a theoretical framework through which the development of the MNEs can be understood. At the centre of this framework are the transaction costs that arise from the presence of market imperfections. These imperfections detract from the optimal outcome, and can be circumvented through the internalisation of exchange relationships. According to TCE asset specificity, uncertainty and the frequency of transaction combine to determine the appropriate governance structure for exchange relations. Although there are undoubted problems with the perspective, not least of which is the ambiguous nature of asset specificity the perspective remains attractive. The strengths of the perspective are highlighted in Walker & Weber's (1984) summary:

Williamson's (1975) argument is that in an imperfect world, where individuals have limited information-processing capacity and are subject to opportunistic bargaining, high uncertainty makes it more difficult for the buyer of the goods or service to evaluate the supplier's actions, and high asset specificity makes opportunistic supplier decisions particularly risky for the buyer. Transaction with high uncertainty, to which non-fungible assets have been dedicated, will be more efficient if governed completely by the buyer than if governed by the buyer and supplier in the product market. The problems of evaluating supplier performance under high uncertainty and of suffering potential supplier opportunism under high asset specificity are both reduced when the buyer has unilateral control over the transaction by producing the component in-house.⁷⁹

2.3 UPPSALA INTERNATIONALISATION MODELS.

Andersen (1993) argues that there are two components within Uppsala internationalisation models. On the one hand there are those models associated with Nordic writers such as Johanson, Vahlne and Wiedersheim-Paul, whilst on the other hand there is a series of models derived, either explicitly or implicitly, from the former group. Examples of this second group of

⁷⁹ Walker & Weber, 1984, pg373.

models, which are labelled 'innovation-related internationalisation models' by Andersen (1993), include Bilkey & Tesar (1977) and Cavusgil (1980).

However, this dichotomy is inappropriate as it does not accurately reflect the distinction between the earlier and later work within the Uppsala school. Over time the focus of internationalisation has shifted, away from examining the process within an individual company to determining how the interaction of a given company with others through a network of exchange relationships affects the internationalisation process. Whilst there are similarities between the two the changing context is such that they should be treated separately from the earlier models. Consequently, the following sections shall address in turn the earlier, later and derived models of internationalisation.

The various earlier and derived internationalisation models share several common traits with the most apparent being that they divide the internationalisation process into a series of stages through which the company slowly and purposefully passes. Although the subject addressed differs between models the findings are united by a certain level of commonality:

- common *conceptual issues* identified are: that facilitators and inhibitors to internationalisation exist, that information needs and acquisition are important, that stimuli and barriers to export development exist, that initial market entry is indirect by way of agents etc, and finally, that psychic distance determines which overseas markets are entered first.⁸⁰
- common *structural issues* observed are: that the models exclusively focus on the development of export operations, internationalisation is perceived in terms of a sequential and evolutionary process, and that distinct stages exist within this process.⁸¹
- common *methodological issues* addressed include: the validation of theories through 'snap-shot' empirical research, focusing predominantly on American companies

⁸⁰ Leonidou & Katsikeas, 1996, pg534-537.

⁸¹ Leonidou & Katsikeas, 1996, pg525-528.

manufacturing industrial products. The unit of analysis is the company, and data is often collected from a limited sample by means of a mail questionnaire.⁸²

Unsurprisingly there are also dissimilarities between the models, so that, for example, there is no consistency as to the number of stages a company should pass through during the course of internationalisation. Furthermore, as a result of the different subject matter addressed the stimuli and intricacies of internationalisation identified are dissimilar. However, by abstracting the findings of each individual model it is possible to identify common themes across the literature.

2.3.1 Early Uppsala internationalisation models.

Among the authors of early Uppsala internationalisation models most attention has been given to the research of Johanson & Wiedersheim-Paul (1978) and Johanson & Vahlne (1975). These are not independent of one another, in that Johanson & Vahlne (1977) extends the insights into the internationalisation of the individual company that the work of Johanson & Wiedersheim-Paul (1975) provided.

Johanson & Wiedersheim-Paul (1975) propose a model of internationalisation where it is assumed that companies develop within the domestic marketplace prior to their expansion overseas. It is also assumed that overseas expansion is effected through a series of incremental decisions, and although it is acknowledged that a company may internationalise through a unknown number of steps four are identified by Johanson & Wiedersheim-Paul (1975) (see Table 2.5). Each of the four stages identified represents a successively greater commitment of resources to the foreign market.

Table 2.5: Four stage internationalisation by Swedish firms

Stage	Principal Characteristics of the Stage
• No regular export activities	No resource commitment to the market
• Export via independent Representatives (agents)	Channel to the market from which the firm receives regular information
• Sales Subsidiary	Controlled information channel to the market
• Production / manufacturing	Still larger resource commitment

Source: Johanson & Wiedersheim-Paul, 1993, pg17f

⁸² Leonidou & Katsikeas, 1996, pg528-534.

The gradual increase in foreign presence allows the company to gain an understanding of the market in which it has invested, and subsequently expand its commitment to the market. Such a gradual increase in foreign commitment allows for the company to reduce the obstacles that it faces whilst operating overseas. At the centre of this relationship is the ability of additional information to reduce the psychic distance present between the investing company and the host market.

Psychic distance is defined “as factors preventing or disturbing the flows of information between firms and markets. Examples of such factors are differences in language, culture, political systems, level of education, level of industrial development, etc.”⁸³ Whilst there is an obvious correlation between psychic distance and geography, it is also the case that many countries display minimal psychic distance even though they are geographically distant. For instance, former countries within the British Commonwealth such as Great Britain and Australia are geographically distant, yet culturally similar. The gradual internationalisation conceived by Johanson & Wiedersheim-Paul (1975), in this case through four distinct stages, allows the company to expand overseas whilst minimising the risks to which it is exposed.

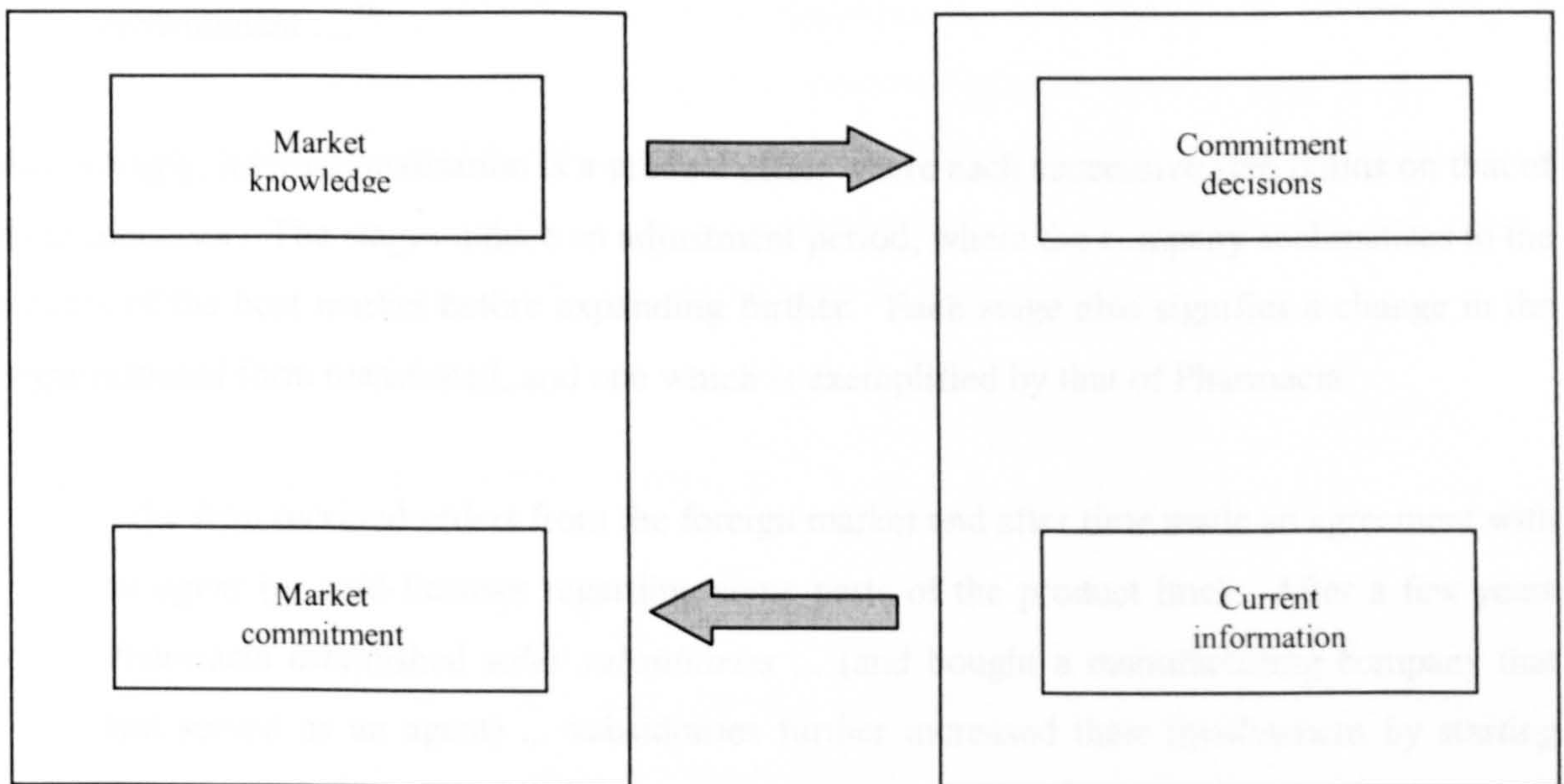
This understanding of internationalisation is built upon, and extended, by Johanson & Vahlne (1977). Internationalisation is the outcome of a dynamic relationship between two sets of factors, state and change aspects. State aspects are those that relate to the resources committed to a given location, and are market knowledge and market commitment. In contrast change aspects are those that determine where new resources are to be invested, and are commitment decisions and current activities. The interaction between these four govern internationalisation:

- *Market commitment.* The greater the level of resources invested by the company to a given market, and the more that these are integrated with the firm’s other activities then the more committed a firm is to a given location. A distinction is made by Johanson & Vahlne (1977) between the total commitment to a particular location and the degree to which specificity is displayed by an investment.

⁸³ Johanson & Wiedersheim-Paul, 1975.

- *Market knowledge.* In the course of determining the level and nature of commitments two types of knowledge are important, the knowledge of opportunities and that of alternatives and evaluation.⁸⁴ Knowledge can also be divided into objective (taught) and experiential (learning-by-doing), and it is argued that within the internationalisation process it is the latter which is more important,⁸⁵ for it provides the firm with the ability to interpret the vagaries and peculiarities of the overseas marketplace.⁸⁶

Figure 2.2: The Basic Mechanism of Internationalisation - State and Change Aspects



- *Current business activities.* Though it is possible to hire in personnel with the relevant experience current business activities are the main source from which the company can acquire experiential knowledge. However, the delay in processing the knowledge acquired means that a lag exists between actions and consequences.⁸⁷

⁸⁴ Johanson & Vahlne, 1977, pg27.

⁸⁵ Penrose, 1956, pg53, cited in Johanson & Vahlne, 1977, pg28.

⁸⁶ The vagaries and peculiarities of foreign markets are more commonly referred to as psychic barriers which serve collectively to isolate one market from another so that the ability to transfer knowledge between locations is diminished proportionately to the strength of the barriers found.

⁸⁷ Johanson & Vahlne, 1977, pg28f.

- *Commitment decisions.* The interplay between investment appraisal, risk assessment, uncertainty and experience determines whether or not the company commits itself to investing in a particular location.⁸⁸ Consequently:

... additional commitments will be made in small steps unless the firm has very large resources and/or market conditions are stable and homogenous, or the firm has much experience from other markets with similar conditions. If not, market experience will lead to a step-wise increase in the scale of the operations and of the integration with the market environment⁸⁹

Accordingly, internationalisation is a gradual affair where each successive step builds on that of its predecessor. The stages induce an adjustment period, where the company acclimatises to the rigours of the host market before expanding further. Each stage also signifies a change in the organisational form manifested, and one which is exemplified by that of Pharmacia:

...the firm received orders from the foreign market and after time made an agreement with an *agent* (or sold licenses regarding some parts of the product line). After a few years Pharmacia established *sales subsidiaries* ... (and bought a manufacturing company that had served as an agent) ... subsidiaries further increased their involvement by starting *manufacturing activities*. It is interesting to note that even this production decision was incremental; the new production began with the least complicated manufacturing activities and later successively added more complicated ones.⁹⁰ (*emphasis added*)

Psychic distance links together what Andersen (1993) calls the theoretical and operational elements of Johanson & Vahlne (1977). The theoretical elements are the interaction between the state and change aspects, whilst the operational element is the progressive internationalisation through the stages identified that results from this interaction. By progressing through the four stages identified the company accumulates an ever increasing and detailed level of market

⁸⁸ Johanson & Vahlne, 1977, pg29f.

⁸⁹ Johanson & Vahlne, 1977, pg30f.

⁹⁰ Johanson & Vahlne, 1977, pg26.

specific knowledge that enables the psychic distance encountered to be reduced. As a result a dynamic model of internationalisation is evident.

2.3.2 The different mechanisms of market entry.

Although not detailed in depth by either Johanson & Weidersheim-Paul (1975) or Johanson & Vahlne (1977) the different mechanisms through which market entry is affected play a central role in the models that they propose. As a consequence, this section outlines the array of different entry mechanisms that a company may resort to when internationalising. In doing so it describes the advantages and disadvantages associated with some of the different organisational forms that are available. (At this point it is necessary to note that the theories and authors mentioned in this section are *not* Uppsala internationalisation models).

2.3.2.1 The variety of market entry mechanisms

From Narula (1996), Root (1987), Livingstone (1989), Yoshina & Rangan (1995) and Young, Hamill, Wheeler & Davies (1989) it is possible to identify a wide variety of possible ways through which a company may enter a foreign market. As shown in Table 2.6 (over), Young, Hamill, Wheeler & Davies (1989) divide the possible ways into 'production in the home market' and 'production overseas'.

Both 'production in the home market' and 'production overseas' are not homogenous, however. Production in the home market may take one of two forms, namely, non-direct investment marketing and direct investment marketing. Similarly, production overseas may be either non-direct investment production or direct investment production operations. In all cases, a variety of options are available to the internationalising company.

Table 2.6: Forms of international market entry

Production in the home market	Non-direct investment marketing operations	<ul style="list-style-type: none"> • Indirect goods exports • Direct goods exports • Service exports • Know-how exports • Partial project exports
	Direct investment marketing operations	<ul style="list-style-type: none"> • Sales promotion subsidiaries • Warehousing units • Service units • Sales subsidiaries
Production overseas	Non-direct investment production operations	<ul style="list-style-type: none"> • Licensing • Franchising • Contract manufacturing / international subcontracting
	Direct investment production operations	<ul style="list-style-type: none"> • Assembly • Manufacture

Source: Young, Hamill, Wheeler & Davies, 1989, pg21.

Of the options outlined above in Table 2.6 some are more well known, and therefore, more readily understandable, than others. Of those mentioned perhaps the two best known are licensing and franchising. These are briefly detailed forthwith:

- **Licensing.** According to Root (1987) licensing occurs when “licensors make available their intangible assets (patents, trade secrets, know-how, trademarks, and company name) to foreign companies (licensees) in return for royalties and/or other forms of payment.”⁹¹ In addition to the above, the licensing package may also contain other components such as performance guarantees, a schedule of royalty payments, technical and commercial training and the direct sale of necessary plant and equipment.⁹²
- **Franchising.** This entry option is similar to licensing in that a company transfers from the home to host market intangibles. However, franchising is different in that a service or support component is a central and significant element of the transfer.⁹³ It is normally the case that the franchisee operates under the name of the franchising company, and that they are provided with a package that includes trade marks as well as local exclusivity and joint

⁹¹ Root, 1987, pg85.

⁹² Young, Hamill, Wheeler & Davies, 1989, pg12.

⁹³ Young, Hamill, Wheeler & Davies, 1989, pg13.

advertising as well.⁹⁴ In effect, the licensee is operating a business that heavily relies on the reputation and performance of the licensor. Therefore, the fate of one is dependent on the actions of the other.

It is clear from the literature that there are advantages as well as disadvantages to both of these options. Licensing often provides a mechanism for market entry where other alternatives are not possible, enabling in the process companies to circumvent tariffs and any other market entry barriers that may be present.⁹⁵ In addition, licensing allows companies to enjoy a lower level of risk than would be the case with, for example, equity investments.⁹⁶ If the expropriation of assets occurs the licensor is not affected. Having said this, licensing is not without its faults. To a large degree the success or otherwise of licensing is dependent on the reputation, trademarks and company name, as well as the technology on offer. However, one of the major problems associated with licensing is that the company loses control of the development of the business in the foreign market.⁹⁷ The policing of licensing agreements is also difficult. The licensee may adopt a strategy that is detrimental to the reputation of the licensor, or use the opportunity to become a competitor. In either case the licensor will be placed at a disadvantage. Finally, Root (1987) notes that in most cases the amount of income generated by the licensing agreements is minor in comparison to other entry mechanisms.⁹⁸

As franchising is similar to licensing in many respects the disadvantages mentioned above are also applicable. However, because franchising involves a greater resource commitment on the part of the franchisor many of the problems are exacerbated. Opportunistic behaviour is particularly problematic. The franchising agreement may be viewed by the franchisee as an opportunity to learn from a company already competent in the market so that at some point in the future it will be able to operate independently in the market. In doing so the company will become a competitor to the franchisor. Thus, franchising is associated with low levels of control.

⁹⁴ Root, 1987, pg109-112.

⁹⁵ Root, 1987, pg86.

⁹⁶ Root, 1987, pg86.

⁹⁷ Narula, 1996, pg15.

⁹⁸ Root, 1987, pg87.

Outside of franchising and licensing several other possible ways of market entry are identified in Table 2.6 (above). One of these is exporting. Narula (1996) highlights two different types of exporting: indirect and direct. In the former of these there is an intermediary between the exporter and the targeted market. The intermediary may take one of various forms such as a trading company, broker or agent. A trading house buys and sells on its own account; a broker aligns buyers with the seller whilst an agent represents the producer in overseas markets.⁹⁹ Common to all of these is that the exporting company remains at arm's length from the overseas market.

In contrast is indirect exporting where there is a closer relationship between the company and the overseas market. In indirect exporting the company undertakes the exporting act itself with the result that more resource commitment is required.¹⁰⁰ The company will have to build up contacts, undertake market research, physically export the good and handle all of the associated paperwork. One advantage of this is that the company is able to control more of the process itself, and can, therefore, ensure that opportunistic behaviour is minimised. One way through which the company may undertake direct exporting is through the establishment of a sales subsidiary in the overseas market. The subsidiary would handle all of the duties previously done by the intermediaries in indirect exporting.

Contracting is another way through which a company may enter a foreign market. Both Root (1987) and Young, Hamill, Wheeler & Davies (1989) distinguish between management contracts and turnkey contracts. In a management contract the company is hired to run the operations of another company on a day-to-day basis. The contract is often limited in that it excludes the authority to make investment decisions, or to change the ownership of assets. Root (1987) states that management contracts often occur in association with other forms of contracting such as turnkey contracting.

In turnkey contracts the company is obligated to develop the overseas project up to the point that it can be handed over to the client as a completed and productive unit such as a power station of

⁹⁹ Narula, 1996, pg15f.

¹⁰⁰ Young, Hamill, Wheeler & Davies, 1989, pg11

manufacturing plant.¹⁰¹ However, teething problems, which the customer may not have the necessary skills to resolve, have resulted in management and turnkey contracts being coupled with one another. Not only does the company oversee the project but then it also operates afterwards. One variation of such an arrangement is build-operate-transfer (BOT) whilst another is build-transfer-operate (BTO). In both cases the company oversees construction, and then undertakes its management but in the former this occurs before it is handed over to the customer whereas in the latter case this occurs after it is handed over.

2.3.2.2 Joint-ventures

Although the previous section has shown that a wide variety of different entry options are available to companies the focus here is on the use of those market entry mechanisms that require the internationalising company to actually make an investment in the overseas location. This is because, as Root (1987) notes, when a company wishes to enter an overseas market it can do so by either exporting to that market or directly transferring its resources to the market.¹⁰² When the company operates in the service sector exporting is not a viable option. Instead, service sector companies have to enter the market through some form of actual investment. In other words, the expanding company has no choice but to transfer resources when expanding abroad. As a consequence, not all of the market entry options detailed in Table 2.6 (above) are viable ones.

The options that are viable involve the transfer of resources from the home to host country. Such a transfer occurs through the use of a joint-venture, or alliance, with another company or through the establishment of a wholly-owned subsidiary. This sub-section focuses on joint-ventures whilst the next concentrates on wholly owned ventures. What is meant by a joint-venture or alliance? According to Dunning (1993b) joint-ventures:

... represent an alliance of two or more firms which collaborate to form a distinct economic entity in which each of the partners own a sufficiently large proportion of the

¹⁰¹ Root, 1987, pg113.

¹⁰² Root, 1987, pg6.

equity capital to provide them with some degree of control over key areas of decision making.¹⁰³

Buckley (1992a) offers the following definition: inter-firm collaboration over a given economic space and time for the attainment of mutually defined goals.¹⁰⁴ Thus, joint-ventures bring two or more companies together. Yoshino & Rangan (1995) discern between those joint-ventures where no new entity (company) is created and those where one is created. An aside is that Harrigan (1993) reifies the joint-venture entity that is created by referring to this as the ‘child’ of the parent companies that undertakes economic activities.¹⁰⁵ Where no new entity is created the companies are brought closer together through the exchange of equity in one another. In contrast, the creation of a new entity brings the parent companies closer together through common ownership of the joint-venture. Whilst this ownership may be equally distributed among the parent companies, it is not always the case. The different ways through which joint-ventures may bring companies closer together are shown in Table 2.7 (below).

Table 2.7: Bringing companies closer together

No new entity created	<ul style="list-style-type: none"> • Minority equity investments • Equity swaps
New entity created	<ul style="list-style-type: none"> • Fifty – fifty joint-ventures • Unequal equity joint-ventures

From: Yoshino & Rangan, 1995, pg8.

As Table 2.7 (above) suggests joint-ventures are not homogenous, with a wide variety of different types evident within the literature. Porter & Fuller (1986) suggest two broad categories of alliance characteristics. Firstly, those where the companies involved are seeking to use the joint-venture to expand the scope of their existing lines-of-business. These are referred to as Type Y alliances. In contrast is the second type of joint-venture where companies are seeking to position themselves as specialist players within a particular part of the industry and use joint-ventures to achieve this. Porter & Fuller (1986) label this type of joint-venture Type X. The characteristics of both types are outlined below in Table 2.8.

¹⁰³ Dunning, 1993b, *cited in*, Narula, 1996, pg102

¹⁰⁴ Buckley, 1992a, pg91.

¹⁰⁵ Harrigan, 1993, pg138.

Table 2.8: Alliance characteristics

Type Y	Type X
Share activities	Divide actions between the partners
Work together to perform an activity	Individually perform the activity
Partners of similar size or strength	Asymmetrical relationship between partners
Neither alone are satisfactory performers of the activity	Specialise where strongest
Relatively hard to switch partners	Easier to switch partners

From: Porter & Fuller, 1986, pg336ff.

Buckley (1992a) and Narula (1996) distinguish between 'vertical' and 'horizontal' joint-ventures. Vertical joint-ventures occur between companies within the same industry but at different stages of the value chain. This enables complementary assets to be brought together within the same joint-venture company. This is similar to one of the characteristics of Type Y alliances detailed by Porter & Fuller (1986) above. In contrast are horizontal joint-ventures. In this case companies in the same part of the value chain combine their operations, often to achieve economies of scale and scope. There is, of course, a third type of joint-venture between companies. In this case companies in different industries combine together in a joint-venture. This type of joint-venture is termed 'cross-sectoral' by Buckley (1992a).¹⁰⁶

Gullander (1976) makes a threefold distinction between 'successive integration', 'spider's web' and 'together-split' joint-ventures. In the first of these an initially weak inter-company relationship is gradually replaced by greater interdependency between the companies. This may ultimately lead to M&A activity that unites the two companies under single ownership. 'Spider's web' joint-ventures occur in concentrated industries, where companies enter into a series of joint-ventures with one another. This effectively binds together the different participants within the industry. 'Together-split' joint-ventures bring two or more companies together for a specific purpose, for instance, the development of a certain product, but once this is over the joint-venture is dissolved.

Over the years the motivations for the use of joint-ventures as a means of market entry have changed. In Table 2.9 (above) Dunning (1993b) identifies some of the main motivational changes that have occurred in recent years. Broadly speaking, joint-ventures are no longer viewed as second-best alternatives by companies or solely as a means of reducing the risk

¹⁰⁶ Buckley, 1992a, pg93.

associated with a given investment. Rather, joint-ventures are regarded by companies as an first-best way to entry foreign markets and to acquire in the process access to assets (resources) they view as strategic. Importantly, the changes that have occurred in the motivation for joint-ventures should not be interpreted as negating the validity of the those explanations from the 1960s and 1970s, but instead as being indicative of a change of emphasis between the two periods identified by Dunning (1993b). Of the changes and motivations identified it is necessary to draw attention to several, as they require further comment.

Table 2.9: The changing characteristics of joint-ventures

1960s – 70s	1980s – 90s
<ul style="list-style-type: none"> • Transitional – testing the water entry strategy. • Second-best to other alternative organisational forms. • Freestanding as part of a polycentric or multi-domestic strategy. • Mainly undertaken by medium or smaller MNEs, especially from smaller home countries. • Especially favoured by developing countries. • Especially prevalent in mature sectors or those producing standard goods. • Designed primarily to reduce risks of 100% commitment. 	<ul style="list-style-type: none"> • Frequently non-transitional or complementary to other entry strategies. • As a first-best entry strategy. • Integrated with a geocentric or global strategy of MNEs. • Increasingly undertaken by larger MNEs from leading capital exporting countries. • Also favoured by firms engaging in strategic asset seeking investment. • Spread throughout both developed and developing countries. • Spread throughout sectors, including technology and information intensive sectors, in which economies of scale are prevalent. • Intended mainly to acquire complementary assets and capture economies of synergy.

Source: Dunning, 1993b, pg238.

Hamel, Doz & Prahalad (1989) assert that joint-ventures allow companies to compensate for their shortcomings. It is possible to conceive shortcomings in two different ways. Either the company lacks the resources to fully develop a product, or as Harrigan (1993) suggests, the company may actually lack the innovative capabilities to devise the product or service in the first place.¹⁰⁷ In the former case it is more likely that the joint-venture will provide the company with financial and productive assets, whilst in the latter case, the joint-venture allows the company to access innovations developed by others.

As competition intensifies, and the cost of developing new products and services increases, joint-ventures have been used by companies as a way of offsetting some of the risk and financial

¹⁰⁷ Harrigan, 1993, pg146.

costs incurred. Moreover, companies have also been using joint-ventures as a way to provide them with the option to expand when market conditions are more favourable. Kogut (1991) highlights this when writing that:

...joint ventures are investments providing firms with the discretion to expand in favourable environments, but to avoid some of the losses from downside risk.¹⁰⁸

In other words, joint-ventures provide the internationalising company with the ability to 'test the waters,' ascertain market conditions and react accordingly whilst limiting the risk to which it is exposed. Although Dunning (1993b) alludes to the declining importance of this as a motivation for joint-venture formation it nevertheless remains important. Moreover, this explanation quite naturally leads onto one raised by Glasiter & Buckley (1996). Glasiter & Buckley (1996) state that joint-ventures can be viewed as the "means of gaining a significant presence in a new market, enabling faster entry to the market and achieving greater international market penetration."¹⁰⁹ That is, joint-ventures enable companies to quicken their entry into new markets. This is particularly important for companies operating in rapidly changing industries, with many new investment opportunities and a high degree of uncertainty like telecommunications.

Of course, there are negative aspects to a company's participation in a joint-venture. A non-exhaustive list of the disadvantages of joint-ventures includes:

- *Different time horizons.* The parent companies may have different time horizons regarding the life of the joint-venture.¹¹⁰ For instance, one company may view the joint-venture as part of a long-term strategy and is prepared to invest accordingly whilst the other may regard the joint-venture as the means to achieve some short-term strategic objective. Alternatively, one of the parent companies may view the joint-venture as a prelude to a full merger whilst the other believes that the joint-venture will safeguard its independence. Regardless of the specific vision that each has for the joint-venture the

¹⁰⁸ Kogut, 1991, pg20

¹⁰⁹ Glasiter & Buckley, 1996, pg328.

¹¹⁰ Harrigan, 1993, pgl43.

fact that there are differences will lead to tension between the parent companies with the consequence that the effectiveness of the joint-venture is impinged upon.

- *Ill-conceived.* The parent companies may have formed the joint-venture without thinking through its full implications. On the one hand the joint-venture may have been formed in haste; either as the knee-jerk reaction to market developments or to prevent one of the companies falling prey to a takeover. On the other hand, the joint-venture may have been undertaken as part of strategy whose validity has been negated through market changes. Alternatively, the parent companies are not able to fulfil their strategic objectives from the joint-venture because the parent companies do not possess the necessary resources.
- *Instability.* One consequence of the ill-conceived nature of some joint-ventures is instability, that is, joint-ventures are formed and then dissolved. Mody (1993) writes that instability occurs because “contracts are incomplete and residual rights to profits are not well-defined.”¹¹¹ Without explicit mechanisms to resolve disputes between the parent companies the only course of action left open is to dissolve the joint-venture. When coupled with the rapidly changing industry, that can invalidate company strategies, the end result is a high failure rate and the rapid formation / dissolution of joint-ventures.
- *Co-ordination problems.* According to Buckley (1992a) co-ordination problems arise due to clashes in corporate cultures, and are exacerbated when parent companies are of different nationalities.¹¹² However, co-ordination problems go further than this. Central to joint-ventures is the trade-off between the generation of knowledge and resources for the parent companies and the possibility that the other company(s) may be acting opportunistically.¹¹³ Joint-ventures have weak incentive structures to prevent cheating and opportunistic behaviour and ensure that the partners are working for the common good.

¹¹¹ Mody, 1993, pg152.

¹¹² Buckley, 1992a, pg98.

¹¹³ Mody, 1993, pg168.

Although there are undoubted problems in the use of joint-ventures by companies, they will be used as long as their benefits outweigh their costs. Again resorting to a human analogy, Harrigan (1993) states that “like a marriage, they tolerate their wayward partner to attain some advantage that satisfies their needs.”¹¹⁴ The companies in the joint-venture will tolerate opportunistic behaviour and cheating by their partners as long as participation within the joint-venture is in the company’s strategic best interest. When this ceases to be the case the company will reassess its participation in the joint-venture.

2.3.2.3 Wholly owned subsidiaries

Companies may also enter foreign markets through the establishment of wholly-owned subsidiaries. As their name suggests, wholly owned ventures are not collaborative but are instead owned by a single company. In a similar way to joint-ventures, wholly owned subsidiaries can be categorised in a variety of different ways. They may be either the result of M&A activity or a ‘greenfield’ investment. In the case of the former, the expanding company enters the market through acquiring outright ownership of a local company. In the latter case, the company expands into the targeted market through establishing a subsidiary that hitherto did not exist.

Perhaps the principal advantage of wholly owned subsidiaries is that through complete ownership the company avoids opportunistic behaviour by others. This overcomes one of the disadvantages associated with joint-ventures that was discussed above. Having said this, complete ownership results in the company is not without its problems. Not only does the company have to invest more but it is also exposed to greater risk as a consequence. If the venture fails the internationalising company alone carries the full burden of the failure.

¹¹⁴ Harrigan, 1993, pg143.

2.3.2.4 Conclusion

This section has demonstrated the existence of a wide variety of mechanisms for market entry. Although all of these identified represent options that a company can consider when entering a market, they do not represent options when this market is overseas in our particular case. This is because in service industries, such as telecommunications, the only way that a company can enter a foreign market is through an entry mechanism that results in an actual investment in the targeted market. Thus, the option is between either joint-ventures or wholly owned subsidiaries. The choice of either joint-venture or wholly owned will be determined by the interplay between the circumstances at hand the effect that this has on the relative strengths and weaknesses of each option.

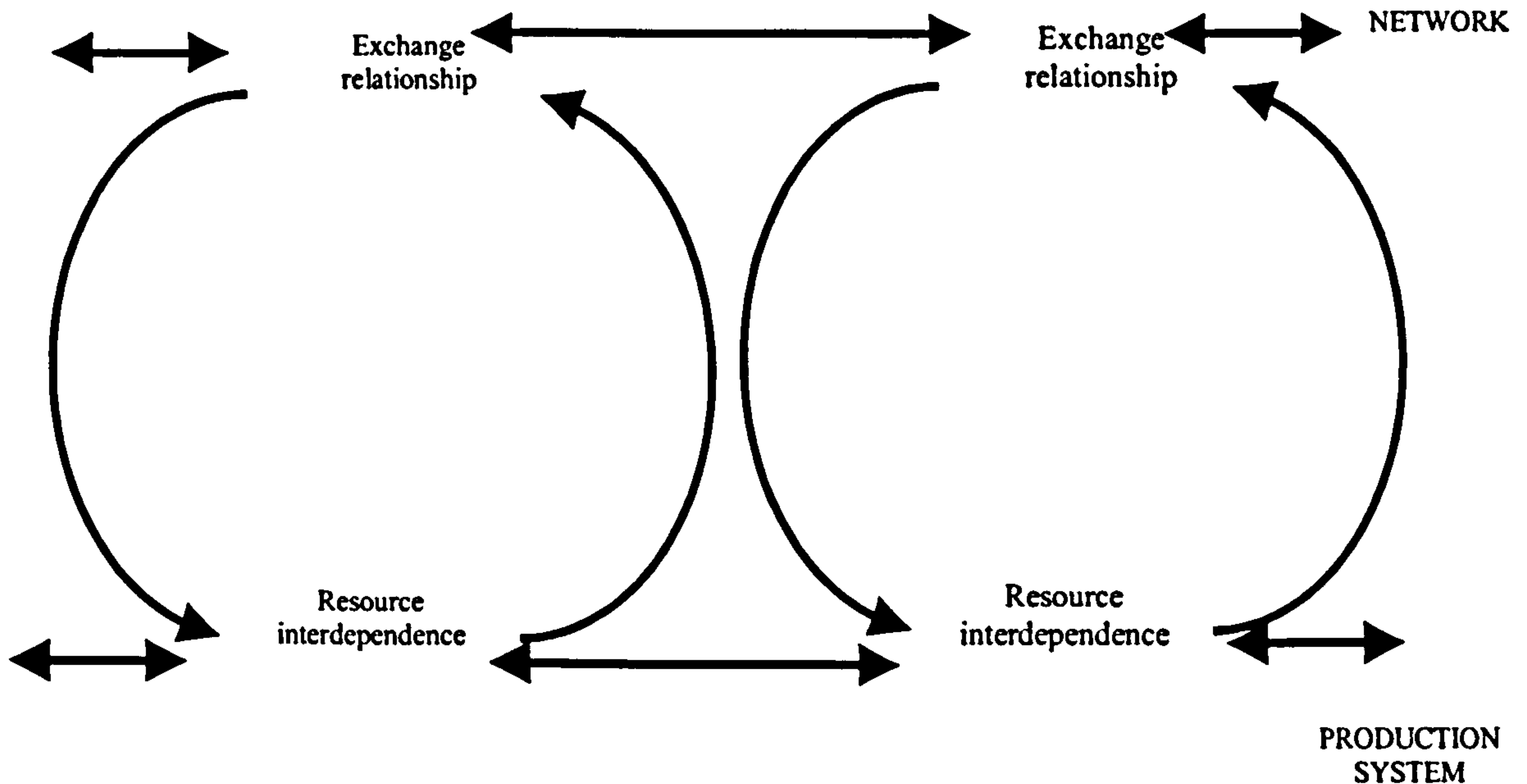
2.3.3 Network or later Uppsala internationalisation models.

Johanson & Mattsson (1988) state that an network is comprised of companies engaged in the production, supply and distribution of goods and services. In between these companies are exchange relationships that effectively bind the fate of one company to that of others. Exchange relationships arise due to the nature of asset ownership and the production of goods and services. That is, that whilst assets may be controlled by one company others are dependent on these assets for the production of their own goods and services. This interrelationship is a basic assumption of the network model.

Thus, exchange relationships occur as companies seek to acquire the necessary goods and services that are outside their immediate control to produce their own goods and services. Exchange relationships are not stable, as at some point in the future one or both of the parties concerned may decide that the company's survival and market position is best suited through the pursuance of relationships with others:

... relationships are continually established, maintained, developed, and broken in order to give satisfactory, short-term economic return, and to create positions in the network, securing the long-term survival and development of the firm.¹¹⁵

Figure 2.3: Network exchange



Source: Johanson & Mattson, 1991, pg268.

2.3.3.1 The network as an expansion mechanism.

As networks are scale-neutral they may be either national or international in scope. In the domestic marketplace exchange relationships are used by a company to facilitate its growth so that it can eventually encompass the entire national space. Internationally, a company can leverage its existing exchange relationships to expand outside the national space through one of three different ways:

... (1) through establishment of positions in relation to counterparts in national nets that are new to the firm, i.e. *international extension*; (2) by developing the positions and increasing resource commitments in those nets abroad in which the firm already has

¹¹⁵ Johanson & Mattsson, 1988, pg292.

positions, i.e. *penetration*; and (3) by increasing co-ordination between positions in different national nets, i.e. *international integration*.¹¹⁶

The interplay between market and company characteristics provides Johanson & Mattsson (1988) a simple matrix through which internationalisation strategies can be evaluated.

- *The Early Starter.* As a consequence of having few, if any, exchange relations with an international dimension the company's expansion abroad necessitates the dedication of resources for knowledge development. As a result, the level and nature of resources available to a company have a significant bearing on the subsequent nature of the internationalisation undertaken. A lack of resources, and international experience, may be overcome through targeting the closest market first for expansion before those further away.
- *The Lonely International.* Due to a combination of limited international experience, and the larger resources that are available, less resistance to internationalisation than previously the case is encountered. Furthermore, it is likely that The Lonely International's domestic network will be conducive to internationalisation:

[L]onely international has the qualifications to promote internationalisation of its production net, and consequently of the firms engaged in it. The firm's relationships both with and in other national nets may function as bridges to those nets for that firm's suppliers and customers.¹¹⁷

- *The Late Starter.* A company may be indirectly linked to international markets through the expansion plans of its domestic network partners. Thus, through drawing on the greater international experience of these partner companies the Late Starter company will be able to enter more distant markets than would have otherwise been the case.

¹¹⁶ Johanson & Mattsson, 1988, pg296.

¹¹⁷ Johanson & Mattsson, 1988, pg301f.

It is argued by Johanson & Mattsson (1988) that in the case of the Late Starter company size is important. A small company is very likely to be highly specialised and may be able to draw on the existing network bonds that it has to overcome any problems that it may face. In contrast, the larger a company becomes the less likely it is to be specialised, with the result that access to overseas networks may be correspondingly more difficult:

[i]n general, it is probably more difficult for a firm which has become large at home to find a niche in highly internationalised nets. Unlike the small firm, it cannot adjust in a way which is necessary in such a net, nor has it the same ability as the small firm to react to the initiatives of other firms - which is probably the main road to internationalisation in a net in which other firms are already international.¹¹⁸

Table 2.10: Internationalisation and the network model

Degree of Internationalisation of the firm	Degree of internationalisation of the market	
	Low	High
Low	The Early Starter	The Late Starter
High	The Lonely International	The International Among Other

Source : Johanson & Mattsson, 1988, pg298.

- *The International Among Others.* As a consequence of the already highly internationalised nature of both the market and company the extension and penetration of networks has only a marginal impact on the continued internationalisation of the company.

Moreover, on the basis of the numerous exchange relationships that the International Among Others company has in different networks it may be able to gain access to new markets. The strength of the exchange relationships built up in one network, regardless of whether these are domestic or international, are leveraged to gain access to a new market.

¹¹⁸ Johanson & Mattsson, 1988, pg303.

In such an environment the ability of the company to co-ordinate its resource use is important, not least because this enables surplus capacity may be transferred from one market to another. Co-ordination is also important when it is remembered that The International Among Others company occupies a position within several networks and as such has access to, and even possibly influence over, the resources of other companies.

The interpretative framework provided illustrates that network membership, and therefore exchange relationships, impacts on the internationalisation strategy adopted. One of three strategies are adopted, either extension (The Early Starter), penetration (The Lonely International) or integration (The International Among Others). Fundamental to this choice is the level and nature of the resources controlled by the internationalising company. Internationalised exchange relationships, in conjunction with unique assets, enable a company to expand more rapidly and substantially overseas than would otherwise be the case.

2.3.3.2 Illustrating networks as expansion mechanisms.

Several illustrations of networks as an expansion mechanism are to be found within the literature. Vahlne & Nordstrom (1988) applied the approach to the storage and distribution of blood products. It was observed that once exchange relationships were established they are likely to be long lasting, and that they can be employed to shorten the time taken to enter new markets.

Hakansson, Kjellborg & Lundgren (1993) examine the development of strategic alliances within biotechnology. After conceptualising the network along the five dimensions of density, distance, degree, neighbourhood and diameter it was observed that:

- The distribution of alliances by size of company is not even. Of the 1072 alliances identified 51% were accounted for by large companies, thereby confirming the earlier suggestion that size plays an important role in the construction of exchange relationships.

- Regional preferences for alliance formation were observed, with North American over European or Asian companies acting as network focal companies.
- Alliances are often formed in areas where companies share common expertise.¹¹⁹ Through such a mechanism companies are able to strengthen the knowledge and production base on which they rely for their competitiveness. Across the biotechnology field the propensity to engage in alliances is not uniform, with some sections of the industry displaying a greater willingness than others to engage in collaborative arrangements.¹²⁰

Through examining the Canadian telecommunications industry D'Cruz & Rugman (1994a) highlighted the role played by focal or flagship companies within a network. The presence of a flagship company within a network ensures that exchange relationships are asymmetrical due to its ability to disproportionately influence others. D'Cruz & Rugman (1994a) did not, however, comment on how the flagship company, in this case Bell Canada, was also a member of another network. Bell Canada is a member of both Stentor, an alliance of domestic telecommunications companies that provides long distance services, as well as the BCE Inc group of companies. These companies, which include BCE Mobile, Tele-Direct Publications and Nortel, form another network to which transcends the Canadian national space and is international in scope. It is this network that Bell Canada has turned to expand internationally. Both networks serve different ends, one is primarily orientated towards domestic developments whilst the other is international and thus complementary to Bell Canada's domestic focus.

2.3.3.3 Questioning the appropriateness of the network approach to internationalisation..

Perhaps surprisingly little in the way of direct criticism has been expressed against the network model of internationalisation. Having said this one of the main problems with the network model is its inability to explain the internationalisation of 'early starter' companies. That is,

¹¹⁹ Haksansson, Kjellborg & Lundgren, 1993, pg79.

¹²⁰ Alliances, where the alliances is formed between two distinctive areas, were relatively common in the food segment of the biotechnology industry and infrequent in human therapeutics.

companies which themselves are not highly internationalised, and which belong to industries that are also only barely internationalised. By stressing the role played by existing exchange relationships, overseas experience and company size (and thus available resources) the network model does not easily accommodate early starter companies. Such a company does not possess the necessary resources, nor is likely to have access to existing exchange relationships with the necessary international contacts, so that it can follow one of the three outlined strategies. As a result it must internationalise through another avenue.

When this is coupled with the influence of a lack of resources on internationalisation the company is more likely than not to expand overseas cautiously in a manner consistent with that laid out by the early Uppsala school. This is recognised by Johanson & Mattsson (1988) who state that the early Uppsala school, and in particular Johanson & Vahlne (1977) offer a more appropriate mechanism for understanding early starter internationalisation.

Using the network model as an analytical tool is problematic. The identification of a network is complicated through what Johanson & Vahlne (1990) describe as its subtle characteristics:

...business relationships and consequently industrial networks are subtle phenomena, which cannot easily be observed by an outsider, i.e. a potential entrant. The actors are tied to each other through a number of different bonds: technical, social, cognitive, administrative, legal, economic, etc. The outsider can only achieve a very superficial comprehension of such a complex and fluid network. The relationship and the networks can only be understood through experience from interaction inside, and especially so if there is a cultural distance between the actors.¹²¹

Therefore, network membership is required if a company is to use its existing exchange relationships to expand, either domestically or internationally. But, a company can only determine the usefulness, or appropriateness of exchange relationships as an expansion vehicle by being part of a network. Therefore, the move of a company from one network to another so that it can internationalise as suggested above by Johanson & Mattsson (1988), is not based on an thorough understanding of the capabilities that the network will offer but on a superficial or

¹²¹ Johanson & Vahlne, 1990, pg18.

partial analysis. As such, it can be argued that the successful use of a network as an expansion mechanism has as much to do with serendipity as it has to do with rational analysis. Furthermore, in a risk averse environment the inability to analyse the capabilities of other networks is likely to induce inertia on the part of companies.

The subtle nature of networks raises a related question, namely, how can networks be identified? Some form of delineating mechanism is required, otherwise in its logical extreme all companies would somehow be related to another through membership of a single network. Hakansson, Kjellborg & Lundgren (1993) offer one such mechanism through which the limits of a network can be ascertained. They propose that a network can be measured along five different dimensions, and that two of these dimensions – degree and distance – can be used to determine the position of a company relative to that of the focal (flagship) company. However, both of these are determined relative to the focal company whose position is arbitrarily fixed. As a consequence, the determination of a company’s position within a network is tautologous. The dimensions used are self referencing in that each dimension is relative to the focal company whose position in turn is fixed by these very same dimensions.

Table 2.11: Measures used to describe the network structure.

Measure	Characteristics on graph level	Characteristics on firm level
Distance	Average distance between two firms	Average distance between a focal firm and other firms
Diameter	Maximum shortest distance between two firms	
Degree		Number of direct alliances of a focal firm
Density	Existing alliances out of the total number of possible relationships	
Neighbourhood		Number of firms within reach (in a specified distance)

Source: Hakansson, Kjellberg & Ludgren 1993, pg76

2.3.3.4 Conclusion.

The network model of internationalisation identifies the exchange relationships evident between companies, and acknowledges that these are dynamic and can be strategic in nature. However, the network model is unable to satisfactorily explain internationalisation in either a risk averse environment, or where resources are scarce. The network model is unable of satisfactorily

explaining internationalisation in the first case, with Johanson & Mattsson (1988) acknowledging that Johanson & Vahlne (1977) offers insight in this case.

2.3.4 Derived or 'innovation-related' internationalisation models.

The derived or innovation internationalisation models build on, either explicitly or implicitly, the understanding of internationalisation proposed by Johanson & Wiedersheim-Paul (1975) as well as Johanson & Vahlne (1977). In doing so they conceive internationalisation as an incremental project. Importantly these models largely focus on events preceding internationalisation, rather than on events subsequent to the decision to internationalise having been made. Thus they seek to identify those 'push' or 'pull' factors that initiate international investment activity. It is for this reason that Andersen (1993) terms them 'innovative.'

2.3.4.1 Innovation related internationalisation models.

Bilkey & Tesar (1977) proposed six stage model through which the behaviour of small and medium sized manufacturing companies can be explained. The analysis of 816 Wisconsin companies found that the motive for exporting behaviour varies depending on the stage at which the company is at. Thus, for example Stage 3 companies exporting was found to be closely related to managerial images of the benefits or otherwise of exporting, whereas for Stage 5 exporting was rational in the sense that expectations and perceived barriers were significant determinants of export activity.¹²²

Bilkey & Tesar (1977) concluded that the analysis confirmed the validity of the six stage model. Furthermore, it was also found that "[w]ithin the size range of firms studied, size was relatively unimportant for export behaviour when account was taken of the quality and dynamism of management."¹²³

¹²² Bilkey & Tesar, 1977, pg94.

¹²³ Bilkey & Tesar, 1977, pg95.

Table 2.12: Stages in the export behaviour of Wisconsin SMEs

Stage	Characteristics
One	Unwilling exporter
Two	Full fills unsolicited orders
Three	Explores feasibility of exporting
Four	Exports experientiality to one or two markets
Five	Experienced exporter to those markets
Six	Explores the possibilities of exporting to additional markets

Source: Ford, Lawson & Nicholls (1982); Bilkey & Tesar (1977).

Weinstein's (1977) examination of advertising agency internationalisation illustrates the interaction of internal and external factors in the determination of strategy. In the first of these two models seven factors are identified: external parameters, internal parameters, basic motivations, entry strategy, ownership strategy, decision to become an international agency and decision to make a specific investment.¹²⁴ Each of these can not be treated in isolation, and first movers display different factor characteristics than those internationalising later on. It is argued that the decision to make a specific investment is influenced by, firstly, the company's prior decision to become international, secondly, the date of the investment, thirdly, the cultural differences of the proposed host country, and fourthly, agency size.¹²⁵ From the analysis of agencies by the first model two findings are of particular interest:

1. Once a threshold size has been breached the agency undergoes an initial bout of internationalisation, and after completion acclimatisation to its new found circumstances occurs. After a period of acclimatisation the agency once again expands.
2. Weinstein (1977) states that "... as agencies grow in size and overseas experience, their investments switch from Canada and Europe to Latin America and the Far East."¹²⁶ That is, increased overseas experience and resources allow further expansion to occur.

¹²⁴ Each of these seven factors are not homogenous so, for instance, internal parameters can be divided into the agency's size at the time of the investment, the overseas experience possessed when the investment was made, and whether or not the investment was made pre or post 1950 (Weinstein, 1977, pg84).

¹²⁵ Weinstein, 1977, pg86.

¹²⁶ Weinstein, 1977, pg86.

The second model developed by Weinstein (1977) highlights the inherent complexity of investment decisions, and found that:

[T]he agencies, as a rule, did not have a well-defined set of objectives and goals. This prevented them from developing a careful set of decision criteria. ... Financial analysis was limited and the use of such tools as discounted cash flow analysis was rare.¹²⁷

Wiedersheim-Paul, Olson & Welch (1978) examine the pre-export stage of internationalisation and suggest a model that highlights key factors such as “information, characteristics of the decision-maker, the enterprise environment, and the extraregional expansion of the firm.”¹²⁸

It is argued by Wiedersheim-Paul, Olson & Welch (1978) that changes in a company’s willingness to export, as well as information collection and transmission abilities result in its emphasis changing from domestic to passive to pre-export. Important within this change are attention evokers, which may be either internal or external in origin, and include the possession of unique competencies and excess capacity, fortuitous orders and markets opportunities.¹²⁹ These stimulate the move of a company from one state to the next. The company’s information activities relate to its ability to collect and then transmit information, and central to this is the role played by the decision-maker who is influenced by external factors such as the environment and well as his/her perception of such factors.¹³⁰

Table 2.13: Groups of pre-export activity

Group	Dimension		
	Willingness to start exporting	Information collection activity	Information transmission activity
Domestic	None to low	None to low	None to low
Passive	Low to medium	Low to medium	Low
Active	Medium to high	Medium to high	Low to high

Source: Wiedersheim-Paul, Olson & Welch, 1978, pg53.

¹²⁷ Weinstein, 1977, pg87.

¹²⁸ Wiedersheim-Paul, Olson & Welch, 1978, pg47.

¹²⁹ Wiedersheim-Paul, Olson & Welch, 1978, pg52.

¹³⁰ Wiedersheim-Paul, Olson & Welch, 1978, pg48.

On this basis three basic types of company can be identified, namely, domestic, passive and active. A company migrates from one category to the next as a result of the interaction between external and internal stimuli. Wiedersheim-Paul, Olson & Welch (1978) also note that experience plays a role as well, positive experiences reinforce the decision to enter into pre-export activities and vice versa.

Welch & Wiedersheim-Paul (1980) extend Wiedersheim-Paul, Olson & Welch (1978) so that those factors which continue to play a role once exporting has begun can be identified.¹³¹ As can be expected many of the same factors are highlighted with attention being drawn to the part played by pre-exporting activities in the determination of the subsequent success of exporting.¹³² However, of more significance is the suggestion that export sales generate information flows which inform the company as to nature of the environment to which they are exporting. This in turn enables the actual, as well as perceived, levels of risk and uncertainty faced to be ascertained. Welch & Wiedersheim-Paul (1980) write:

[a]ssociated with the export sales are information flows, not just about market opportunities, but of a more general nature which may improve the firm's knowledge and understanding of the cultural and business environment to which it exports, as well as exporting in general. ... The effect of these knowledge changes, when viewed positively, is to reduce the perceived risk and uncertainty associated with conducting export operations.¹³³

This constitutes a positive feedback loop: the more a company exports the greater the information flow that it has access to, this in turn enables the risk and uncertainty associated with exporting to be evaluated with the result that further exporting occurs. Within this the decision-maker plays a significant role; if internationally orientated those problems that are encountered may be downplayed, whereas a pessimistic managerial disposition results in a

¹³¹ Welch & Wiedersheim-Paul, 1980, pg336.

¹³² Pre-exporting is regarded to be significant by Welch & Wiedersheim-Paul (1980) for various reasons including: resources are invested; logistical problems are encountered and solutions put in place; the company will be better prepared to trade abroad and will have begun to build long term commercial relationships with other companies (Welch & Wiedersheim-Paul, 1980, pg 336f).

¹³³ Welch & Wiedersheim-Paul, 1980, pg339.

passive stance towards exporting. The pessimistic orientation engenders a negative feedback loop, which ultimately leads to the failure of the company's exporting efforts. Hence:

[t]he impact of the type of feedback on perceived risk and uncertainty is thereby directly related to the expectations of the decision-maker regarding the nature of the exporting strategy and its outcome.¹³⁴

Cavusgil & Nevin (1980) clearly demonstrate the central role of management in shaping the company's initial international marketing decision. A four stage model of internationalisation is articulated which suggests that:

... attributes the presence and the degree of involvement in international marketing to personal evaluations of decision makers, their subjective expectations, and managerial aspirations, among other variables.¹³⁵

Stage 2 stimuli are both internal and external in origin. External stimuli are unsolicited orders from abroad, and are of sufficient strength that they are capable of overturning any reservations on the part of the company. However, short-term profit taking rather than compliance with any long-term objectives result from the presence of this type of stimuli.¹³⁶ Cavusgil & Nevin (1980) identified three different types of internal stimuli, one of which are those "differential advantages" which result from the company's product range, production processes, resources and markets in which it operates.¹³⁷ In contrast, the other two identified stimuli relate to the decision-maker:

[t]he presence of *aggressive, venturesome* decision makers in the firm has been associated with successful exporting. ... [A]doption of an *international outlook* at the top-

¹³⁴ Welch & Wiedersheim-Paul, 1980, pg340.

¹³⁵ Cavusgil & Nevin, 1980, pg71.

¹³⁶ Cavusgil & Nevin, 1980, pg69.

¹³⁷ Cavusgil & Nevin, 1980, pg69. Market characteristics, such as saturation and increasing competitiveness, may also 'push' companies into considering foreign opportunities.

management level appears to be a critical determinant of initial interest.¹³⁸ (*emphasis added*)

Despite arguing that the presence of any one of the stimuli encourages managerial interest in the evaluation of foreign marketing opportunities, the role of decision makers (management) is emphasised by Cavusgil & Nevin (1980). The individual stages within the model are detailed below in Table 2.14. Importantly each of the relevant managerial experiences regarding foreign opportunities results in the company seeking outside assistance.¹³⁹

Through highlighting the role of management in this and subsequent stages Cavusgil & Nevin (1980) categorically underline the pivotal role played by management in the company's initial internationalisation efforts. Heightened managerial interest in foreign markets, in association with other factors such as resource availability combine to determine whether or not internationalisation results.

Table 2.14: A model of incremental internationalisation process of the firm

Stage	Critical activity	Stimuli
1. Domestic marketing	Selling solely in the home market	<ul style="list-style-type: none"> • Inhibiting firm characteristics • Attitudinal barriers
2. Experimental involvement	Preliminary evaluation of the feasibility of exporting	<ul style="list-style-type: none"> • <i>External</i>: unsolicited orders; change agents • <i>Internal</i>: managerial aspirations; international orientation; differential advantages & firm characteristics
3. Active involvement	Systematic exploration of expanding international marketing activity	<ul style="list-style-type: none"> • Availability of resources • Willingness to commit resources • Experience based expectations
4. Committed involvement	Long-term commitment to international markets	<ul style="list-style-type: none"> • Execution of marketing mix • Impediments in international marketing

Source: Cavusgil & Nevin, 1980, pg69

Drawing upon the four "Ps" of promotion, place, price and product Wortzel & Wortzel (1981) develop a value chain where the progression from each stage of the model to the next necessitates the company internalising a greater proportion of the chain. Therefore, and as

¹³⁸ Cavusgil & Nevin, 1980, pg69.

¹³⁹ Cavusgil & Nevin, 1980, pg70.

shown in Table 2.15 below, companies in stage I occupy less of the value chain than those in subsequent stages.

The progression of a company from Stage I to Stage II signals a ‘fundamental change’ on the part the company, for as a consequence of the company becoming increasingly interested in exporting new capabilities are developed to facilitate this shift in emphasis. Moreover:

...each succeeding Stage is marked by the exporting firm’s increasing control over product design, and over the marketing and physical distribution efforts required to get its products from plant to the consumer’s household.¹⁴⁰

The decision to export, taken in Stage II, propels the company not only to develop the new capabilities that are required, but also to internalise activities in the following stages. Consequently, in Stage III the company not only develops new capabilities but also internalises to a greater extent than previously the case.¹⁴¹

Table 2.15: Stages of export marketing development

	Product				
	Internal design	External design	Package design	Quality design	Branding
I. Importer pull Export push	1	1			
II. Basic production capacity marketing	X	1	1		
III. Advanced production capacity marketing	X	X	X	1	
IV. Product marketing channel push	X	X	X	X	1
V. Product marketing consumer pull	X	X	X	X	X

Notes: 1 - Partial responsibility; X - Full responsibility. Source: Wortzel & Wortzel, 1981, pg53.

Significantly it is recognised by Wortzel & Wortzel (1981) that it is not always the case that a company should progress to either Stage IV or V. At this stage the company is faced with several alternatives; it may variously diversify its product range, produce higher quality and/or priced goods (that is, trade-up), or enter into the long term production of standardised

¹⁴⁰ Wortzel & Wortzel, 1981, pg52.

¹⁴¹ Wortzel & Wortzel, 1981, pg54.

products.¹⁴² Faced with these options, all of which require additional resources to be invested,¹⁴³ the company will progress from Stage III to IV when it is either threatened by other Stage III companies, or when it recognises that it possesses the potential to expand upmarket. However, any progression will be accompanied by the company's exposure to increased uncertainty and risk, especially as the management of the company's operations become more complicated.¹⁴⁴

Hence, the model proposes that both internal and external factors influence the company's progression from Stage I to V, and as a consequence this progression is by no means certain. Finally, Wortzel & Wortzel (1981) comment that:

... there is no particular strategy or particular export stage which is optimum for all firms in any one industry, or across industries, or across countries.¹⁴⁵

Dalli (1994), through an analysis of small Italian manufacturing companies, argues that though the companies follow different paths when internationalising they confirm some of the premises on which stage models are based.¹⁴⁶ It was found that despite the variability witnessed between companies the notion of incremental, or developmental in Dalli's (1994) terminology, internationalisation was essentially correct.¹⁴⁷ Furthermore, it was also found that internationalisation is a multidimensional concept:

...firms increase their international involvement with respect to a number of aspects of their exporting strategy (export intensity, commitment of organizational resources, number of markets, customers and channels).¹⁴⁸

¹⁴² Wortzel & Wortzel, 1981, pg57.

¹⁴³ One exception to this is when the company has entered into the long term production of standardised products which are distributed by the customers themselves.

¹⁴⁴ For instance, as the company's design responsibilities are expanded in stage IV "conflicts can arise between what the home office wants to make and what the destination country office believes it can best market" (Wortzel & Wortzel, 1981, pg58).

¹⁴⁵ Wortzel & Wortzel, 1981, pg51.

¹⁴⁶ Dalli, 1994, pg85.

¹⁴⁷ Dalli, 1994, pg104.

¹⁴⁸ Dalli, 1994, pg105.

However, discrepancies between the expected pattern of incremental internationalisation and that observed in the sample were noted. It was suggested that as they stand stage models are deterministic in nature, they presume a linear progression from one stable and homogenous stage to another. In doing so they provide a series of discrete stages against which internationalisation may be referenced, and thus evaluated. Whilst generally accepting with the overall framework Dalli (1994) disagrees with this conceptualisation of internationalisation, and instead argues that as a consequence of internationalisation being a process of change it is necessary to pay less attention to the stages and more to the processes involved.

By doing so it is possible to show that within stages companies display instabilities as they constantly seek to adapt to the environment in which they find themselves. This phenomenon is referred to as 'micro-internationalisation.' Within a stage companies may be differentiated in terms of the number of markets, customers and entry modes and history.¹⁴⁹ With this in mind, Dalli (1994) identifies two different patterns of internationalisation within the sample. First and foremost is *incremental internationalisation* which is typified by:

... growing commitment and export dependence, associated with higher diversity, in terms of either commercial relations (number of customers), or operational diversity (entry channels used), or geographical scope (number of markets).¹⁵⁰

For all intense and purpose this is the traditional stage model of internationalisation. In contrast is the second pattern, *export experience and internal formalisation*, where companies recognise that the principal source of their competitiveness remains the home market notwithstanding the extent to which they have internationalised. Not only do these two patterns enable the diversity of internationalisation strategies to be illuminated but the second pattern also enables de-internationalisation, a frequently overlooked component of any company's strategic portfolio, to be brought to the fore. It is important to note that these two patterns are not mutually exclusive, a company will combine elements from each in order to achieve its strategic objective(s). Dalli

¹⁴⁹ Dalli, 1994, pg94.

¹⁵⁰ Dalli, 1994, pg106.

(1994) notes that the analytical consequence of such a strategy is that the categorisation of companies into groups on the basis of these patterns is not possible.¹⁵¹

In the context of economic development, where a country is progressing from import substitution to export orientated development, Haar & Ortiz-Buonafina (1995) propose a multi-levelled model capable of distinguishing between those companies fulfilling unsolicited orders and those actively seeking export contracts. Based on the company's marketing activities a company may fall into one of two categories, it may either display limited marketing activities (levels 1 – 3) or in contrast may have directed resources towards international marketing (levels 4 – 6).

Table 2.16: Levels of export marketing activities

Level	Characteristics
One	<ul style="list-style-type: none"> The firm sells to foreign buyers coming to the place of business and/or fills unsolicited orders from abroad.
Two	<ul style="list-style-type: none"> The firm is mostly interested in receiving orders to sell surplus products overseas and lacks the resources to fill orders on an ongoing basis.
Three	<ul style="list-style-type: none"> The firm fills unsolicited orders from abroad stemming from trade leads, referrals from customers and/or foreign buyers coming to the place of business on an ongoing basis.
Four	<ul style="list-style-type: none"> The firm solicits overseas sales for existing products and is willing to make limited modifications in its products and marketing procedures to accommodate the requirements of foreign buyers.
Five	<ul style="list-style-type: none"> The firm develops a worldwide export marketing strategies and systematically plans marketing development, new products development, and/or market expansion in existing and new overseas markets.

Source: Haar & Ortiz-Buonafina, 1995, pg177.

Such a classification enabled Haar & Ortiz-Buonafina (1995) to determined that “financial flexibility, comparative advantage of the firm, and systematic environmental assessment contribute significantly to the development of exports.”¹⁵² Furthermore:

[t]he most important implication is that for exporters to embark upon an extensive exports marketing campaign, they must have a strategic focus: this includes attention to strategic issues within the firm, as well as analysis of the competitive environment. In today's

¹⁵¹ Dalli, 1994, pg106.

¹⁵² Haar & Ortiz-Buonafina, 1995, pg180.

environment, this also means an understanding of global political and economic changes.¹⁵³

2.3.4.2 Some salient characteristics of innovation models of internationalisation..

That innovation models of internationalisation are wide ranging in nature is clearly evident from the previous section. They are, however, united by a common conceptualisation of internationalisation as an incremental process, where the degree and type of information available plays a determining role in controlling the process. As these models are also grounded on the insights gleaned from the early Uppsala models of internationalisation, they are complimentary in nature.

The following is a non-exhaustive list of the salient features that these complimentary models highlight, and which need to be addressed in some manner by any future models of based internationalisation based on the early Uppsala models of internationalisation. Salient insights from innovation models of internationalisation include:

- Internationalisation may occur through several different paths that are in accordance with the notion of a gradual increase in overseas exposure (Johanson & Wiedersheim-Paul, 1975; Petersen & Pedersen, 1997).
- That as the company increases its internationalisation efforts it demonstrates a tendency to internalise operations previously conducted by others (Wortzel & Wortzel, 1980).
- That stage internationalisation is size neutral in nature (Bilkey & Tesar, 1977).
- That the mobilisation of resources by a company, whether to effect internationalisation or for some other purpose, occurs within a strategic context (Haar & Oritz-Buonafina, 1995). Furthermore, this strategic context is strongly shaped by the role of decision maker, and

¹⁵³ Haar & Oritz-Buonafina, 1995, pgl80.

by past managerial experiences with internationalisation in particular (Wiedersheim-Paul, Olson & Welch, 1980).

- Internal – external dynamics play an important role in shaping internationalisation (Wortzel & Wortzel, 1980; Weinstein, 1977; Cavusgil & Nevin, 1980). This is particularly important given that companies operate within an uncertain and changing environment, that is shaped by the interaction of other companies with regulatory, economic and political developments. In such an uncertain and unstable environment managerial expertise is important.
- That a company may resort to external assistance – partnerships and so forth – to overcome its lack of relevant experience (Cavusgil & Nevin, 1980). In the case of internationalisation such assistance will help overcome the psychic distance between the company and host market, as well as rectify any operational shortcomings as well.

2.3.5 Some problems of the Uppsala internationalisation models.

Like all theoretical perspectives on internationalisation the Uppsala internationalisation models, and the related innovation models, are not without criticism. Amongst others Hedlund & Kverneland (198) has argued that the validity of these models can be tested and challenged along several dimensions: international experience, organisational and oligopolistic market structures, environmental changes and limited sample size. Importantly, the validity of criticism is not equal in all cases, with some more forceful than others.

Meyer (1996) recounts two of the more frequent criticisms levelled against such models, when arguing that:

- Stage models are too deterministic in nature, that is, they conceive a company's overseas involvement in terms of a steady progression from stage to stage. However, companies may skip stages or combine different stages to achieve their objective(s).

- Stage models have also been criticised for being incrementalist in nature, as the possibility that radical internationalisation may occur is not accounted for by the models. Internationalisation follows the path laid down in the models regardless of extenuating circumstances, not least because this is perceived as being the only way through which a company may be able to operate wholly owned overseas subsidiaries.

Continuing the above line of criticism both Sullivan & Bauerschmidt (1990) and Turnbull (1988) conclude that stage models of internationalisation are at odds with the empirical evidence available. Through reference to the UK marine diesel engine, vehicle component and telecommunications industries, Turnbull (1988) argues that stage models are without empirical validity as the pattern of internationalisation within these industries did not correspond to that laid out in the models. Instead, the companies examined combined organisational forms as environmental circumstances required, with experienced international operators employing agents and distributors on the basis of their cost effectiveness and intelligence gathering ability.¹⁵⁴ In the case of the telecommunications industry it was observed that even within a single country organisational forms were mixed:

...company T8 has a wholly owned sales subsidiary in the French market, yet also employs agents and distributors and these are supplemented by sales and service support direct from the head office in the United Kingdom. Again, this finding brings into question the stages theories of internationalisation in terms of organisational development.¹⁵⁵

Radical internationalisation involves a company's overseas expansion through a series of large steps in preference to the gradual and cautious expansion of stage models.¹⁵⁶ As this stands it is in direct contradiction to the incremental expansion of stage models. However, it is important to clarify the exact meaning of radical internationalisation before critically applying the term to stage models. Radical internationalisation may occur geographically, or culturally as implied by psychic distance, as well as operationally. If it is assumed that at the centre of stage models is

¹⁵⁴ Turnbull, 1988, pg30f.

¹⁵⁵ Turnbull, 1988, pg32f.

¹⁵⁶ Meyer, 1996, pg18.

risk aversion on the part of internationalising companies, then radical internationalisation will occur when the company expands into geographically, culturally and operationally distant markets.

In Figure 2.4 (below) radical internationalisation is found in quadrant D alone, but it also partially occurs in quadrants B and C as well. Quadrant A is the antithesis of radical internationalisation, and the epitome of risk aversion. Consequently, the charge of radical internationalisation is only valid if the move represents a high degree of difference on all dimensions.

Figure 2.4: Two dimensional radical internationalisation

		Operational distance from core domestic market	
		Low	High
Geographical distance from home market	Low	A	B
	High	C	D

Furthermore, as detailed within Cavusgil & Godiwalla (1982) radical internationalisation is wholly consistent with the gradual, progressive and planned internationalisation outlined by stage models. In contrast, incremental internationalisation is the outward manifestation of a company internationalising without reference to any overarching strategic plan and is thus continually reacting to changing environmental circumstances. The resulting internationalisation is disjointed and characterised by a tendency for the company to ‘muddle through.’ Therefore, radical internationalisation may be in accordance with, and not contradictory to, a company’s expansion.

Aside from these two criticisms others are to be found within the literature. Hedlund & Kverneland (1985), as well as others such as Sullivan & Bauerschmidt (1990), comment on the tendency for stage models, especially early Uppsala models like Johanson & Vahlne (1977), to be reliant on a small sample for their empirical support. Furthermore, these small samples are often drawn from atypical countries such as Scandinavia. In respect to the first point it has been

shown previously that some of the stage models draw upon large surveys for their empirical support. For instance, Dalli (1994) draws on a sample of 171 manufacturing companies in support of the assertion that the central tenets of stage models offer an appropriate framework for investigating internationalisation.

Dalli (1994) also addresses the second point, as the companies examined were Italian and not Scandinavian. Moreover, the majority of stage models examined are non-Scandinavian in origin though it is the case that this is not true for the early Uppsala internationalisation models. Of the eleven models compared by Leonidou & Katsikeas (1996) the sample sizes range from 4 to 1057, and only one is focused on a Scandinavian country. Both Young, Hamill, Wheeler & Davies (1989) and Cavusgil & Godiwalla (1982), quote a wide range of examples that support the notion of the cross national applicability of stage models.¹⁵⁷

It has been argued that stage models are lack a dynamic element capable of explaining the progression of a company from one stage to the next. None of models reviewed by Leonidou & Katsikeas (1996) were considered to be dynamic in nature:

[I]n the inter-stage situation, the models fail to explain the dynamics of the firm's decision to move from one export stage to another, as well as the dramatic variations that take place across a large number of the variables affecting or affected by this transition. Another time-related issue is the velocity at which the firm moves within and between stages. This factor has been ignored by almost all models, although variations in technological intensity, product life cycles, research and development costs, and other factors can affect a firm's progress along the internationalisation path.¹⁵⁸

Similarly, Ford, Lawson & Nicholls (1982) comment the question as to how a company progresses from one stage to the next has been marginalised within the literature:

¹⁵⁷ Examples drawn from Young, Hamill, Wheeler & Davies (1989) are those of Finnish firms (Luostarinen, 1979) and small first time UK investors (Buckley, 1979), whilst Cavusgil & Godiwalla (1982) cite cases of the influence of psychic distance on the internationalisation strategies of Canadian, Australian and America companies.

¹⁵⁸ Leonidou & Katsikeas, 1996, pg527f.

... these studies have concentrated on the reasons for movement through the stages and the incremental decisions involved in changes from one form of international operation to another. There has been relatively less attention paid to the process of making changes between stages and the problems faced by companies in making them.¹⁵⁹

Whilst this may be a valid criticism of several stage models, Dalli (1994) demonstrates that it is possible to combine the traditional stage model approach with greater attention on the processes at play. Through focusing on the processes at play Dalli (1994) is able to detail the micro-internationalisation that occurs within each stage, and then place these developments within the wider context of stage based internationalisation. In doing so the role of explicit stages within internationalisation is downplayed, with process correspondingly elevated. As most models seek to identify the number of stages within internationalisation it is not surprising that they have downplayed intra-stage process in favour of inter-stage dynamics. Dalli's (1994) focus on process also demonstrated that internationalisation is multi-dimensional, and can not be explained through reference to a single variable alone.¹⁶⁰

Both Andersen (1993) and Petersen & Pedersen (1997) specifically address Johanson & Vahlne (1977), and question the validity of the model in light of the evidence at hand. After determining how a model should be evaluated Andersen (1993) goes on to highlight several areas in which Johanson & Vahlne (1977) theory is less than satisfactory. These findings are summarised in Table 2.17 and 2.18 (below) and question the degree to which the theory is scientific in nature.

A large number of the concerns expressed by Andersen (1993) stem from the notion of boundary assumptions, which are a set of assumptions, either implicit or explicit, that limit the application of the model. These can be either spatial or temporal, with the former "restricting the use of the

¹⁵⁹ Ford, Lawson & Nicholls, 1982, pg30.

¹⁶⁰ Although the literature identified four significant variables the structure of exporting activities within the company; the entry modes employed; the geographical and operational diversity of the company; and, the ratio of total sales to export sales (Dalli, 1994, pg96) the model found only two to be important. These were (1) the incremental progression of entry modes (2) a high dependency on export with the resulting internal formalisation of this activity in some shape or form (Dalli, 1994, pg99).

theory to specific unit of analysis (e.g., specific types of organisation), while temporal contingencies specify the historical applicability of a theoretical system.”¹⁶¹ Either in conjunction with one another, or separately these restrict the applicability of the model.

Table 2.17: A brief summary of the evaluation from a falsifiability perspective

Aspects evaluated	Uppsala model
Congruence between - Theoretical and operational model - Conceptual and operational definitions	Unclear -
Specification of variables assumed to affect the process development	No variables beyond the casual cycle model
Empirical setting	Case-study measurement of independent variable (psychic distance) after the observation of dependent variable
Tautologies	Some difficulties in delimiting the theoretical concepts
Test of alternative explanatory variables	No

Source: Andersen, 1993, pg226.

Table 2.18: A summary of the evaluation based on the explanation criteria

Aspects evaluated	Uppsala model
Type of scientific explanation	Genetic (historicist)
Boundary assumptions - Space (unit of analysis) - Time	No specified restrictions Unbounded
Causality - Model type - Explanatory variables	Causal cycles Firm’s knowledge
Utility – scientific - Assumptions about firm’s behaviour - Variables properly defined - Precise statements of the relationship between stages	Based on behavioural theories, incremental decision making process. Little of no influence from competitive and market factors Examples of possible indicators, no operational definitions Considerable vagueness
Utility – intuitive	Logic axiomatic. The usefulness is stressed for management and governments.

Source: Andersen, 1993, pg221.

Although Andersen (1993) concludes that the model appears to be unbounded in time and space, the generalisability that ensues is counter productive. The vagueness of the model’s boundary assumptions are such that a set of problems, often due to contradictions internal to the model, are clearly evident. According to Andersen (1993), the model is tautological in nature:

¹⁶¹ Andersen, 1993, pg217.

[t]he core explanation of the model is that (increased) market knowledge will lead to (increased) market commitment, and vice versa. However, based on the definition of market commitment (the amount of resources committed), and the fact that market knowledge could be regarded as an intangible resources, the explanation above is in fact tautological.¹⁶²

A second criticism is that the model does not take into account the influence of other factors on internationalisation as it is assumed that once initiated the process will continue ad infinitum. This is clearly not the case, not only is the phenomena of de-internationalisation well documented but internationalisation is strongly influenced by external and environmental factors as well.

The third of Andersen's (1993) criticisms relates to the influence of psychic distance on internationalisation. Initially it is assumed that although not constant psychic distance will decline slowly, but later on it is also assumed that the presence of a company within a country will quicken this pace of reduction through the increased levels of market specific knowledge. Andersen (1993) continues:

...if knowledge of transactions can be transferred from one country to another, firms with an extensive international experience are likely to perceive the psychic distance to a new country as shorter than firms with little international experience.¹⁶³

For this contradiction to be overcome a restriction in the use of the model is required, so that its use is limited to either a specific company or to the early stages of the internationalisation process. More generally, Andersen (1993) argues that through explicitly stating the model's boundary assumptions, the contradictions evident will be rectified and several of the model's shortcomings overcome. In particular, the formal stating of boundary assumptions will ensure that the model has reduced generalisability, but at the same time explanatory power will be increased.

¹⁶² Andersen, 1993, pg216f.

¹⁶³ Andersen, 1993, pg221.

In the course of evaluating the model's contribution over twenty years Petersen & Pedersen (1997) draw attention to several problematic areas. The fundamental role of market knowledge within the model is questioned:

... we cannot conclude that more market knowledge, *ceteris paribus*, will make the decision-maker more inclined to commit resources (increase control). Presumably, the accumulation of market knowledge does have a bearing on the level of foreign market commitment, but in both positive and negative ways depending on the decision-maker's level of informational sophistication in the first place.¹⁶⁴

In addition, the model's unit of analysis is also questioned. Whilst the analysis of production subsidiaries has undoubted benefits, it may be the case that their parents are larger, and have more resources at their disposal, than their sales counterpart. Furthermore, production subsidiaries are more likely than not to have a mandate to sell to other countries as well. Thus, their establishment is not solely motivated by market seeking considerations as articulated by the model. Cross-border selling, as well as other motives such as resources seeking and global competition are also likely to encourage "leap-frogging" (radical internationalisation in the language of others) within the establishment chain. Whilst leap-frogging directly challenges the model's gradual establishment chain, the widening of the analysis to include the possibility of other chains, and which are in accordance with the overall premise of the model, negates the impact of this criticism.

2.4 SUMMARY.

This chapter has sought to relate continued internationalisation of the global economy to the theoretical debate as to the character and motives of internationalisation. In doing so the scale and scope of internationalisation has been demonstrated, and the prominent role of MNEs as integrators of the global economy commented on. It has also been shown that MNEs are not a new development, with their antecedents capable of being traced back several hundred years.

¹⁶⁴ Petersen & Pedersen, 1997, pg124.

However, they have not remained constant. For example, the service sector has overtaken the manufacturing and extractive sectors as the principal source of international investment activity.

Six different theoretical stances on the development of MNEs have been reviewed in the preceding sections of this chapter. Common to all is the acceptance that market imperfections play a role in fashioning not only the development of the company but also the international investment activity that it conducts as it expands outside of the national market. Market imperfections are manifold, and include differences in trading practices, tariffs, customs arrangements and intellectual property rights. Moreover, market imperfections also arise from the presence of cultural differences between countries, with the most apparent being language. This latter group of market imperfections is often known as psychic distance. The presence of market imperfections engenders transaction costs in two different ways; firstly, from the actual conduct of business itself, and secondly, from operating within an uncertain environment. In practice it is hard to separate the two as they are closely intertwined. For instance, different legal systems requires MNEs to incur the legal costs, but operating in a different legal climate gives rise to uncertainty as misunderstandings may have occurred at some point during the course of the inward investment.

In the internalisation, eclectic paradigm and transaction cost economics perspectives MNEs respond to the presence of market imperfections through common ownership. That is, they bring under single ownership foreign subsidiaries so that opportunistic behaviour by others is negated, and the uncertainty to which they are exposed reduced. However, promoting international investment activity based solely on wholly owned subsidiaries is inappropriate in an environment where collaborative ventures are commonplace. Although the ownership-internalisation-location rubric of the eclectic paradigm is capable of highlighting many of the factors inherent to the internationalisation process, it does not offer a way through which the interaction of companies under alliance capitalism can be more fully understood. Importantly, whilst common ownership may reduce some of the risk associated with international investment activity it does not remove all of the risks faced by companies when expanding overseas. When coupled with radical internationalisation wholly owned subsidiaries are liable to expose the expanding company to risks and uncertainty that its initial market assessment did not identify.

In contrast with internalisation, the eclectic paradigm and transaction cost economics is the Uppsala school. Whilst all of these perspectives address internationalisation they differ in the emphasis that they accord to information flows, the decision making process and the organisational form used in market entry. As Johanson & Vahlne (1977) were the first to combine together all of these issues, subsequent models that fall within the Uppsala school owe them an intellectual debt. As a consequence, the focus here is on the differences between Johanson & Vahlne (1977) and internalisation, the eclectic paradigm and transaction cost economics.

Johanson & Vahlne (1977) place the interaction between the environment in which companies operate and the internal decision making process that results in the commitment of resources at the heart of their analysis. In turn, this interaction determines the organisational form through which international investment activity occurs. In other words, the environment in which the company operates shapes the internationalisation that takes place. This occurs through the flow of information from the environment to the company enabling it to evaluate if it should invest in the market, and, if it should, what the appropriate organisational form of internationalisation is.

This approach towards understanding internationalisation differentiates Johanson & Vahlne (1977) from the other theoretical perspectives in several ways. Firstly, a direct link is made between the environment, the internal decision making process and the resulting organisational form. Although others comment on this link, they do not do so in either the same way or to the same extent. Moreover, the decision making process internal to companies in internalisation and transaction cost economics is for all intent and purpose ignored. Their focus is on internationalisation as a response to market imperfections and not on those factors that may be driving internationalisation. Although the eclectic paradigm does make reference to a series of decisions relating to the ownership, locational and internalisation advantages it does not include any consideration of strategic issues. The eclectic paradigm does not detail how internationalisation decisions are made except that they are responses to the presence of market imperfections.

The second way in which Johanson & Vahlne (1977) and the other Uppsala school models are distinct from internalisation, the eclectic paradigm and transaction cost economics is through the acceptance that internationalisation can occur through organisational forms other than wholly

owned subsidiaries. Johanson & Vahlne (1977) argue that internationalisation can occur through a multitude of different organisational forms, that range from sales subsidiaries to joint-ventures to wholly owned subsidiaries. Further than this, Johanson & Vahlne (1977) acknowledge that distinctive and significant benefits arise from internationalisation through collaborative ventures. Collaborative ventures offset some of the risk inherent to international investment activity. The risk offset may be financial or operational in nature. Having said this, the other theoretical perspectives are right to highlight the disadvantages associated with collaborative ventures. One of the principal disadvantages associated with collaborative ventures is opportunistic behaviour by the other partners.

There is, however, another advantage that accrues from collaborative ventures, one that differentiates the Uppsala school from the other theoretical perspectives, namely, that collaborative ventures allow the internationalising company to acquire information about those markets that it wishes to enter. This in turn allows the company to make investment decisions. Johanson & Vahlne (1977) explicitly draw attention to this through the identification of 'change aspects' (commitment decisions and current information) within their model. The collaborative venture enables the internationalising company to access information relating to the market that it has chosen to enter. This enables the company to ascertain whether the investment is in the company's interest. When coupled with the risk reduction role of collaborative ventures this leads onto the fourth way in which the model of Johanson & Vahlne (1977) is different from that proposed by the other theoretical perspectives: the organisational form through which internationalisation occurs changes over time.

Internationalisation is initially undertaken through those organisational forms that minimise the risk to which the company is exposed. This reflects the risk adverse nature of the company. The initial organisational forms provide the company with information so that it can appraise its investment decision, deciding, for instance, whether or not to invest additional resources in the market. Depending on the information at hand, the company may or may not invest further resources in the market. This cautious and incremental approach to international expansion is contrary to the 'all or nothing' radical internationalisation adopted by internalisation, the eclectic paradigm and transaction cost economics. Moreover, the decision to invest is testament to the interaction between the environment, the internal decision making process and the information available to the company.

In the course of the above discussion four areas have been identified where Johanson & Vahlne (1977) differ from the other theoretical perspectives. The four areas are:

- The explicit linking together of the environment in which the company operates, the decision making process and the organisational form adopted in internationalisation.
- Internationalisation is broader than that implied by radical internationalisation, and is undertaken through a variety of different organisational forms.
- The use of collaborative ventures enables the internationalising company to gain access to market related information. Due to this the company is able to determine whether or not it should increase its investment in the market.
- Collaborative ventures also provide the internationalising company with a way to offset some of the risk inherent to international investment activity. This occurs through the aforementioned provision of information as well as the provision of resources by the collaborative venture partners.

It is on the basis of these four differences that Johanson & Vahlne (1977) is preferred to the other theoretical perspectives discussed in this chapter. The model that they propose provides for a unique analysis of internationalisation, not least because it integrates together features of internationalisation that are considered to be important. That is, the flow of information between the environment and the company, risk aversion and how this affects the organisational form of internationalisation. Moreover, the model draws attention to features that are prevalent to emerging industries like telecommunications where collaboration and international inexperience are commonplace.

The next chapter details regulatory, market and company developments within the American telecommunications industry. In doing so the domain in which the RBOCs are located is described. Chapter Four outlines a model, based on Johanson & Vahlne (1977), which is used in subsequent chapters to examine the internationalisation of the RBOCs out of this domain into other markets.

CHAPTER THREE: AMERICAN TELECOMMUNICATIONS.

3.1. INTRODUCTION.

This chapter will outline the development of the American telecommunications industry, from its inception in the latter quarter of the nineteenth century to the present day. In the course of the discourse the different regulatory regimes that have existed, and the central role of regulation in determining market structure are highlighted. The discourse will also demonstrate that the industry has been subject to several period of relative stability punctuated by abrupt discontinuities that have radically recast the telecommunications industry. The first of these epochs created a regulated monopoly; the second fragmented the regulated monopoly into competitive and monopoly segments and the final epoch promised to create a truly competitive telecommunications market.

These three epochs provide the structure for this chapter. After recounting the initial regulatory framework, and commenting on the increasing competitive pressures faced by AT&T, the break-up of the Bell system and the provisions of the Modified Final Judgement (MFJ) are detailed. The final portion of this chapter deals with the latest discontinuity within American telecommunications, namely the Telecommunications Act of 1996. Particularly important for our purpose are the second and third of these epochs. The MFJ created the RBOCs that are the object of this study, whilst the 1996 Telecommunications Act promises to allow them into the long-distance market that they have long sought to enter. As a consequence the focus of this chapter is on these two epochs, and not early developments within the American telecommunications industry.

3.2 EARLY DEVELOPMENTS.

The evolution of telecommunication regulation within the United States is intertwined with the development and subsequent modification of the Bell system. Commercial telephone services began within America in 1877, and after a period of competition due to rival patents a monopoly

arose in the shape of the National Bell Telephone Company in 1879.¹ This monopoly arose out of the legal settlement between Western Union and National Bell which saw National Bell agree to not enter the telegraph market until 1894, purchase Western Union's telephone equipment and pay twenty percent of future royalties to Western Union.² In the following years National Bell sought to defend its position as a monopoly by suing in cases of patent infringement, and as Irwin (1984) comments "patent infringements were prosecuted vigorously."

However, patents only have a finite life span and from the 1880s the initial patents granted to National Bell began to expire, allowing both increased technical diversity within the industry as well as competition.³ Initially this challenge was located in the rural areas, where America Bell as National Bell was now known as was largely absent from, but as these dwindled competition emerged in urban areas.⁴ According to Finkelstein (1989) the limited resources available to these new entrants ensured that they were not in a position to build their own long distance networks, forcing customers to rely on America Bell for such services.

Thus the challenge to America Bell was short-lived. The period of relative stability that followed enabled AT&T, America Bell's successor⁵, under the leadership of Theodore Vail, to gain a dominant position within the telecommunications industry. Central to the ascendancy of AT&T was its aforementioned long distance network, but also the technological advantage resulting from Vail's expansion of R&D and the increased financial strength that arose from the creation of AT&T.

Although AT&T was the largest and dominant telecommunications company, by 1910 more than 10,000 such companies existed. This resulted in an unprecedented degree of competition,

¹ Finkelstein, 1989, pg153ff.

² Finkelstein, 1989, pg154f; Irwin, 1984, pg15ff.

³ Carpentier, Farnoux-Toporkoff & Garric, 1992, pg2; Finkelstein, 1989, pg155; Irwin, 1984, pg17f.

⁴ Finkelstein, 1989, pg156f; Irwin, 1984, pg17f.

⁵ In order to raise extra capital the assets of America Bell were transferred to a wholly owned subsidiary in New York, AT&T. This move circumvented the previous restrictions placed on America Bell's ability to raise capital and invest it in its businesses, (Finkelstein, 1989, pg156).

especially where the companies' non-compatible systems overlapped.⁶ The chaos that resulted from incompatible systems motivated States to regulate telecommunications operators as 'public service' companies, so that, according to Carpentier, Farnoux-Toporkoff & Garric (1992), by 1920 most States had in place some form of regulation. The States regulated telecommunications through either the 1910 Mann-Elkins Act that gave control over tariffs to the Interstate Commerce Commission (ICC), or the 1920 Public Utilities Transportation Act that confirmed the authority of the ICC over inter-state flows of information through cable etc.⁷ Regulation of telecommunications continued with the Kingsbury Commitment (1912) that illustrated the scope and growth of the Bell system under Vail. In this agreement AT&T agreed to divest control of Western Union as well as confirm that it would purchase no more independent telephone companies and allow those that remain to interconnect with the network.⁸ Thus, the Kingsbury Commitment limited the growth of the network to either organic or the ICC sanctioned acquisition of independent companies.

3.2.1 The Communications Act of 1934.

The Communications Act of 1934 formalised and gathered together the loose regulatory framework that had until then governed the industry. The Act laid out the duties and obligations of common carriers (network operating carriers) that conformed to the notion of "universal service." According to Carpentier, Farnoux-Toporkoff & Garric (1992) this:

...compelled them [common carriers] to put at the disposal of the American public (that is, without discrimination) to the extent possible, a rapid and effective cable or radio communications service covering the whole country and connected to the outside world, at a reasonable price.⁹

⁶ Carpentier, Farnoux-Toporkoff & Garric, 1992, pg3.

⁷ Carpentier, Farnoux-Toporkoff & Garric, 1992, pg3.

⁸ Finkelstein, 1989, pg158. Hills (1986, pg54) notes that the antitrust petition that predated and precipitated the Kingsbury Commitment originated after AT&T bought a controlling interest in Western Union thereby galvanising the remaining independent telephone and telegraph firms to complain.

⁹ Carpentier, Farnoux-Toporkoff & Garric, 1992, pg4.

In addition the Act also established the Federal Communications Commission (FCC) as the federal body with responsibility for the telecommunications sector, and with the objective:

...to make available, so far as possible, to all people of the United States a rapid, efficient, nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges.¹⁰

Furthermore, the Act defined key terms, such as wire communications, radio communications and interstate communications, thereby determining the scope of the FCC. Hills (1986) asserts that the Act gave the FCC wide discretionary powers, covering the approval of new services, compulsory interconnection, the determination of rates and the allocation of frequencies.¹¹ However, the Act also limited the FCC's operational mandate to inter-state and international communications by radio, television, wire, satellite and cable.¹²

As a consequence of the Act, and in particular of the notion of universal service contained therein, the number of independent carriers reduced as they merged with one another to gain the necessary scale efficiencies to meet the FCC's requirements. However, the resulting large non-Bell companies such as GTE and Contel, were still smaller than AT&T that remained the dominant force in the telecommunications industry through control of its long distance lines.

3.2.2 Increasing competitive pressures and continued investigation.

The period from the 1934 Communications Act until the Modified Final Judgement (MFJ) in 1984 has been variously described as either one of calm, as the industry continued on the gentle trajectory that the prior turmoil had set it on. Or, as one which saw a gradual increase in the

¹⁰ Hills, 1986, pg55 quoting Section 1 of the Act.

¹¹ Hills, 1986, pg55.

¹² Hilliard, 1991, pg1.

frustration felt by the non-Bell operators against the seemingly overwhelming presence of AT&T in the marketplace.

In 1949 the Department of Justice (DOJ) brought an anti-trust action against AT&T arguing that the company had violated the Sherman Act through its vertical integration of long-distance, local access and equipment subsidiaries. The 1949 antitrust suit was resolved by the 1956 Consent Decree that limited the operational scope of the company. AT&T agreed to divest all of Western Electric's operations except for the telephone equipment and defence operations, and to limit its operational scope to the regulated communications industry.¹³ A second substantive provision of the decree was that AT&T agreed to license, on request, any patents within the Bell system, excluding those with GTE, RCA and Westinghouse, at a reasonable cost.¹⁴ The consent decree is depicted by Hills (1986) in an almost Machiavellian manner – AT&T ceded these operations in order to maintain its position as a long-distance monopoly telecommunications operator.¹⁵

Subsequent to the 1956 Consent Decree competitive pressures increased as a result of three cases. These challenged and undermined AT&T's position as the all pervasive supplier of telecommunications services and equipment:

- AT&T prohibited any connection of non-authorized, that is, non-Bell equipment to the telephone network on operational efficiency grounds. The non-Bell "Hush-a-phone" was attached to the telephone's mouthpiece and both reduced background noise and enhanced privacy. The FCC backed AT&T's ban of its use but this was overturned by a US Court of Appeals ruling that stated that customers had the right to use their telephones "in ways which are privately beneficial without being publicly harmful."¹⁶

¹³ Finkelstein, 1989, pg159.

¹⁴ Baughcum, 1986, pg82f.

¹⁵ Hills, 1986, pg58. Hills describes this action in the following manner: '...as it [AT&T] had done in the past it traded its right to enter new markets for the safety and legitimacy of a protected monopoly area.'

¹⁶ Manishin, 1997.

- Arguing that there was insufficient frequency AT&T also prohibited the construction of private networks at frequencies above 890 MHz. All frequencies were leased from AT&T. However, in 1959 the FCC ruled that sufficient frequencies did exist for both common carriers such as AT&T as well as the private networks of large businesses. In conjunction with a 1960 ruling this decision allowed private users to employ their own point-to-point equipment thereby bypassing the Bell system in its entirety.
- In 1968 the FCC ruled that the AT&T ban on the attachment of non-Bell equipment to the telephone system on the grounds of network protection was illegal. This ruling was the result of the appeal of Thomas Carter to the FCC after AT&T refused him permission to manufacture terminal equipment that would be attached to the network. However, all equipment would need to incorporate protective elements so that the network would not be harmed. This ruling allowed anyone to manufacture terminal equipment.¹⁷

Through two enquiries the FCC sought to ascertain which telecommunications services should be regulated and which should not. The first of these enquiries, Computer 1, was initiated in 1966 and concluded in 1971 for implementation two years later. Computer 1 concluded that local service and terminal equipment charges should be itemised separately and that AT&T should provide new terminal equipment through a separate subsidiary.¹⁸ Carpentier, Farnoux-Toporkoff & Garric (1992) note that the enquiry also divided services into four distinct categories: plain-old-telephone-services (POTS), hybrid communication services, computing and hybrid computing services.¹⁹ Computer 1 mandated that telephone companies could not provide computer services. The logic behind this decision was that telephone companies would lever their dominant position in one market to act anti-competitively in another.

Technological advances provided the opportunity for AT&T to once again face competitive pressures. In 1969 MCI started a microwave based long distance service between St. Louis and Chicago. The introduction of competition that this service represented would decrease prices

¹⁷ Carpentier, Farnoux-Toporkoff & Garric, 1992, pg4f; Hills, 1986, pg59; Manishin, 1997.

¹⁸ Baughcum, 1986, pg71.

¹⁹ Carpentier, Farnoux-Toporkoff & Garric, 1992, pg17.

towards that of the lowest rate, thereby removing the 'fat' within the system that allowed the Bell system to transfer resources from the long distance to local element of the network. According to Robinson, Verner, Collins, Wiley & Burke (1991) under these circumstances the rationale for the integrated Bell system, with all that this implies in terms of cross-subsidy, was undermined.²⁰

The competitive threat that MCI represented arose due to its ability to undercut AT&T, thereby enabling private lines to be offered at a considerable saving to similar services from AT&T.²¹ Unsurprisingly AT&T objected to the intrusion of MCI into the marketplace on the grounds of reliability and need. However in contrast, a majority of FCC commissioners, who would approve or forbid the service, were in favour of the service due to its competition enhancing qualities.²² Once MCI had been granted permission to provide its services a large number of other companies filed similar applications with the FCC.²³ To counter the threat posed by the new service AT&T deployed various spoiling tactics, such as proposing tariff rate cuts that would have undermined the cost advantage of the MCI service. As AT&T continued with these tactics the once grand ambitions of MCI gradually grew smaller, with the 100-city network initially proposed being cut back to a rudimentary service in just 41 cities.²⁴

MCI responded by repositioning itself in the marketplace, and wrote to AT&T accusing it of 'bad faith' in the interconnection negotiations and demanded that they were given access to the 'foreign exchange' market. 'Foreign exchange' extends the local service area through the provision of dedicated private line from the customer's premise to an inter-exchange switch located in another part of the Bell system. The affect of this arrangement is to enable a customer in one city to make calls in another as if they were local.²⁵ The premium, and thus

²⁰ Robinson, Verner, Collins, Wiley & Burke, 1992, pg81-84.

²¹ Vietor, 1989, pg62. The cost savings of MCI's service were not insignificant - for \$464 per month two voice grade channels, each capable of being shared by five users would be provided, whereas AT&T charged \$988 and did not allow sharing.

²² Vietor, 1989, pg63.

²³ Vietor, 1989, pg63.

²⁴ Vietor, 1989, pg65.

²⁵ Vietor, 1989, pg65.

lucrative nature of the foreign exchange market, naturally enough ensured that AT&T refused MCI's demands. Such was the company's determination in this respect that even a threat of an antitrust suit from MCI did not alter their stance. As the debate concerning MCI's demands continued the company continued to invest in its network and unveiled in early 1975 its Execunet service. The Execunet service effectively allowed MCI to offer switched long-distance services to its customers.

Both the FCC and AT&T objected to MCI's entry into the long-distance market. The FCC backed AT&T not least because the entry by MCI represented a challenge to the authority of the FCC. MCI resorted to the courts for legitimisation of its entrance into the market, and the courts concluded that FCC support for AT&T was founded on incorrect considerations.²⁶ The Execunet decision is important for several reasons:

- The legal victory legitimised the presence of MCI in the market and heralded the beginning of the fundamental role of the courts in shaping the telecommunications industry.
- That MCI could introduce such a service, and that it was successful, clearly demonstrated the willingness of customers to move away from AT&T.
- The deployment of Execunet also showed that once competition had been introduced, and its effects felt, it is not possible to return to a non-competitive environment.
- The Execunet decision also marked a shift in regulatory emphasis, away from the protection of consumers towards the protection of competitors.²⁷

A changing telecommunications environment, with increasing competitive pressures and technological advances, led to the second of the FCC enquiries examining service regulation and industry structure. In 1976 the FCC launched the Computer 2 enquiry that reported four years

²⁶ Court cases in 1977 and 1978 allowed MCI to provide long distance voice-line services via its Execunet service, (Hills, 1986, pg65).

²⁷ Robinson, Verner, Collins, Wiley & Burke, 1991, pg84.

later. The enquiry concluded that telecommunications services could be placed into one of two categories, that is, either basic or advanced. Basic services were defined as “speech or data transmission without any change to the form or content of the information,” whilst advanced services were defined as anything that did not fall within the first definition.²⁸ It was also concluded that both AT&T and GTE should provide advanced services through a separate subsidiary that shared no commonalities with other parts of the company.

The significance of Computer 2 arises from the opportunity it granted AT&T to compete outside of the telecommunications industry, an opportunity which was its first since the 1956 Consent Decree. Furthermore, Computer 2 also continued and advanced the unbundling of the Bell system through the delineation of basic and advanced services and the determination of what markets AT&T could operate in.

3.3 THE MODIFIED FINAL JUDGEMENT.

Whilst the Computer 2 enquiry was being conducted the environment in which AT&T operated continued to become more hostile. Competition, as exemplified by a rapidly growing Execunet service, was rapidly growing and placing an increased strain on the traditional Bell relationship between local and long distance services. Moreover, relations with MCI continued to be acrimonious. In 1973 MCI accused AT&T of ‘bad faith,’ and fought a heated battle with AT&T over foreign exchange and then Execunet. In September 1973 de Butts, AT&T Chairman, fanned the flames of hostility in a speech given to the National Association of Regulatory Utility Commissioners (NARUC). de Butts attributed the onset of competition to opportunistic entrepreneurs, manufacturers and business customers and stated that the Bell system ‘would take a stand’:

... in short, there is something right about the common carrier principle. There is something right about regulation. And – given the nature of our industry – there is something right about monopoly – regulated monopoly.²⁹

²⁸ Carpentier, Farnoux-Toporkoff & Garric, 1992, pg18.

²⁹ de Butts, AT&T chairman, “An Unusual Obligation.” Address to NARUC cited in Victor, 1989, pg75.

As summarised by Vietor (1989) the Bell system “would neither concede the market to competition nor concede to the concept of competition.” In response to the hostile and uncooperative stance of AT&T, MCI filed a civil antitrust suit in March 1974. In November 1974 Attorney General William Saxby filed an antitrust suit against AT&T, which alleged that the industry as then constituted gave unprecedented opportunity for AT&T to act unfairly:

...attempted to prevent competing long-distance carriers and competing equipment manufacturers from gaining access to the local network, or to delay that access, thus placing them in an inferior position vis-à-vis AT&T’s own services. Second, it supposedly has used profits earned from the monopoly local telephone operations to subsidise its long-distance and equipment business in which it was competing with others.³⁰

The antitrust suit gave urgency to de Butts’ call for a legislative solution to the problems facing AT&T. Under the auspices of NARUC the Consumers Communications Reform Act was introduced into Congress in 1976. This Act intended to heighten entry barriers and protect universal service. However, the Act failed to progress within Congress and by 1978 had been almost completely redrafted to propose measures that would increase the level of competition, lessen regulation and prohibit vertical integration between manufacturing and service providers.³¹ The Act as now constituted would be unacceptable to AT&T given de Butts’ comments.

Ever present throughout was the antitrust suit filed in 1974. In 1978 an ailing Judge Waddy had been replaced by an assertive Judge Harold Greene who claimed jurisdictional exclusivity. In 1979 Chester Brown replaced de Butts as AT&T chairman, and declared “AT&T is ready without preconditions to explore alternative futures.”³² To this end a review of AT&T’s business was initiated, and overtones were made to Congress for a favourable legislative solution.

³⁰ Baughcum, 1986, pg83.

³¹ Vietor, 1989, pg76f.

³² Vietor, 1989, pg77; Snow, 1995, pg211.

Although the resulting proposal, The Telecommunications Competition and Deregulation Act, contained within it objectionable proposals such as the mandatory purchase of equipment from outside the Bell system, the proposal was accepted by Brown. Significantly, if passed the Act was foreclose the antitrust suit. However, continued Congressional opposition in the form of Representative Wirth, and the eagerness of the newly elected Reagan administration to continue the antitrust case, reduced the options available to Brown.

3.3.1 Provisions of the Modified Final Judgement.

Caught between the rock and a hard place of an unavailable legislative solution and a hostile antitrust suit Brown announced on January 8 1982 that AT&T had settled its dispute with the DOJ. This settlement altered AT&T's 1956 Consent Decree, and was therefore called the Modified Final Judgement (MFJ), and was to be implemented on January 1 1984. This settlement called for AT&T to divest its twenty-two local telephone companies, whilst retaining Western Electric, Bell Laboratories and long distance. In return the Federal government would release AT&T from its obligations under the 1956 Consent Decree, thereby enabling the company to enter new markets such as information services and overseas markets. Importantly, the announcement provided only a broad overview of divestiture, with the task of filling in the details assigned to Bell system management under the watchful eye of Judge Greene.³³

The MFJ created seven holding companies into which the Bell system's twenty-two telephone operating companies (Bell operating companies, or BOCs) were assigned. The seven holding companies, or regional Bell operating companies (RBOCs) created were:

- *Ameritech*. Operating in the mid-west, and based in Chicago, five BOCs were allocated to this holding company: Ohio Bell, Indiana Bell, Michigan Bell, Illinois Bell and Wisconsin.

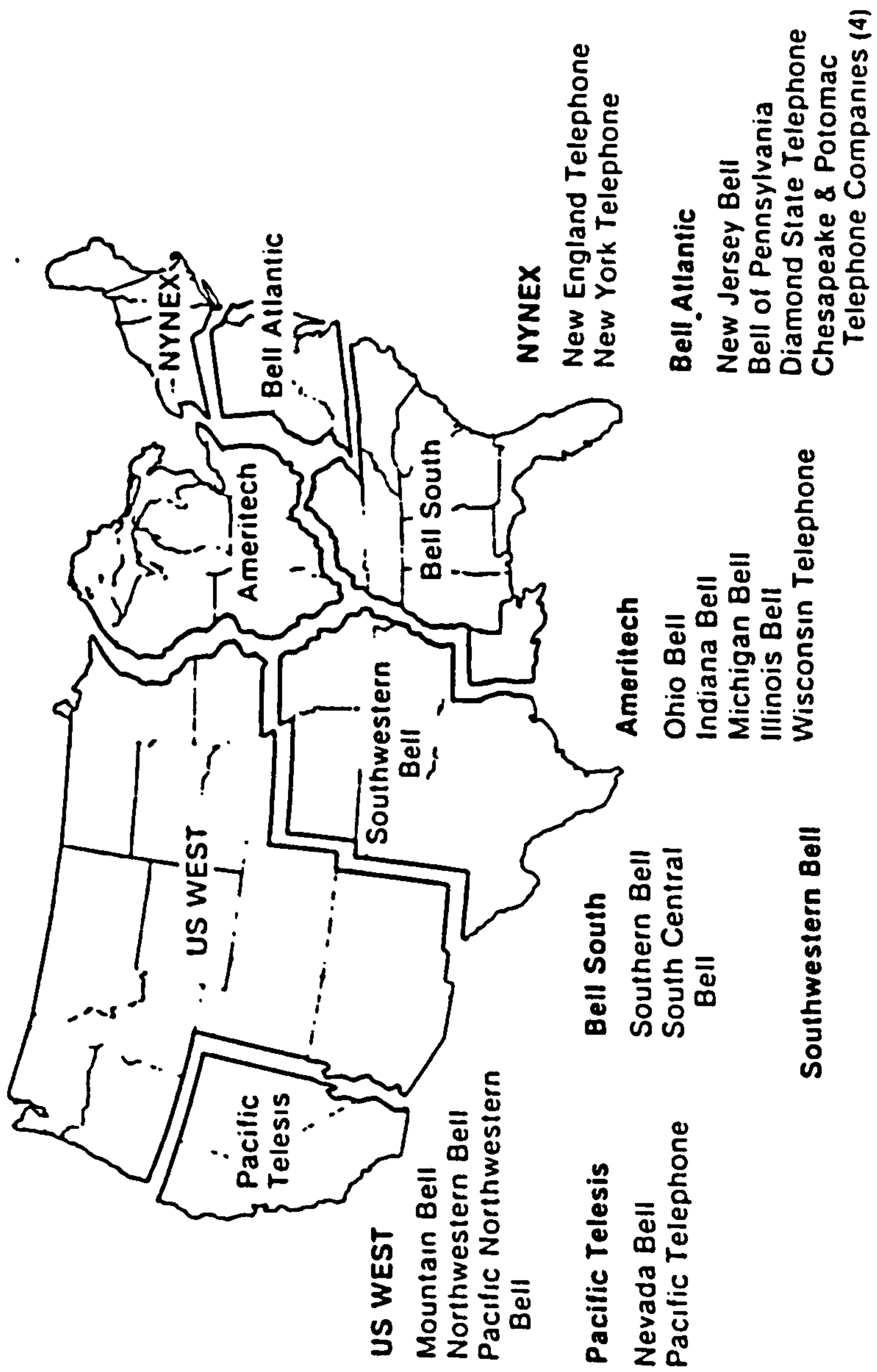
³³ Vietor, 1989, pg80.

- *Bell Atlantic.* Head-quartered in Philadelphia, and covering the Mid-Atlantic region this RBOCs was assigned seven BOCs in all: New Jersey Bell, Bell of Pennsylvania, Diamond State Telephone, and the four Chesapeake & Potomac Telephone Companies.
- *BellSouth.* Covering the south-east of the United States, and based in Atlanta, the MFJ assigned two BOCs to this RBOCs, namely, Southern Bell and South Central Bell.
- *Pacific Telesis.* Based in San Francisco, the RBOCs is comprised of Nevada Bell and Pacific Telephone. Services are provided within the two state region of California and Nevada.
- *Nynex.* This RBOCs is comprised of two BOCs, New England Telephone and New York Telephone, and provides telecommunications services within New England. The company is based in New York.
- *Southwestern Bell.* Just one BOCs, Southwestern Bell, was allocated to this holding company that was located in St Louis. This BOCs, however, operated across the five state southwestern region of the United States.
- *US West.* The largest territory geographically was assigned to US West, with the three BOCs, Mountain Bell, Northwestern Bell and Pacific Northwestern Bell, covering fourteen Mountain and Pacific coast states in all. US West was based in Englewood, Denver.

The geographical extent of each of the RBOCs, and their relationship to one another is shown in Figure 3.1 (over). The removal of the local telephone companies from the Bell system significantly reduced AT&T, from \$153bn in assets to \$34bn.³⁴ In addition AT&T sold its shares in two non-Bell telephone companies, Cincinnati and Suburban and Southern New England Telephone (SNET). As a result the telecommunications operations that remained with AT&T

³⁴ Vietor, 1989, pg84; Carpentier, Farnoux-Toporkoff & Garric, 1992, pg20.

Figure 3.1: The RBOCs



Source: Vietor (1989).

were its long distance lines, as well as equipment manufacturing in the shape of Western Electric.

Divestiture also affected the other activities within the Bell system, namely, cellular, R&D and directory publishing. Judge Greene assigned the directory publishing operations of the old Bell system to the RBOCs so that their revenues could be used to offset charges for local services.³⁵ The MFJ also instituted a transfer of staff from Bell Labs to Bell Communications Research (Bellcore). Bellcore was established to:

... be a research company at the service of the seven ... in a competitive environment....to serve as a co-ordination centre for communications services with regard to national security interests and emergency service activities.³⁶

When combined with the transfer of the local lines to the RBOCs, the transfer of cellular and directory publishing activities and the creation of Bellcore ensured that the RBOCs were substantial enterprises. Table 3.1 (below) provides details of the RBOCs along several dimensions, and shows that divestiture created seven companies of comparable size that were considerable enterprises in their own right. Each of the RBOCs provided local services within geographically defined areas on a monopoly basis, as well as cellular and directory publishing within the area. Finally, they conducted R&D through one-seventh ownership of Bellcore.

Table 3.1: The RBOCs on divestiture

RBOCs	Revenues \$bn	Profits \$m	Assets \$bn	Employees	Nos. BOCs/states
Ameritech	9.0	1100	15.4	79000	5/6
Bell Atlantic	9.1	1100	15.4	80000	7/7
BellSouth	10.5	1500	19.7	99100	2/8
Nynex	10.4	1100	16.2	98200	2/6
Pacific Telesis	8.5	970	15.3	82000	2/2
Southwestern Bell	8.0	1000	14.8	74700	1/5
US West	7.8	950	14.4	75000	3/14

Source: Carpentier, Farnoux-Toporkoff & Garric (1992); Loomis (1983); O'Reilly (1983); Victor (1989).

³⁵ Chessler, Clark & Ferng, (1986) state that directory publishing revenues had been treated as operating revenues in most states for almost a decade prior to divestiture (pg8).

³⁶ Carpentier, Farnoux-Toporkoff & Garric, 1992, pg26.

As already alluded, in the intervening period between the announcement of the MFJ in 1982 and its implementation in 1984 much of the detail of divestiture was provided. One such detail was the transfer of directory publishing by Greene from the Bell system to the RBOCs. Of greater importance was the debate over the definition of local service, and the operational restrictions imposed on the RBOCs. After accepting divestiture AT&T lobbied for a settlement advantageous to itself and to this end sought a new definition of local service. Under the old Bell system AT&T linked together customers in different BOC jurisdictions which in turn provided the avenue for call termination of inter-jurisdictional traffic. Implicit within this structure was a transfer of resources, essentially from the long distance to the local but also from metropolitan to rural and east and west coastal to the Midwest interior through access charges.³⁷ However, with competition in the long distance market reducing prices the cross subsidy was becoming more difficult to maintain. Furthermore, basing local service on BOCs jurisdictions would minimise the markets for long distance carriers as the majority of calls would be intra rather than inter BOC region.

Through arguing that customers would gain from a competitive long distance market AT&T was able to extract a new definition of local service.³⁸ This definition, which was implemented by the MFJ on January 1 1984, sub-divided the twenty-two BOCs jurisdictions into local access transport areas, or LATAs. Within each LATAs service provision was the responsibility of the ILEC, which is either a BOC or independent company such as GTE or TDS. However, between these subdivisions the choice of service provider was to be made by the customer from one of the competitive inter-exchange carriers (IXCs) such as MCI or AT&T. In all 161 LATAs were created covering Continental USA. Of these twelve corresponded to a single state and the remainder were spread across the other lower states.³⁹ California clearly illustrates the outcome in practice. The ILEC, Pacific Bell, provides service within each of the state's ten LATAs though service between these LATAs is the responsibility of IXCs regardless of the geographic distances involved.

³⁷ Victor, 1989, pg85.

³⁸ Hills (1986); Carpentier, Famoux-Toporkoff & Garric (1996).

³⁹ Crandall & Waverman, 1996b, pg4.

The fragmentation of the marketplace that resulted brought to the fore the related issue of how IXCs should pay ILECs for the use of their network in the termination of inter-LATA traffic, and at what level any payment should be set at. As announced in January 1982 the Consent Decree did not allow for payment of access charges for the termination of long distance traffic over local networks.⁴⁰ AT&T argued that local users alone should pay for the upkeep of the local loop.⁴¹ Countering the RBOCs stated that without access payments local services could not be continued as before. Particularly problematic for the RBOCs was the issue of bypass. This is the use of alternative infrastructure for the termination of traffic. As Hills (1986) comments:

[t]he problem for the local companies is that a very small number of users contribute a large amount of revenue and they are vulnerable to bypass by these users both by satellite and, in the large conurbations, by interactive broad-band cable.⁴²

To reconcile these differences in December 1982 the FCC proposed a three-stage plan. Customers would be charged a fee for their access lines, long distance carriers would continue to pay a variable per minute access fee and a universal service fund established from contributions made by long distance carriers.⁴³ The compromise nature of this plan ensured that objections were raised. For instance, legislators objected to the plan as they perceived the FCC to be encroaching on their jurisdiction.⁴⁴ Long distance competitors objected to the proposal, arguing that without the discount that they had enjoyed under the Bell system their viability as competitors to AT&T would be challenged. The problem became more pressing after divestiture when the seven RBOCs and AT&T filed tariffs under the new system. It was alleged that AT&T was using the opportunity to restructure its rates as well as ensuring that cost savings were not being passed.⁴⁵ In January 1984 the FCC voted to postpone the plan, and imposed a monetary

⁴⁰ Hills, 1986, pg68.

⁴¹ Hills, 1986, pg68.

⁴² Hills, 1986, pg70.

⁴³ Viator, 1989, pg86f. See Baughcum, 1986, pg75ff for a more detailed outline of the plan.

⁴⁴ Viator, 1989, pg87.

⁴⁵ See Baughcum 1986 pg78; Viator, 1989, pg88.

ceiling on monthly access charges for residential and business consumers as well as restore the discount offered to AT&T's competitors.⁴⁶

Consequently, the IXCs paid access charges to the RBOCs to offset the cost of providing universal local services within their respective regions. Although the MFJ has sought to structurally separate the local and long distance elements of the Bell system these payments bound together the two parts. A transfer of resources was thus established, as Baughcum (1986) states:

[i]t is Judge Greene's view that the costs of providing equal access should be covered by imposing charges on inter-exchange carriers. AT&T, as the largest inter-exchange carrier, will thus pay the bulk of those charges. He does not see the threat of bypass by those carriers or by large business customers as sufficiently great that end users should be charged for such costs.⁴⁷

3.3.2 Lines-of-business restrictions.

The operational scope of the RBOCs was also determined in the detailed discussion and planning period after the January 1982 announcement of divestiture. The 1982 announcement divided the Bell system into a competitive long distance market, and a series of monopolistic local markets. Sullivan (1989) states it was argued that within these local markets the RBOCs should be limited to the provision of POTS alone.⁴⁸ By excluding the RBOCs from competitive markets, they would not be able to cross subsidise their entry into such markets or leverage their local monopolies and act anti-competitively. Sappington (1995) and Sullivan (1989) state that it was widely assumed, by regulators and competitors alike, that the RBOCs would follow their erstwhile parent and act anti-competitively. The RBOCs would, for instance, be capable of adopting proprietary technology and subsequently 'locking-in' customers to supply

⁴⁶ Baughcum, 1986, pg78.

⁴⁷ Baughcum, 1986, pg85.

⁴⁸ Sullivan, 1989, pg124.

arrangements that could be exploitative in some shape or form. This would, in conjunction with other mechanisms, serve to stifle competition in the markets that others sought to enter.⁴⁹

Further, the belief existed that rate of return regulation could be manipulated so the cross-subsidisation of RBOCs entry into new markets would result. Under these circumstances any potential societal gains from the entry of the RBOCs into new markets, through lower prices or improved service quality, would be negated in favour of the aggrandisement of the company. Arrow, Carlton & Sider (1995) write that past experience informed the debate, with the restrictions being:

... motivated by a desire to eliminate the potential for anti-competitive conduct associated with local exchange telephone service, which was considered a natural monopoly. The restrictions were based on the view that AT&T has used its monopoly position as the monopoly provider of local exchange services to interfere with competition in ancillary businesses that were potentially competitive.⁵⁰

Consequently, with these arguments in mind Judge Greene inserted lines-of-business restrictions into the MFJ. Only with a waiver from the court could a RBOCs enter one of the proscribed business areas that were:

- providing inter-exchange telecommunications services or information services;⁵¹
- manufacturing telecommunications products or consumer premises equipment (CPE);
- offering any other product or service, except exchange telecommunications and exchange access services, that is not a natural monopoly service actually regulated by tariff.⁵²

⁴⁹ Sappington, 1995, pg292; Sullivan, 1989, pg124f.

⁵⁰ Arrow, Carlton & Sider, 1995, pg303.

⁵¹ Long distance is defined as the provision of inter-LATAs telecommunications services. Thus, as Crandall & Waverman (1996:pg4) write “[t]he local BOC may offer service within its LATAs, but not between LATAs, even those within a state.”

After objections to the outright bar on the RBOCS entering new businesses a waiver was inserted into the MFJ that provided for the possibility for them to enter new services only if they could demonstrate that their local monopoly position would not be used anti-competitively in the process.⁵³

Together with the other constituent elements of the MFJ the impact of the aforementioned LOBs restrictions was to tightly constrain the operational scope of the RBOCs. As soon as they were divested in 1984 the RBOCs sought to overturn the LOBs restrictions. The RBOCs have filed numerous waiver requests in the intervening years that have largely been granted without amendment, but after considerable delay.⁵⁴ Initially the numerous waiver requests filed proved to be quite a successful means of overturning the LOB restrictions, between 1983-1990 twenty modifications were made to the original terms of divestiture.⁵⁵ Sullivan (1989) describes the rush of the RBOCs to remove not only the MFJ's restrictions, but also the structural separations and states' involvement, as "falling in love with competition."⁵⁶

The onset of the 1990s witnessed a concerted effort by the RBOCs to overcome the remaining LOBs restrictions. In 1990 they placed jingoistic advertisements in national papers implying that the MFJ restriction on their entry into both equipment manufacturing and information services was facilitating the foreign purchase of American companies.⁵⁷ Through taking their case to the Appeals Court the RBOCs were able to overcome the restriction barring them from entering the

⁵² Brotman, 1986, pg i.

⁵³ Sullivan, 1989, pg124f. The waiver is in Section VIII of the MFJ.

⁵⁴ See Rubin & Dezhbakhsh (1995) for a detailed discussion of the waiver process. It is interesting to note that, at the time when Rubin & Dezhbakhsh were writing, of the 266 requests that the DOJ had examined only four were opposed, and all these were related to 'landline interLATAs (local access and transport area) traffic' (pg109). Further, the Court approval was given to 249 out of 266 applications in their entirety (pg111).

⁵⁵ Robinson, Verner, Collins, Wiley & Burke, 1991, 88ff.

⁵⁶ Sullivan, 1989, pg125.

⁵⁷ Manishin, 1997.

information services market. Although Judge Greene disagreed with this judgement of the Appeals Court, and argued that the timing was too soon the ban was lifted in July 1991.

Table 3.2: LOB restrictions and release dates

LOB restriction	Release date
Inter-exchange	1996 Telecom Act
Information services	July 1991
Manufacturing and CPE	1996 Telecom Act
Other non regulated monopoly services	Sept 1987

Source: Sappington (1995); Gates, Milgrom & Roberts (1995); Rubin & Dezhbakhsh (1995); Crandall & Waverman (1996a).

In August 1993 Bell Atlantic challenged the restriction pertaining to the provision of cable-TV services within its own region on First Amendment grounds, and won.⁵⁸ Pacific Telesis received a similar ruling with respect to broadcast video programming within California and Nevada in 1994.⁵⁹ In attempting to gain access to the long distance market Ameritech offered to open up its local network to competition providing it could enter the market.

Though a large number of the MFJ's provisions were overturned by the industry over the course of a decade or so, several remained in place. The willingness of the RBOCs to challenge the regulatory environment, even after they had suffered setbacks and to persist with such challenges was able to generate uncertainty as to its longevity. Despite widespread acknowledgement of the necessity for a reappraisal of regulatory structures, it proved difficult for the necessary consensus to emerge. Lewyn (1995) and Global Telecoms Business (1995) amongst others, demonstrate the inherent difficulties in the establishment of consensus across all telecommunications industry stakeholders. The inability to develop consensus, the willingness of Greene to grant waivers that expanded the operational remit of the RBOCs, and a changing political landscape all delayed the revision of the telecommunications regulatory environment that was sought. As Hughes (1996) illustrates, this inability was further compounded by a rapidly changing technological environment that created a disjuncture between the regulatory framework in place and its concept of competition and that what would be feasible under a new regime. It was only in 1996 that the call to reform the

⁵⁸ Baumol & Sidak, 1994, pg18f.

⁵⁹ Pacific Telesis Group, 1995, pg4.

telecommunications regulatory environment was answered with Congress passing the 1996 Telecommunications Act.

3.4 THE TELECOMMUNICATIONS ACT OF 1996.

The Telecommunications Act sought to rectify the incongruity between the regulatory regimes and industry dynamics by imposing a flexible and dynamic structure onto the industry. The Act would provide a mechanism for the removal of the structural delineation of the industry and the establishment of a new relationship between the various interested parties of regulators, consumers and companies.

3.4.1 Provisions of the 1996 Telecommunications Act.

Subsequent to the passage of the 1996 Telecommunications Act much of the debate has concerned itself with the removal of structural barriers between different parts of the telecommunications industry. Whilst this is undoubtedly an important element of the Act, it is not the only element that deserves mention. The Act addresses a wide range of issues relating to the balance between the various regulatory authorities influencing the industry, cross ownership within the broadcasting industry as well as the rate regulation of cable-TV. The following sections highlight key elements of the Act, and illustrate their relationship to the RBOCs.

3.4.1.1 The institutional landscape.

In replacing the increasingly diffuse and confused regulatory environment that arose as a consequence of the Communications Act of 1934 and numerous consent decrees, the Act established a simplified, and 'appropriately' delegated, regulatory regime aimed at encouraging competition at all levels of the industry.

In a single statement the Act pre-empts all other barriers aimed at delineating the market in whatever manner:

[n]o state or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.⁶⁰

Federal law is, therefore, pre-eminent within the telecommunications industry. In doing so the other elements of the previous regulatory regime - the states and courts / DOJ - are relegated to secondary positions. These institutions are left to deal with those matters that the Act delegates to it with the consequence that their role as agenda setters is correspondingly diminished.

Since divestiture in 1984 the Washington District Court, under the guidance of Judge Greene, has played a pivotal role in determining the industry's fate for it was this court that held responsibility for overseeing the MFJ. By superseding the MFJ the Act removed the validating mechanism by which the court legitimised its role within the industry. However, the FCC must give 'due consideration' to the concerns of the DOJ thereby maintaining the regulatory role of the DOJ within the telecommunications industry.⁶¹ The Act ensures that the FCC is centre stage when determining the fate of the industry, a point that is reinforced by the fact that many of the clauses within the Act are broad in nature and require their details to be filled in by the FCC at a subsequent date.⁶²

The Act should not be equated with deregulation, but instead with re-regulation. In the period immediately following the passage of the Act the FCC will be required to make more than eighty separate rulemaking decisions across a plethora of areas covering at least twenty-three aspects of telephony. Areas to be resolved at a later date include the entry of utilities into the

⁶⁰ Huber, Kellogg & Thorne, 1996, pg7.

⁶¹ Huber, Kellogg & Thorne, 1996, pg33.

⁶² Business Week, 1996. As Business Week notes: there are dozens of other unresolved issues the FCC will address - and in doing so shape policy. "What they do will determine the future of competition in communications," says Leon M. Kestenbaum, Vice-president for Federal regulatory affairs at Sprint Corp.'

telecommunications market, BOC alarm monitoring services, rights of way issues and pay phone services.⁶³

Despite of the above, and the delegation of responsibilities, the Act formally states that it does not pre-empt any state or local law. However, the spirit of the language used, as well as the repeated reference to federal procedures in contentious issues, indicates that pre-emption does occur. The issue is thus debatable. Huber, Kellogg & Thorne (1996) write:

[t]he new legislation's division of legal authority between federal and state regulators will likely to be litigated on for many years to come.⁶⁴

The imposition of an overarching federal structure onto the regulation of the telecommunications industry is conducive to market integration as it reverses the increasing Balkanisation of the national market place that was encouraged by the uncertainty surrounding the MFJ.

3.1.1.2 Geography and markets.

The MFJ and other consent decrees established regulatory quarantines so that operators were limited in terms of either their operational or geographical scope, or some combination of both. With the first tri-annennial review of the MFJ in 1987 this delineation started to collapse as the RBOCS were permitted to provide non-telecommunications services. The Act represents the logical conclusion of this development.

The Act allows previously segregated competitors to freely compete with one another though steps were taken to prevent companies from leveraging their dominance in one particular market in an anti-competitive manner in another through, for example, cross subsidy. With respect to

⁶³ See Huber, Kellogg & Thorne, 1996, pg52 for a full list of the twenty-three areas to be addressed.

⁶⁴ Huber, Kellogg & Thorne, 1996, pg50.

the RBOCs the Act does not permit them to enter the in-region long distance market without first meeting stringent conditions. Three elements are to be found within these conditions:

1. RBOCs can offer-originate long distance in region services only when the barriers to local competition have been sufficiently eroded to the satisfaction of regulators that anti-competitive abuses by the BOCs can not occur.
2. RBOCs must then meet the conditions contained within a fourteen-point checklist that determines their obligations in the new competitive environment. As detailed by Tadjer (1996) the competitive check list conditions are to:
 1. provide interconnection at any technically feasible point;
 2. give access to unbundled network elements;
 3. give access to poles, conduits and rights of way;
 4. provide unbundled loops;
 5. provide unbundled local transport;
 6. provide unbundled switching;
 7. give access to 911 services, directory-assistance services and operator call-completion services;
 8. give access to telephone numbers for assignments;
 9. offer white page listings for competitors' customers;
 10. give access to databases and signalling as necessary for call-routing and call-completion;
 11. comply with number portability requirements;
 12. comply with local dialling parity requirements;
 13. reach reciprocal compensation agreements; and,
 14. provide resale of services at retail process to subscribers who are not carriers.
3. The structural separation of subsidiaries must occur so that the local BOCs' customer information, derived from the billing system, can not be misused to the detriment of new entrants.

After the RBOCs have satisfied these conditions the FCC will then evaluate the service(s) proposed under normal criteria. That is, is the service proposed in the public good.

Outside of their territories the Act allowed for the RBOCs to immediately offer inter-exchange services without structural separation requirements.⁶⁵ The RBOCs are allowed to immediately offer inter-exchange services that are judged to be 'incidental' to certain services. They can, therefore, provide long distance over cellular and personal communications services (PCS) systems without fulfilling the in-region network equal access requirements.⁶⁶

3.1.1.3 Structural separation.

Within a specific set of circumstances the Act imposes structural separation obligations on telecommunications companies. The need for structural separation of subsidiaries within the telecommunications is not a new issue. As Huber, Kellogg & Thorne (1996) comment:

[o]ne of the most persistent problems faced by the FCC in recent years has been whether, and to what extent, to allow telephone companies to offer certain services directly, without creating a structurally separate affiliate with its own facilities and personnel.⁶⁷

The Act states that structural separation is a useful and productive mechanism when countering potential anti-competitive behaviour. Structurally separate subsidiaries inhibit the company's ability to offer integrated services to its customers. The Act distinguishes between in- and out-region provision of services. In-region inter-exchange services are required to be provided through a structurally separate subsidiary, whereas out of region services need not be.⁶⁸ Importantly, the requirement for structural separation is not permanent and will last for only three years after the service is authorised by the FCC.⁶⁹ The joint marketing of services by the BOCs and its long distance affiliate is only possible if the RBOCs allows competing long distance operators to market BOC products and services.⁷⁰

⁶⁵ Telecommunications Act of 1996, Section 271(b)(2).

⁶⁶ Telecommunications Act of 1996, Section 271(g)(3) and Section 332(c)(8).

⁶⁷ Huber, Kellogg & Thorne, 1996, pg41.

⁶⁸ Telecommunications Act of 1996, Section 272(a)(2)(B).

⁶⁹ Telecommunications Act of 1996, Section 272(f)(1).

⁷⁰ Lake & Jain, 1996.

Separate subsidiaries are also required for inter-LATAs information services until the year 2000.⁷¹ With regard to electronic publishing the Act requires separate subsidiaries only when these are delivered over the company's own network.⁷²

The objective of structurally separating subsidiaries is to prevent incumbent telephone companies from leveraging their monopolistic positions through cross subsidisation, or by making uptake of one service conditional on uptake of another. In doing so, the structural separation prevents bundled packages of services being offered to customers and implicitly underlines the role of unbundled services in fostering competition.

3.1.1.4 Universal service.

Addressed but not resolved by the Act is the issue of universal service. As defined by Meadows (1996) universal service is "the provision of quality services at just, reasonable and affordable rates, and the provision of access to advanced telecommunications services to all areas of the country." According to Rosenberg & Wilhelm (1998) the 1996 Telecommunications Act is the first time that the concept of universal service has been explicitly expressed within law, and that the FCC and State PUCs are given a clear mandate for its effect.

Section 254(a)(1) of the Telecommunications Act places several obligations on the FCC. The Act created a Federal-State Joint Board to assist the FCC in a review of the means through which universal service can be affected. The aim of the Joint Board is to replace the implicit arrangement that had existed with one that is explicit. Moreover, under the Act the FCC is given a wide-ranging remit to define the concept on an ongoing basis, so that as technologies develop those services that are regarded to be essential and in the public interest can be determined. Finally, the Act also calls for the FCC to consider expanding the universal service fund to subsidise schools, libraries and medical facilities.

⁷¹ Telecommunications Act of 1996, Section 272(f)(2).

⁷² Huber, Kellogg & Thome, 1996, pg42.

The Act did not provide a detailed agenda by which universal service could be ensured in the competitive environment that it aims to promote. However, the Act did create a specific class of telecommunications companies, Eligible Telecommunications Carrier (ETC), on which the responsibility for providing universal service would fall.⁷³ Designated ETCs are under an “obligation to carrier,” in that they are required “to provide a specified list of services to all willing and able subscribers within a designated area.”⁷⁴

3.1.1.5 Unbundling.

Several aspects of the regulatory regime ushered in are conducive to unbundling, as Huber, Kellogg & Thorne (1996) state:

[t]he Telecom Act makes unbundling the key thing local carriers must give in exchange for freedom to enter long distance markets.⁷⁵

Unbundling is when the operator breaks down the service provided into its constituent parts, not only is the provision of one part not dependent on acquiring another but the process enables the costs associated with each to be calculated and made transparent.

The obligations imposed on all operators, as well as the fourteen point competitive checklist specific to the RBOCS, serve to illustrate how commonplace the notion of unbundling is throughout the Act. Operators are required to de-aggregate their services so that, for instance, hidden cross-subsidisation between the products and services offered and over-charging of competitors for the use of assets as mandated by the Act, cannot occur. The over charging by incumbents for the use of assets is anti-competitive, as this enables the incumbent to capture more rent than would otherwise be the case in a facilities based competitive environment.

⁷³ Bernt, 1997, pg18.

⁷⁴ Bernt, 1997, pg20.

⁷⁵ Huber, Kellogg & Thorne, 1996, pg16.

3.1.1.6 Manufacturing.

The Act allows the RBOCS to enter into manufacturing. Immediate relief is given enabling participation in the design and development of telecommunications equipment but one RBOCs may not join with another RBOCs in any venture.⁷⁶

3.1.1.7 Replacement of previous regulatory efforts.

The Act terminates and supersedes previous consent decrees and as such impacts not only on the RBOCs, but also those of other participants within the telecommunications industry such as AT&T and GTE.

The Act terminates the GTE Consent Decree relating to the acquisition of Sprint in 1984, and the AT&T /McCaw Consent Decree.⁷⁷ By 1996 the consent decree that GTE had signed was no longer relevant, as by 1992 the company had divested its interest in Sprint. Thus, the Act was effectively 'good housekeeping.' The Act also superseded the AT&T /McCaw Consent Decree even before it had been signed by Judge Greene. Finally, the Act through its definition of a BOC as a provider of wireline telephone exchange services removed AirTouch Communications and AT&T from being considered to be Bell companies. According to Huber, Kellogg & Thorne (1996) the DOJ argued that AirTouch Communications, as a successor company to Pacific Telesis, and AT&T through its purchase of McCaw had joint-venture arrangements with the RBOCs, were in certain circumstances Bell companies.⁷⁸

However, with respect to the MFJ the Act's implementation was more problematic. As the result of the separation of powers between judiciary, executive and legislature, Congress cannot legislate to overturn a judicial final judgement. Having said this, Congress can legislate to

⁷⁶ Lake & Jain, 1996.

⁷⁷ Huber, Kellogg & Thorne, 1996, pg44.

⁷⁸ Huber, Kellogg & Thorne, 1996, pg44.

overturn an 'injunction' which the MFJ was judged to be.⁷⁹ Consequently the Act supersedes only the MFJ and not the original 1956 Consent Decree in its entirety.

Finally, the Act is forward looking in that those waivers granted under the MFJ are still in place, and that from passage onwards all those issues dealt with by the MFJ fall under the Act's jurisdiction.⁸⁰ Consequently, the Act is the principal mechanism through which regulation within the telecommunications industry is to be effected. Subserving to this are all other regulatory apparatus.

3.4.2 Developments subsequent to the 1996 Telecommunications Act.

The 1996 Telecommunications Act has not been implemented as smoothly as initially envisaged. On the one hand the entrance of the RBOCs into the in-region long distance marketplace has been delayed by their seeming inability to satisfy regulatory requirements as detailed in the fourteen point competitive checklist. It has been judged that the RBOCs face insufficient facilities based competition within their territories to warrant their entry into the long distance market. Whilst on the other hand, the legality of key sections of the Act has been cast into doubt through a series of court cases.

3.4.2.1 The Eight District Court.

In October 1996 a coalition of state regulators and ILECs succeeded in obtaining from the Eight District Court in St. Louis a stay of the interconnection provisions within the Act. Whilst undoubtedly an important issue in its own right interconnection was also a proxy for the debate relating to the jurisdictional balance between regulatory authorities as well as the timetable which introduces competition into the local loop.

⁷⁹ Huber, Kellogg & Thome, 1996, pg47.

⁸⁰ Within the United States any order of the Federal Court is relevant and cannot be overturned by legislation.

State regulators led by the Iowa Utilities Board (IUB), in association with ILECs, resorted to litigation after the FCC imposed pricing rules. It was believed that the forward looking costs models proposed would encumber existing players within the industry with excessive and unrecoverable costs. It was noted by the Eight Circuit Court of Appeals in St. Louis that the petitioners objected to the pricing rules proposed, with the Court commenting that the imposition of the proxy rates:

...would frequently be imposed by the state commissions and would result in many incumbent [local exchange carriers] LECs suffering economic losses beyond those inherent in the transition from a monopolistic market to competitive one.⁸¹

In addition the Court noted that it had been unable to find any authority that expressly granted FCC oversight of intrastate telephone pricing.⁸² Furthermore, the Court backed the IUB in its assessment that the ability to pick and choose rules, and not to follow a mandated procedure, was the best way for the telecommunications industry to implement the provisions of the Act to the concerned parties.⁸³ The FCC, DOJ and IXCs objected to the interconnection stay granted, and appealed arguing that:

[t]he stay already imperils -- and if left intact, would wholly undermine -- Congress's [sic] strict timetable for ensuring expeditious competition in those markets under the Commission's nationally uniform rules.⁸⁴

The FCC continued that if left intact the interconnection stay would:

⁸¹ Telecom AM, 1996, Oct 15.

⁸² Telecom AM, 1996, Oct 15.

⁸³ The IUB objected to the FCC's imposition of cost model for it believed that this would not facilitate the introduction of competition into the market under all circumstances, only in some. Instead the approach should be combined with an historic cost model so that all eventualities can be accommodated (Telecom AM, 1996, Oct 23).

⁸⁴ Telecom AM, 1996, Oct 25.

... delay “the introduction of competition into local markets...to the detriment of the general public and the federal statutory purpose; ... will result in “prolonged, piecemeal litigation in disparate forums throughout the United States” as states arbitrate interconnection agreements; ...timing of ...RBOC entry into long-distance is “draw[n] into question.”⁸⁵

In their appeal the IXCs, FCC and DOJ stated that the central issue was not jurisdictional but the desire to avoid jurisdictional conflict that would delay the introduction of competition into the local loop.⁸⁶ In contrast NARUC brought the issue to the fore when it asked the Supreme Court to support the stay arguing that jurisdictional overreach would impose a national regulatory policy onto local markets.⁸⁷ Thus, from the perspective of ILECs as well as State PUCs the legal action was concerned with determining the extent of regulatory agency authority. A national regulatory framework, sponsored by the FCC would favour the IXCs as it would impose a regime capable of countering the state PUCs’ ability to forestall competition in favour of ILECs.⁸⁸

Subsequent to the initial case the legal battle has continued apace. In January 1997 MFS Communications failed to persuade the FCC to employ its pre-emption powers to ensure that geographical de-averaging of interconnection and unbundled networks elements could occur.⁸⁹ The protracted nature of the legal process, and the ability to appeal to higher courts, has ensured that the validity of the interconnection stay has yet to be categorically resolved. Contradictory signals have been sent by the Courts on the nature of the stay. On the one hand in August 1998 the Supreme Court agreed to hear argument in October of the same year relating to the

⁸⁵ Telecom AM, 1996, Oct 25.

⁸⁶ The delays would be advantageous for the incumbent LECs as it would enable them to develop and enhance competitive skills and competencies judged necessary for them to counter (minimise) the commercial threat posed by new entrants.

⁸⁷ Telecom AM, 1996, Oct 29.

⁸⁸ Reed Hundt (FCC chairman) accused the Iowa Utilities Board (IUB), one of those parties that succeeded in obtaining a stay of the FCC’s interconnection orders, of favouring the incumbent LECs over new entrants. IUB retorted stating that those arbitrations - among the first nation wide - which have been conducted had been fair and adopted the suggestions made by AT&T (Telecom AM, 1996).

⁸⁹ Telecom AM, 1997, Jan 3.

interconnection stay and whether or not the FCC has authority to: firstly, set the prices new entrants must pay incumbents for network access; secondly, force ILECs to allow new entrants to 'pick and choose' from existing interconnection agreements; and thirdly, force incumbents to recombine UNEs for new entrants.⁹⁰ On the other hand the Court has backed the FCC in deciding that UNEs resellers should not contribute to universal service funding, thereby shifting the burden of costs onto ILECs as originally envisaged under the Act.

3.4.2.2 The funding and definition of universal service.

Related to, though distinct from, the determination of interconnection rates is the post-passage determination of universal service. Section 254 of the 1996 Telecommunications Act outlines universal service obligations, and imposes on all telecommunications companies providing interstate services the obligation to contribute to mechanisms established to preserve universal service. According to Mueller (1997) the 1996 Telecommunications Act formalised the position of universal service within telecommunications industry, with the committee responsible for drafting the Act stating that the goal of Section 254 was:

...to clearly articulate the policy of Congress that universal service is a cornerstone of the Nation's communication systems. This new section is intended to make explicit the current implicit authority of the FCC and the States to require common carriers to provide universal service.⁹¹

However, although the 1996 Act recognised the importance of universal service as a central component of the new telecommunications landscape that it was creating, it did not specifically define universal service. Instead the 1996 Act adopted a definition that was evolutionary in nature. Any telecommunications service with a majority of residential consumers subscribers must be included within the definition of universal service.⁹² In addition, the 1996 Act

⁹⁰ Telecom AM, 1998, August 4. Vol.4. No.148.

⁹¹ Mueller, 1997, pg5.

⁹² Mueller, 1997, pg5.

mandated that the FCC should establish a board jointly comprised of federal and state regulators to evaluate the different approaches available for reform of universal service. In doing so, the 1996 Act vested the FCC with a wide-ranging mandate to determine universal service after the passage of the Act. Gasman (1998) draws attention to the wide-ranging powers vested in the FCC, when detailing how the extension of the definition of universal service resulted in the fund growing from an initial \$3.3bn to anticipated \$14.3bn.⁹³

The Federal-State Joint Board reported in May 1997, and proposed new rules through which the implementation of universal service was to be guided. As stated by Kim (1998) these were:

- (1) quality and rates;
- (2) access to advanced services;
- (3) access in rural and high-cost areas;
- (4) equitable and non-discriminatory contribution by service providers;
- (5) specific and predictable support mechanisms;
- (6) access to advanced services for schools, health care facilities, and libraries; and
- (7) competitive neutrality.⁹⁴

The first six of these rules correspond to guidelines contained in Section 254 of the 1996 Telecommunications Act, whilst the seventh was a recommendation of the Federal-State Joint Board itself. The report settled several of the ambiguities arising from Section 254 of the 1996 Telecommunications Act, through, for instance, stating that the rules for universal service funding should be predictable and specific. However, as already has been shown the rules proposed through which universal service was to be funded, that is, through the adoption of forward looking cost models, were objected to by amongst others the ILECs. The ILECs objected to the imposition of forward looking cost models as they would encumber them with allegedly excessive and unrecoverable costs. In contrast, State PUCs objected as they regarded this as an intrusion by the FCC into their local jurisdiction.

It is significant that throughout the debate on the funding mechanism for universal service that the concept itself has been readily accepted. It is as if the various protagonists implicitly recognised that universal service is sacrosanct. However, recently it is possible to identify a

⁹³ Gasman, 1998, pg2.

⁹⁴ Kim, 1998, pg282.

growing critique of universal service as determined by the 1996 Telecommunications Act and the Federal –State Joint Board recommendations. Gasman (1998) and Pitsch (1997) question the concept of subsidising telecommunications and other service provision through the universal service fund. Gasman (1998) questions the entire rationale for universal service namely, that the distortions within American society should be negated through subsidy so that information and telecommunications ‘have nots’ as well as differences in infrastructure are equalised. It is argued by Gasman (1998) that subsidies distort the competitive process that is capable of innovating solutions to these problems such as high cost service provision or ‘inferior’ rural telecommunications infrastructure. This distortion is further exaggerated by the lack of political debate over universal service funding that has ensured that its necessity has not been questioned. Moreover, universal service is liable to extension, as it is a hidden tax not directly attributable to either of the main political parties. Mueller (1997) questions the affordability rationale for universal service and states that “marginal users are driven off or prevented from joining the network by a combination of unpaid toll bills, installation fees and call control issues”⁹⁵. This is taken as suggesting that artificially low pricing through universal service subsidy will do little counter the lack of telecommunications access.

Kim (1998) argues that universal service and competition are incompatible. With reference to the Internet, Kim (1998) argues that universal services sits uneasily with commercialisation. Commercialisation rests on a lack of government intervention, not only in the Internet but also in society and business more generally. In contrast universal service has at its centre government intervention that mandates that a fund is collected so that the disadvantaged in society can enjoy access to telecommunications. Pitsch (1997) asserts that an inappropriate administrative mechanism for the universal service fund has been devised. The mechanism, where in essence subsidies are distributed to companies on the basis of a competitive process, does not encourage efficiency as it places one company at an unnatural advantage compared its rivals. That is, one company has access to a subsidy and other(s) in the same market does not.

Thus, although universal service has been widely accepted, and its central role in the telecommunications landscape established, questions have begun to be asked as to its suitability

⁹⁵ Mueller, 1997, pg7.

given the rapidly changing nature of the industry. The suggestion has been forcefully made that competitive new technologies, and alternative administrative mechanisms, may be more capable of achieving the stated universal service objectives than the competitive bid process that has arisen in the aftermath of the 1996 Telecommunications Act.

3.4.2.3 Section 271 and RBOCs failure to enter the long distance marketplace.

From the viewpoint of the RBOCs the key provision of the 1996 Telecommunications Act is the opportunity for their entry into the long distance market that it presents. However, this entry is not automatic with Section 271 of the 1996 Telecommunications Act detailing those conditions that need to be satisfied before the RBOCs can enter the long distance market. Local markets need to be competitive, and the RBOCs satisfy all of the 14-point competitive checklist. Driving the Section 271 debate, and in effect responsible for the failure of any of the RBOCs to enter the long distance market, is the inter-play between three sets of factors: interconnection, unbundled network elements (UNEs) and the presence of facility based competitors within their in-region marketplace. Section 251 outlines both interconnection and UNEs, and with respect to the former Section 251(c)(2) states that ILECs are required to:

... provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier's network ... for the transmission and routing of telephone exchange service and exchange access. ... [at] any technically feasible point within its network ... at least equal in quality to that provided by the local exchange carrier to itself or to any other party to which the carrier provides interconnection ... [and under conditions that are] just, reasonable, and nondiscriminatory, in accordance with the terms and conditions of the agreement and the requirement of this section and section 252.

Section 251(c)(3) then continues that ILECs should also provide:

... non-discriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and

non-discriminatory in accordance with the terms and conditions of the agreement and requirement of this section and section 252. This section also requires incumbent LECs to provide these elements in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service.

Different rationales underpin each of these sections of the Act. The rationale for interconnection is simply the maximisation of welfare benefits through ensuring that customers on one network can receive calls from those on another. In contrast, Section 251(c)(3) seeks to readdress the uneven balance between ILECs and new entrants by allowing one carrier to construct its own network using components from the ILECs. Thus, Section 251(c)(3) aims to promote competition. Regardless of the different rationale the two sections are complimentary, as without interconnection the use of UNEs by new entrants would not be possible.

With respect to Section 271 and the entrance of the RBOCs into the long distance market it would appear that the main stumbling block is not interconnection per se, but unbundling. A large number of interconnection agreements have been signed between ILECs and new entrants, for example, since the Act was passed Bell Atlantic alone has signed more than seventy such agreements. At the national level interconnection agreements are commonplace, but what has proved to be problematic is the costing arrangement for interconnection as well as the actual detail of the agreements. In the Telecommunications Act UNEs are only vaguely defined, Bolter (1997), for example, asserts that virtually anything may be classified as an UNE, whilst a prominent CLEC, Teleport, has drawn attention to local loops, switching and operations support systems (OSS). In addition to these elements the FCC adds information and directory assistance facilities as well.

The vagueness of UNEs, and the indeterminate evaluation criteria of each, has contributed to the RBOCs' failure to satisfy the 14-point checklist and enter the long distance market. The RBOCs have not unbundled their networks to the satisfaction of both state and federal regulators. Regulatory misgivings are evident in more than one area, including:

- With interconnection and unbundling new entrants require access to incumbent OSS to ensure that they can provide services to their own customers.⁹⁶ To date regulators have rejected Section 271 on the grounds that ILECs have not sufficiently opened up their OSS to new entrants consistent with the development of a competitive market. For example, even though BellSouth has spent at least \$500m on OSS and competitor interfaces state PUCs, such as Louisiana, have denied long distance entry arguing that access to OSS is not yet on a non-discriminatory basis.⁹⁷
- Section 271 applications have also been denied because the RBOCs have not unbundled their networks as extensively as desired by state PUCs. Furthermore, the RBOCs have also balked on cost and competitive grounds from recombining UNES as this would aid in the development of competition. The first charge arises from the vagueness within the Act of the nature of UNES, whilst the second is a direct attempt by incumbents to act anti-competitively and delay competition. State regulators have sought to combat this reluctance on the part of incumbents by imposing conditions on ILEC applications. For instance, in return for unqualified support in New York state Bell Atlantic is required by the state PSC to provide packages of recombined UNES to competitors, and that these packages must not need physical co-location in order to be used.⁹⁸
- Until recently the ubiquity of emergency services and directory assistance services has been based on all the information being on the same database, and that all entries are regularly and correctly updated. New entrants have alleged that ILECs have delayed updating their databases to the detriment of their customers. Whilst there is prima facie evidence to suggest that these delays are not systematic, they are symptomatic of the wider problems in migrating to a multiple operator and competitive environment and a

⁹⁶ OSS are those computer systems internal to a telephone company that deal with ordering, billing and maintenance.

⁹⁷ Telecom AM, May 28. Vol.4. No.101; Telecom AM, July 4. Vol.4. No.107; Telecom AM, July 8. Vol.4. No.129.

⁹⁸ Telecom AM, May 8. Vol.4. No.88; Telecom AM, August 7. Vol.4. No.150.

willingness by incumbents to forestall the development of competition through whatever means possible.

After several failed attempts to offer long distance services state PUCs have begun to offer 'roadmaps' that detail RBOCs Section 271 application shortcomings and highlight those areas that need to be addressed. These roadmaps, inevitably criticised by IXC's and new entrants, have highlighted the failure of the RBOCs in respect to the level of facilities based competition that they face and the extent to which they have unbundled their network. Significantly, these roadmaps have reiterated that competition needs to be facilities based, and thus stand contrary to the arguments of both BellSouth and Bell Atlantic, that the widespread use of PCS and the number of interconnection agreements respectively, are indicative of the degree of competition faced.

3.4.2.4 The 1996 Telecommunications Act as a Bill of Attainder.

Frustrated by their failure to enter the long distance market by way of a successful Section 271 application the RBOCs have resorted to other courses of redress. The constitutionality of the 1996 Telecommunications Act was questioned in July 1997 when SBC Communications sued arguing that the Act was unfair as it specifically named companies rather than created categories on companies into which one may or may not fall. In particular, through Sections 271 to 275, which prohibit the RBOCs from offering long distance services and other services that non-RBOCs can offer, the Act approximates to a Bill of Attainder.

In the broadest sense a bill of attainder is "an act of the legislature by which one or more persons are declared to be attainted, and their property confiscated."⁹⁹ As a consequence the punishment is inflicted without recourse to a judicial trial. Under Article 1 of the United States constitution bills of attainder are illegal, not least to ensure a separation of powers between the legislative and executive branches of government. A statute may be considered to be a bill of attainder when it:

⁹⁹ The 'Lectric Law Library, 1998.

(1) identifies a specific individual or group (2) inflicts punishment on that individual or group (3) without the benefit of a judicial trial.¹⁰⁰

Criteria (1) and (3) are not contestable as the Act through the legislative process explicitly highlighted the RBOCs. Accordingly, the constitutionality of the Act is dependent on whether or not the Act punishes the RBOCs by prohibiting their entry into certain markets. SBC Communications described the Act as “discrimination, pure and simple,”¹⁰¹ and petitioned Judge Kendall (United States District Court Wichita Falls) to declare these sections of the Act unconstitutional. Judge Kendall concluded that Sections 271 – 275 were a punishment, not only do they presume RBOCs guilt but they also deprive them of income as well.¹⁰² It was argued that through their inability to provide a full range of services the RBOCs would probably lose market share to those companies that can offer such a service.¹⁰³ Judge Kendall ruled in favour of SBC Communications and the other plaintiffs stating that:

Sections 271-275 of the Telecommunications Act of 1996 constitute a bill of attainder and thus are unconstitutional. If the sections were statutes of general applicability this Court’s ruling would be different.¹⁰⁴

Such a ruling clearly vindicated SBC Communications’ stance and on the surface allowed the RBOCs to freely enter the long distance market other telecommunications companies. However, the protracted nature of the appeal process has meant that the RBOCs cannot freely enter the long distance market. In April 1998 before the 5th US Appeals Court (New Orleans) both SBC Communications and the FCC reiterated their arguments, that the Sections were unconstitutional

¹⁰⁰ United States District Court Wichita Falls, 1997, pg6.

¹⁰¹ San Antonio Chronicle, 1997.

¹⁰² Hausman (1997), in support of US West’s application to the Court to have the Act declared a bill of attainder, calculated that US West’s in-region customers would receive a \$700m welfare gain through lower prices and increased competition, and that net income would increase by between \$34-56m.

¹⁰³ United States District Court Wichita Falls, 1997, pg15.

¹⁰⁴ United States District Court Wichita Falls, 1997, pg15.

and that they ensured that the RBOCs were better off than under the previous regulatory regime respectively. In later hearings the testimony of Klein (Assistant Attorney General), focused on the opportunities inherent in the Act and to which the RBOCs previously did not have access. Countering, SBC Communications argued that this claim is not valid, as Judge Greene could have lifted the bar on in-region long distance service provision.¹⁰⁵

In May 1998 BellSouth attempted to overturn Sections 271 – 275 with arguments similar to SBC Communications before the US Appeals Court (D.C.). However, these arguments were rejected by the Court, which argued that:

...placing Section 271 among the burdens historically forbidden as attainders seems especially dubious because it does not bar the [Bells] from electronic publishing but simply requires structural separation.¹⁰⁶

This decision questioned the validity of the RBOCs' argument, as well as perpetuated both regulatory and commercial uncertainty. In September 1998 the 5th US Appeals Court (New Orleans) in a 2-1 vote overturned the 1997 decision of Judge Kendall. According, to *Telecom AM* (1998) "the appeals court rejected the Bell companies' bill of attainder argument saying that the sections 'are not punitive because they do not impose a perpetual bar' on the Bell companies' entry into the long distance market."¹⁰⁷ Although SBC Communications may appeal against this decision, the ruling blocked one of the avenues through which the RBOCs may have entered the long distance market.

3.4.2.5 RBOCs entry into the long distance market through marketing agreements with IXCs.

The RBOCs have also sought to enter the long distance surreptitiously by signing marketing agreements with Qwest Communications, an IXC. In May 1998 US West signed marketing

¹⁰⁵ *Telecom AM*, 1998, July 10, Vol.4. No.131.

¹⁰⁶ *Telecom AM*, 1998, May 18, Vol.4. No.94.

¹⁰⁷ *Telecom AM*, 1998, September 9, vol.4. no.173.

agreements with Qwest that in essence turns the ILECs into in-region marketing agents for Qwest. In return for a fee the RBOC will promote Qwest long distance services to in-region customers. However, to comply with the law as it presently stands a particular process must be followed. As outlined by US West Chairman Solomon Trujillo:

...our customer service and marketing staff will ask new customers if they have a choice of carriers, then will offer Qwest service. Caller will be transferred to Qwest network to complete filling out forms.¹⁰⁸

According to US West these marketing agreements would spur on competition by widening choice, and deliver economic welfare benefits through reduced prices for long distance services. Existing and new entrant IXCs objected to the agreement arguing that the move violated the Telecommunications Act on several grounds: the violation of Section 271 of the Act, the favouring one IXC over another, and the restrictions imposed on the equal access provisions contained within the Act. Despite the suit filed against US West by AT&T and others on May 13 1998 Ameritech signed a similar marketing agreement with Qwest Communications covering its five state region on the May 15th 1998.¹⁰⁹ Interestingly, after initially objecting to the US West-Qwest deal AT&T proposed to several ILECs that it too would be willing to sign similar agreements to facilitate competition and “to provide our customers the convenience of one-stop shopping.”¹¹⁰

Once the legality of the marketing agreements was challenged both sides in the dispute began to position themselves. Ameritech, US West and Qwest argued that the agreements are competition enhancing, and pointed to the ability of US West to sign up 100,000 customers as evidence that the service is both wanted and welcomed by the public. It was also argued that within the agreements the RBOCs' role was one of sales agent, and that this was consistent with the 1996 Telecommunications Act. In contrast, IXCs and state regulators objected with Washington Utilities & Transportation Commission (WUTC) stating that:

¹⁰⁸ Telecom AM, 1998, May 13. Vol.4. No.91.

¹⁰⁹ Telecom AM, 1998, May 15. Vol.4. No.93; Telecom AM, 1998, May 14. Vol.4. No.92.

¹¹⁰ Telecom AM, 1998, May 21. Vol.4. No.97.

[t]he arrangement violates the letter and spirit of the Telecom Act, by delaying the implementation of federal-state policies promoting competition in the local market Also the arrangement would inject US West into a role of controlling various aspects of long distance service.¹¹¹

At the end of September 1998 the FCC ruled that the agreements of Ameritech and US West with Qwest were contrary to Section 271 of the 1996 Telecommunications Act.¹¹² The FCC concluded that the two agreements resulted:

...in both Ameritech and US West providing, under their own brand names, a package of services, that includes Qwest's long distance, before gaining authorisation to provide in-region long distance services.¹¹³

The FCC ruling continued that contrary to the assertions of Ameritech and US West they were in fact performing activities normally conducted by a long distance telecommunications service provider. Furthermore:

... Ameritech and US West are holding themselves out to customers as providers of long distance service by marketing and selling, under a single brand name, Qwest's long distance service and their own local and intraLATA (short haul) long distance service.¹¹⁴

Through ruling that these agreements violated Section 271 of the 1996 Telecommunications Act the FCC ruling did not address whether they also were contrary to Section 251(g) that states that a RBOCs may not favour one IXC over another.

¹¹¹ Telecom AM, 1998, June 2. Vol.4. No.104.

¹¹² FCC, 1998a.

¹¹³ FCC, 1998a, pg1.

¹¹⁴ FCC, 1998a, pg2.

3.5. SUMMARY.

Since its inception the development of the telecommunications industry within the United States has undergone a series of changes that have fundamentally rewritten both the regulatory framework that governs the industry as well as its structure. The Communications Act of 1934 created the FCC and structured the industry around AT&T as a regulated monopoly. The emergence of competition and a series of regulatory judgements challenged this arrangement and ultimately resulted in 1984 in the MFJ. The MFJ fragmented AT&T into 8 successor companies: a much smaller and long-distance focused AT&T and seven regional Bell operating companies (Ameritech, Bell Atlantic, BellSouth, Nynex, Pacific Telesis, SBC Communications and US West). The MFJ divided the telecommunications industry into a competitive long-distance market and a series of local monopolies. One important consequence of the MFJ was to bring the courts into the heart of the telecommunications industry, determining not only regulation but also the industry's structure as well.

The MFJ only temporarily resolved the problems facing the telecommunications industry, and as the underlying tension between regulation and technology once again rose to the surface the industry entered another period of instability and uncertainty. The Telecommunications Act of 1996 intended to resolve the underlying tensions by providing the industry with a regulatory framework that takes account of the impact of technology and the benefits that arise from competition. The significance of the 1996 Telecommunications Act for the RBOCs was that it provided them with the opportunity to enter those markets that previously they had previously been prevented from entering. The most important of these markets was the long-distance (inter-LATA) market. However, by the end of 1998 none of the RBOCs had been able to satisfy the entry criteria laid down in Section 271 of the 1996 Telecommunications Act. This inability had led to renewed instability and uncertainty as the efforts of the RBOCs were rebuked and they resorted to other means in their attempts to enter the long-distance market.

CHAPTER FOUR: MODEL AND METHODOLOGY.

4.1 INTRODUCTION.

Chapter Two demonstrated the wide range of theoretical perspectives that seek to explain the development of the MNEs with reference to market imperfections. During the course of discussing these models it was shown that no parsimonious general theory of MNEs growth can be found within the literature. However, the same debate also drew attention to two concepts, stage or incremental international expansion and asset specificity, that it was felt were capable of shedding unparalleled insight into international investment activity. The theoretical discussion also proposed that asset specificity could extend the stage model of international expansion laid out by Johanson & Vahlne (1997) in a constructive and beneficial manner.

As a consequence this chapter is comprised of two sections. In the first of these a formal extension of Johanson & Vahlne (1997) through asset specificity shall be presented. Not only will an ideal form of international investment activity be detailed, but also the propositions to be investigated in subsequent chapters will be outlined. The remaining section within this chapter is concerned with how the international investment activity is to be investigated, that is, with methodology. After a brief general discussion of methodological stances, the section will proceed with a discussion of the methodological stance adopted in this case. Also included within this section is an outline of the methodologies adopted in existing accounts of RBOCs international investment activity. The failings of these other accounts of RBOCs investment activity provide a list of pitfalls to avoid as well as highlight areas of interest.

4.2 A FRAMEWORK FOR UNDERSTANDING INTERNATIONAL INVESTMENT ACTIVITY.

As already argued in Chapter Two stage models in general, and Johanson & Vahlne (1977) in particular, offer an insightful way through which international investment activity can be examined. Johanson & Vahlne (1977) is taken here as the basis of the proposed framework

that in turn is extended through asset specificity from transaction cost economics. Central to Johanson & Vahlne (1977) is the interaction between two groups of variables, those relating to the resources committed to a particular location and those that determine where new resources are to be invested. These are termed 'state' and 'change' aspects respectively. The interaction between state and change aspects gives rise to international expansion that is incremental in nature, and which is typified by the expansion of Pharmacia detailed earlier.

Integral to this pattern of expansion is the notion that each successive stage of the international expansion provides the company with information that is in turn employed by the company to guide its subsequent investment activity. Implicit is the assumption that the head-office is capable of interpreting the information provided by the overseas affiliate, and moreover, that the information is transferable in the first place. Moreover, this also assumes that access to information is uniform. But as is argued below this is not the case. Information is characterised by its diversity as well as its resistance to transfer. The next section will show how the uniformity and transferability of information can be detracted from, insights which will then be used to construct an analytical framework in subsequent sections. This framework goes beyond that proposed by Johanson & Vahlne (1977).

4.2.1 Some implications of different types of knowledge.

There is widespread agreement within the literature that knowledge is not homogenous. Hedlund (1994), Lamberton (1996), McGarry (1993) and Monk (1989) amongst others testify to the diverse nature of knowledge. After demonstrating the diversity of knowledge this section will highlight some of the implications and difficulties for a company wishing to enter into international investment activity.

How is knowledge differentiated within the literature? A useful starting point is Monk (1989) who argues that tradable knowledge can be divided into seven categories. These are: packaged information (for example, scientific literature), semi-packaged information (for example, annual reports), transient information (for example, news services), permanent information (for example, libraries), skilled judgement (for example, consultancy), education and training (for example, textbook publishing) and entertainment (for example, broadcasting).¹ However, what is not clear from Monk (1989) is the extent to which these

¹ Monk, 1988, pg48f.

different categories are in fact tradable. The focus of Monk (1989) is on the public goods nature of knowledge and the fundamental paradox of information, and not on the characteristics of knowledge that would allow for its trade.

In this respect Hedlund (1994) is instructive. Hedlund (1994) draws a distinction between tacit and articulated forms of knowledge, as well as between ‘levels of carrier.’ The definition of tacit knowledge offered is consistent with Polanyi (1962), that is, “knowledge which is non-verbalized or even non-verbalizable, intuitive, unarticulated.”² Conversely, articulated knowledge is defined as “specified either verbally or in writing, computer programs, patents, drawings or the like.”³ Both tacit and articulated knowledge may take one of three forms: cognitive, skills and embodied. Hedlund (1994) equates cognitive knowledge with mental constructs and precepts and embodied knowledge with well-defined services, products and artefacts.⁴

As shown in Table 4.1 (below) knowledge, either tacit or articulated, may reside at one of four levels: individual, group, organisation and inter-organisation. Depending on the circumstances the knowledge necessary for decision making such as investment appraisal will reside in some or all of these layers. Particularly important for knowledge generation are, according to Hedlund (1994), the roles performed by the group, which are often small and temporary in character, and the inter-organisational interaction between suppliers and customers.

Table 4.1: A model of knowledge categories and transformation processes: types of knowledge

	Individual	Group	Organization	Inter-organisational domain
Articulated Knowledge/ Information	Knowing calculus	Quality circle’s documented analysis of its performance	Organization chart	Supplier’s patents and documented practices
Tacit Knowledge/ Information	Cross cultural negotiation skills	Team co-ordination in complex work	Corporate culture	Customers attitudes to products and expectations

Source: Hedlund, 1994, pg775.

² Hedlund, 1994, pg75.

³ Hedlund, 1994, pg75.

⁴ Hedlund, 1994, pg75f.

Ideally, a company making an investment would access knowledge from all four types of carriers, and only with the full array of knowledge at its disposal would make the decision whether to invest. However, it is highly unlikely, if not improbable, that this ideal will be borne out in reality. For instance, for a company wishing to enter a market for the first time it is likely that knowledge residing at the level of the organisation and inter-organisational domain will be available before that at the individual and group level.

To an internationalising company some types of knowledge will be more readily accessible than others. Using Hedlund (1994) and Monk (1989) as a guide it is possible to propose a simple hierarchy of the different types of knowledge. At the base of the hierarchy are general sources of information that are available to all; whilst at the pinnacle are those sources that are unique in nature. Knowledge located close or at the pinnacle may include expert opinions for example. The acquisition of knowledge further up the hierarchy enables the company to access increasingly unique sources. As these sources are not available to others the company is placed in an advantageous position vis-à-vis its rival in the market. This type of knowledge is termed 'differential information' by Arrow (1984). The possession of differential information by one party gives rise to asymmetries within the market:

... two individuals with the same probability beliefs may nevertheless have different probabilities for the same event when entering the market, because they have observed different other events. The existence of information derived from observations can have profound effects on the working of the risk-sharing markets. Indeed, the problem of differential information has long been known in the insurance literature under such headings as "moral hazard" and "adverse selection."⁵

Consequently, those companies in possession of differential information are better placed to evaluate market opportunities, and, therefore, whether or not they should invest in the market, than those who lack such knowledge. Separately, and in conjunction with one another, differential information and the four levels of knowledge carriers, engender knowledge asymmetries. In turn this leads to uncertainty, as the company will not be in the position to make decisions in possession of all pertinent knowledge.

⁵ Arrow, 1984, pg199

The impact of the knowledge asymmetries may be mitigated through one or both of two options. The inward investor may hire indigenous employees who will bring with them an understanding of the local market that cannot be acquired by the company without several years' presence in the market. Alternatively, the inward investor may collaborate with indigenous companies and rely on them to interpret developments in the market on its behalf. However, the main disadvantage here is that the inward investor is reliant on the indigenous company and that as a consequence the relationship is asymmetrical. The relationship between the two companies will continue to be asymmetrical unless the inward investor can internalise the interpretative ability provided by its local partner.

The internalisation of this interpretive ability is problematic. The nature of knowledge is such that although some forms may be transferable others may not. Moreover, some transferable forms of knowledge may be reliant for its interpretation on forms that cannot be transferred into another context. That is, knowledge asset specificity may occur. The effect of this is to limit the circumstances in which it is possible to transfer knowledge from one company to another. Whilst the knowledge itself, codified in manuals and sets of procedures, may be transferable the actual use of the knowledge is reliant on interpretative skills that may not be transferable. For example, knowledge about a particular technology may be codified in manuals that can be transferred from one company to the next but the actual ability to use the knowledge contained therein productively is also dependent on knowledge, such as operator experience, that is not transferable. In such a case internalisation provides only a limited benefit.

The difficulties of internalising knowledge will be exacerbated when it occurs between countries due to differences in culture etc, that is, due to the presence of psychic distance between countries. Problems will arise not only in the identification of appropriate knowledge sources, but also in their interpretation and transfer elsewhere. It may be the case that although the knowledge is available psychic distance between countries prevents its identification as well as its subsequent transfer and productive use.

Therefore, the inward investor must not only internalise the knowledge it seeks but also the ability to interpret it as well. Furthermore, internationalisation necessitates that the company must internalise knowledge in such a way that its use can be made of it in different countries.

4.2.2 Framework.

In this section a framework for investigating international investment activity will be proposed. This framework builds on the strengths of the incremental model of internationalisation proposed by Johanson & Vahlne (1977) through incorporating the implications of the diverse nature of knowledge. Thus, the starting point here is to ask what are the implications of the diverse nature of knowledge for the theoretical framework?

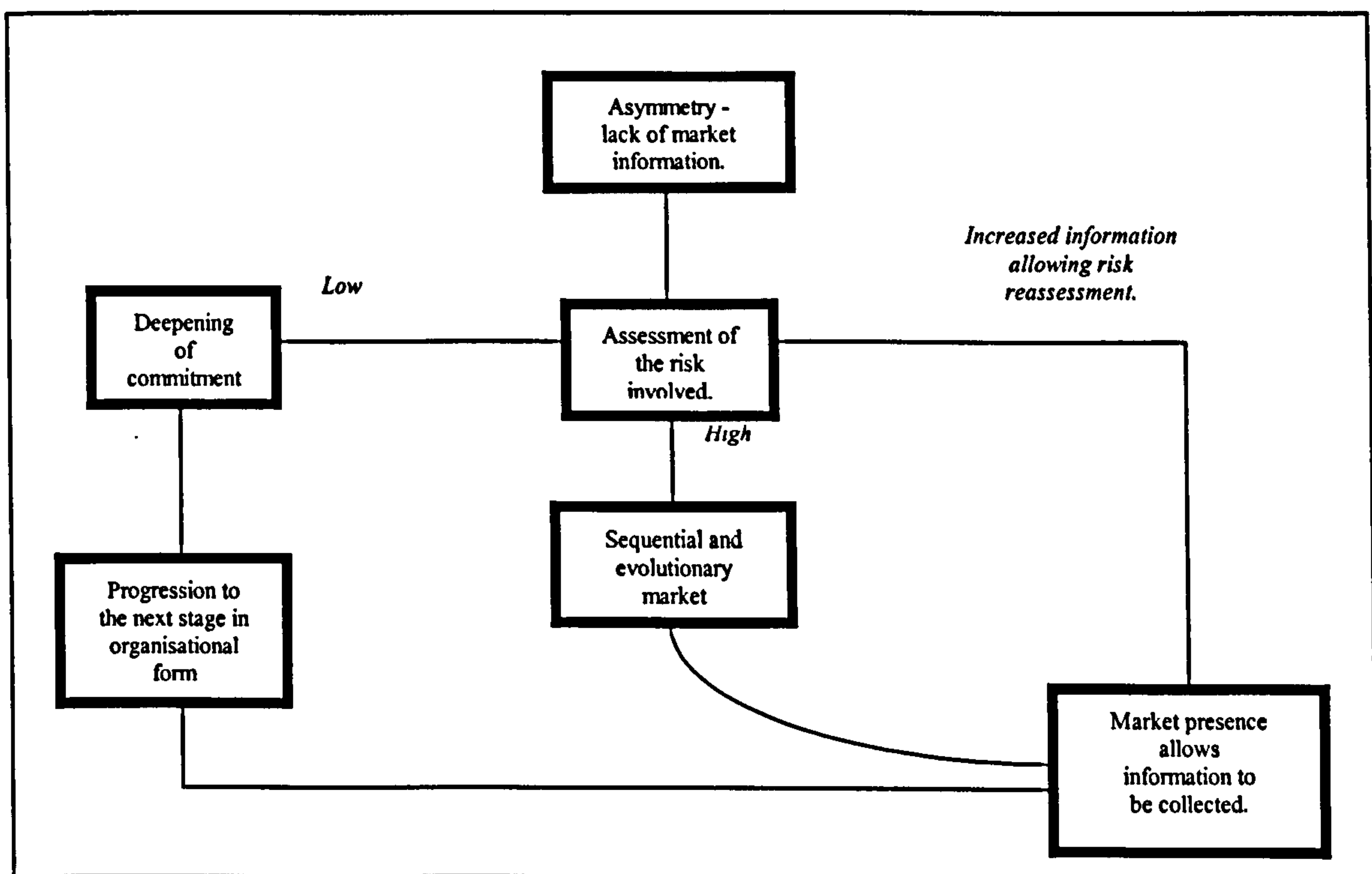
The application of knowledge asset specificity simultaneously expands and restricts the framework. On the hand asset specificity restricts the scope of international investment, as knowledge gained in one country cannot be productively used in another context. On the other hand some forms of knowledge are not restricted to a single location, but are instead transferable and useable outside of its originating context. Within the framework international expansion will be gradual but because knowledge asset specificity restricts the degree to which knowledge can be transferred between countries the expansion will be skew in favour of either certain geographical or lines-of-businesses. It is possible to identify several key components within the resulting framework:

- State and change aspects interact to produce an international expansion pattern that gradually expands the company's presence in foreign markets. Governing this interaction is a desire to minimise the risks of international investment.
- The increase in commitment to a market is governed by the investing company obtaining information that allows for the identification and appraisal of investment opportunities.
- Knowledge asset specificity restricts the use that information can be put to. Highly idiosyncratic knowledge cannot be transferred out of the context in which it originated.
- Some forms of knowledge are in fact transferable out of the originating context. Generally speaking these types of knowledge will be codifiable, however, some will relate to shared cultural characteristics.
- Where knowledge is transferable and understandable out of context developments in one country will influence those in another. Conversely, where knowledge is highly idiosyncratic this will not be the case.

The interaction between the aforementioned key components is shown diagrammatically in Figure 4.1 below. A lack of information gives rise to uncertainty and therefore risk regarding international investment. These are minimised through the adoption of a sequential expansion into the foreign market. Through its presence in the market the company gathers information that enables it to identify and evaluate investment opportunities. The information collected will determine whether or not the company continues to expand within that particular market, or will transfer its investment activity elsewhere.

If the company's assessment of market conditions is such that further investment is warranted, then the company will gradually increase its commitment to the market. The increased risk that comes from the greater commitment is offset by the company being better informed to identify and assess investment opportunities through having access to a wider array of knowledge. The company will continue to gradually expand within a market until no further investment opportunities can be identified.

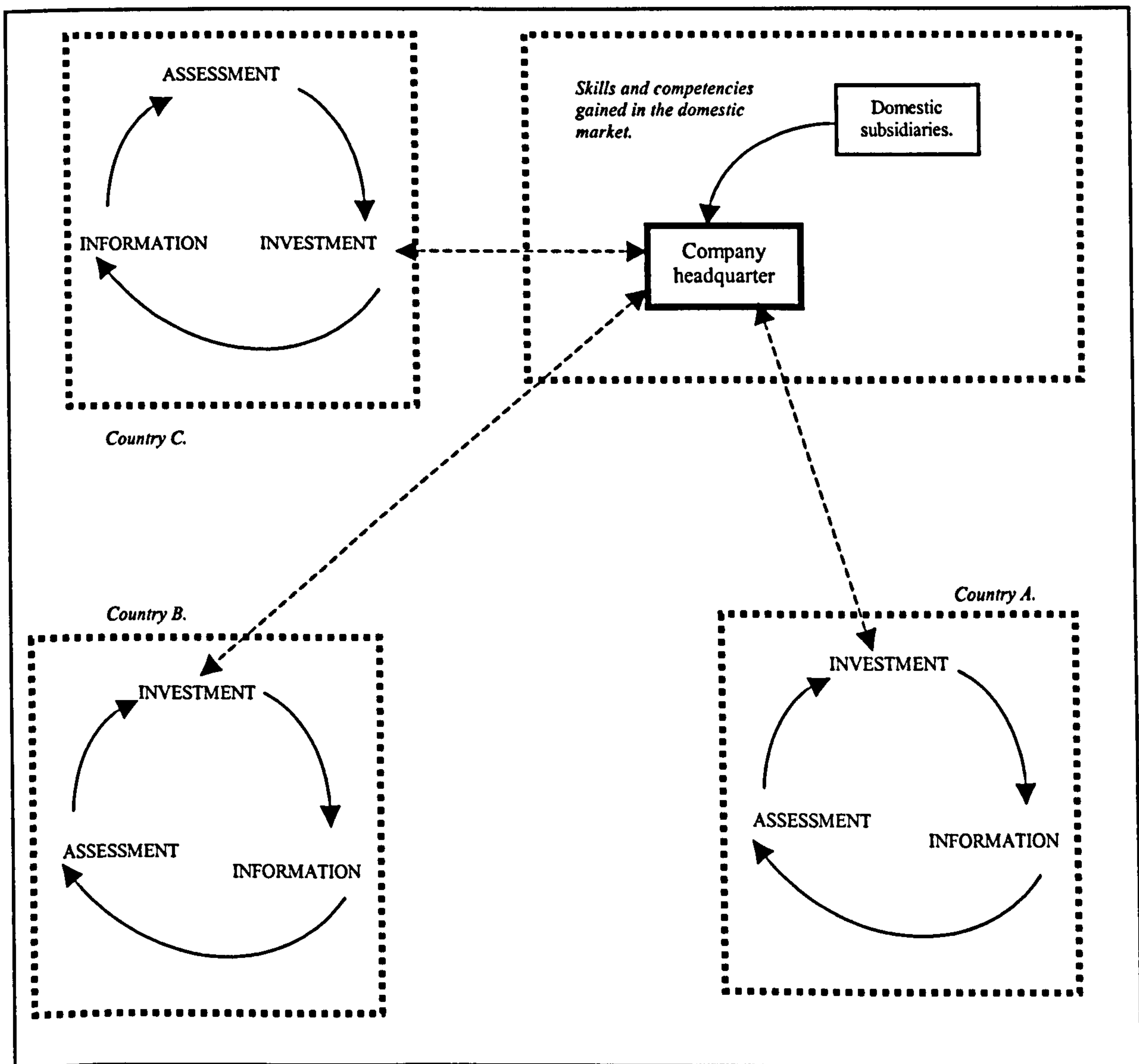
Figure 4.1: Market commitment, information and international investment activity



A company will be able to draw on developments elsewhere in the company only when the knowledge is transferable. Where this is possible, the pace of the gradual commitment process will be accelerated. In the diagram over (Figure 4.2) draws upon its domestic subsidiaries for skills and competencies that are then transferred to its foreign investments.

Within each of the countries the company expands gradually, in accordance with the framework. In addition to financial resources flowing back to the parent company, the foreign subsidiary will also transfer skills, competencies and market specific knowledge back if it is not highly idiosyncratic. The parent company may use this knowledge elsewhere within the company. For example, if countries B and C in Figure 4.2 share common cultural characteristics the parent company may use the local market knowledge gained in country B when investing in country C.

Figure 4.2: Multiple market entry international expansion



4.2.3 Other investigations of RBOCs investment activity.

Within the literature only a handful of commentators are evident that have sought to address the issue of RBOCs strategy development in anything other than an anecdotal manner. The first of these is Kashlak & Koshi (1994) who sought to examine the influence of core

business area regulation on RBOCs strategy. A matrix approach was adopted where the severity of the regulatory environment was judged through state PUCs, whilst changes in the number of access lines were taken as a measure of core business growth. In their analysis Kashlak & Koshi (1994) proposed that the harsher the regulatory environment, and the slower core business growth the greater would be the company's incentive to undergo some form of expansion outside its operating region.

Three different forms of RBOCs expansion were identified: firstly, to elsewhere in the United States in industries where they already operated; secondly, to new markets elsewhere in the United States; and thirdly, to markets outside the United States where they have no prior experience. Of the seven RBOCs three were accurately predicted on both dimensions, three on one dimension and one on neither (see Figure 4.3 below).

Figure 4.3: Predicted versus actual RBOCs diversification

Core business growth	High	Quadrant I	Quadrant II
		<i>Selective international diversification</i>	<i>Limited diversification</i>
		Predicted - US West Actual - US West ²	Predicted - BellSouth, Pacific Telesis Actual - Ameritech ¹ , Pacific Telesis ² , SBC ¹
		Quadrant IV	Quadrant III
		<i>Dual diversification</i>	<i>Selective product diversification</i>
	Low	Predicted - Bell Atlantic Actual - Bell Atlantic ² , NYNEX ¹ , BellSouth	Predicted - Ameritech, NYNEX, SBC Actual -
	Low	High	
	Aggregate regulatory environment		

Notes: 1. One dimension predicted accurately. 2. Both dimensions predicted accurately. Source: Kashlak & Koshi, 1994.

However, several problems exist with Kashlak & Koshi's (1994) examination that collectively detract from the usefulness of the insights generated. One of the most surprising omissions is their failure to mention that other regulatory bodies exist and significantly impact on the RBOCs' ability to conduct business as they see fit. Other regulatory influences on the RBOCs include the FCC as well as the court's administration of consent decrees such as the MFJ. Moreover, the measure of strategy was static and did not take into account those changes that have occurred since the RBOCs began their international investment activity. Measuring internationalisation through the number of countries alone is problematic, not

least because it hides as much information as it reveals. Consequently, a more sophisticated measure of internationalisation is required to further the analysis.

Bagchi-Sen & Das (1995) offer a different perspective on the international investment activity of the RBOCs. After arguing that the recent nature of international investment activity within the telecommunications industry means that its development is not understood, Bagchi-Sen & Das (1995) seek to understand RBOCs developments in this area through the application of Dunning's eclectic paradigm. Although Dunning's eclectic paradigm contains three advantages (ownership, locational and internalisation), Bagchi-Sen & Das (1995) primarily focus on location and observe, "the RBOCs seemed to have sectioned off certain portions of the world among themselves."⁶ In addition, political and economic stability was identified as an important determinant of RBOCs investment. Other than this the impact of geography on the location of RBOCs international investments was not further commented upon.

The main concern with Bagchi-Sen & Das (1995) is that the use of the eclectic paradigm results in developments being identified but not further examined. For instance, three firm specific advantages – capital, technology, and knowledge – are noted but their influence in RBOCs international investment is not developed further. Similarly, although a series of general RBOCs characteristics are noted, for instance, the tendency to invest in association with local company, these are not elaborated upon.

Smith & Zeithaml (1997) adopt a 'garbage can' approach to understanding RBOCs strategy in the increasingly competitive post-divestiture period. A 'garbage can' is defined by Smith & Zeithaml (1997) as areas of chaos within the company where managerial skills and strategy develop on an ad hoc basis in response to environmental changes. One such garbage can is the international investments of the RBOCs.

Drawing upon two unnamed RBOCs it is shown by Smith & Zeithaml (1997) that over the course of the post-divestiture period the international investments change. That is, from being detached from and peripheral to, senior managerial concern to being a source of 'inspiration' for the rest of the company as well as being increasingly focused on certain geographies and lines-of-business. For instance, in one of the RBOCs the actual international investments were managed by a small skeleton staff of ex-patriates. Decisions were made by

⁶ Bagchi-Sen & Das, 1995, pg103.

these staff without the assistance of large support staff. When these ex-patriates returned back to the United States they sought to streamline and quicken the decision making process in the BOCs.⁷

Together Kashlak & Koshi (1994), Bagchi-Sen & Das (1997) and Smith & Zeithaml (1997) draw attention to aspects of the telecommunications environment that need to be considered when investigating RBOCs international investment activity. For example, Smith & Zeithaml (1997) highlight the diversity of markets that the RBOCs initially invested in whereas Bagchi-Sen & Das (1997) assert that the RBOCs have largely concentrated their investment activity in non-overlapping geographies. At the same time, they also demonstrate that failure to include one aspect of the telecommunications industry within the analysis can undermine the overall results. For instance, the failure of Kashlak & Koshi (1994) to recognise the dynamic nature of domestic regulation and the impact that this would have on strategy detracts from the robustness of their findings.

4.2.4 Propositions.

Drawing on the discussion of American telecommunications in Chapter Three, along with that of the analytical framework and the shortcomings of the existing literature on RBOCs international investment activity, a series of propositions can be developed. Broadly speaking these propositions fall into one of four categories: geographical, lines-of-business (operational), organisational and risk. These propositions are, in effect, a series of questions that guide the analysis in the following chapters. A summary of the propositions, and the location of the relevant discussion within the thesis, is presented in Table 4.2 (over).

4.2.4.1 Geographical.

By definition geography is at the heart of international investment activity. The geographical dimension of RBOCs investment activity will be examined through reference to the following propositions:

- International expansion will be initially to those countries with close psychic distance to the United States, and subsequently to those further away.

⁷ Smith & Zeithaml, 1997, pg417.

- International investment will not only be between groups of countries with similar psychic distance from the United States, but also within these groups of countries as well.
- Factors other than psychic distance will influence the location of RBOCs international investment activity.

Table 4.2 Propositions and their corresponding location in the thesis

Proposition	Principal location of discussion within the thesis
<i>Geographical</i>	
• International investment activity occurs initially to closer psychic distance countries, and then to countries further away.	Section 7.2
• International investment activity will occur within groups of countries with similar psychic distances.	Section 7.2
• Factors other than psychic distance influence the location of investment activity.	Section 7.3
<i>Lines-of-business</i>	
• Lines-of-business where investment activity is located changes over time, from where the RBOCs already operate to new markets.	Section 8.3
• International investment activity is used to circumvent domestic regulations that prohibit entry into certain lines-of-business.	Section 8.4
<i>Organisational</i>	
• The organisational form through which international investment activity is affected changes over time.	Section 7.4
• Collaborative ventures will occur whenever the RBOCs are seeking to enter new markets, or wish to gain access to new technologies, skills and competencies that they do not possess.	Section 8.3
<i>Risk</i>	
• Collaborative ventures are used to offset the risk(s) inherent to international investment activity.	Section 7.4
• Investments in newer lines-of-business are associated with greater risks than those in older lines-of-business.	Section 8.3

4.2.4.2 Lines-of-business.

The second dimension of RBOCs international investment activity is that of the lines-of-business in which they have invested.

- That the location of international investment activity will not be constant with time. International investment activity will initially focus on those parts of the telecommunications industry where the RBOCs already operate, and will over time expand into new sectors of the industry.

- That the RBOCs will use their international investment activity as a way to circumvent domestic lines-of-business restrictions to gain long-term competitive advantage.

4.2.4.3 Organisational.

The third category of propositions are concerned with the organisational dimension of RBOCs investment activity.

- The organisational form through which international investment activity is affected shall change over time. Over time the organisational forms of the international investments shall migrate across a continuum typified by Pharmacia above.
- Collaboration with other companies will also occur wherever the RBOCs are seeking to either, enter new markets or where they are seeking access to new technologies, skills and competencies that they presently do not possess.

4.2.4.4 Risk.

The final category of propositions are concerned with the risk associated with RBOCs investment activity.

- Those RBOCs seeking to minimise the risks of international investment activity will favour collaborative arrangements with other companies.
- Greater risk is associated with investment activity in new(er) lines-of-business, and conversely investments in existing lines-of-business involve less risk.

4.3 METHODS.

When deciding on a research method there is a basic choice that needs to be made: phenomenology or positivism. The former is concerned with understanding the meaning of events. In contrast positivism focuses on the provision of numerical information so that relationships – laws – can be determined. As a consequence, the adoption of either will have an important influence on the overall research design chosen.

By equating qualitative methods with phenomenology and quantitative with positivism Easterby-Smith, Thorpe & Lowe (1991) demonstrate the far-reaching consequences of this

choice. Table 4.3 (below) outlines the basic tenets of both positivism and phenomenology. In positivism it is possible not only to measure the external world but also to reduce it to its basic components so that underlying relationships can be identified. Through identifying underlying relationships it is possible to formulate explanatory laws. This necessitates large samples and numerical analysis. In contrast, phenomenology seeks to understand what can be observed through the in depth analysis of a limited sample. In this limited sample a multitude of analytical methods are used to capture the totality of the phenomenon in question.

Table 4.3: Key attributes of positivism and phenomenology

	<i>Positivism</i>	<i>Phenomenology</i>
Basic beliefs:	<ul style="list-style-type: none"> • The world is external. • Observer independent. • Science value-free. 	<ul style="list-style-type: none"> • World socially constructed, and subjective. • Observer part of what observed. • Science driven by human interest.
Researcher should:	<ul style="list-style-type: none"> • Focus on facts. • Look for causality & fundamental laws. • Reduce phenomena to simplest elements. • Formulate hypothesis and test them. 	<ul style="list-style-type: none"> • Focus on meanings. • Try to understand what is happening. • Look at totality of each situation. • Develop ideas through induction.
Preferred methods:	<ul style="list-style-type: none"> • Operationalise concepts so can be measured. • Large samples. 	<ul style="list-style-type: none"> • Multiple methods. • Small samples investigated in depth or over time.

Source: Easterby-Smith, Thorpe & Lowe, 1991, pg27.

For all intents and purpose Easterby-Smith, Thorpe & Lowe (1991) view qualitative and quantitative as polar opposites. However, there are advantages to the use of each of these methodologies. Hence, there is much to be said for combining the totality and focus on meaning of phenomenology with the numerical rigor and hypothesis testing of positivism. As Kinnear & Taylor (1991) argue:

[a] good research design will make sure that the information gathered is consistent with the study objectives and that the data are collected by accurate and economical procedures. There is no standard or idealised research design to guide the research since many different designs may accomplish the same objective.

The research methodology adopted here is qualitative based as it is built around a series of case studies that seek to provide an understanding of the international investment patterns of

the RBOCs. The uniqueness of the RBOCs ideally lends itself to case study based research. The seven RBOCs were all created at the same time and possess a common managerial, organisational and technological heritage through being part of the old Bell system. These case studies provide the necessary information, both numerically and chronologically, to test the theoretical conceptualisation of international investment activity gained from the literature review.

The use of case studies as a research methodology is commented on by Eisenhardt (1989), Easterby-Smith, Thorpe & Lowe (1991), Sarason (1997) and Yin (1994). Eisenhardt (1989) draws attention to three strengths of case study research. Firstly, by reconciling information across different sources, and constantly comparing theory with empirical evidence, it is likely that new theories may emerge. Secondly, it is also likely that the resultant theory will be testable against measurable criteria. And thirdly, the theory is given greater credibility through being grounded in empirical observation.⁸ However, the resulting theory may not be parsimonious through attempting to reflect the totality of the empirical data collected. Alternatively, a theory reflecting case study empirical evidence may be narrow and idiosyncratic.⁹

Notwithstanding these concerns the research methodology adopted here has at its centre case studies. In all seven large scale case studies were undertaken, one for each of the seven RBOCs. In turn each of these seven cases studies were broken down so that individual investments made by the RBOCs could be identified, information collected about each and then analysed. In order to prevent information overload an iterative and structured process of data collection was implemented. The structure of each case study was provided by the series of propositions laid out in Table 4.2 (above). The propositions provide a bridge between the theoretical abstraction of the framework and the phenomena in question. The following sections detail the practical aspects of implementing the chosen case study research method. After detailing the sources of information (Section 4.3.1) the discussion moves onto the unit of analysis (Section 4.3.2) and the methodology as an iterative process (Section 4.3.3).

⁸ Eisenhardt, 1989, pg546f.

⁹ Eisenhardt, 1989, pg547.

4.3.1 Sources of information.

The initial source of information regarding the international investments of the RBOCs was the companies themselves. Each of the seven RBOCs were asked to provide copies of their annual reports from 1984 onwards, as well as any other corporate literature concerning their international investments. The response to the initial request for information was patchy, with some companies providing much more information than others. For instance, in response to the initial enquiry US West provided copies of its annual reports from 1984 onwards, whilst Bell Atlantic provided copies of only the last two years. Repeated requests however managed to rectify this type of discrepancy so that by the end of 1998 complete annual report histories were available for Ameritech, BellSouth, Nynex, SBC and US West. However, for both Bell Atlantic and Pacific Telesis the earlier annual reports could not be obtained even though repeated requests had been made for copies.

Annual reports are effectively summaries of a much larger body of information that public companies are under an obligation to provide to their shareholders. This information is lodged with the Securities and Exchange Commission (SEC) through a series of filings such as 10-K (annual report), 10-Q (quarterly) and 8-K (events likely to have a material effect on the company). Collectively these filings provide more detailed information covering the whole range of RBOCs activities than that provided in the annual reports. As such they complimented and extended the information gleaned from annual reports and other corporate literature.

It is, of course, highly unlikely that the information contained within the annual reports and other corporate literature provided by the RBOCs would cast them in anything other than a favourable light. For all intents and purpose such material is promotional in nature. Moreover, whilst the SEC may place the RBOCs under obligation to provide an accurate and truthful assessment of the state of their business the filings are often opaque in nature, raising as many questions as they answer. Thus, to broaden the diversity of information at hand and to overcome the bias the annual reports, other corporate literature and SEC filings were supplemented by other sources.

A series of reports were obtained from the National Regulatory Research Institute (Columbus, Ohio) covering RBOCs developments in the post-divestiture period. These reports covered a wide range of issues arising from divestiture and the 1996

Telecommunications Act including organisational structure, open network architecture, universal service and early diversification efforts by the RBOCs. Additional sources included the Financial Times and Wall Street Journal, online databases and grey literature obtained from both regulators as well as competitors of the RBOCs.

Telecommunications regulators at both the federal and state levels proved to be a valuable source of information. From the FCC it was possible to obtain a large amount of contextual information relating to the historical development of the RBOCs since 1984 covering issues such as capital expenditure, the digitalisation of their networks and equal access implementation. The FCC also provided comparative information where all operating telecommunications companies were detailed along a similar set of criteria that included geographical location, assets, access lines, net income, telephone company employees and debt levels. Collectively this information allowed profiles of all of the RBOCs, and their twenty-two BOCs, to be compiled for the period 1984 to 1998.

Although the state PUCs had always been part of the RBOCs regulatory regime they came to the fore with the 1996 Telecommunications Act. Through their roles as assessors of RBOCs compliance with the fourteen-point checklist the state PUCs provided one measure of the level of competition facing each of the RBOCs at the state level. Both the FCC and NRRI aggregated this at the national level. To this was added opinions about the level and nature of competition faced by the RBOCs from pressure groups such as UCAN in California, academics, local activists and online discussion groups. As the 1996 Telecommunications Act also gave the FCC a role in shaping the competitive landscape of the industry, their opinion as to the RBOCs compliance with the competitive checklist was also sought. A particularly value was the FCC web-site record of the implementation of the provisions of the 1996 Telecommunications Act, and a listing of all the associated rulings.

The objectives driving the collection of an extensive array of material were twofold. Firstly, an extensive array as possible of material increased the likelihood that all of the international investments of the RBOCs would be identified. This allowed detailed case studies of each of the seven RBOCs to be compiled during the research period. Secondly, the wide scope of material allowed for triangulation between sources enabling not only inaccuracies to be identified and corrected but also biases to be taken into consideration. With respect to the first objective, although the material collected enabled a large number of RBOCs international investments to be identified it is felt that a small minority will have been overlooked. The

principal reason for this shortcoming is the failure to obtain material from the RBOCs and others that comprehensively covered the years immediately after divestiture in 1984.

The triangulation of material collectively acts as a check on the validity of the source and the information therein. As a consequence, the ability to scrutinise one source with another can not only check a tendency to over rely on a limited number of sources, but can also highlight the biases and hidden agendas of sources. The wide array of sources also contributed to the richness of the resulting case studies that were constructed for each of the RBOCs.

4.2.1.1. Interviews.

Once an understanding of the literature on American telecommunications in general, and the RBOCs in particular, had been gained a series of interviews were conducted. The objective of these interviews was twofold. Firstly, to better comprehend developments within the American telecommunications industry. Secondly, to test and extend the understanding gained of RBOCs investment activity.

The interviews took place between Autumn 1997 and Summer 1998. The interviewees fell into one of three categories: telecommunications industry executives, federal and state regulators and academics. A total of 15 interviewees were conducted (6 industry executives, 4 regulators and 5 academics). With respect to telecommunications industry executives the number and nature of the interviews was heavily influenced by the fact that some of the RBOCs were prepared to co-operate, whilst others were not. All but two of the RBOCs refused to formally co-operate and did not grant permission for their employees to be interviewed. Having said this, several employees were prepared to discuss issues relating to the thesis providing this was undertaken confidentially and anonymously. Although these interviews endeavoured to obtain as much information about RBOCs internationalisation as possible, perhaps the principal area where the interview focused was on determining whether the motives for internationalisation elicited from a study of publicly available information were in fact correct.

One consequence of the lack of RBOCs co-operation was that interviews were conducted with non-RBOCs industry executives as well. These executives came from other ILECs as well as CLECs and long-distance carriers. The interviews here covered issues relating to their own companies as well as those more specific to the RBOCs. To encourage a frank and open

discussion it was agreed that these interviews, like those with the RBOCs executives, would be confidential and anonymous. To these interviews were added four with federal and state regulators. The principal focus of these interviews was to ascertain how the RBOCs are viewed by regulators, not only as the providers of local telecommunications services, but also as active international investors as well. In all cases the interviewees stated that their comments were their own and did not necessarily reflect the view of the regulator.

In all five interviewees were conducted with academics. These academics were primarily American, and are experts in the field of telecommunications at Michigan State University, University of Southern Illinois at Edwardsville and Australian National University. These interviews had a somewhat different focus from those undertaken with regulators and industry executives. The focus of these interviews was threefold: to test the analytical framework proposed, to ensure that the understanding of the industry gained was consistent with others and to gain further insight into internationalisation within telecommunications.

Following Easterby-Smith, Thorpe & Lowe (1991) a 'topic guide' of salient issues was prepared before each of the interviews. Some of the issues remained constant across the different types of interviews. For instance, in all cases interviewees were asked to identify those developments/issues within the American telecommunications industry that they felt to be key. As intimated above, other issues were targeted towards certain groups of interviewees. Broadly speaking, interviews with academics focused on the validity of the framework and overarching developments within the telecommunications industry. In contrast, those interviews with regulators concentrated on how the RBOCs are perceived and the tensions that occur as the RBOCs move into other lines-of-business.

In all cases a two-stage approach was adopted. In the first part of the interview general developments were discussed, whilst in the second part the emphasis shifted onto RBOCs specific issues. This allowed the interviewees to relax by talking about developments they were familiar with. A secondary reason for dividing the interview into two sections was to maximise information if the interviewee took exception to talking explicitly about RBOCs centred developments. In other words, if the interviewee left half way through the interview they would have at least provided some information covering general telecommunications developments within the United States.

Throughout the interviews and the use of the information that they provided two caveats were borne in mind. Firstly, that the interviewees may be biased in some way and secondly, that the interviewees lacked sufficient stature within their respective organisations to be aware of all the pertinent facts. Because each of the interviewees brought with them to the interviews their own particular agenda they will be biased in some manner, exaggerating the effect of certain developments whilst downplaying that of others. The compartmentalised nature of university research, companies and regulators alike ensures that interviewees in each of these areas are unlikely to be in possession of the full array of facts and figures. The key to overcoming both of these concerns was the triangulation of information sources. In respect to the first concern, triangulation ensured that the more extreme or speculative comments made were not accepted unless they could be substantiated by other information sources. Similarly, triangulation brought together a variety of information sources so that the incompleteness of one interview could be negated.

4.3.2 The unit of analysis.

In the longitudinal analysis of RBOCs international investment behaviour the unit of analysis is twofold. On the one hand, attention is focused on the individual international investments that the RBOCs have made since 1984, but because these investments can only be understood in a wider context they have also been aggregated at the company level with the result that the unit of analysis here is the RBOCs. This distinction allows a much wider range of observations to inform the discussion at the company level. The distinction between company and individual investments also enables the analysis to be dynamic, as it allows the 'life' of individual investments to be tracked, and turning points in their development noted. Moreover, aggregation at the company level provides the context in which the significance of the investment can be understood.

Focusing on individual international investments, and then determining their relationship to other investments within the company, was also advantageous in another respect as it facilitated the restructuring of the information presented in Chapter Six along thematic lines. The value of adopting a thematic approach is that the resulting analysis highlights not only the inter-relationships present between investments, but also the similarities and differences between each of the RBOCs. That is, a thematic approach helps in the comparison and contrasting of RBOCs investment activity. The thematic approach here is comprised of three

inter-related though separate elements, namely, geography, organisational form and lines-of-business (operational).

When combined with the dynamic longitudinal analysis the result is a richer analysis of the RBOCs. The longitudinal analysis provides an insight into the dynamic nature of international investments, whilst the thematic approach illustrates the inter-relationships that are evident in this activity. Instead of evaluating developments along just one dimension the resulting analysis is multi-dimensional, and as such is consistent with calls by Sullivan (1994), Gomez-Meija & Palich (1997) and Ietto-Gillies (1997) for the multiple criteria analysis of MNEs. Multiple criteria allows for the comparison of investment activity along different measures and the determination of relationships between these criteria. Moreover, the use of multiple criteria provides the opportunity for a more accurate and insightful picture of RBOCs international investment to be developed. Venkatraman & Ramanujam (1986) argue that the determination of investment performance provides an indication as to overall strategy development by, in this case, the RBOCs.

4.3.2.1 The unit of analysis adopted.

In the above discussion it has been implicitly assumed that the company level to which the individual international investments are aggregated to is the seven RBOCs that emerged from the 1984 divestiture. However, the telecommunications industry has not remained constant since 1984. The restructuring that has taken place has complicated the matter of which companies are to be included at the company unit of analysis level.

The number of companies regulated under the MFJ increased to eight when in 1994 Pacific Telesis spun off AirTouch Communications as a separate company. However, the 1997 mergers of Bell Atlantic with Nynex and Pacific Telesis with SBC decreased the number of RBOCs to five. The number of independent RBOCs will be further reduced if the pending merger of SBC and Ameritech is approved by regulators. The question therefore is whether the analysis should aggregate the investment information to reflect the seven RBOCs created in 1984, or those five RBOCs and AirTouch that presently exist at the end of 1998 as independent companies?

In the following chapters both approaches are adopted. In Chapters Five, the domestic strategies of the RBOCs, and Chapter Six, international strategies, the unit of analysis is all

seven of the RBOCs created in 1984. In Chapters Seven and Eight, where the thematic analysis of RBOCs international investment activity is undertaken, the international investments of Bell Atlantic and Nynex are aggregated together as Bell Atlantic for the period 1984 to 1998. Pacific Telesis and SBC are not aggregated together because at the time of the merger between these two RBOCs Pacific Telesis did not have any international investments as these were all divested as part of AirTouch. As a consequence Pacific Telesis is detailed separately from SBC. The unit of analysis for each of the chapters is shown in Table 4.4 below.

Table 4.4: The units of analysis

	Unit of analysis
Chapter Five: RBOCs domestic investment.	Ameritech, Bell Atlantic, BellSouth, Nynex, Pacific Telesis (1984 – 1994), SBC, US West.
Chapter Six: RBOCs international Investment.	Ameritech, Bell Atlantic, BellSouth, Nynex, Pacific Telesis (1984 – 1994), SBC, US West.
Chapter Seven: Geography, risk and the Organisational form.	Ameritech, Bell Atlantic (Bell Atlantic and Nynex combined), BellSouth, Pacific Telesis (1984 – 1994), SBC, US West.
Chapter Eight: Lines-of-business.	Ameritech, Bell Atlantic (Bell Atlantic and Nynex combined), BellSouth, Pacific Telesis (1984 – 1994), SBC, US West

4.3.3 The methodology as an iterative process.

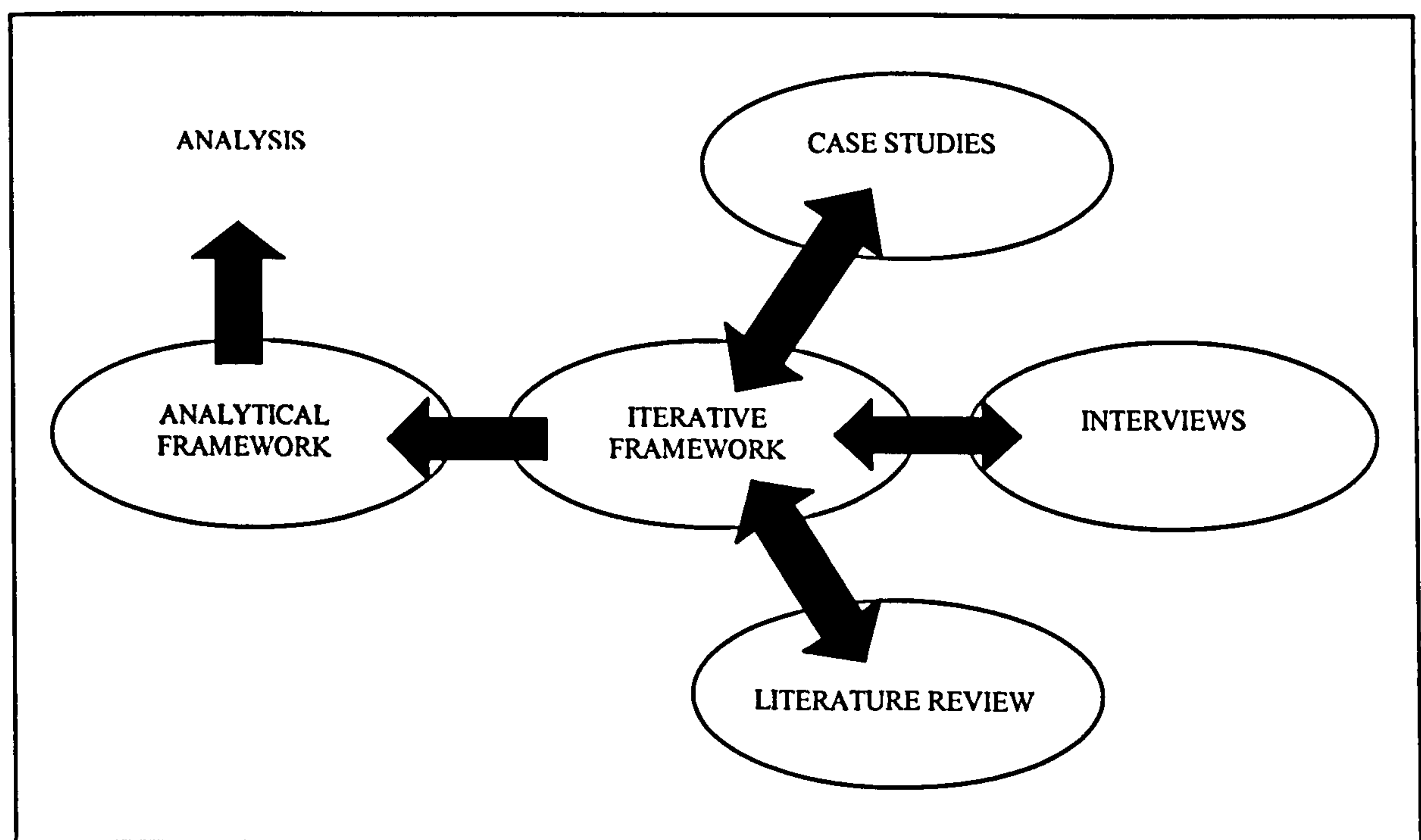
The literature review, RBOCs case studies and interviews were combined through adopting an iterative approach to methodology. The literature review of theoretical perspectives on international investment and MNEs identified the stage or incremental model of Johanson & Vahlne (1977) as being the most appropriate. A case study, US West, was then undertaken to test the insightfulness of their model. The case study revealed that although the model of Johanson & Vahlne’s (1977) model was generally suitable, it could not explain all of the international investment activity entered into by US West. Thus, a gap had been identified between the observable facts and the model at hand.

One aspect not adequately explained by the model was the broad regional clustering of US West’s international investments. This necessitated a rethink of the model proposed by Johanson & Vahlne (1977) so that other analytical elements could be included. In particular, the notions of knowledge asset specificity and information asymmetries were incorporated into the model. The resulting extended model was then tested through another case study,

namely, BellSouth. In a similar fashion to US West this case study highlighted areas where the model was unsatisfactory. Once again the identification of unsatisfactory areas prompted the re-evaluation and refinement of the model. The new version that emerged was then tested through another case study. The process was repeated for all of the remaining RBOCs.

Through repeating the process for all of the RBOCs it was possible to refine the initial theoretical model that was proposed. In doing so the approach adopted was similar to that described by Vaughan (1992) as 'theory elaboration.' Theory elaboration involves the refinement of theory so that it becomes more parsimonious, that is, the circumstances when it does and does not apply are more clearly defined. According to Vaughan (1992), case studies provide a mechanism through which theory elaboration can occur. Here theory elaboration took the form of extending the model of Johanson & Vahlne (1977) with knowledge asset specificity and information asymmetries, and then testing the resulting model through a series of case studies. The end product of this process is the analytical framework laid out in Section 4.2.2 above.

Figure 4.4: Methodology as an iterative process



The iterative approach that was adopted is diagrammatically shown in Figure 4.4 (above). This figure shows how the case studies, interviews and literature review interacted in the course of the model development and analysis. There is, however, another dimension to the methodology adopted. Namely, that the iterative process ensured that knowledge of the nature of RBOCs internationalisation and the suitability of the analytical model proposed was

generated at each stage. The stock of knowledge held in both of these areas at the start of the iterative process was smaller and less sophisticated than that at the end. Moreover, the more sophisticated understanding that resulted highlighted the meaning and significance of particular investments in their broader context. The iterative process was, in other words, hermeneutic in nature. Hermeneutics stresses interpretation and understanding, with Scriven (1991) writing that “it represents an emphasis on ‘seeing events from the inside’, on empathic understanding, on meaning and significance....”¹⁰ The iterative process elevated the importance of individual investments as well as themes / issues within internationalisation, enabling them to be incorporated into the next round of analysis.. In doing so the analysis was focused on the RBOCs, and not driven by theoretical concerns.

The adoption of the iterative process outlined above is important as it helps address the concerns that Yin (1994) draws attention to regarding the validity and reliability of research. According to Yin (1994) there are four tests when judging the quality of a research design. To paraphrase Yin (1994) and Easterby-Smith, Thorpe & Lowe (1991) the research design is the route map that takes the researcher from posing the initial research question to identifying, collecting and then analysing the necessary data so that the research question can be answered. The four tests proposed by Yin (1994) ensure that the route map adopted is appropriate for the research undertaken, and are as follows:

- *Construct validity* – the establishment of correct operational procedures for measuring the concepts being studied.
- *Internal validity* – the establishment of causal relationships, where certain conditions are demonstrated to lead onto others, rather than spurious relationships.
- *External validity* – establishing the domain to which the research’s findings can be generalised.
- *Reliability* – the demonstration that the operations of the study, data collection and so forth, can be repeated with the same results.¹¹

For each of the four tests Yin (1994) suggests ‘tactics’ that can be used to ensure that the research design is a robust one. These are detailed in Table 4.5 (over). At various points in the thesis all four of these tests are touched upon in some shape or form. Given the nature of the propositions outlined in Table 4.2 (above) construct validity is particularly important, with

¹⁰ Scriven, 1991, pg186f.

¹¹ Yin, 1994, pg33.

inappropriate measures undermining the analysis. Table 4.5 (over) lists three ways (tactics) through which this possibility can be forestalled: multiple sources, chains of evidence and review by informants. To varying degrees all three were employed over the course of the analysis. Because of the nature of the interviews conducted, the emphasis was on the former two with the role of informants being correspondingly less.

Table 4.5: Case study tactics for four design tests

Test	Case study tactic	Phase of research in which tactic occurs
Construct validity	<ul style="list-style-type: none"> • Use multiple source of evidence • Establish chain of evidence • Have key informants review draft case study report 	Data collection Data collection Composition
Internal validity	<ul style="list-style-type: none"> • Do pattern matching • Do explanation building • Do time series analysis 	Data analysis Data analysis Data analysis
External validity	<ul style="list-style-type: none"> • Use replication logic in multiple case studies 	Research design
Reliability	<ul style="list-style-type: none"> • Use case study protocol • Develop case study database 	Data collection Data collection

Source: Yin, 1994, pg33.

Central to internal validity are questions that cast doubt on the scope and insightfulness of the research. An illustrative example of such questions would be “have all possible explanations been considered?” The iterative case study approach adopted raised many similar questions that collectively served to cast doubt on the insightfulness of the analytical framework. However, through incorporating the answer(s) to the question(s) raised into the framework it became more insightful, as it was able to identify a greater range of motives for international investment activity than was previously the case.

There are two ways to interpret external validity. The first of these restricts the domain to the telecommunications industry, whilst the second is broader and includes all emerging industries. Included within the group of emerging industries are industries like financial services and airlines. These are industries that until recently were limited to their home national market and, therefore, could not partake in internationalisation. The domain here is defined as including companies and industries with no prior international experience. The domain, therefore, includes both of the aforementioned interpretations. The analytical framework is appropriate for industries outside of telecommunications because it highlights a range of salient features of internationalisation that are common to emerging industries. Namely, a lack of international experience, a changing market environment, market

instability, information asymmetries, market uncertainty and risk aversion by participants within the industry.

Until the research design is repeated it is unknown as to whether the methodology employed here satisfies the reliability test proposed by Yin (1994). That is, can someone unfamiliar with the telecommunications industry and literature on internationalisation take the data collected and framework and produce the same set of results. The framework breaks down the task of analysing internationalisation into a series of steps. This provides guidance for anyone endeavouring to reproduce the study. Similarly, the propositions break down the task of analysing international investment activity into a series of areas corresponding to, for example, risk or geographical dimensions of internationalisation.

4.4 SUMMARY.

This chapter has outlined a framework for examining the international investments of the RBOCs. This framework is based upon Johanson & Vahlne (1977) as it conceptualises international expansion to be a gradual process. The framework extends Johanson & Vahlne (1977) by incorporating the concept of knowledge asset specificity. The expanding company is risk averse due to the presence of psychic distance. Companies reduce psychic distance through acquiring knowledge of the markets they operate in. It is sometimes possible to transfer knowledge from one market to the other. This encourages companies to invest in countries with similar psychic distances. However, knowledge asset specificity means that not all knowledge is transferable. When knowledge cannot be used outside of its originating context it can be said to be highly idiosyncratic.

From this framework a series of propositions – questions – were derived. In order to answer these questions this chapter presented a case study based methodology. This methodology is iterative in nature, and adopts a qualitative approach to the analysis of RBOCs investment activity. The methodology also informs the structure of the proceeding chapters. In the next chapter the domestic strategies of the RBOCs since divestiture are recounted, demonstrating the diversity as well as commonality that can be observed between the seven companies. Chapter Five also provides details relating to the organisational restructuring that has been undertaken, especially in the aftermath of the passage of the 1996 Telecommunications Act.

Chapters Six to Eight detail the international investment activity of the RBOCs, and it is in these chapters that the propositions outlined above are addressed. In Chapter Six the international investment activity of the remaining RBOCs plus Pacific Telesis is recounted, largely on a longitudinal basis. Each of the profiles contained within Chapter Six highlights the geographical and operational scope and scale of the RBOCs' international investment activity. Chapters Seven and Eight recast the information provided within Chapter Six so that hitherto unrecognised linkages between the international investment activity of each of the RBOCs can be brought to the fore.

Chapter Seven examines the relationship between geography and RBOCs international investment activity, investigating the degree to which this has been influenced firstly by psychic distance, and secondly, by the degree to which host markets have been liberalised and are subject to competitive pressures. Psychic distances, and the competitive nature of markets, are used as proxies to ascertain the degree to which international investment activity has been shaped by risk aversion. This theme is continued within Chapter Seven when the organisational form of international investment activity is analysed.

In Chapter Eight a taxonomy of the sectors of the telecommunications industry where the RBOCs have invested is constructed. This is then used to determine whether risk aversion is prevalent within the operational dimension of RBOCs international investment activity as well. Also within Chapter Eight can be found an analysis where the domestic and international operational scopes are compared and attention drawn to those cases where they have used international investment activity to circumvent domestic regulatory prohibitions arising from the MFJ and 1996 Telecommunications Act.

CHAPTER FIVE: RBOCs DOMESTIC INVESTMENT.

5.1 INTRODUCTION.

Since their emergence from the Bell system in 1984 the seven RBOCs have been at the forefront of developments in the American telecommunications industry. The RBOCs have shaped the overarching regulatory framework for the industry through challenging the legality of the MFJ and its replacement, the 1996 Telecommunications Act. The same companies have also been active in the development of new industries such as cellular, and have entered and changed existing markets like cable-TV. Throughout the RBOCs have continued to be the pre-eminent channel for the distribution of local telecommunications services. All things considered the RBOCs have played a fundamental role in shaping the telecommunications landscape of America.

Although each of the RBOCs was previously part of the Bell system, and therefore shared a common technological, managerial and cultural heritage as well as being subject to the same overarching regulatory framework, they have reacted differently to changes within the telecommunications industry. Having said this, it is possible to broadly define three components to the strategies that the RBOCs have enacted since 1984. These three components are geographically delineated into in-region, out-region and international. The first two of these three components are dealt with in this chapter, whilst the third is addressed in chapters six, seven and eight. At first glance this may appear to stand in contradiction to the overall emphasis of the thesis on the *international* investment activity of the seven RBOCs. However, it is necessary to outline the domestic focus of the RBOCs so that subsequent parts of the thesis, primarily Chapter Eight, can comment on the relationship between the domestic and international investment activity displayed. It has been proposed in Chapter Four that the RBOCs have used their overseas expansion as a way to gain access to markets that are foreclosed to them domestically.

This chapter is organised to highlight the changes that are evident within the in-region and out-

region strategies of the RBOCs. This is achieved through a series of RBOCs specific profiles that outline the strategies that the RBOCs have enacted since 1984. The order of the individual RBOCs profiles starts with those that have not been part of industry restructuring, BellSouth and US West. These are then followed by profiles of those RBOCs involved with Bell Atlantic and SBC centred restructuring. The resulting order of the individual RBOCs profiles is as follows: BellSouth, US West Inc., Bell Atlantic, Nynex, Ameritech, SBC Communications and Pacific Telesis Group.

The next section places the RBOCs in context, demonstrating their relative size against other telecommunications through measures such as market capitalisation on both a national and international level. In addition this section illustrates that the principal source of revenues for the RBOCs is their in-region telephone networks operated by the BOCs. The individual RBOCs profiles are then presented. The penultimate section then presents an outline of the Bell related restructuring that has occurred since the advent of the 1996 Telecommunications Act. Conclusions are then drawn in the final section.

5.2 CONTEXT: SIZE AND STRUCTURE OF THE RBOCs.

The 1984 break-up of AT&T, which at the time was the world's largest company with more than \$150bn in assets and nearly one million employees, resulted in the RBOCs being substantial enterprises when they became independent on January 1st 1984. The RBOCs ranged in size from US West with assets of \$14.4bn to BellSouth, which with assets of \$19.7bn was the largest of the RBOCs created by divestiture. The key structural role that the MFJ designated the RBOCs, as providers of local exchange services, has ensured that despite fourteen years of increasing competition, and the passage of the pro-competitive 1996 Telecommunications Act, they remain among the largest providers of telecommunications services within the United States.

Table 5.1 (over) shows the relative size of the RBOCs in the domestic context, but with the increased internationalisation of the telecommunications industry since divestiture it is necessary to place the RBOCs in an international context as well. Table 5.2 (over) details the market value, revenues and net income of the telecommunications industry's largest twenty-five

companies in 1998. This table shows that all of the remaining RBOCs (Ameritech, Bell Atlantic, BellSouth, SBC and US West) are among the largest twenty-five operators in the telecommunications industry. Table 5.2 (over) demonstrates that the RBOCs display considerable diversity, varying along all three criteria.

Table 5.1: The regional Bell operating companies and other American telecommunications companies, March 30 1997

Company	Market value \$m Feb 21 1997	Revenues \$m FYE Dec 31 1996	Net income \$m FYE Dec 31 1996	Customer lines Millions, FYE Dec 31 1996
AT&T	64572.8	52184	5908	-
GTE	46108.3	21339	2798	23.6
BellSouth	46205.4	19040	2863	21.7
MCI Communications	24314	18494	1237	-
Ameritech	35423.5	14917	2134	19.4
Sprint	19046.5	14044	1190	7.1
SBC Communications	34257.8	13898	2101	14.6
Nynex	22973.9	13508	1477	17.5
Bell Atlantic	30643.8	13081	1881	20.1
US West Communications ¹	17057.8	10079	1249	15.1
Pacific Telesis	17454.2	9588.0	1142	16.2
Alltel	6565	3192.4	291.7	1.6
Frontier	3518.8	2576.6	217.9	0.9
Citizens	-	1307	85	0.8
SNET ²	-	-	-	c2.1
TDS	-	-	-	0.5

Notes: 1. US West Communications Group is the telecommunications subsidiary of US West Inc, a separately quoted stock tracks non-BOC activities. 2 Southern New England Telecommunications. Source: Business Week (1997a); Global Telecoms Business (1996a); various annual reports: FCC (1997c).

Table 5.2: The world's largest twenty-five telecommunications companies, 1998¹

Company (American unless stated)	Market value \$bn	Revenues \$bn	Net income \$m
Nippon Telegraph & Telephone (Japan)	130.91	63.66	1081
AT&T	98.89	51.31	4472
Deutsche Telekom (Germany)	73.64	37.81	1853
SBC Communications ²	71.49	24.85	1474
Bell Atlantic ³	71.12	30.19	2455
British Telecommunications (UK)	66.26	25.50	3307
BellSouth	63.86	20.56	3270
GTE	56.13	23.26	2794
France Telecom (France)	56.01	26.19	2484
Telecom Italia (Italy)	51.30	24.37	1963
WorldCom	46.96	7.35	384
Ameritech	46.56	15.99	2296
Telefonica (Spain)	45.85	15.61	1256
TIM (Italy) ⁴	44.94	5.38	885
MCI Communications	38.73	19.65	149
Vodafone (UK)	33.75	2.85	593
Sprint	30.94	14.87	953
Telstra (Australia)	30.28	9.66	1608
BCE (Canada)	29.42	22.81	972
AirTouch Communications	27.26	3.59	448
Koninklijke PTT Nederland (Netherlands)	26.42	7.59	1339
Cable & Wireless (UK)	25.60	11.41	1194
US West	24.61	10.31	1180
MediaOne Group ⁵	22.56	5.04	-480
Singapore Telecommunications (Singapore)	21.50	2.95	1127

Notes: 1. Excludes companies listed in 'emerging markets' such as Brazil, Taiwan and Mexico. 2. Acquired Pacific Telesis 1997. 3. Acquired Nynex 1997. 4. TIM is a quoted subsidiary of Telecom Italia. 5. Formerly US West Media Group, and divested from US West in 1998. Source: Business Week, 1998b.

5.2.1 Organisational structure.

Due to the Computer 2 Enquiry, MFJ and the 1996 Telecommunications Act the RBOCs are organised as holding companies. Each of these regulatory requirements draw a distinction between those lines-of-business which are regulated as part of the local telephone companies, and those which are not. Furthermore, these requirements also structurally separate selected business activities where cross-subsidisation in some form would be anti-competitive. One particular concern was the cross leveraging of common assets such as databases. For instance, the 1996 Telecommunications Act structurally separates RBOCs in-region long distance subsidiaries from their BOCs.

According to Bonbright & Means (1932), and Tucker (1938) the exercise of control, especially hierarchically, is the key characteristic of a holding company. The 1935 Public Utility Act defines a holding company as:

...any company which exercises a voting control over as much as 10 percent of the outstanding securities of a public utility or which is found, after notice and hearing, to exercise a controlling influence over the management and policies of such a public utility.¹

From Bonbright & Means (1932) it is possible to identify several advantages of holding companies compared to other forms of organisational governance:

- Holding companies allow companies to be combined with one another in circumstances where an outright merger is not possible.
- Holding companies enable the subsidiaries to be run as separate entities, with distinct brands and investment strategies. This can be used to perpetuate the illusion of competition under common ownership.
- Financial evaluations of subsidiary performance can be complicated by the removal of accounts to the holding company. Furthermore, accounting systems can be manipulated so that overall holding company profits can be maximised.
- Through the location of the holding company out of state the ability of state regulators to ascertain local profitability is impeded. Thus, regulation of utilities becomes more difficult.
- Holding companies can also be used to facilitate decentralisation, and thus allow for decisions to be taken by those closest to the marketplace. In addition, holding companies also allow subsidiaries to be divested far more readily than if they were integrated within other group companies.²

Chessler, Clark & Ferng (1986) and Rosenberg, Borrows, Hunt, Samarajiva & Pollard (1993) examine the organisational structure of the RBOCs. Chessler, Clark & Ferng (1986) express that surprise was felt in the aftermath of divestiture that the RBOCs had adopted a complex organisational structure given that they and AT&T had opposed previous regulatory efforts to

¹ Tucker, 1938, pg429.

² See Bonbright & Means (1932) for a fuller discussion of the forms of organisation's advantages.

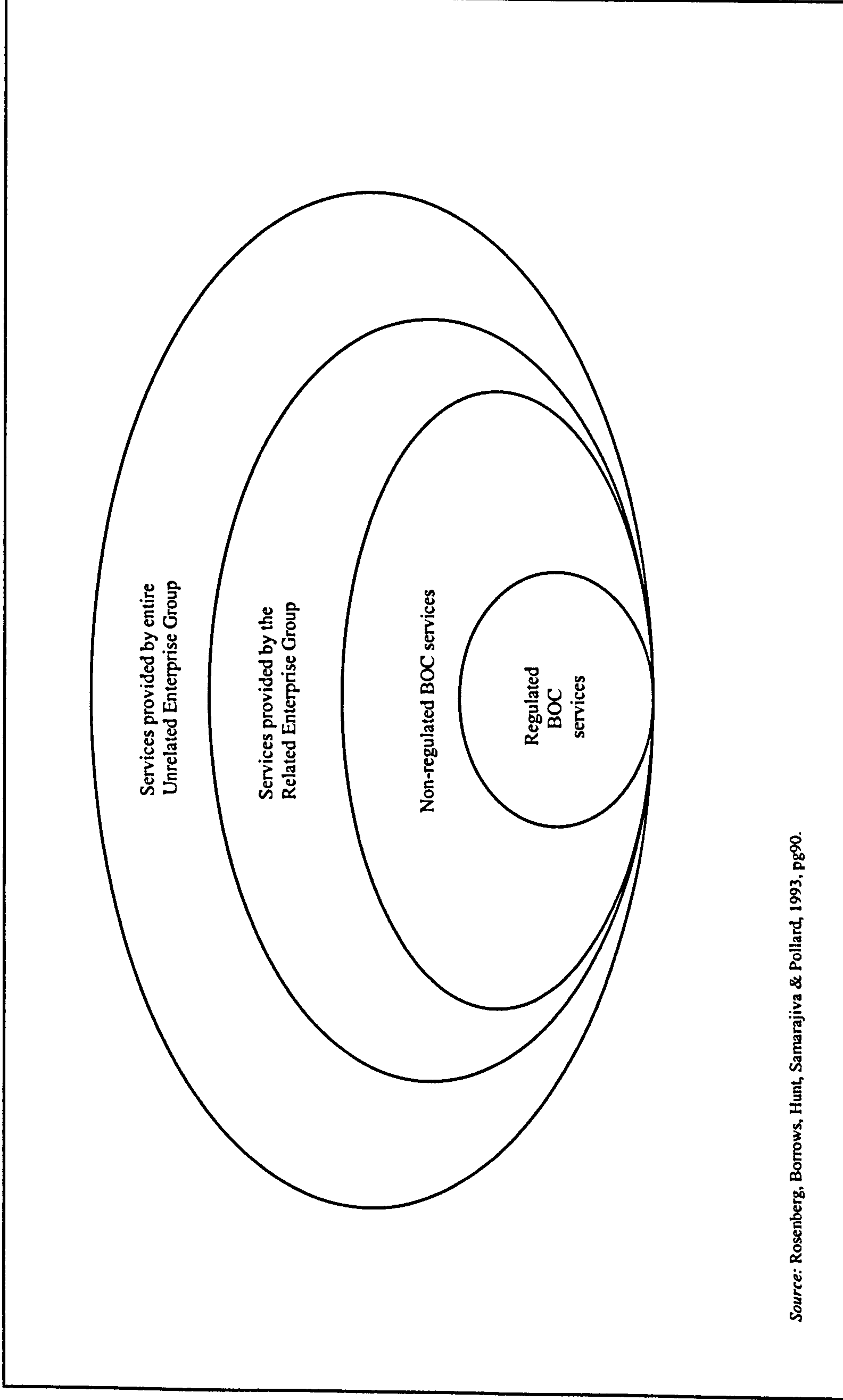
impose structural separation. The structural arrangements adopted effectively divided the RBOCs into two components; the former BOCs and their support or services functions, and the non-BOCs activities such as directory publishing, cellular and diversification investments. From the standpoint of facilitating regulation the complex arrangements enacted are further investigated by Rosenberg, Borrows, Hunt, Samarajiva & Pollard (1993), who refine the BOC / non-BOC (or germane / non-germane in their terminology) division into a four-tier generic classification as shown over in Figure 5.1.

This refined classification of RBOCs activities has at its centre the regulated BOC activities, which are surrounded in turn by non-regulated BOC activities, services provided by the related enterprise group and services provided by the entire unrelated enterprise group.³ Through applying this classification to the RBOCs some of the problems implicit to the use of holding companies are highlighted. The regulatory concerns expressed largely correspond to the converse of the aforementioned advantages of Bonbright & Means (1932). A non-exhaustive list of concerns include changes to the cost of capital arising from non-BOC investment, difficulties arising from the lack of account and other information transparency, the ability to experiment and diversify into new markets, and circumvent LOBs through overseas expansion.

This four-tier generic classification exposes the practical impact of adopting a holding company structure on the RBOCs, an impact that can be shown through reference to any one of the seven companies divested. For example, in the case of Nynex the inner two areas of regulated and non-regulated BOCs activities correspond to the RBOCs' two BOCs, Nynex New England and Nynex New York. The related enterprise group is comprised of Nynex's BOCs service company, Telesector Resources Group Inc, as well as its cellular and other related activities such as customer premises equipment (CPE). In the unrelated enterprise group are all of Nynex's non-telecommunications investments, such as financial services credit and computer software. Both Nynex's directory publishing and international operations can be assigned to more than one of the categories. Under the logic of divestiture, directory publishing should be included within the regulated enterprise group, but instead are often found in the related enterprise group. Depending on the nature of the international investments these may be in either of the related or unrelated enterprise groups.

³ Rosenberg, Borrows, Hunt, Saramajiva & Pollard, 1993, pg90.

Figure 5.1: Generic holding company service categories



Source: Rosenberg, Borrows, Hunt, Samarajiva & Pollard, 1993, pg90.

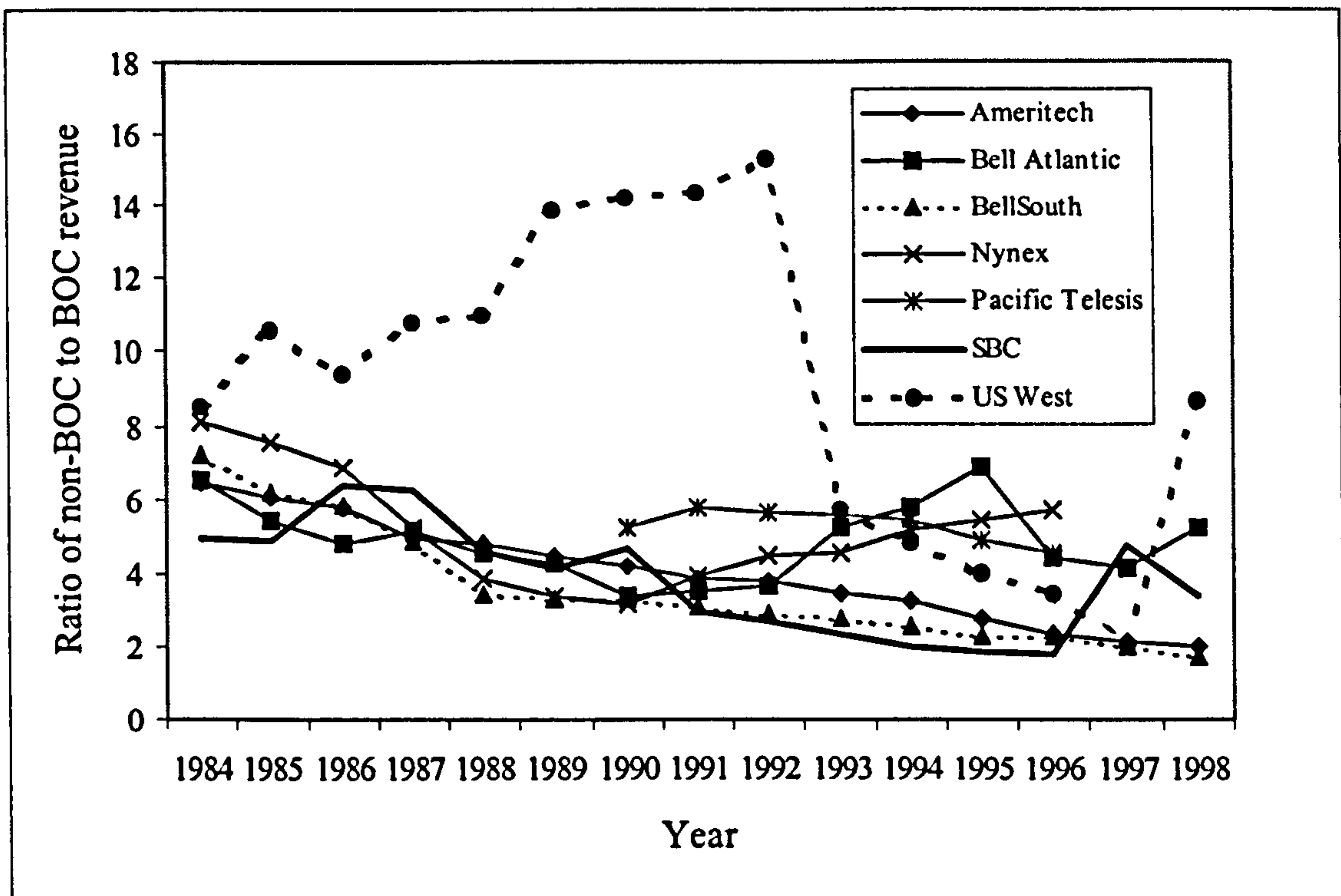
5.2.2 Revenue structure.

In their analysis of RBOCs structure Rosenberg, Borrows, Hunt, Samarajiva & Pollard (1993) highlight the role of the BOCs as the provider of the majority of revenues. However, little in the way of substantiation is offered to support this assertion. Having said this, a close examination of the RBOCs posted accounts provides one avenue through which the sources of revenues can be identified. The published accounts of the RBOCs de-aggregate the overall revenue figure into:

1. Those generated by the BOCs, through local service, network access, intra-LATA long distance and other BOC activities.
2. Those revenues from non-BOC activities such as cellular, directory publishing and other sources. In this context other revenue sources include sources such as, realised gains from the sale of investments and interest income.

The Figure 5.2 (over) shows that even though the RBOCs have diversified their revenue sources they are reliant on the BOCs for the majority of their revenue, and by extension of income. As illustrated the general trend since divestiture has been of a decline in the contribution of BOC generated revenue to overall revenue levels. There are, however, significant differences in how this decline has been manifested, with the most dramatic being that of US West. The reversal of the declining share of revenue accounted for by non-BOCs activity in the case of US West was due to accounting changes as well as the creation of a separately traded company containing all of the non-BOCs investments. The changes increased transparency and more faithfully revealed the percentage of revenues derived from the BOCs.

Figure 5.2: RBOCs revenue sources



Source: various annual reports from each of the RBOCs.

In the case of Nynex fluctuations to the decline are due to the RBOCs reversing its diversification strategy and concentrating its investments in-region. During 1993 and 1994 Nynex sold many of its diversification investments, both within the United States and abroad, and merged Nynex Mobile Communications with its Bell Atlantic counterpart. Collectively these actions considerably reduced Nynex's non-BOCs revenues. However, both Nynex and US West are exceptions that prove the rule. Over the course of the divestiture period the RBOCs have generated a steadily increasing proportion of their revenues from non-BOCs lines-of-business.

5.3 BELLSOUTH CORPORATION.

At divestiture BellSouth was not only the largest of the seven RBOCs, but it also was the most profitable with a five-year return on equity of twelve percent.⁴ BellSouth was also considered to be one of the most technologically orientated of all the RBOCs, and was labelled "futuristic" by O'Reilly (1983). Gannes (1989) and Ticer (1988) reiterate the technological orientation of

⁴ O'Reilly, 1983, pg63.

BellSouth. In the post divestiture period BellSouth has articulated a three-pronged strategy, focusing investment on local telephone services, wireless communications and international opportunities. Although evident from the late 1980s onwards, this three pronged strategy has only recently been formalised in the 1996 Annual Report:

The South. BellSouth's first core strategy is to strengthen our position as the South's premier communications company....

Domestic Wireless. Our strategy in the booming US marketplace for wireless communications is to continue to grow our operations profitably, with emphasis on expanding BellSouth's already strong "footprint" of wireless coverage in the South.

International. BellSouth's international strategy is to continue to grow our existing operations and expand into new markets and related network services.⁵

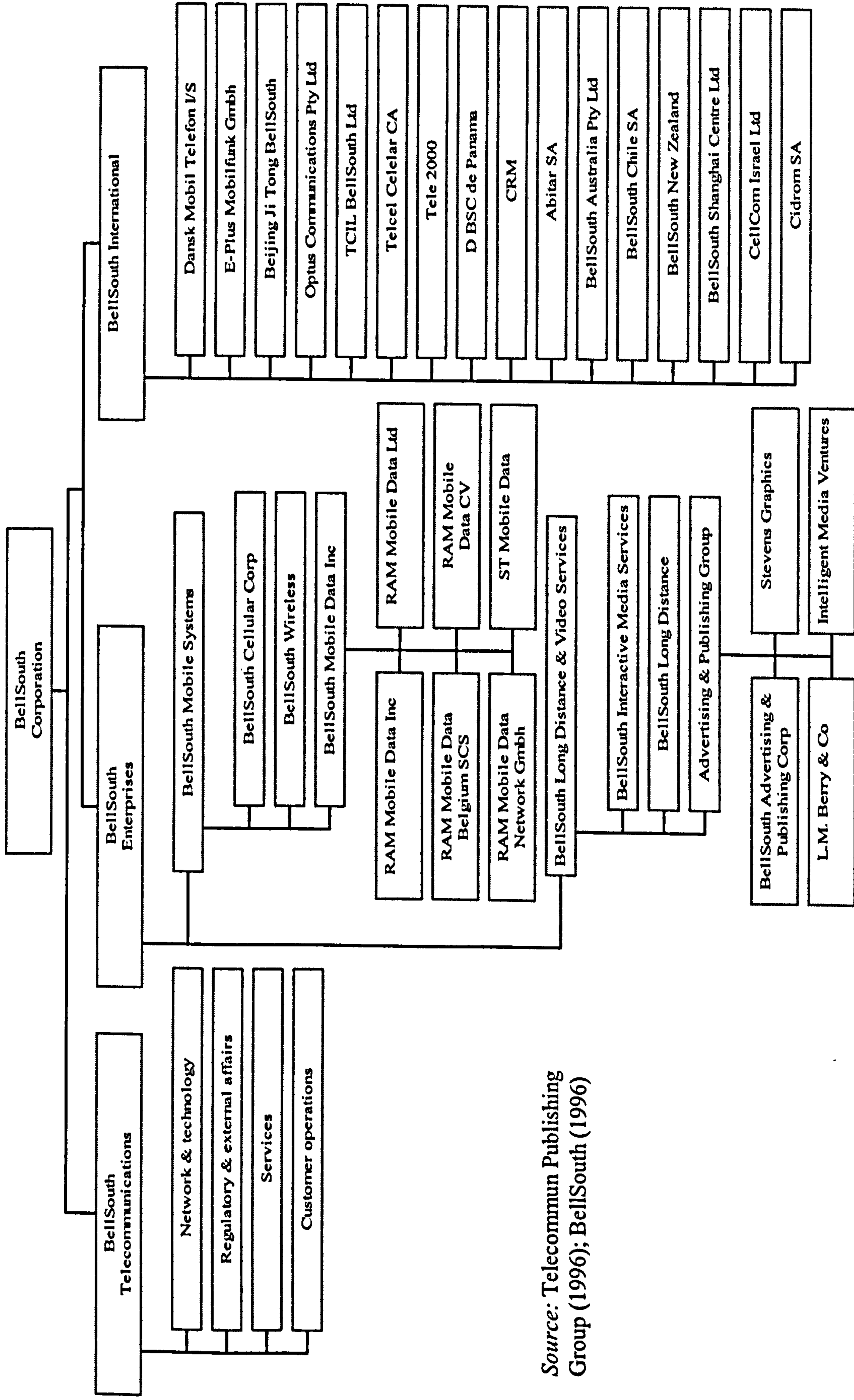
Despite the illusion to forward looking and technological orientation that is suggested, a common strand to BellSouth strategy since divestiture has been one of caution. Chessler, Clark & Ferng (1986) state that BellSouth has adopted a conservative approach to the development of non-BOCs subsidiaries, preferring instead to focus on in-region developments. In-region is a theme common to two of the three aforementioned strategies. Ward (1995) states that BellSouth lacks ambition, whilst Maney (1995) argues that whilst the company has proved to be capable of becoming a significant cellular operator it has not showed the same enthusiasm in new technology areas such as multimedia. Clendenin, the Chairman & Chief Executive Officer (CEO) of BellSouth between 1984 and 1996, stated that "care and caution – that's been our style of management."⁶

The remainder of this section is structured to reflect the emphasis evident within the post-divestiture strategies of BellSouth. The following sections are organised chronologically to reflect when the strategy became significant to the RBOCs. Since 1984 BellSouth has stressed

⁵ BellSouth, 1996c, pg26f.

⁶ Telecom Publishing Group, 1996.

Figure 5.3: BellSouth Corporation organisational structure



Source: Telecommun Publishing Group (1996); BellSouth (1996)

the pivotal role played by local telephone services within the RBOCs this is dealt with first. Next, the directory publishing strategies enacted are recounted. The majority of BellSouth's investment activity has been focused towards the wireless sector, with successive investments in the cellular, paging and mobile data markets. These investments occur both within and out-side the nine-state territory of BellSouth. A conclusion is then drawn in the final section.

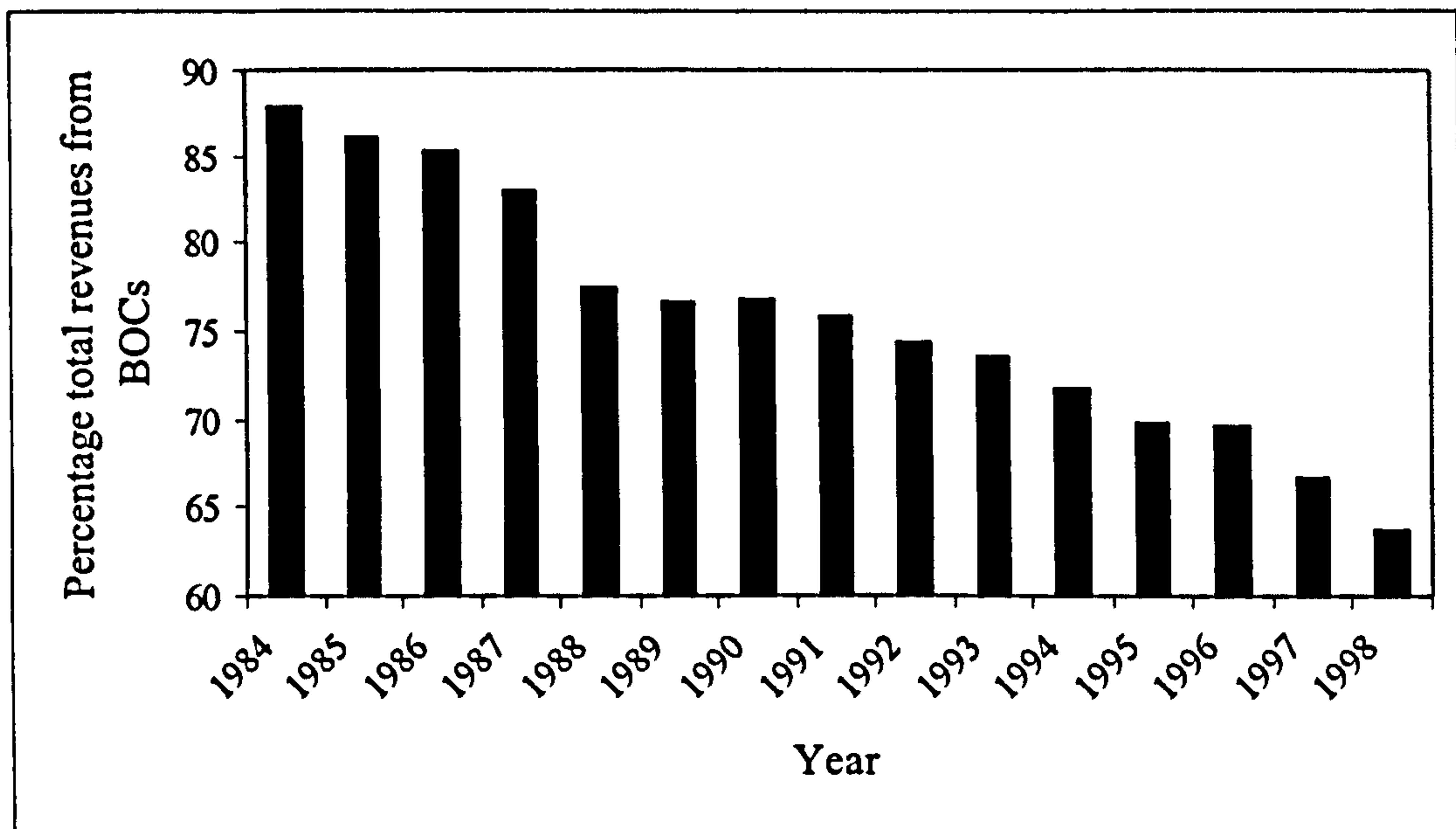
5.3.1 In-region.

Throughout the post divestiture period local telephone services have remained the principal, but declining, source of revenues for BellSouth (see Figure 5.4 over). The role of the BOCs in underpinning revenue and net income growth is frequently alluded to in the company's annual reports.

Immediately on divestiture the local telephone services of BellSouth were provided through three companies, the two BOCs of South Central Bell Telephone Company and Southern Bell, and the services support company of BellSouth Services.⁷ The two BOCs provide local telephone services throughout the southeastern United States nine state region of Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee. In addition the BOCs jointly own BellSouth Services. The formal organisational structure of BellSouth remained constant until 1991 when BellSouth merged South Central Bell Telephone Company and Southern Bell with BellSouth Services to form BellSouth Telecommunications (BST). The formal merger completed a gradual centralisation process that had been initiated in 1987 to enhance efficiency in the provision of certain activities that transcended BOCs jurisdictions. BST then became one of the two second tier holding companies beneath BellSouth. The second of these holding companies is BellSouth Enterprises, which is responsible for managing all of the other investments of BellSouth.

⁷ BellSouth, 1985, pg18.

Figure 5.4: Local telephone service revenues as a declining proportion of BellSouth revenue, 1984 – 1997



Source: various annual reports; BellSouth, 1993b, 1995a, 1996a, 1997c & 1998d.

For all intense and purpose BellSouth has adopted a technological deterministic stance towards its in-region network, asserting in 1991 that “technology boosts revenue, saves expenses.”⁸ In corporate publications BellSouth has repeatedly argued that through continued capital expenditure focused on the local telephone network the company is positioning itself for future developments within the telecommunications industry. As shown in Table 5.3 (over) BellSouth has out-spent the other RBOCs in terms of capital expenditure, spending more than \$20bn on its businesses between 1984 and 1996.

The impact of technological determinism can be observed in two areas in particular; on new service development and productivity. With regards to new service development BellSouth has argued that through continued network investment the company is able to innovate and deliver the new services required by customers. From 1984 onwards the BOCs have expanded the range of services offered, introducing over the years features, introducing voice mailboxes in 1992 and BusyConnect in 1997. Between 1995 and 1997 revenue from advanced and vertically

⁸ BellSouth, 1991, pg17.

integrated services grew from \$773m to \$1.3bn.⁹

Table 5.3: RBOCs network feature and productivity differences

Company	Telephone company employees	Cumulative capital expenditure 1984 - 1996 \$m	Access lines / employee	% digital lines (1996)	ISSN capable switches (1995)
Ametech	51415	12068	371.49	74	489
Bell Atlantic	57823	15857	342.42	75	671
BellSouth	68585	21054	307.65	76.2	467
Pacific Telesis	64107	11274	288.58	81.6	259
Nynex	47800	15004	330.54	65	417
SBC	48440	11216	293.15	50	303
US West	47934	15321	308.76	62.8	262

Source: Argus Research Corporation, 1996; Global Telecoms Business, 1996c; FCC, 1997b; Kraushaar, 1995 & 1997b.

In relation to network productivity 1993 is a pivotal year. Although productivity slowly improved after divestiture it was only after 1993 that substantial gains were made, with the number of access lines per telephone company employee rapidly increasing to just more than 400 in 1997. The number of telephone company employees has declined from 1988 onwards, but more rapidly so since 1994.

In 1990 BellSouth became the largest telephone company within the United States, and has remained so ever since so that by 1997 the BST had 23.2m access lines in service. The company was also the first to add 1m additional lines in a year, and the first to have more than 20m in services.

5.3.2 Directory publishing.

In many respects the strategy adopted by BellSouth Advertising & Publishing Corporation (BAPCO) since divestiture epitomises that adopted by the group as a whole. That is, with technology, geographical expansion and new service innovation all feature prominently.

⁹ BellSouth, 1995b, pg8; BellSouth, 1997a, pg22.

Immediately in the aftermath of divestiture BAPCO expanded into two new markets, the publication of specialist directories, that is, directories other than Yellow and White pages, and into directory services provision for non-affiliated telephone companies.¹⁰ Initially these non-affiliated telephone companies were in-region, and thus signify a desire on the part of BAPCO to consolidate its position in the Southeast of the United States. In 1985 BAPCO expanded out-region through establishing BellSouth National Publishing to provide directory services to non-affiliated companies out-region. BAPCO also acquired Stevens Graphics and TechSouth to gain additional printing and graphics competencies, and published the company's first specialised directory, *The Florida Industrial Pages*.¹¹ In 1986 BAPCO acquired L.M. Berry & Company, a specialist directory advertising company, and published its first out-region specialist directory.¹²

This pattern of geographical expansion, new service development and new technology is common throughout the remainder of the post-divestiture period. From 1989 onwards BAPCO has steadily increased the number of directories it provides for non-affiliated companies. For example, in 1993 BAPCO published 400 directories for 160 non-affiliated telephone companies, whilst in 1997 the company published a total of 500 directories for 125 non-affiliated telephone companies.¹³ Contracts with non-affiliated telephone companies BAPCO has facilitated the expansion of the company out-region, with the number of states where the company and its various subsidiaries operate reaching 39 by 1993.¹⁴

Technological advances, especially in areas such as the automation of directory compilation, have played a significant role in the development of BAPCO. Technological advances have enabled BAPCO to innovate new services, thereby providing more specialist directories that are available in an increasingly wider array of formats. As stated by Perozzi, President of BAPCO:

¹⁰ Chessler, Clark & Ferng, 1986, pg62f.

¹¹ BellSouth, 1985, pg23.

¹² BellSouth, 1986, pg20, 22, 28.

¹³ BellSouth, 1993b, pg8; BellSouth, 1997c, pg10.

¹⁴ BellSouth, 1993a, pg1.

By staying on the cutting edge of technology, BellSouth is creatively developing new ways to supply consumers and businesses with the most advanced information services available.¹⁵

Thus, it is no surprise that directory diversity has continued apace. In recent years BAPCO has developed specialist directories, such as BellSouth Guia Export Guide or BellSouth Home Improvement Guide, that seek to “connect customers with the appropriate advertisers.” Continued investment in new technologies has allowed for additional features to be included within directories, for instance, subject index, headings and advertiser promotional coupons have all been incorporated within directories. Perhaps of greater long term significance is that new technologies have broadened the array of distribution channels available to BAPCO. Consequently, directories are no longer just available in paper format, but digitally (CD-ROM and electronic databases) as well.¹⁶

5.3.3 Wireless investments.

Table 5.4 (over) presents a summary of the significant investments that BellSouth has entered into during the course of its expansion into the wireless market. The table shows BellSouth has invested in three different types of wireless markets: cellular, paging and mobile data. From divestiture onwards BellSouth has expanded its cellular investments, increasing the number of systems operated both in and out-region. In addition BellSouth has also been active in the paging market, creating in the process one of the largest operators until this business was sold in 1996. Finally, and more recently, BellSouth has entered the mobile data market.

¹⁵ Bell Atlantic Advertising & Publishing Corporation, 1998a.

¹⁶ Bell Atlantic, 1997c, pg15.

Table 5.4: Significant wireless investments of BellSouth, 1984 – 1998

Investment	Market			Significance
	Cellular	Paging	Mobile data	
American Cellular Corporation (1986)	✓			Out-region expansion.
MCCA (1989)	✓	✓		Consolidation of previous investment, increased subscribers.
Graphics Scanning (1990)	✓	✓		In-region expansion.
CellTelCo		✓		Out-region expansion.
Cellular system exchanges with GTE (1991)	✓			In-region expansion.
Acquisition of McCaw systems out-region (1991)	✓			Creation of larger systems clusters.
RAM Mobile Data Inc (1992)			✓	Entry into mobile data market. Minority investment.
PCS 'A' auction (1995)	✓			In-region expansion, new services.
PCS 'D & E' auction (1997)	✓			In-region expansion, expansion into markets adjacent to 9 state territory.
United States Cellular Corporation asset swap (1997)	✓			In-region expansion, increased ownership in existing joint-ventures.
Pagemart Wireless Inc (1998)		✓		Paging reselling.
RAM Mobile Data Inc. (1998)			✓	Out-right control of mobile data subsidiary.

The success of BellSouth, especially in the cellular market, has elevated the role played by the company's wireless investments. Noda & Bower (1996) show how the better than anticipated early success of BellSouth in-region encouraged the company to expand its cellular business out-region, and that past success reassured senior management concerned about the risks inherent to such an expansionist strategy. Over time wireless – primarily cellular, and subsequently mobile data as well – came to the fore, so that by 1993 company publications are describing wireless as one of the principal avenues through which the company will continue to grow in the future.

5.3.3.1 Cellular.

In May 1984 BellSouth Mobility Inc. (BMI) launched cellular services in-region in Miami/Fort Lauderdale, and by the end of 1985 a total of twelve systems were in operation.¹⁷ The following year witnessed the initiation of dual expansion strategy by BMI. On the one hand BMI sought to expand its in-region coverage through roaming agreements with other cellular companies, whilst on the other hand the company also sought to expand out-region. With respect to the second strategy, in late 1986 BellSouth invested \$100m to acquire 50% of American Cellular Corporation, a subsidiary of Mobile Communications Corporation of America (MCCA).¹⁸ American Cellular Corporation had interests in cellular companies across the United States in Los Angeles, Houston, Milwaukee, Indianapolis, Richmond, Mobile, Jackson, and Bakersfield.¹⁹

Two years later in February 1988 BellSouth acquired MCCA for \$710m, gaining in the process outright control of the American Cellular Corporation. The combination of the acquisition of MCCA, and strong growth of existing operations, more than doubled the number of cellular subscribers, which rose from 205,000 in 1988 to 407,000 in 1989.²⁰ Furthermore, the acquisition also consolidated the out-region presence of BellSouth that the investment in American Cellular Corporation had begun.

In 1989 BellSouth moved to further expand its cellular business by proposing to merge BMI with LIN Broadcasting Corporation in return for 50% of the combined company, and the option to buy another 25% within six years.²¹ In addition LIN shareholders would receive a \$1.3bn

¹⁷ BellSouth Cellular Corporation, 1998a; BellSouth, 1985, pg24.

¹⁸ BellSouth Cellular Corporation, 1998a.

¹⁹ BellSouth Cellular Corporation, 1998 a.

²⁰ BellSouth, 1990, pg28.

²¹ Gannes, 1989, pg46.

special dividend.²² The attraction to BellSouth of LIN Broadcasting was not only that the company was profitable, but also that it had all of its systems within the top ten American markets.²³ When combined with MCCA, BellSouth would own half of a national cellular company with a significant presence in the largest metropolitan markets.

However, shortly after the merger was announced McCaw Cellular Communications Inc. made a counter offer of \$127.5 in cash and stock for LIN Broadcasting. LIN management rejected this bid, arguing along with BellSouth, that the merger with the RBOCs and the special dividend were of greater value in the long run. In the ensuing battle for control of LIN Broadcasting both sides increased their bids. BellSouth increased the cash component of its bid to \$42 a share, and proposed to spin off the broadcasting businesses of LIN to shareholders, whilst McCaw offered \$110 and then \$125 in cash for all of LIN Broadcasting.²⁴ The increased cash bid from McCaw valued LIN at \$6.7bn.

BellSouth failed to acquire LIN Broadcasting Corporation. In December 1989 BellSouth terminated the merger agreement, primarily because it was unprepared to outbid McCaw. As explained in the 1989 Annual Report:

LIN accepted an alternative proposal, and we received one-time payments totalling \$89 million from the termination of our agreement. Our aggressive but prudent initiatives in our dealings with LIN helped focus attention on the value and excellent management of BellSouth's own cellular properties. We also demonstrated that BellSouth will pursue imaginative approaches to new business opportunities and that we will act quickly and decisively. Although our owners' expectations would not have been well served by further enhancing our proposed transaction with LIN, we remain committed to the

²² Keller, Hawkins & Hof, 1989, pg31.

²³ Keller, Hawkins & Hof, 1989, pg31.

²⁴ Hawkins & Hof, 1989, pg30; Keller, Hawkins & Hof, 1989, pg31.

cellular business worldwide.²⁵

That is, BellSouth was unwilling to offer more than McCaw as it would be detrimental to the interests of its shareholders. The failure to acquire LIN marks a pivotal point in the development of BMI. After 1989 BellSouth has ignored large-scale M&A activity, favouring instead smaller bolt-on acquisitions and joint-ventures to achieve its expansionary plans. Furthermore, the failure to merge with LIN BellSouth largely curtailed the expansion of BMI out-region. Instead BellSouth focused on the development of its existing out-region businesses on the one hand, as well as the development of opportunities in or adjacent to its nine-state region. In December 1990 the acquisition of Graphics Scanning, a cellular and paging company, for \$180m extended BMI coverage in-region, whilst a series of small purchases in 1991 extended service coverage in markets both within and adjacent to existing cellular systems.²⁶

Between 1991 and 1998 BellSouth has continued to expand the geographical scope of service coverage. The 1995 FCC auction of personal communication service (PCS) licenses provided an opportunity for BellSouth to continue to expand its service coverage. In the auction BellSouth acquired two PCS licenses, one covering North and South Carolina and another covering eastern Tennessee. The former of these licenses is a joint-venture, whilst the latter is wholly owned, and together they extended the potential market for BMI by 7.6m customers.²⁷ PCS is not provided by BMI, but by BellSouth Mobility DSC instead. BellSouth gained 37 licenses in the January 1997 auction by the FCC that coverage both in and adjacent to its nine-state territory was expanded. BMI further consolidated its position in-region in November 1997 when it agreed to exchange with United States Cellular Corporation its cellular systems in Wisconsin and

²⁵ BellSouth, 1989, pgl.

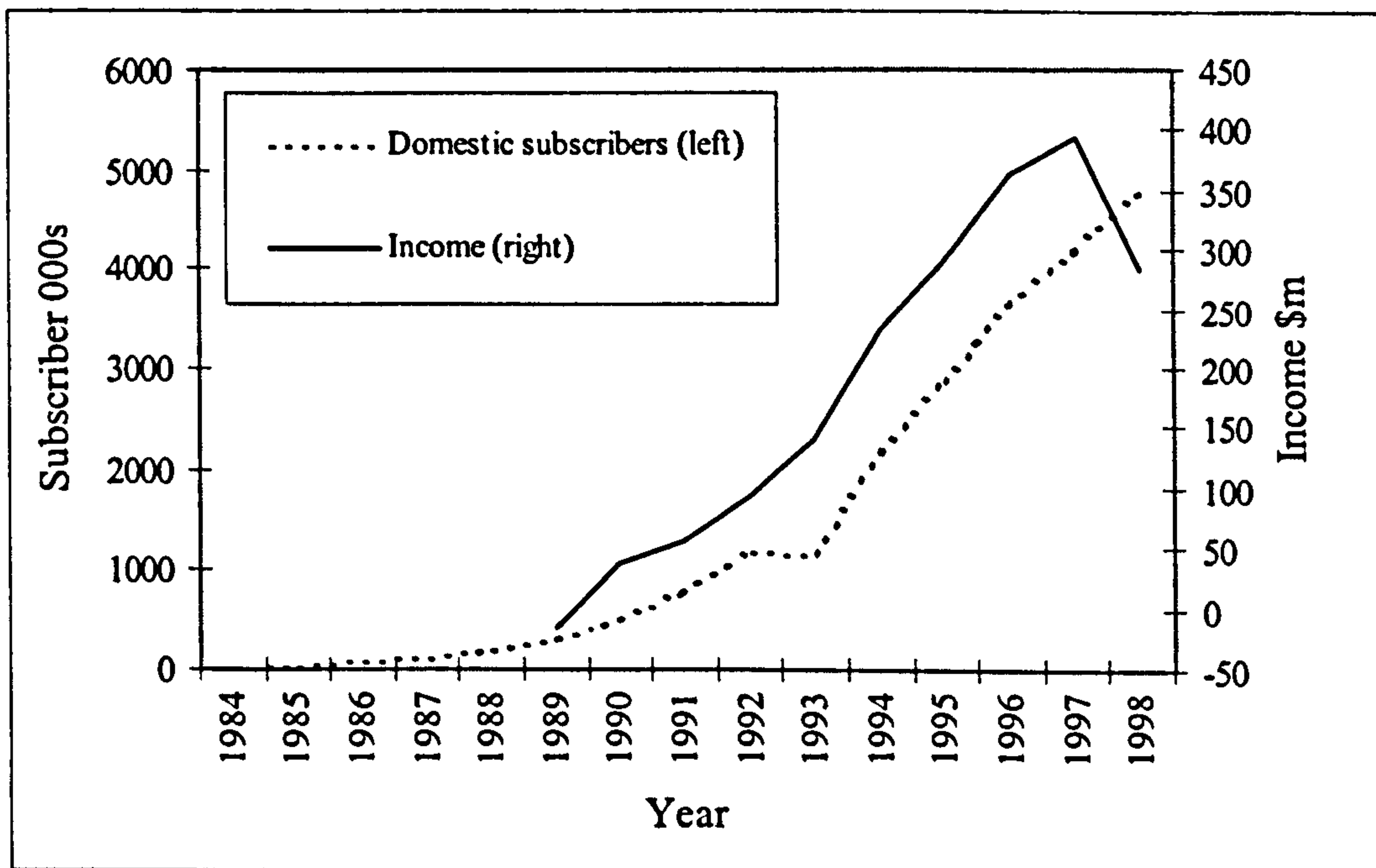
²⁶ One such purchase involved acquiring McCaw Cellular Communication interest in seven Indiana markets, ten in Wisconsin and one in Illinois for \$360m plus assets < BellSouth Cellular Corporation, 1997c. These strengthened the existing positions of BMI in these markets.

²⁷ BellSouth, 1996a, pg9.

Illinois for interests in 23 systems in or adjacent to the nine state territory.²⁸

The consequence of combining the concerted early effort to extend service coverage, both in and out region, and the later emphasis on the completion of coverage within the nine state territory, has been to increase the number of subscribers. As shown in Figure 5.5 (over) the number of cellular subscribers has grown on a yearly basis with only the exception of 1993, and has been aided in recent years by the launch of PCS which has added 88,000 in less than two years of operation. Hand-in-hand with the growth in cellular subscribers numbers has been the steadily increasing contribution of BellSouth Cellular to overall group net income.

Figure 5.5: Rising subscriber and net income levels of BellSouth Cellular



Source: various annual reports; BellSouth, 1993a, 1995a, 1996a, 1996f, 1996g, 1997c & 1998d.

5.3.3.2 Paging.

In January 1985 BellSouth entered the paging market through the addition of the service to

²⁸ BellSouth, 1997c, pg11.

those already offered in the Atlanta market.²⁹ Paging services were offered through BellSouth Mobility, the company's cellular subsidiary. By year end BellSouth's paging service had c62,000 subscribers, and through a combination of organic growth and acquisition this figure increased to 146,000 by the year of 1987.³⁰

In 1988 BellSouth announced the acquisition of Mobile Communications Corporation of America (MCCA). In addition to strengthening the company's position in the cellular market this acquisition vastly increased the exposure of BellSouth to paging. The purchase of MCCA, which was completed in 1989, added 65 markets to those where BellSouth already operated, and increased the number of subscribers from 240,000 in 1988 to 819,000 in 1989.³¹ MobileComm became the paging subsidiary of BellSouth. In 1990 announced its intention to construct the second national paging network, and to facilitate this the company acquired one of the three national licenses from CellTelCo.³² By 1991 MobileComm had become the largest paging company within America with more than 1.2m subscribers. MobileComm consolidated its position as the largest company through the acquisition of cellular and paging company, Graphics Scanning.³³

Nineteen ninety-one is a transitional year, and marks a shift from expansion by acquisition to growth through innovation and service development. Until 1991 the principal way through which BellSouth had expanded was by acquisition, with the various acquisitions increasing the number of markets in which BellSouth provided service as well as extending the geographical scope of service provision. De-aggregating the growth in paging subscribers shows that in 1987, 1989 and 1991 acquisitions underpinned growth. For instance, in 1987 acquisitions accounted more than half of the increase in paging subscriber numbers.³⁴ Subsequent to 1991 BellSouth has emphasised the innovation of new services through technological advances as the

²⁹ BellSouth, 1985, pg20.

³⁰ BellSouth, 1988, pg27.

³¹ BellSouth, 1990, pg28.

³² Noda & Bower, 1996, pg164.

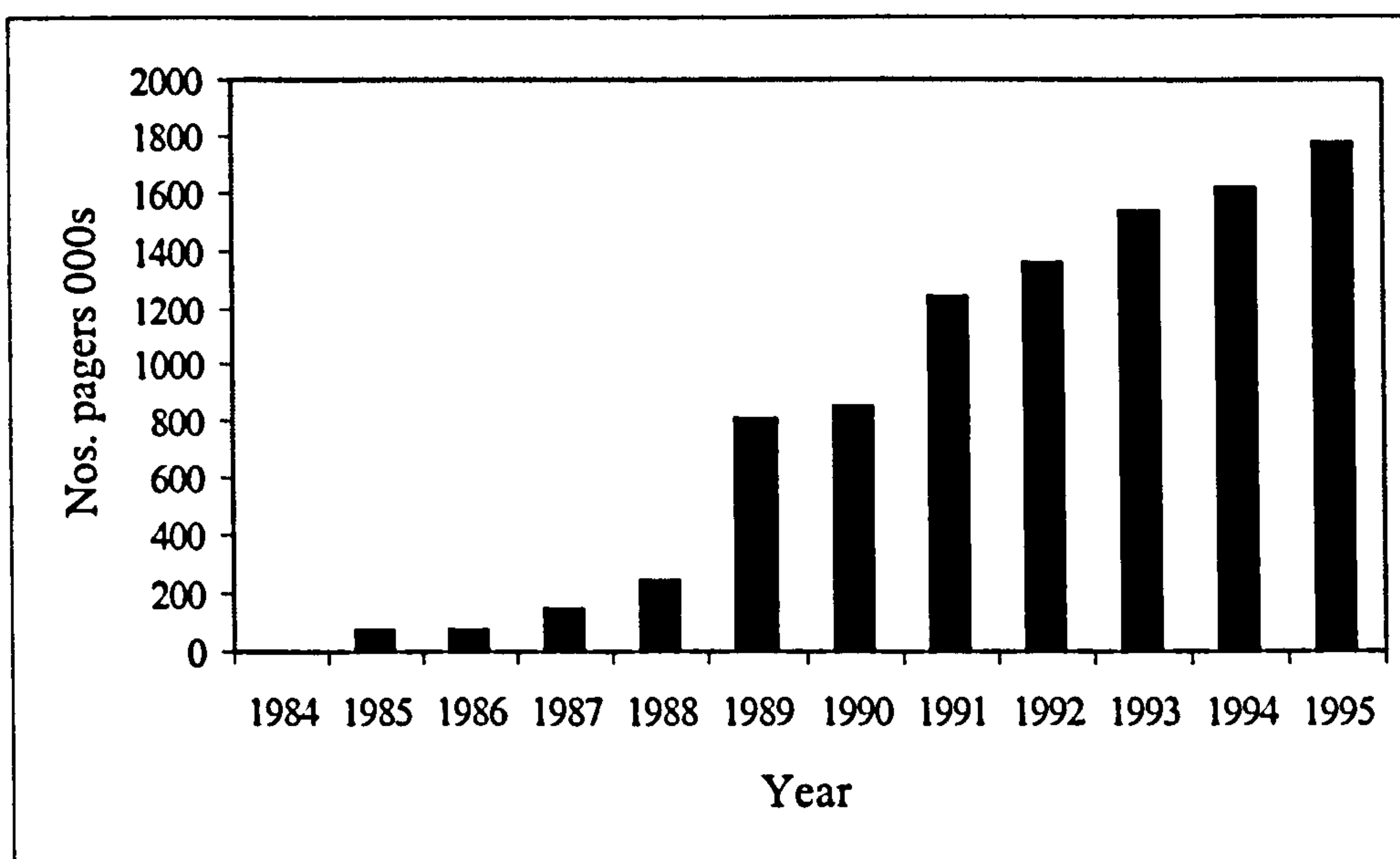
³³ BellSouth, 1990, pg27; BellSouth, 1991, pg34.

³⁴ Between 1986 and 1987 paging subscribers grew by 75,000 in all, with 46,000 being accounted for by acquisition (BellSouth, 1988, pg27).

means to achieve subscriber growth. BellSouth instituted a national paging service after acquiring the license from CellTelCo, and then broadened the range of services offered away from those traditionally associated with paging. As stated in the 1993 Annual Report:

Our MobileComm subsidiary has transformed its paging system into a nationwide wireless network for a host of additional specialised one-way information applications. For example, MobileComm provides the wireless communications network for the Apple Newton – a versatile, handheld computer.³⁵

Figure 5.6: BellSouth paging subscribers, 1985 – 1995



Source: various annual reports; BellSouth, 1993b, 1995a & 1996a; BellSouth Cellular Corp, 1997c, 1998a & 1998b.

In addition MobileComm also increased the number of retail outlets where the public could become subscribers, from 10,000 in 1992 to 14,000 in 1994.³⁶ The increased diversity of distribution channels enabled BellSouth to increase retail subscribers more than 50% in 1994.³⁷

³⁵ BellSouth, 1993a, pg21.

³⁶ BellSouth, 1992, pg13; BellSouth, 1994b, pg17.

³⁷ BellSouth, 1994b, pg17.

Despite the apparent success of the business BellSouth sold MobileComm, parts of MCCA and a national two-way narrow band PCS license to Mobile Media Communications for \$930m in January 1996.³⁸ BellSouth exited the paging market because it was unprepared to invest the necessary resources to expand the business. Moreover, BellSouth felt that the resources freed by the sale could be more productively invested elsewhere.³⁹ However, recognising the need to still provide paging services so that the 'one stop shop' provision of telecommunications services could be maintained, BellSouth became a reseller of paging services. In 1998 BellSouth formed a strategic alliance with Pagemart Wireless Inc. to distribute paging services on a national basis.⁴⁰

5.3.3.3 Mobile data.

In February 1992 BellSouth and RAM Broadcasting Corporation announced the formation of a joint-venture company, RAM Mobile Data US. The joint-venture was owned 49% by BellSouth and 51% by RAM Broadcasting Corporation.⁴¹ At the same time BellSouth established a new subsidiary, BellSouth Mobile Data Inc., to manage its mobile data business. In June 1993 RAM Mobile Data US completed the construction of a national network of 840 base stations covering 210 markets and 85% of the population.⁴² By 1998 the network had been expanded further to cover 90% of the population from more than 1000 base stations.⁴³

Various Annual Reports allude to the great potential of mobile data, and state that a range of services can be offered which in contrast to paging are two-way in nature. The range of services presently offered by RAM Mobile Data US include; computer aided dispatch, electronic mail, remote data entry and retrieval. BellSouth positioned its expansion into mobile data as part of a

³⁸ BellSouth, 1996a, pg48.

³⁹ BellSouth, 1996f.

⁴⁰ BellSouth, 1998b.

⁴¹ BellSouth Mobile Data, 1997a.

⁴² BellSouth Mobile Data, 1997b.

⁴³ BellSouth Mobile Data, 1997b.

logical progression from cellular and paging into the provision of other wireless services. This progression is driven by the changing needs of mobile customers, where both cellular and paging are incapable of satisfactory providing for all the requirements of mobile customers.

In February 1998 BellSouth acquired the majority shareholding of RAM Broadcasting Corporation in RAM Mobile Data US, and changed the company's name to BellSouth Wireless Data.⁴⁴

5.3.4 Broadband services.

At the turn of 1993/1994 BellSouth expanded into the broadband services market. In the midst of the QVC and Viacom bidding war for Paramount Communications in November 1993, BellSouth entered the broadband services market by agreeing to invest \$2bn in QVC if the company was successful in its bid. BellSouth also acquired an option to acquire \$500m worth of QVC stock at \$60 a share if the bid was unsuccessful.⁴⁵ However, QVC failed in its bid to acquire Paramount Communications, and BellSouth did not exercise its option to acquire \$500m of shares.

In January 1994 BellSouth completed a strategic alliance with Prime Cable. BellSouth provided \$250m in financing to Prime South Diversified Inc., a subsidiary of Prime Cable that owns the Las Vegas cable-TV operator, Community Cable TV. In addition, BellSouth was granted the option to acquire 22.5% of the Prime Cable management company that manages five companies affiliated with Prime Cable.⁴⁶

To these ventures BellSouth added a third in early 1994. Recognising its lack of expertise in content BellSouth formed americast, a joint-venture with Disney, SBC and Ameritech.

⁴⁴ BellSouth Mobile Data, 1997a.

⁴⁵ BellSouth, 1993b, pg12.

⁴⁶ BellSouth, 1993b, pg11.

According to company publications Disney is contributing the creative element to the joint-venture, whilst BellSouth and the other RBOCs are contributing their technical expertise. As stated in the 1994 Annual Report:

The powerful joint-venture would develop, market, and deliver innovative video programming to consumers, including a “navigator” that lets customers easily get to the options that they want through their TV screens.⁴⁷

It is on the basis of these three investments that Maney (1995) argues that BellSouth has failed to implement a broadband strategy that matches the stated ambitions of the company. The company’s options for QVC stock were allowed to lapse, and the investment in Prime Cable is minor in comparison to those of other RBOCs such as US West and Bell Atlantic.

This criticism however ignores the expansion of BellSouth into wireless cable-TV, a development that is largely subsequent to the period discussed by Maney (1995). In 1994 BellSouth became the last of the RBOCs to ask for regulatory permission to construct a video trial network in a suburb of Atlanta. According to O’Shea (1994a) the trial would last for 18 months, with an option to be extended up to 15 years, and would enable BellSouth to gain experience of the market. In February 1995 the FCC approved the request of BellSouth to construct the Atlanta based video trail.⁴⁸ BellSouth broadened the number of trails conducted through successfully acquiring cable-TV franchises for video trails in Vestavia Alabama, Daniel Island South Carolina, and World Golf Village Jacksonville Florida.⁴⁹ The objective of the aforementioned trails was to not only evaluate the commercial potential of cable-TV, but also to gain the necessary skills and competencies required to construct the networks. With regard to the various trials entered into, BellSouthnews (1996) writes:

...[w]e’re carefully weighing the competitive environment, level of customer demand, and - most importantly - financial returns available in each market. ... By carefully

⁴⁷ BellSouth, 1994b, pg3.

⁴⁸ BellSouth, 1995a, pg11.

⁴⁹ BellSouth, 1995a, pg11.

evaluating the results of these trials, we'll determine what it takes to be successful in the video arena so that we can best serve both our customers and our shareholders.

The 1996 Telecommunications Act solidified the strategy of BellSouth, in that the Act allowed the RBOCs to construct in-region networks. In this context cable-TV becomes another way through which BellSouth could expand the range of services offered in-region, and thereby defend the company from the effects of new entrants and competition. In the 1996 Annual Report a three pronged strategy was articulated:

We have a disciplined, three-pronged entry strategy. First, we're acquiring wireless licenses in good markets. We have acquired franchises or have talks underway in New Orleans, Atlanta and Miami. Second, we will take advantage of the economic growth we have in the booming Sunbelt to selectively build new cable-TV systems at the same time we extend our core telecommunications network. Third, we will compete hard for cable customers where the potential is clear.⁵⁰

From November 1997 BellSouth began offering wireless cable-TV services in-region, starting initially in New Orleans and then expanding subsequently to Atlanta and Orlando in 1998.⁵¹ Each of these franchises offers digital wireless TV services, uses americast navigation software and prominently features Disney programming. These three wireless cable-TV systems represent the sole broadband investments of BellSouth, which when compared to other markets such as mobile data where the company has invested recently are relatively minor in scale. The marginal nature of BellSouth's presence in the cable-TV market is reinforced by its absence from the 1997 Annual Report.

5.3.5 Conclusion.

Undoubtedly fortune has favoured BellSouth since divestiture. Not only is BellSouth the local telephone for the economically vibrant south-east of the United States, but also the company's

⁵⁰ BellSouth, 1996c, pg9.

⁵¹ BellSouth, 1997b; 1998a and 1998c.

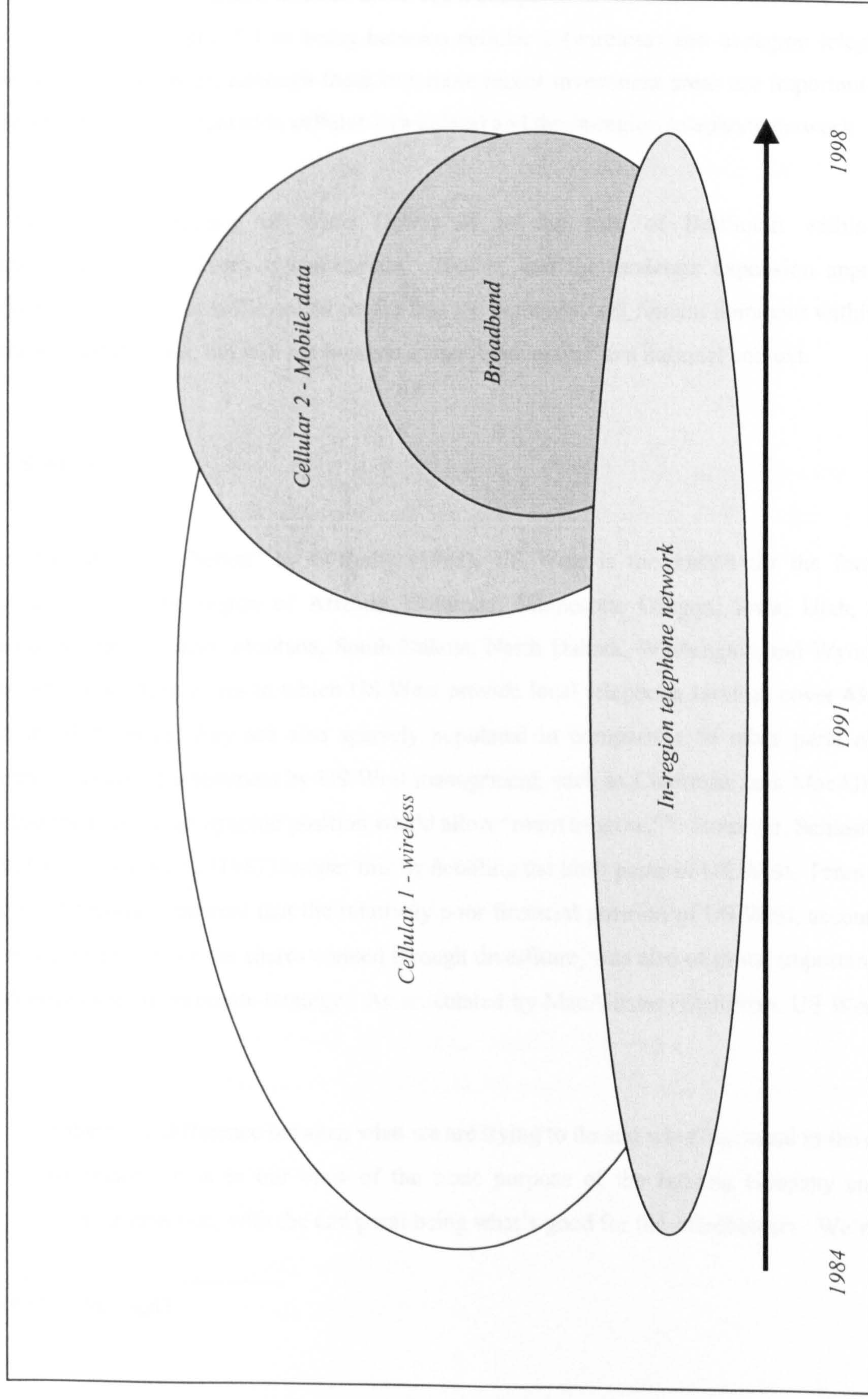
early success in the cellular market encouraged management to further expand into this market. These two areas of local telephone service (BellSouth Telecommunications) and cellular (BellSouth Mobility DSC, BMI, BellSouth Mobile Data) have driven the growth of BellSouth in the post divestiture period, and as such have been the recipient of the majority of capital expenditure since divestiture.

However, one consequence of the concentration of BellSouth on the twin markets of local telephone services and cellular has been to ignore other areas such as broadband. As a result the presence of BellSouth within the broadband market is comparatively minor, even though the company has launched in-region wireless-TV services in-region within the last year. The unwillingness of the company to invest in other areas is a vivid demonstration of the conservatism prevalent within the strategy of BellSouth. The 1996 sale of paging businesses, and the underdeveloped nature of the mobile data business, demonstrate the preoccupation of BellSouth with cellular.

The relationship between the various strategies implemented by BellSouth since 1984 is graphically illustrated in Figure 5.7 (over). Before commenting on the relationship of these strategies it is necessary to explain the intended purpose of this diagram in particular, and similar diagrams more generally, in the thesis. The overarching purpose of Figure 5.7 and the other such diagrams in the thesis is to demonstrate how RBOCs strategies have changed over time. As a consequence only the horizontal axis is labelled. The vertical axis was purposefully not labelled in an attempt to prevent the size of the various ovals from being equated with either the amount of investment that has taken place, or the strategic significance of the area of the investment. Instead it has been left to the preceding discussion to highlight both of these areas and their impact on RBOCs strategy. The size of the various ovals aims to demonstrate how the different strategy components inter-relate with one another.

Thus, in the case of BellSouth two ovals, cellular 1 (wireless) and in-region telephone network, span the entire period between 1984 and 1998. This demonstrates that these two have been the main strategic focus of the RBOCs domestic investment activity since divestiture, a fact borne out from the previous discussion. From approximately 1993 onwards BellSouth has diversified

Figure 5.7: Domestic BellSouth strategies between 1984 and 1998



its investment activity into another cellular area, mobile data, as well as broadband. To represent the secondary nature of these areas when compared to the other two investment areas they are shown in Figure 5.7 as being between cellular 1 (wireless) and in-region telephone network. In other words, although these two more recent investment areas are important they are secondary when compared to cellular 1 (wireless) and the in-region telephone network.

All in all, the summary of Ward (1995) as to the role of BellSouth within the telecommunications industry is appropriate. That is, that the moderate expansion approach adopted by BellSouth is sufficient to ensure that the company will remain dominant within the southeast United States, but will not become a significant player in a national context.

5.4 US WEST INC.

Characterised as “exuberant” by O’Reilly (1983), US West is the RBOCs for the fourteen mountain and Pacific region of Arizona, Colorado, Minnesota, Oregon, Iowa, Utah, New Mexico, Nebraska, Idaho, Montana, South Dakota, North Dakota, Washington and Wyoming. Although the fourteen states in which US West provide local telephone services cover 43% of Continental America, they are also sparsely populated in comparison to other parts of the country. The initial assessment by US West management, such as Chairman Jack MacAllister, was that the peculiar geographic position would allow “room to grow.”⁵² However, Schlesinger, Dyer, Clough & Landau (1987) temper this by detailing the birth pains of US West. From their analysis it becomes apparent that the relatively poor financial position of US West, accounting for only four percent of the shares created through divestiture, was also of prime importance in the development of corporate strategy. As articulated by MacAllister (Chairman, US West) in 1987:

If there is a difference between what we are trying to do and what happened in the other six regions, it is in our view of the basic purpose of the holding company and its singular direction, with the end point being what’s good for the shareholders. We’re not

⁵² O’Reilly, 1983, pg67.

here to manage operations; we're here to improve the value of the shareholders's investment through the selection of good strategies. ... this commitment to serving shareholders is the overriding consideration in every decision we make, and is the nucleus of our management philosophy, organisational structure, and vision for the future. More than anything else, they describe the character and content of our organisation. They are also the basis for our claim that US West is not a telephone company.⁵³

From Schlesinger, Dyer, Clough & Landau (1987), Sarason (1997) and company literature it is possible to discern initially three strategies. As stated by Schlesinger, Dyer, Clough & Landau (1987) these were:

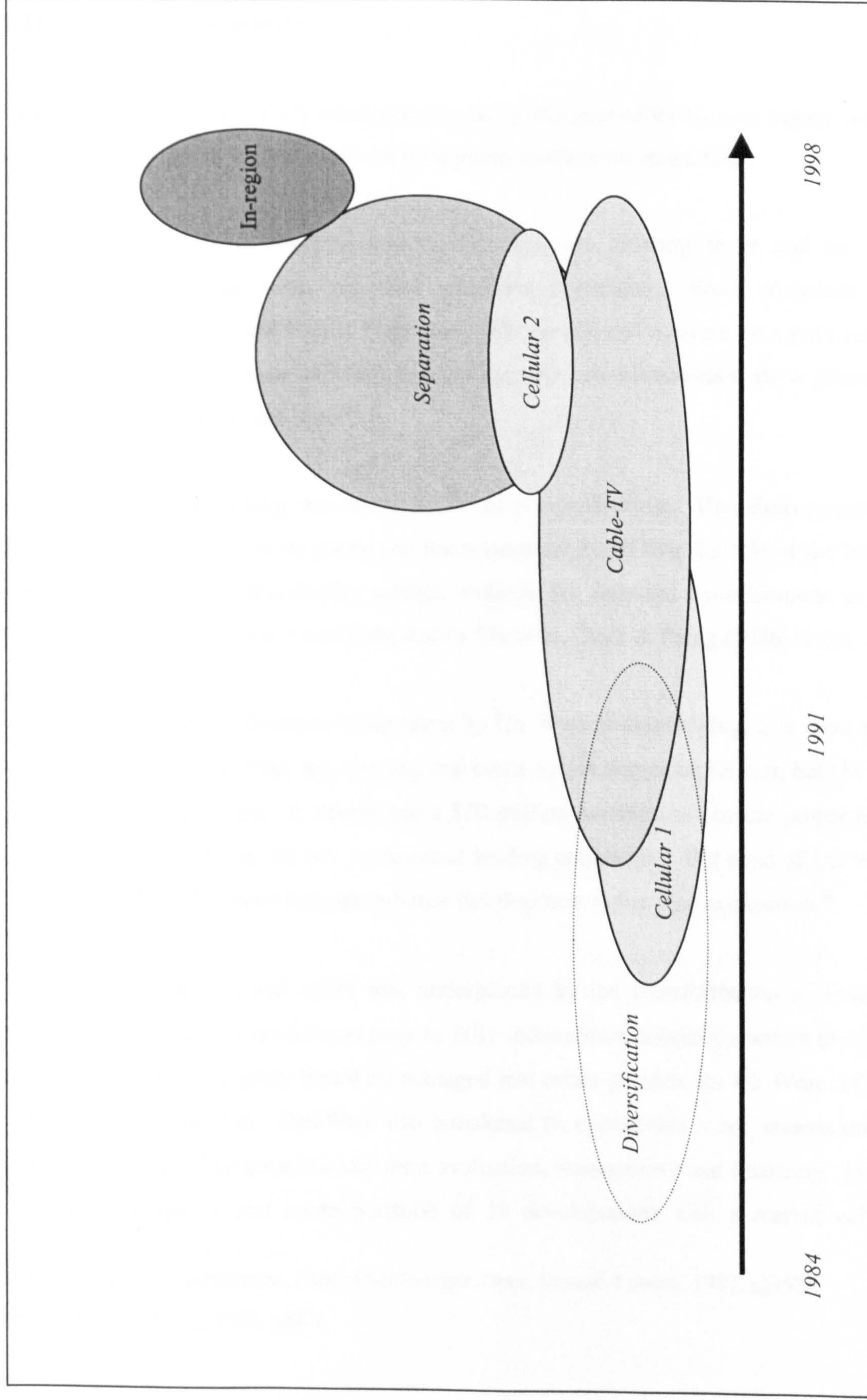
... (1) to maintain a clear separation between regulated and unregulated businesses, (2) to press for further deregulation and unregulated businesses, and (3) to diversify into high-growth markets.⁵⁴

All three strategies can be found over the course of the post-divestiture period. Significantly the balance between these strategies fluctuates, so that whilst the separation strategy is continuously present the prominence given to the other two strategies changes over the years. Figure 5.8 (over) summaries the different strategies enacted by US West since divestiture, and places each of these components in relationship to one another. It is clearly evident from Figure 5.8 that the post-divestiture period has witnessed US West enact many different strategies. These range from diversification to cellular, cable-TV and ultimately to the divestment of its out-region assets so that the RBOCs once again became a company solely focused on its in-region activities. The minimal degree to which the ovals within the figure overlap is representative of the way in which US West continuously shifted its strategic focus in the post-divestiture period. The following sections will discuss not only how the RBOCs continuously changed its strategy within the post-divestiture period, but also how the separation strategy became to be implemented as the logical conclusion of earlier strategies.

⁵³ Schlesinger, Dyer, Clough, Landau, 1987, pg193f.

⁵⁴ Schlesinger, Dyer, Clough, Landau, 1987, pg194.

Figure 5.8: Domestic strategies of US West between 1984 and 1998



5.4.1 The diversification strategy.

The diversification strategy of US West was driven by the possibility to earn higher rates of return than by investing in the BOCs. An early company publication stated that:

We are carefully diversifying into markets that are growing faster and are more profitable than our basic, regulated telephone operations. Since Mountain Bell, Northwestern Bell, and Pacific Northwest Bell are allowed a return on equity ranging up to 16 percent on their intrastate investments, any new venture must show promise to substantially exceed that level.⁵⁵

Thus, the diversification strategy was driven by financial consideration. The relative small size of US West when compared to its peers, and the managerial belief that the role of the holding company was to maximise shareholder returns, underlie the financial considerations at play. Surveying the unregulated enterprises of the RBOCs Chessler, Clark & Ferng (1986) write:

If there is a unique direction being taken by US West in diversifying, it is commercial real estate. Several RHCs are stressing real estate to one degree or another, but US West is pushing the hardest. It already has a \$70 million portfolio of outside properties. It has spent \$74 million for two commercial lending companies. But most of US West's diversification has been through in-house development rather than acquisition.⁵⁶

US West's expansion into real estate was underpinned by the transformation of BetaWest Properties, from an internal service company to fully independent subsidiary within the group. As a fully independent company BetaWest managed real estate projects for US West affiliated and non-affiliated companies. BetaWest also broadened its operational remit, undertaking not only the development of projects but also their evaluation, management and financing. In 1987 the company managed a real estate portfolio of 29 developments with a market value of

⁵⁵ Unspecified company publication, cited in Schlesinger, Dyer, Clough, Landau, 1987, pg198f.

⁵⁶ Chessler, Clark & Ferng, 1986, pg90f.

\$797m.⁵⁷

In 1989, despite the success of the investment, BetaWest was restructured:

US West will retain the existing operating properties in BetaWest's portfolio, but will liquidate this portfolio over the next five to seven years. Certain properties will be sold to a new entity which will remain active in real estate development and will operate under the name of BetaWest Properties Ltd., and will not be owned by US West. US West has taken this approach to refocus to other areas of the financial services business.⁵⁸

In 1989 BetaWest Properties Ltd was sold to management.⁵⁹ However, the gradual liquidation of the remaining property portfolio did not go as planned, with changing economic circumstances necessitated a large restructuring charge, and a slower than anticipated sale programme being implemented so that returns could be maximised. Notwithstanding, US West took a charge of \$500m so that it could exit the real estate.⁶⁰

In parallel to US West's exit from the real estate market was its continued and expanding presence in the financial services sector. In 1987 the principal company operating in the market was US West Financial Services, managing a \$2bn portfolio "providing asset-based financing programs to US West companies and more than 19000 borrowers."⁶¹ To this was added Financial Security Assurance (FSA) in 1989, a company specialising in the financial guaranty business.⁶² A Japanese marketing and joint-venture was cemented by the sale of 10% of FSA to Tokyo Marine & Fire Insurance in 1990.⁶³ Throughout the expansionary period of 1988 to 1992

⁵⁷ US West, 1987, pg25.

⁵⁸ US West, 1989, pg7.

⁵⁹ US West, 1989, pg7.

⁶⁰ US West, 1991; US West 1992.

⁶¹ US West Financial Services operated five divisions covering real estate financing, investment banking, equipment financing and leasing (US West, 1987, pg16).

⁶² US West, 1989, pg7.

⁶³ US West, 1990, pg15.

(inclusive) US West Capital Corporation, the holding company for FSA and US West Financial Services, was profitable and in 1992 had net income of \$113.9m.⁶⁴

The continued profitability of the various financial investments vindicates the decision of US West to diversify into the market. However, in 1993 US West began to sell its various financial holdings. The RBOCs sold US West Financial Services to NationsBank in 1993, and FSA to Fund American Enterprises in 1994.⁶⁵ The sale of an apparently successful business coincided with widespread and fundamental changes to the telecommunications industry that created new investment opportunities, as well as posing new challenges for the company's core operations. These sales enabled resources to be freed for other uses. According to the 1993 Annual Report, the proceeds were used to repay outstanding corporate debt and fund investment in the BOCs.⁶⁶

In summary, the initial diversification into real estate, and subsequently into financial services, represent a combination of opportunism and resource building. US West leveraged an existing internal capability in real estate to enter this market, and then used the resources freed from the sale of BetaWest to expand another existing internal capability and enter the financial services. Finally, the resources built were invested in the core telecommunications business.

5.4.2 The cellular strategy.

In contrast to the other RBOCs US West is testament to a failed cellular strategy. It is possible to trace the failure of US West in the cellular market back to the initial strategy adopted after divestiture. Noda & Bower (1996) argue that US West's initial cellular strategy was financially orientated, with the company intent on maximising its short-term returns instead of growing the market over the long term. Bill Dixon (Vice-president, US West NewVector), is quoted as explaining the cellular subsidiary's strategy shortly after divestiture as:

We were determined not to get leveraged by the distribution channel. We tried to ensure

⁶⁴ US West, 1992, pg23.

⁶⁵ US West, 1993a, pg21; US West, 1994c, pg23.

⁶⁶ US West, 1993a, pg21.

that the business was done half through our indirect organisation and half through our direct sales organisation. In that way, we wouldn't have either group leveraging, saying "We're doing all of your business so we want bigger commissions, or we want this or that." ... We weren't sure that people were very interested in the service ... we didn't think that the price would drive them to buy into cellular. There were others who believed that if you said 'air time is cheap, come buy it now, we have a special deal', you would get more people. We didn't believe that ... and we purposefully kept the prices high. I think we were one of the highest-priced carriers in the industry.⁶⁷

However, this strategy resulted in the slow growth of cellular subscribers when compared to other companies such as BellSouth. Noda & Bower (1996) argue that this then initiated a negative feedback loop where the reduced subscriber base inhibited the company's ability to earn high returns and marginalised the subsidiary within the holding company. Not only would significant investment be required to rectify this situation, but US West NewVector would also be a recipient rather than generator of cash.

To counter its cellular deficiencies US West initiated two ventures in 1994 which sought to simultaneously expand the company's scope and counter its perceived lacklustre reputation. Firstly, in July 1994 US West agreed to merge the domestic operations of US West NewVector with those of AirTouch Communications, creating a company with 53m POPS (potential customers). Moreover the combined company would:

...create opportunities for new cost efficiencies in equipment purchasing, information systems, distribution, marketing and advertising. With improved efficiencies and greater market presence, shareholders of both companies are better positioned to benefit from the explosive growth in the wireless marketplace.⁶⁸

From this it would appear that the merger was driven solely by financial concerns. In one respect this is correct, but one of the main underlying problems facing US West New Vector

⁶⁷ Noda & Bower, 1996, pg172.

⁶⁸ US West, 1994c, pg33

was its poor reputation with customers. This is implicit in the 1996 decision to re-brand US West NewVector as AirTouch Cellular, and to stress in the press announcements the strong customer association of high quality service with the AirTouch name.⁶⁹

In October 1994 US West and AirTouch formed a “strategic alliance” with Bell Atlantic and Nynex to provide a nationally branded service. Furthermore, these same four companies also agreed to collaborate to acquire PCS licenses for those parts of Continental USA not already covered by one of the partners. The successful acquisition of licenses enabled these four companies to expand their service coverage to the rest of the United States through a joint-venture company, PCS PrimeCo.

Though both AirTouch and US West made every effort to ensure that the agreement was within the restrictions laid down by the MFJ and did not compromise existing commercial arrangements, the legality of the US West-AirTouch joint-ventures was challenged. In February 1997 a court ruled that:

...a subsidiary of Media Group violated the terms of its partnership agreement with its minority partners in the Seattle cellular partnership by entering into the AirTouch Joint Venture.⁷⁰

In December 1997 the conflict was resolved through the minority partner selling the minority equity holding to AirTouch. The joint-ventures with AirTouch were suspended and superseded in early 1998 when US West announced its intention to sell all of its domestic cellular and PCS holdings to AirTouch Communications. As stated by US West:

On April 6, 1998 MediaOne [US West Media Group] sold its domestic wireless to AirTouch pursuant of the AirTouch Transaction. ... The Media Group’s domestic wireless business was conducted by NewVector, which conducted the Media Group’s domestic cellular business, and by PCS Holdings, which held the Media Group’s interest

⁶⁹ US West, 1996c.

⁷⁰ US West, 1998c, pg114.

in PrimeCo, a provider of PCS services. Pursuant to the AirTouch Merger Agreement, NewVector and PCS Holdings merged with and into AirTouch and, as a result, AirTouch acquired the business of NewVector and PCS Holdings.

Pursuant to the AirTouch Transaction, MediaOne received from AirTouch (i) \$1.65 billion in liquidation preference of dividend bearing AirTouch Preferred Stock, and (ii) 59.5 million shares of AirTouch Common Stock. In addition, AirTouch assumed \$1.35 billion of indebtedness of NewVector and PCS Holdings.⁷¹

This transaction ensured, albeit temporally, that US West had no involvement in the cellular market. The launch of in-region PCS services in July of the same year ensures that the sale can not be interpreted as US West disavowing the notions of 'one-stop-shopping,' mobility and service integration. Instead the sale could be seen as an opportunity to construct from scratch a cellular service untainted by the company's previous reputation. It is clear, however, from comments made by MediaOne executives that the AirTouch transaction was motivated by financial considerations. In association with the separation of MediaOne from US West Communications the AirTouch transaction substantially reduced the debt burden carried, and enabled MediaOne to focus on its remaining businesses of domestic and international broadband and international wireless.⁷²

5.4.3 The broadband strategy.

Responding to the convergence paradigm of the early 1990s, where a common network supports multiple services US West initiated what can be described as its 'broadband strategy' in 1993. The objective of this strategy is summarised in the 1993 mission statement of US West:

⁷¹ US West, 1998c, pg155. Due to the stock component of the agreement the actual value of the transaction was \$5.9bn, approximately \$900m more than envisaged when originally announced (MediaOne, 1998a).

⁷² MediaOne, 1998a.

... a leading provider of interactive, integrated communications, entertainment and information services over wired broadband and wireless networks in selected local markets worldwide.⁷³

To this end US West grounded its aspirations in three inter-related investments. These investments simultaneously brought together content and its distribution channel (cable-TV networks) and reduced the reliance of US West on its BOCs for revenue.

In 1993 US West paid \$2.5bn to acquire a 25.51% holding in Time Warner Entertainment (TWE), the filmed entertainment, programming and cable systems operator subsidiary of Time Warner Inc. The company also acquired an option for a further 8%.⁷⁴ Finally, a 12.75% holding was also taken in TWE Japan, the company responsible for TWE's business in the Japanese market.

In 1994 US West acquired Wometco Cable Corp and the assets of Georgia Cable Holdings and Atlanta Cable Partners L.P. for a total of \$1.2bn. At the time of purchase US West announced its intention to run these systems jointly with those of TWE in Atlanta, allowing not only purchasing efficiencies to be gained but also the companies to challenge the incumbent local exchange carrier (ILEC), BellSouth.

Soon after the passage of the Telecommunications Act of 1996 US West acquired the third largest cable operator in the United States, Continental Cablevision, for \$10.8bn in a mix of shares, cash and debt.⁷⁵ According to Handford (1996) the driver of such a deal was the ability to extract multiple revenue streams at minimal incremental cost from the same network.

Based on the optimism expressed in 1993 US West had high expectations of its investment in TWE, not least because it was expected that the investment would synergistically bring together

⁷³ US West, 1993b, pgl.

⁷⁴ US West, 1993b.

⁷⁵ US West paid \$5.3bn in cash and stock and assumed \$5.5bn of Continental debt as well.

two different sets of capabilities.⁷⁶ One set of motivations for US West rested on its perceived technological backwardness when compared to cable-TV companies:

... four years ago, when high-level execs met to debate future technology trends, regulatory changes, and customer desires, they reached a surprising consensus. “We believed that, as a phone company, we had inferior technology,” says O’Farrell. The superior technology belonged to the cable companies. And US West set out to be the first of the Bells to buy cable operations.⁷⁷

US West also recognised that access to content would be central to the development of a broadband strategy. The company’s investment in TWE brought US West into contact with Warner Brothers, Lorimar and Home Box Office. For its part Time Warner was motivated to sell equity to US West to offset the debt burden that had arisen through the merger of Time Inc and Warner Communications. In addition, to this financial imperative the sale of equity to US West secured for Time Warner a partnership with a telecommunications company, whose skills and competencies could be drawn upon when the company entered the local telecommunications markets at some point in the future.

Therefore, both Time Warner and US West entered into the joint-venture to gain access to the technological competencies of the other company. Moreover, the investment would expand the presence of US West outside of its fourteen-state territory, and enable Time Warner products to be delivered over the out-region cable-TV networks acquired in 1994.

Changing circumstances have threatened the stability of the TWE alliance. In 1995 Time Warner moved to acquire Turner Broadcasting Systems (TBS) for \$7.5bn so that its presence in the filmed entertainment and programming markets could be enlarged. Time Warner then proposed to restructure its operations, effectively creating a cable properties company separate from the content operations.⁷⁸ US West objected to this merger, alleging “breaches of contract and

⁷⁶ US West, 1993, pg2.

⁷⁷ Garner, 1996.

⁷⁸ O Neal, 1995, pg63.

fiduciary duties by Time Warner.”⁷⁹ In turn Time Warner sued, charging US West with “misrepresentation, breach of contract and other misconduct.”⁸⁰ Even though the law suit has been settled in favour of Time Warner the disagreement has continued, with US West declaring in its 1996 SEC 1996 that the company still has a means through which influence on the restructuring of TWE can be exercised.⁸¹

5.4.4 The separation strategy.

From divestiture onwards US West had used its holding company structure to separate the BOCs from its other subsidiaries. In 1995 US West formalised the division of the company into BOCs and non-BOCs lines-of-business through the creation of a new second tier holding company, US West Media, subordinate to US West Inc. Into this new holding company US West Inc folded all its non-BOCs subsidiaries in the fields of cable-TV, cellular, directory publishing as well as international. US West Inc then distributed on a pro-rata basis tracking shares in this company to existing shareholders whilst retaining legal ownership. Similarly, the BOCs and their support subsidiaries were grouped together as US West Communications Group. Through this procedure two classes of stock related to the performance of US West were created - one tracking the performance of the BOC and the other all of the remaining investments. Such a move increased the financial and operating transparency of the RBOCs. Writing in 1995 McCormick (Chairman, US West Inc.) articulated the company’s rationale for such a move:

We [US West] have received wide recognition and support for our long term strategy. But we have felt for some time that the financial market is undervaluing our stock.

This is because our growth strategy has resulted in a mix of assets with differing characteristics. On the one hand, we have the US West Communications Group, a profitable, stable, highly focused, well-managed telecommunications company with strong earnings and available cash flow, located in an excellent region.

⁷⁹ US West, 1996a, pgB-26.

⁸⁰ US West, 1996a, pgB-26.

⁸¹ US West, 1996a, pgC-40.

On the other hand, we have our Media Group businesses, which are superbly positioned to benefit from the worldwide growth in electronic commerce made possible by advanced networks. But they differ fundamentally from the telephone business, both in their fundamentals and in the indicators the financial community uses to measure value.⁸²

Once again financial considerations were driving the decision making process, as it was expected that the creation of two classes of stock would increase market value through improving transparency. The notion that the creation of separate stocks was a prelude to a full separation was rebuked by McCormick, who insisted that US West would remain a single corporate entity.

However, in 1997, less than two years after creating the additional class of stock US West moved to formally break the link between the two companies by separating US West Media Group from US West Communications. Integral to the separation would be:

- The transfer of US West Dex (directory publishing) from US West Media Group to US West Communications for \$3.9bn in debt assumption and \$850m in new US West Communications stock.
- The cancellation of the planned sale of Minnesota cable properties to Charter Communications for \$600m. This sale had been initiated under FCC cross ownership rules that prohibit a company from owning a telephone and cable network in the same geographic region. The separation would remove the conflict of interests.

The separation was approved by US West shareholders in June 1998.⁸³ On implementation US West Media Group renamed itself as MediaOne, and US West Inc took the name of its principal subsidiary, US West Communications Group. The separation of the BOCs and non-BOCs

⁸² US West, 1995b, pg1f.

⁸³ Telecom AM, 1998c.

activities, in conjunction with the earlier exit of the RBOCs from the cellular market through what is referred to as the 'AirTouch Transaction,' represents the logical conclusion of the separation policy initiated at divestiture. In doing so, US West Communications Group reverts to a position similar to that on divestiture, where it is almost completely reliant on local telephone services for its revenue. Although active in several business areas such as PCS wireless, data and Internet services, the only subsidiary of substance is directory publishing.⁸⁴ The de-entangling of US West is diagrammatically shown in Figure 5.9 (over).

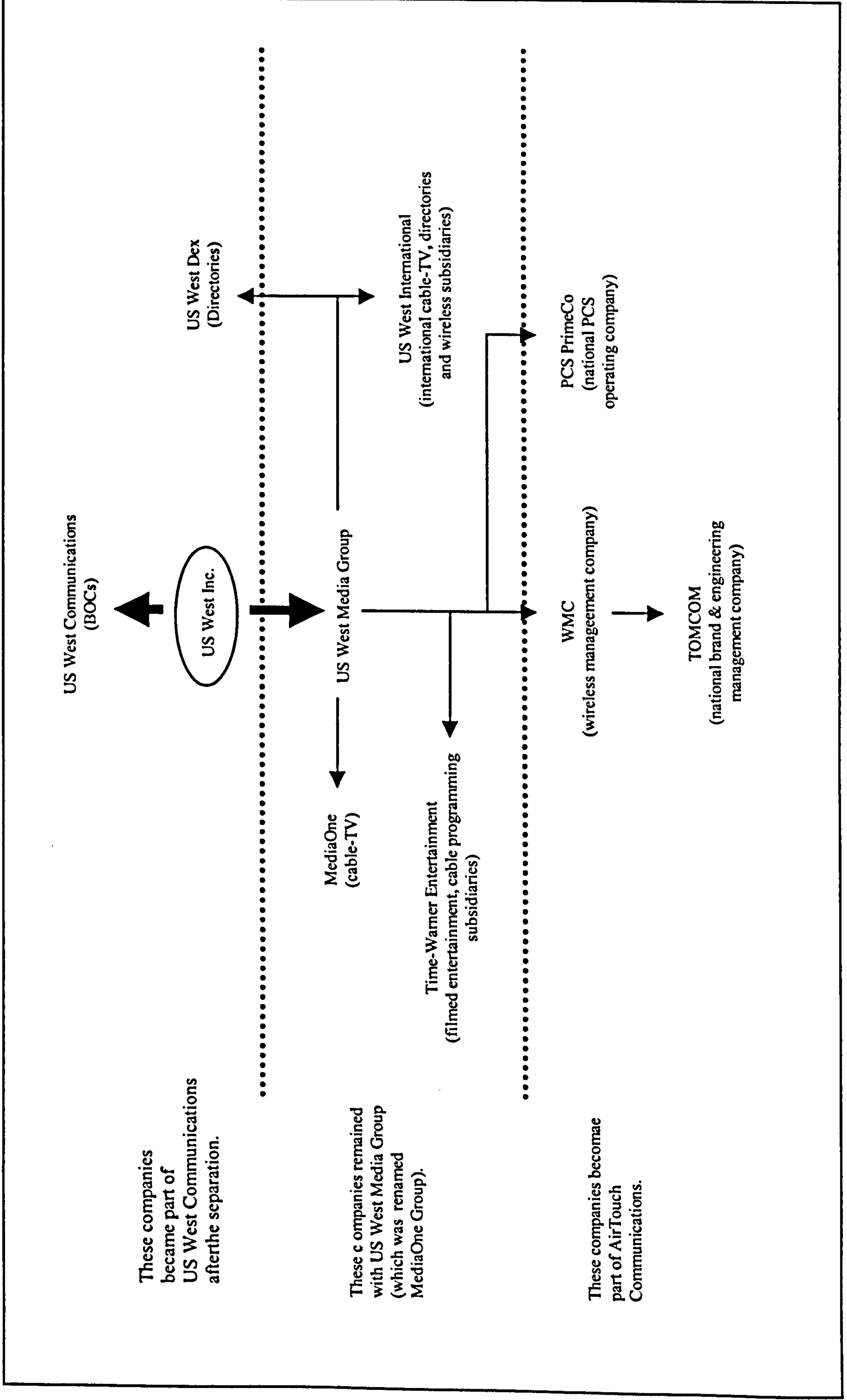
5.4.5 Conclusion.

The exuberance of divestiture manifested itself in an aggressive diversification programme that sought to extend the boundaries of the company, and lessen US West' reliance on its BOCs. Although this initial diversification effort was a failure, with the investments being shed by the late 1990s, US West subsequently continued to enact strategies that moved the company's focus away from the BOCs. Initially this strategy expanded the presence of US West in the cellular market that had arisen as a consequence of the post-divestiture focus on financial returns and the maximisation of shareholder value. Diversification then took the form of broadband, and through a series of acquisitions and alliances US West became one of the largest cable-TV companies in the United States. However, the logic of separation came to the fore from 1995 onwards and eventually resulted in the separation of the diversification efforts of US West from its BOCs.

It is surmised that the separation strategy of US West will in turn give rise to a network strategy. Prior to the separation the main focus of investment activity had repeatedly been outside of the core BOCs, initially in diversification markets and then in cable-TV. Throughout the BOCs were of a secondary concern to management. Without the other lines-of-business US West now has no choice but to develop, and then articulate, an in-region BOCs focused strategy.

⁸⁴ US West, 1998c, pg116.

Figure 5.9: Disentangling US West Inc: separating US West Communications Group (MediaOne Inc) and the AirTouch Transactions



5.5 BELL ATLANTIC.

Of all the RBOCs Bell Atlantic is unmistakably portrayed in the most flattering terms by Maney (1995). Bell Atlantic is characterised as being aggressively at the forefront of developments, especially convergence related developments, within the telecommunications industry. A more reflective assessment of Bell Atlantic strategy is provided by Telecommunications Publishing Group (1996), which asserts that the strategy enacted is paradoxical. On the one hand the RBOCs has diversified only to concentrate on a limited number of markets, and whilst it articulates its innovation in new service development the company remains behind its peers in the deployment of some advanced technologies.

Like all the other RBOCs Bell Atlantic was organised as a holding company on divestiture. The corporate headquarters of Bell Atlantic is comprised of three companies, Bell Atlantic Management Services and Bell Atlantic Corporate Services, and a one seventh holding in Bell Communications Research.⁸⁵ Chessler, Clark & Ferng (1986) refer to these companies as 'The Headquarters Group.' The second group of companies identified by Chessler, Clark & Ferng (1986) are the local telephone companies or BOCs. The BOCs provide local telephone services throughout the states of New Jersey, Pennsylvania, Delaware, Maryland, Virginia, West Virginia and the District of Columbia. Local telephone service is provided through seven BOCs: New Jersey Bell, Bell of Pennsylvania, Diamond State Telephone, Chesapeake & Potomac Telephone District of Columbia, Chesapeake & Potomac Telephone Maryland, Chesapeake & Potomac Telephone Virginia and Chesapeake & Potomac Telephone West Virginia. All the other subsidiaries within Bell Atlantic belong to the third group identified by Chessler, Clark & Ferng (1986), namely Bell Atlantic Enterprises. Subsidiaries here included Bell Atlantic Mobile Systems and Tri-continental Leasing Corporation.

It is unclear whether or not the organisational division of Bell Atlantic laid out above has remained constant in the post-divestiture period. Rosen, Borrows, Hunt, Samarajiva & Pollard (1993) allude to a sharper distinction between the communications and other subsidiaries. A distinction is drawn between the BOCs and mobile on the one hand, and financial services and

⁸⁵ Chessler, Clark & Ferng, 1986, pg54.

real estate on the other. From the more recent filings of Bell Atlantic with the SEC it would appear that the organisational structure has undergone change. Broadly speaking Bell Atlantic is organised around the lines-of-business that it conducts, that is, telecommunications, wireless and international.

The next section shall provide an outline of the diversification undertaken by Bell Atlantic in the post-divestiture period. This is then followed by an overview of the multimedia and in-region strategies undertaken. A conclusion is then drawn.

5.5.1 Diversification.

Chessler, Clark & Ferng (1986) provide an account of the early diversification efforts of Bell Atlantic. From this it can be seen that the expansion expanded Bell Atlantic's remit both operationally and geographically as well. Operationally the diversification took Bell Atlantic into the CPE, computer and wireless markets, whilst geographically the scope of the company was expanded to become national in scale. Illustrative examples of the diversification include:

- National Funding Corporation. Medical financing and leasing nation wide.
- Bell Atlanticom Systems. The in-region CPE market.
- CompuShop Incorporated. Computer retailing in Midwest, Southwest and West of the United States.
- Sorbus. National computer maintenance.
- Telecommunications Specialists. The out-region CPE market primarily in Texas.
- Tri-Continental Leasing. Merged into Bell Atlantic Leasing Corporation to provide leasing support for equipment related subsidiaries.⁸⁶

The diversification undertaken by Bell Atlantic attracted criticism, not least because of it diverted investment capital away from the fast growing in-region market. Moreover, critics argued that the various investments were loss making and that this and investment analysts

⁸⁶ Chessler, Clark & Ferng, 1986, pg55f.

concerns over the nature of the diversification were reflected in lower stock prices.⁸⁷ Singled out for concern by Chessler, Clark & Ferng (1986) is the Information Product and Services Group of Bell Atlantic Enterprises. They argue that the markets in which these companies operated were highly competitive and that as a group they were not profitable. Further, the Information Product and Services Group was highly reliant on just one company, Sorbus, for revenue and net income. Attempting to deflect criticism Kelley (President, Bell Atlantic Enterprises) stated that:

[w]e have all the pieces of the puzzle, now we have to put all the piece together. Sometimes that's a little tricky.⁸⁸

It is surmised that Bell Atlantic was able to put all the pieces together in a satisfactory manner, as the company made no mention of moves to divest its diversified operations in the subsequent years. Indeed diversification continued apace regardless of the criticisms levelled. For instance, in 1990 Bell Atlantic bought the PBX business of Northern Telecom and the healthcare software company Simborg Systems Corporation. The 1993 Annual Report provides details of the diversified lines-of-business in which Bell Atlantic was active:

... computer maintenance, software development and support, systems integration, and telecommunications consulting ... diversified leasing, computer leasing, real estate, and liquefied petroleum gas distribution.⁸⁹

Nineteen ninety-three marks the high point of Bell Atlantic's diversification efforts. In 1994 Bell Atlantic sold its leasing and liquefied petroleum businesses, and in the following year disposed of its computer maintenance subsidiary.⁹⁰ The 1994 sale of Tri-Continental Leasing raised \$1.1bn, whilst the 1995 sale of the computer maintenance subsidiary fetched \$250m.⁹¹ As a result Bell Atlantic was left with a much narrower range of diversified operations, namely,

⁸⁷ Mulqueen, 1985, pgC12.

⁸⁸ Quoted in Chessler, Clark & Ferng, 1986, pg58.

⁸⁹ Bell Atlantic, 1993, pg8.

⁹⁰ Bell Atlantic, 1995c, pg14.

⁹¹ Bell Atlantic, 1995c, pg38.

real estate, telecommunications consulting and financial services.⁹² The decision by Bell Atlantic to divest these businesses is not attributable to any single factor. Instead the sale can be placed at the confluence of unsatisfactory profitability, and changes in the telecommunications industry that resulted in Bell Atlantic concentrating on its core telecommunications businesses.

5.5.2 Multimedia.

Telecommunications Publishing Group (1996) describe the entry of Bell Atlantic into the multimedia market as incremental. Over a period of several years starting from 1992 the RBOCs gradually expanded into the market, eventually formulating a four pronged strategy:

Distribution - finding an efficient method of transporting video services over video dialtone networks; *Organisation* - creating an in-house unit to retail video services and provide customer service; *Technology* – developing interactive video delivery systems; and *Programming* – providing the content for the company's 'next generation' video services.⁹³ (*emphasis added*)

This four pronged strategy was manifest through three multimedia investments. The first of these was the only one to entirely rely on internal resources, whilst the other two investments brought Bell Atlantic into contact with companies that could provide the necessary skills and competencies that it lacked.

5.5.2.1 Stargazer.

The 1984 Cable Act prohibited telephone companies from providing cable-TV services in-region. In 1992 the FCC allowed telephone companies to provide cable-TV services in-region on condition that it was done on a non-discriminatory common carrier basis.⁹⁴ Importantly,

⁹² Bell Atlantic, 1997c, pg19.

⁹³ Telecommunications Publishing Group, 1996, pg5.

⁹⁴ Crabdall & Furchgott-Roth, 1996, pg90.

telephone companies could only own a maximum of 5% of the content carried.

In late 1992 Bell Atlantic challenged the 5% limit on First Amendment grounds, and in August 1993 won the case.⁹⁵ This cleared the way for Bell Atlantic to enter the multimedia industry, and the company did so through the development of 'Stargazer.' Developed by Bell Atlantic Video Services during 1993 'Stargazer' is described by the company as a programming service.⁹⁶ Stargazer was developed to act as a navigation tool enabling subscribers to move around a virtual mall that offered entertainment, shopping and educational content.

From the onset Bell Atlantic adopted a strong consumer and marketing stance towards the development of Stargazer, not least because the regulatory framework that required the RBOCs to open its in-region telephone network to all new entrants as required. By branding the service, and providing unique content, Bell Atlantic intended to differentiate the service in the eyes of consumers from those of traditional cable service providers. In the first half of 1995 Bell Atlantic tested the Stargazer software in a 1000 home trial in Fairfax Virginia and concluded that the service was a success. Subscribers used the service more than comparable ones like pay-per-view and direct broadcast satellite, and expressed a willingness to switch from their existing service provider to Stargazer.⁹⁷ It was on this basis that Bell Atlantic decided to go ahead with the development of the full service network.

5.5.2.2 Tele-Communications Inc.

In late 1993 Bell Atlantic agreed to a \$32bn merger with Tele-Communications Inc (TCI), the largest cable operator in the American market. As part of the merger TCI would in turn acquire the outstanding publicly held stock in its programming affiliate Liberty Media. Thus, the merger with TCI would not only provide Bell Atlantic with a substantial stake in the cable industry but also in the programming industry as well. Huey & Kupfer (1993) argue that the rationale for the merger was a combination of technology acquisition and the need to be an

⁹⁵ Baldwin, McVoy & Steinfield, 1996, pg11.

⁹⁶ Maney, 1995, pg67f.

⁹⁷ VIPC, 1995.

active participant in the creation of the 'information superhighway.' The merger was also defensive on the part of Bell Atlantic:

[i]t wasn't patriotism that drove Bell Atlantic and Tele-Communications Inc. into each other's arms. Although Bell Atlantic had been the most aggressive of the Baby Bells in adding video technology, Smith [CEO, Bell Atlantic] felt that unless he made a daring move, his Philadelphia company would be picked apart by vultures. Cable operators had announced plans to soup up their networks and start offering telephone service, which cut into revenues Bell Atlantic receives ...⁹⁸

The merger would be advantageous to both parties. Bell Atlantic gained access to programming as well as an established consumer base of more than 10m subscribers. For its part TCI gained a cash rich partner, which would enable the company to engage in an extensive capital expenditure program enabling the provision of multimedia over its cable networks. The ability to offer multiple services over the same network underpinned the \$15bn network upgrade plan that was announced so after the merger was agreed.

The value placed on TCI and Liberty Media was criticised. Bell Atlantic's offer represented a 35% premium over the value placed on TCI and Liberty Media by the stock market on the day that the merger was announced. Bell Atlantic offered \$22bn whilst the market valued TCI and Liberty Media combined at \$16bn. The disparity in value is further widened when the assumption of \$10bn in TCI debt by Bell Atlantic is taken into consideration. Bell Atlantic defended its bid by arguing that to replicate TCI's cable network with a multimedia network would cost c\$23bn, an amount that did not include the costs of marketing and other subscriber acquisition techniques.⁹⁹

The deal collapsed in early 1994 for a combination of regulatory and pricing difficulties. Crandall & Furchgott-Roth (1996) directly attribute the failure of the merger to changes in the regulatory framework. In compliance with the 1992 Cable Act the FCC had begun to review

⁹⁸ Huey & Kupfer, 1993, pg60.

⁹⁹ Huey & Kupfer, 1993, pg61.

cable subscriber rates in late 1993 and announced its findings in early 1994. As a result of this review the FCC imposed a 7% cut in cable subscriber rates. This reduction would diminish the ability of the merged company to fund the investment required and pay down the \$10bn debt that Bell Atlantic would have taken on. Landler, Weber & DeGeorge (1994) assert that the reduction engendered tensions between Bell Atlantic and TCI executives and ultimately led to the collapse of the merger. Landler, Weber & DeGeorge (1994) cite James Cullen (President, Bell Atlantic) who stated that:

[n]ew uncertainties in the industry made it clear to both of us [TCI and Bell Atlantic] that it was just impossible to come up with a final, fair value.¹⁰⁰

Landler, Weber & DeGeorge (1994) continue:

Cullen insists that the talks broke down only because the companies couldn't project how the rate cuts would affect TCI's cash flow. "We were in agreement on virtually every single issue, except the final price."¹⁰¹

The Financial Times (1994) offers another explanation for the collapse of the merger. Although the merged company would be able to provide a wide range of services over a common network, the company lacked a blockbuster application that attract subscribers and tie them to Bell Atlantic. Consequently, it is likely that the company would be competing against established service providers on price alone. The likely downward spiral on prices would throw into question the ability of Bell Atlantic to support the level of investment required as well as pay down the extra \$10bn taken on board.

5.5.2.3 Building the full service network.

The collapse of the TCI merger did not diminish the enthusiasm of Bell Atlantic for multimedia. Shortly after the collapse of the merger Bell Atlantic announced in mid-1994 its intention to

¹⁰⁰ Landler, Weber & DeGeorge, 1994, pg 30.

¹⁰¹ Landler, Weber & DeGeorge, 1994, pg 30.

construct a full service network in-region that would deliver interactive video services.¹⁰² Integral to the full service network was Stargazer as this would bind together the various services to be offered. As it was planned that these services would be available over the in-region network the development of the full service network also necessitated capital expenditure in this area as well.

To further the development of the full service network Bell Atlantic established in October 1994 Tele-TV, a joint-venture with Nynex, Pacific Telesis and CAA.¹⁰³ Through one joint-venture Tele-TV would pool the various content investments of the three RBOCs, whilst another joint-venture would develop the necessary technology to make interactive services possible. Headed by Howard Stringer, a former CBS chairman, Tele-TV would:

...provide nationally branded, traditional and interactive home entertainment, information and education programming over the partnering companies broadband and wireless networks in six of the nation's top seven media markets, with the first commercial deployment by the end of 1996.¹⁰⁴

Tele-TV would gain access to programming through the licensing, acquisition and creation of content. The inclusion of CAA in the joint-venture would facilitate the accomplishment of this task. Through wide ranging and unique content and an easy to use navigation system Tele-TV would play a central role in Bell Atlantic's full service network. The Stargazer navigation tool would facilitate the search by subscribers of the content provided by Tele-TV, and as such would be an integral and vital part of the full service network. Moreover, the use of Stargazer by the other two RBOCs would expand the brand so that it became national in scope.

The business model of Tele-TV was criticised by *The Economist* (1995) and Tobenkin (1995). *The Economist* (1995) questioned the abilities of Howard Stringer to negotiate within Hollywood, and predicted that the RBOCs entry into this market would be as successful as that of

¹⁰² Telecommunications Publishing Group, 1996.

¹⁰³ Bell Atlantic, 1995e, pgl.

¹⁰⁴ Bell Atlantic, 1995e pgl.

the Japanese electronics manufacturing companies. Tobenkin (1995) questioned the underlying business assumption of Tele-TV, namely whether interactivity, in combination with educational and traditional TV content, would be sufficient to attract viewers. In addition, Tobenkin (1995) also proposed that the expansion in the diversity of content distribution would lower prices as companies fought to gain access to customers.

In parallel to its investment in Tele-TV Bell Atlantic furthered the development of the full service network through a series of multimedia experiments in 1995 in New Jersey and Virginia. When announcing the investment Bell Atlantic asserted that market research showed that a significant proportion of customers were willing to subscribe to the multimedia services provided by the RBOCs.¹⁰⁵ It was envisaged that both of these trial systems would be commercially operationally by the end of 1995, and would use an updated version of Stargazer. Throughout the summer of 1995 Bell Atlantic ran a 1000 subscriber trial in Dover New Jersey. However, despite apparent consumer demand for the service, Bell Atlantic failed to launch the New Jersey trial by the end of the year as originally planned. Moreover, the RBOCs withdrew its application to build hybrid coaxial video dialtone networks in-region even though the FCC was going to authorise construction. Bell Atlantic cited economic and technological reasons for this change of heart.

Bell Atlantic eventually introduced interactive video to Dover New Jersey in early 1996, and had more than 30,000 subscribers by yearend. According to VIPC (1998) this was the only commercial switched digital video network in operation in the United States. In addition Bell Atlantic was also initiated in May 1995 interactive video-on-demand trials in Reston Virginia. The technology used in the trial was asymmetrical subscriber line technology (ADSL). The principal advantage to be gained through implementing ADSL technology instead of fibre was speed. ADSL video-on-demand could be deployed much sooner, and at far less cost, than fibre. The trial ran from May 1995 until October 1996 when Bell Atlantic announced that it would be wound up so that the system could be upgraded to a broadband network.¹⁰⁶

¹⁰⁵ Telecommunications Publishing Group, 1996, pg5f.

¹⁰⁶ Bell Atlantic Video Services, 1996a.

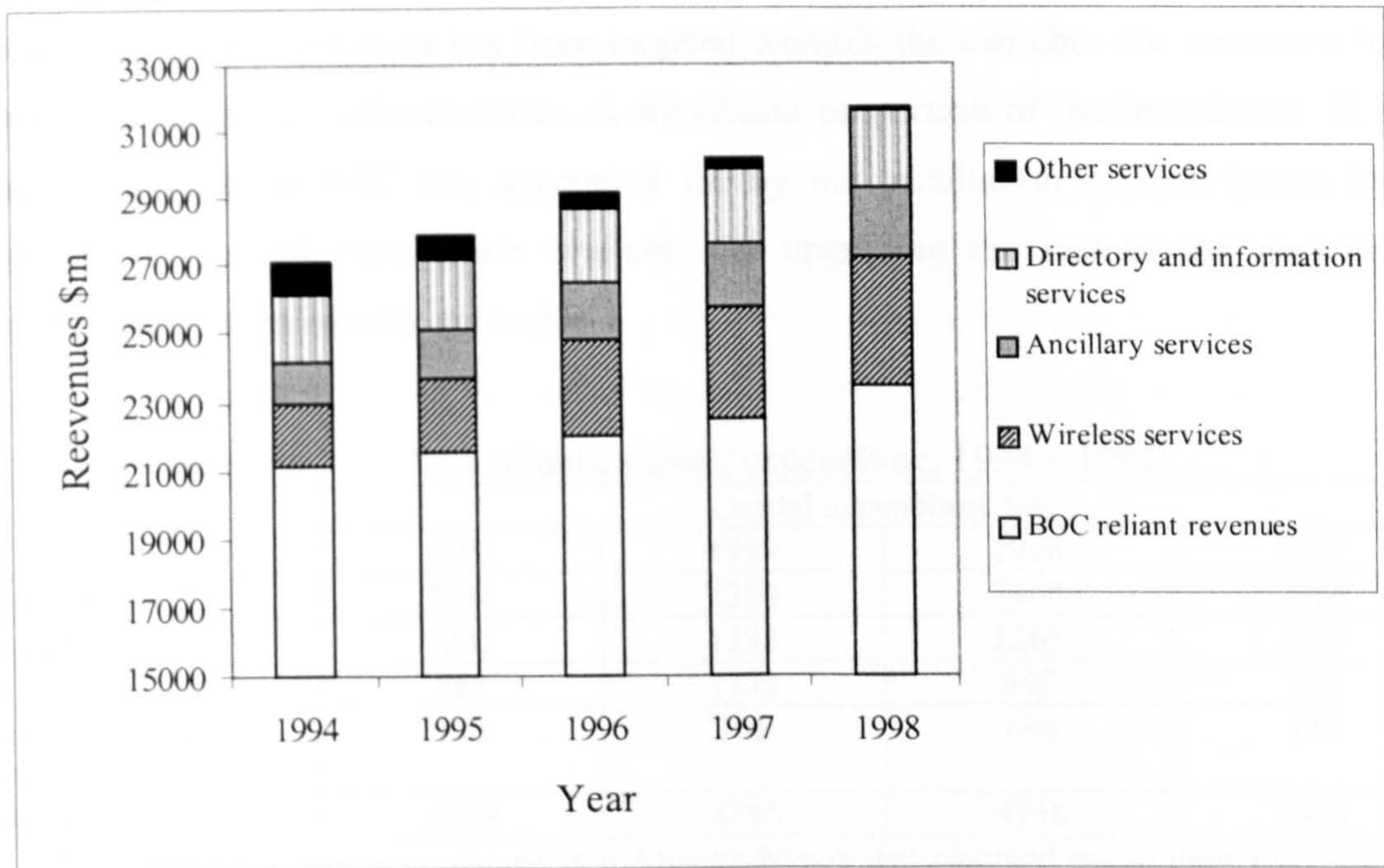
Although Bell Atlantic expended considerable effort in assembling various multimedia investments by 1997 the strategy had failed to develop as anticipated. Throughout 1997 Bell Atlantic retreated from its various multimedia commitments, it exited from Tele-TV thereby effectively closing the subsidiary and wrote down its investments in CAI Wireless that it acquired as part of the acquisition of Nynex. With the closure of Tele-TV, and the lack of commercial video systems, Bell Atlantic was left with only minimal exposure to the multimedia market. The effective exit of Bell Atlantic from the multimedia market was underlined when the RBOCs became a distributor and customer point of contact for DirecTV and USSB in 1997.

5.5.3 Core lines-of-business.

The failure to acquire TCI in early 1994 resulted in a shift in strategic priorities by Bell Atlantic, and saw the RBOCs display a renewed interest in its in-region lines-of-business, that is, in its local telephone and wireless subsidiaries. In many respects this shift was only natural given that the BOCs are the largest single revenue generators in the Bell Atlantic group, whilst the wireless operations are among the fastest growing of the RBOCs lines-of-business.

Figure 5. 10 (over) shows the source of revenue for the enlarged Bell Atlantic that emerged from its merger with Nynex. This figure shows that local telephone services and cellular account for circa half of Bell Atlantic's revenue in 1998. If the revenues from network are included as part of local telephone services then this level is increased further. Moreover, wireless revenues have arguably increased at a faster rate than the other sources of revenue generation.

Figure 5.10: The sources of Bell Atlantic revenue, 1994 – 1998



Source: various annual reports; Bell Atlantic 1997d & 1998.

5.5.3.1 Local telephone services.

The renewed interest of Bell Atlantic towards its BOCs was displayed as a concentrated effort to modernise the infrastructure so that a wider range of services could be offered. In addition such investment would also enhance the operating efficiency and reliability of the network as well. In the 1993 Annual Report Bell Atlantic stated its intention to:

... lead the country in the deployment of the information highway ... We will spend \$11 billion over the next five years to rapidly build full service networks capable of providing these (interactive, multimedia communications, entertainment and information) services within the Bell Atlantic region. We expect Bell Atlantic's enhanced network will be ready to serve 8.75 million homes by the end of the year 2000.¹⁰⁷

To this end Bell Atlantic has invested considerable amounts in its in-region telephone network. Table 5.5 (over) shows that the enlarged Bell Atlantic that emerged out of the 1997 merger with

¹⁰⁷ Bell Atlantic, 1993.

Nynex has spent at least \$4.5 a year since 1994 on the in-region telephone network. In each year a majority of the investment has been targeted towards the switches etc necessary for a digital telecommunications infrastructure. A significant proportion of the investment, \$1.8bn out of a total \$5.4bn in 1997 was accounted for by the installation of new access lines. Consequently, the capital expenditure available for upgrading the rest of the network is correspondingly less than initially applied.

Table 5.5: Bell Atlantic capital expenditure, 1994 – 1997¹

	Capital expenditure \$m.			
	1994	1995	1996	1997
Central office	2284	2256	2408	2968
Outside plant	1242	1233	1263	1568
Support assets ²	868	1171	947	736
Information originating / terminating assets	125	135	140	149
Total network services	4519	4795	4758	5421

Notes: 1. These figures are for the combined Bell Atlantic-Nynex that emerged out of their 1997 merger. 2. Support assets are those infrastructure required to provide telecommunications services, for instance, computers and land and buildings. Source: Bell Atlantic, 1997b, pg21.

Nevertheless Bell Atlantic has expended considerable sums on its in-region telephone network, and one way that this has been manifest is through improved operating efficiency. As measured by the number of employees per 10,000 access lines Bell Atlantic has been able to improve its operating efficiency every year from 1994 onwards. The network investment undertaken also enabled Bell Atlantic to broaden the range of services offered.

Table 5.6: Value added services revenue growth

Year	Revenue	Increase	
		\$m	%
1993	1193.6	N/A	N/A
1994	1284.4	90.8	7.6
1995	1393.2	108.8	8.5
1996	1599.5	206.8	14.8
1997 ^{1,2}	13113.2	554.1	4.4

Note: 1 Figures for Bell Atlantic-Nynex combined. 2. For 1997 Bell Atlantic combined value added services with local services thereby preventing the identification of value added services revenue for 1997. Source: Bell Atlantic 1995c, 1996a & 1997c.

Table 5.6 (above) details the growth of value added services revenue for the years 1993 to 1996. Value added services are those that “expand the utilisation of the network,” and include Caller

ID, voice messaging and Return Call.¹⁰⁸ From Table 5.6 it can be seen that value added services revenues grew in each of the years for which information is available, and that the growth rate increased year on year. In 1997 Bell Atlantic explicitly attributes the growth in local service revenues to value added services.¹⁰⁹

Bell Atlantic has been criticised for its failure to adequately invest in its in-region telephone networks. Ferguson (1997) questions whether the productivity gains are due to downsizing and not investment as the RBOCs assert. (This criticism of the RBOCs is expounded at greater length in Section 5.7.1.1 of this chapter). New Network Institute (1999) cites The Consumer Advocate from New Jersey to support its argument that Bell Atlantic has under invested in its telephone network and failed to develop the full service network promised. It is asserted that of the \$1.5bn that Bell Atlantic promised to spend only \$79m had been spent.¹¹⁰ The Consumer Advocate stated:

Bell Atlantic-New Jersey has over-earned, under spent and inquitably deployed advanced telecommunications technology to business customers, while largely neglecting schools and libraries, low-income and residential ratepayers and consumers in Urban Enterprise as well as urban and rural areas.¹¹¹

Furthermore, the New Network Institute (1999) questions recent pronouncements by Bell Atlantic that ADSL will be available by the end of 1999 across its in-region territory. Announcing the roll out of ADSL does not necessarily mean that it will occur. Bell Atlantic failed to roll out commercial broadband services as planned. ADSL can not be equated with broadband. Although the customer can receive considerable bandwidth the return is only 90K, less than half of the 200K required by the FCC for the service to be defined as broadband.¹¹²

¹⁰⁸ Bell Atlantic, 1995c, pg17.

¹⁰⁹ Bell Atlantic, 1997c, pg15.

¹¹⁰ New Networks Institute, 1999, pg3.

¹¹¹ The Consumer Advocates, 21st March 1997, *cited* in New Networks Institute, 1999b, pg3.

¹¹² New Network Institute, 1999b, pg6.

The criticism voiced by New Networks Institute (1999) and Ferguson (1997) question whether the rhetorical commitment of Bell Atlantic to its in-region local telephone service has been supported by adequate capital expenditure. Given that the in-region local telephone services generate the majority of the revenues for the RBOCs it is arguable that under investment in this market would represent a short-sighted strategy on the part of Bell Atlantic.

5.5.3.2 Wireless.

Even before the failure to acquire TCI necessitated a change in strategic priorities by Bell Atlantic the RBOCs had begun to expand its presence within the wireless market. In 1993 Bell Atlantic acquired Metro Mobile CTS. This expanded the in-region POPS by 11.5m as well as consolidating the position of Bell Atlantic as the largest service provider on the east coast of the United States.

In the middle of the 1990s Bell Atlantic sought to expand its geographical coverage through partnerships with other companies. In 1994 Bell Atlantic joined with Nynex, US West and AirTouch to form two joint-ventures that would provide PCS nationally. The first of these partnerships – PCS PrimeCo – acquired 11 PCS licenses for a total of \$1.1bn in 11 markets across the United States in 1995, whilst the second undertook the development of a “national branding and marketing strategy and wireless communications service standards.”¹¹³ Ownership of both of these joint-ventures was equally distributed between the four partners.

Of the two joint-ventures the more significant is PCS PrimeCo. Only 16 months after acquiring the spectrum licenses PCS PrimeCo simultaneously launched its CDMA network in 16 cities across the United States. After the launch PCS PrimeCo continued to widen its geographical scope by signing roaming agreements that covered a large proportion of those top 50 markets where the company did not provide service.¹¹⁴ Furthermore, PCS PrimeCo introduced dual mode technology into its handsets so subscribers could also roam on analogue as well as digital

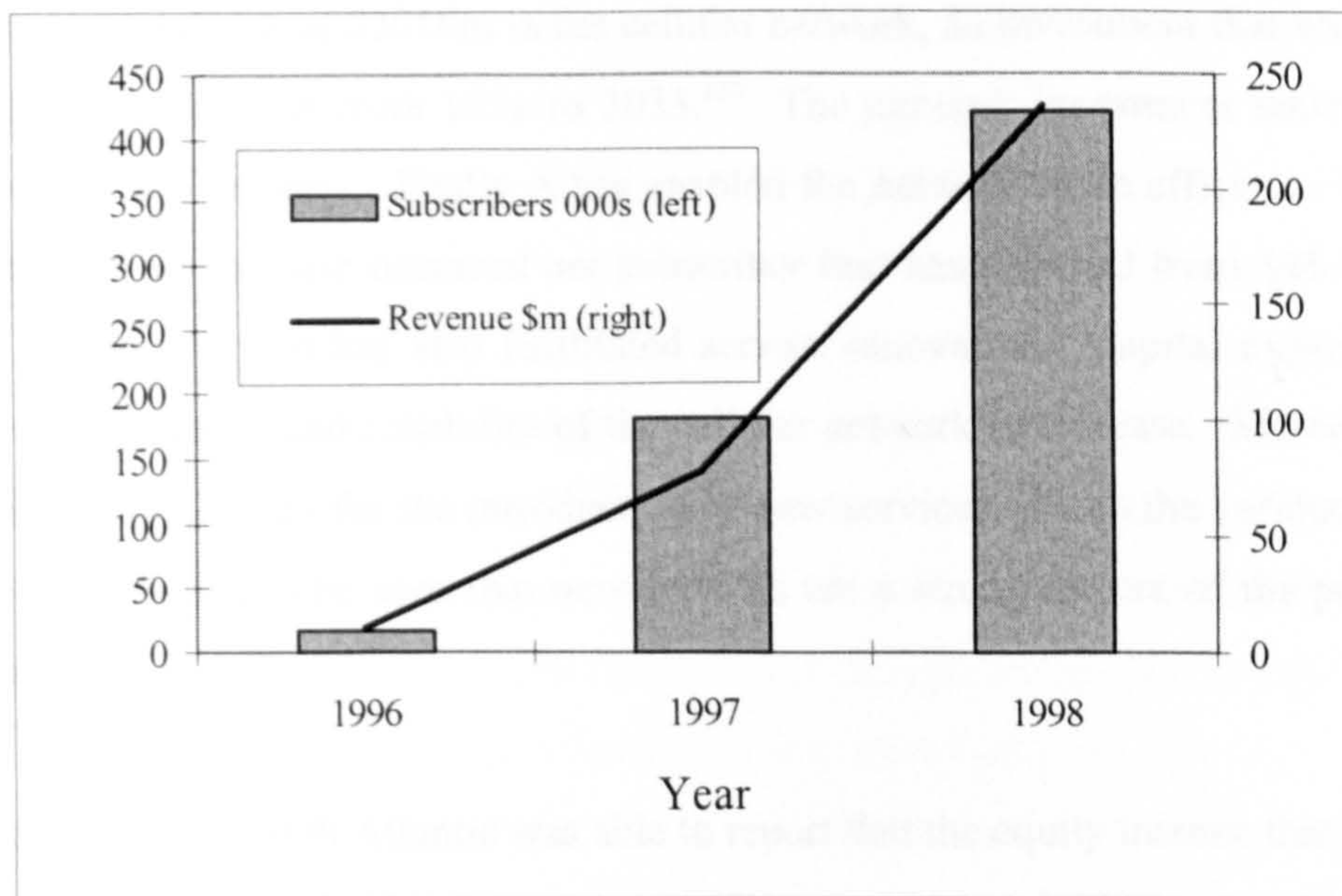
¹¹³ Bell Atlantic, 1995c, pg12.

¹¹⁴ Bell Atlantic, 1997c, pg58.

systems.¹¹⁵

Since the launch of its service PCS PrimeCo has enjoyed significant growth so that by the end of 1998 the company had 422,000 subscribers. Central to this growth has been the strategy of undercutting the incumbent cellular service providers in all those markets where it operates. In addition, PCS PrimeCo has also sought to change the common perception of cellular services so subscribers view them as an integral part of their everyday life.¹¹⁶ Company literature has stressed the multiple distribution channels, innovative service development and simplified pricing structure. This has been demonstrated through a steady increase in the number of stores that PCS PrimeCo operates to 83 by the end of 1998. These stores were supplemented by more than 2000 indirect agents to further widen the company's distribution channels.¹¹⁷

Figure 5.11: PCS PrimeCo subscriber growth



Source: PCS PrimeCo 1998.

Effective July 1st 1995 Bell Atlantic merged its domestic cellular and paging businesses with its Nynex counterpart to form Bell Atlantic Nynex Mobile (BANM). Due to the larger size of Bell

¹¹⁵ Bell Atlantic, 1997c, pg58.

¹¹⁶ Bell Atlantic, 1997c, pg59.

¹¹⁷ PCS PrimeCo, 1998, pg2.

Atlantic Mobile the joint-venture was 63% owned by Bell Atlantic, and 37% by Nynex. As part of the merger agreement Bell Atlantic agreed to the sale of cellular systems in Massachusetts and Rhode Island that amounted to \$314m.¹¹⁸ The merger also saw BANM establish a new cellular subsidiary, Southwestco Wireless, to separately management the company's cellular businesses in Arizona, New Mexico and Texas.¹¹⁹ A clear rationale for this separation was to create a company closer to the markets it serves, and to prevent the company from being operated by east-coast management and being ignored in the process. Reflecting the fact that RBOCs brand names do not travel well outside their own region Southwestco Wireless operates its cellular service as CellularOne.

The operational strategy of BANM is strikingly similar to that of PCS PrimeCo. BANM has combined continued capital expenditure in the cellular network, with marketing and promotional investments and new service innovation. Between 1994 and 1997 inclusive BANM invested capital expenditure of \$3016m in the cellular network, an investment that was manifest in the expansion of cell sites from 1651 to 3033.¹²⁰ The network investment undertaken has been beneficial in two respects. Firstly it has enabled the network more efficient. Efficiency here is taken to be the expense occurred per subscriber that has declined from \$45 in 1994 to \$27 in 1997.¹²¹ Secondly, it has also facilitated service innovation. Capital expenditure has enabled the service quality and reliability of the cellular network to increase. Moreover, it has also provided the opportunity for the introduction of new services. From the various corporate publications available it can be seen that new services are a strong feature of the promotional effort undertaken.

As a result of this strategy Bell Atlantic was able to report that the equity income that it received from BANM increased from \$122m in 1994 to \$267m in 1995 and \$360m in 1996.¹²² This growth was attributed to improving margins, and a widening revenue base due to increased subscriber numbers. The higher the number of subscribers attracted the more capital

¹¹⁸ Bell Atlantic, 1995c, pg38.

¹¹⁹ Bell Atlantic Nynex Mobile, 1995.

¹²⁰ Bell Atlantic, 1997b, pg55.

¹²¹ Bell Atlantic, 1997b, pg56.

¹²² Bell Atlantic, 1996a, pg21.

expenditure that is required. This constitutes a virtuous cycle where investment enables innovation and cost reduction that attracts new subscribers that in turn necessitates additional investment.

The merger with Nynex in 1997 impacted on both of these joint-ventures. In the case of PCS PrimeCo Bell Atlantic became a 50% shareholder. In addition, the merger between the two RBOCs made BANM a wholly owned subsidiary of Bell Atlantic and in recognition of this the company changed its name to Bell Atlantic Mobile (BAM). This resulted in Bell Atlantic operating three cellular brands: Bell Atlantic Mobile in-region, CellularOne in three southwest states (Arizona, New Mexico and Texas), and PCE PrimeCo throughout the rest of the United States. In terms of marketing scope this may appear to be counter intuitive, however, Bell Atlantic to build upon the high in-region recognition of the corporate name wherever possible and to build new brands where it is unsuitable.

In 1995 Ray Smith (Chairman & CEO, Bell Atlantic) asserted that “wireless is a business that requires scale, scope and a national brand.”¹²³ This is perhaps a fitting summary of the strategies that Bell Atlantic has strove to implement. However, it has been shown that the merger with Nynex consolidated the position of Bell Atlantic as the operator of three cellular brands. The merger also expanded the geographical scope of the company as well. However, although PCS PrimeCo and Southwestco Wireless are outside of the in-region territory of Bell Atlantic they are not national in geographical scope. Furthermore, because of the different brand names advertising in one market does not support the marketing efforts made elsewhere by Bell Atlantic. This casts doubt on the coherence of the cellular strategy that Bell Atlantic has implemented from the mid-1990s onwards.

5.5.5 Conclusion.

What conclusion can be drawn as to the nature of the domestic strategy of Bell Atlantic since 1984? Over the entire post-divestiture period the strategies that Bell Atlantic has advocated closely resemble the assessment of Telecommunications Publishing Group (1996). Bell

¹²³ Bell Atlantic, 1995c, pg9.

Atlantic has expanded into new markets whilst exiting existing ones so that the diversification that had long been a hallmark of the RBOCs was largely reversed by the end of 1995. However, from the early 1990s the assessment of Maney (1995), of an aggressive company is an apt one.

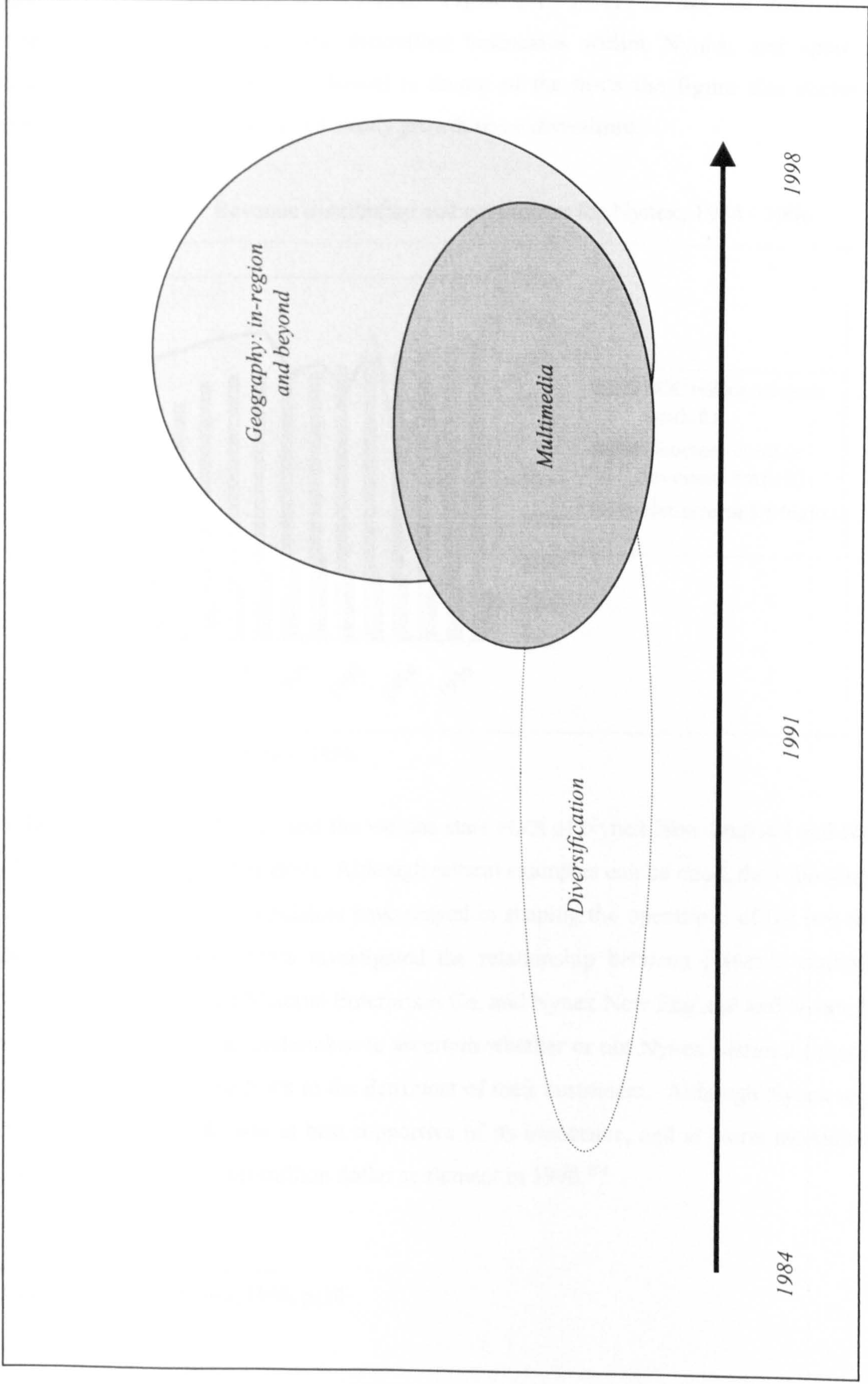
The changing nature of the strategies enacted by Bell Atlantic since 1984 is demonstrated in Figure 5.12 (over). Through reversing the initial post-divestiture diversification efforts Bell Atlantic has focused its investment activity towards a declining number of lines-of-business. At the tail end of its diversification retrenchment Bell Atlantic began to invest in the multimedia market. However, the RBOCs efforts in this market did not prove to be successful. Despite developing Stargazer, and the forming the Tele-TV partnership with three other companies, Bell Atlantic never recovered from its failure to acquire TCI in 1994. The subsequent efforts of Bell Atlantic to become a major player within the multimedia market are at best half hearted, and lack the scope and vision of the original bid for TCI. However, this failure triggered a renewed interest on the part of Bell Atlantic in its in-region telephone network and highlighted the importance of geography to the RBOCs.

5.6 NYNEX.

The initial assessment of Nynex provided by O'Reilly (1983), of a company at war with itself, does not bode well. Neither do the comments of Coy & Lewyn (1990), Global Telecoms Business (1994) and Maney (1995), which collectively attest to the difficult environment in which Nynex operates, as well as the company's failure to articulate strategies that reflect environmental changes that have occurred.

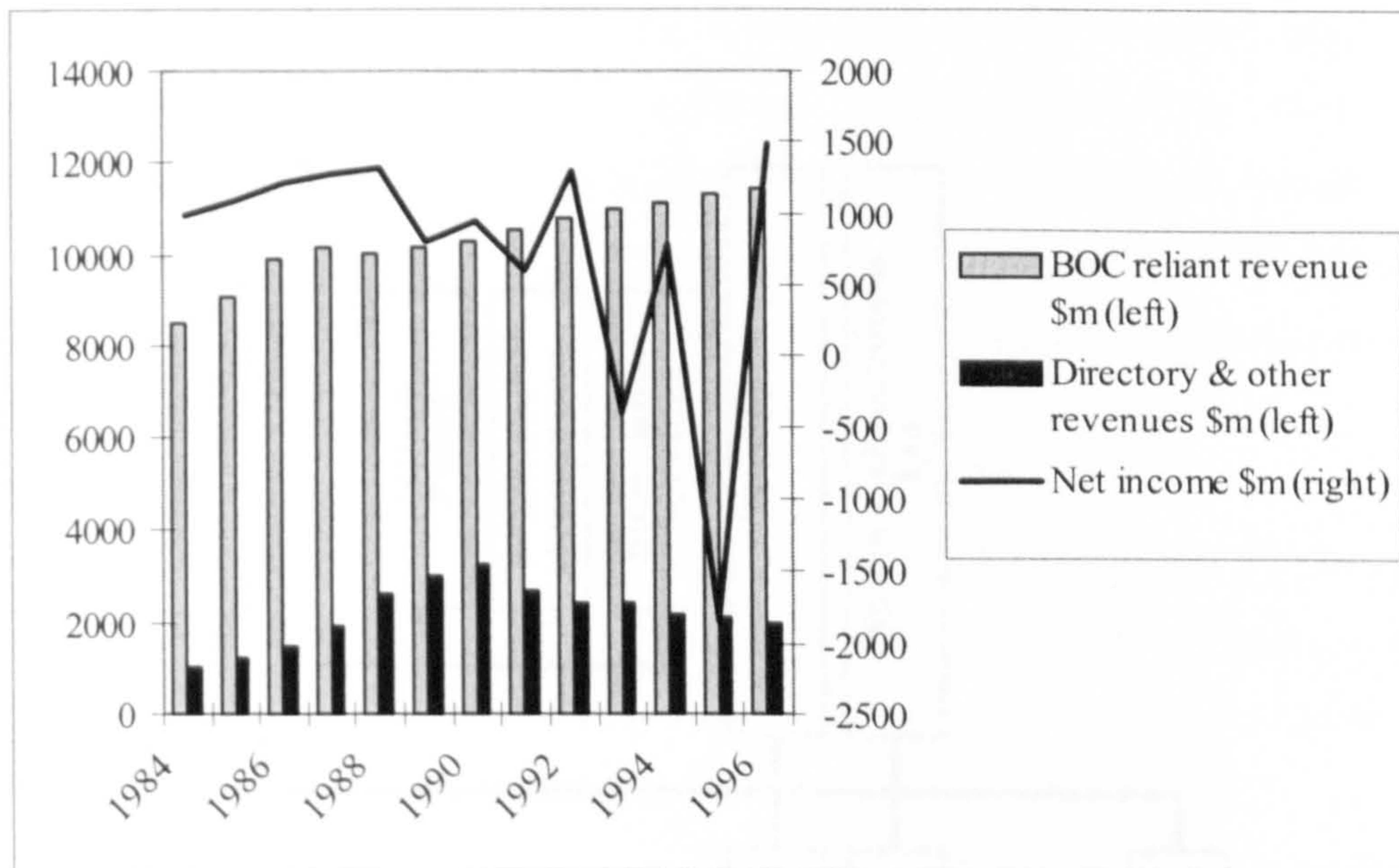
The organisational structure of Nynex has already been dwelt upon in Section 5.2.1. At an organisational level Nynex is divided into two. One group of subsidiaries is comprised of the two BOCs, Nynex New England and Nynex New York, and Telesector Resources Group Inc. The BOCs provide local telephone services in the six-state territory of New York, New Hampshire, Massachusetts, Maine, Connecticut, Rhode Island and Vermont. The other group of subsidiaries within Nynex are the diversified business group, which when coupled with the international investments are referred to as the "worldwide services group" by the RBOCs. Even

Figure 5.12: Domestic Bell Atlantic strategies between 1984 and 1998



though Nynex has expanded its non-BOCs businesses it is still heavily reliant on Nynex New England and Nynex New York for revenue. Figure 5.14 (over) shows the distribution of revenue between the BOCs and the diversified businesses within Nynex, and apart from illustrating that revenue is heavily skewed in favour of the BOCs the figure also shows how revenue and net income have enjoyed steady growth since divestiture.

Figure 5.14: Revenue distribution and net income for Nynex, 1984 - 1996

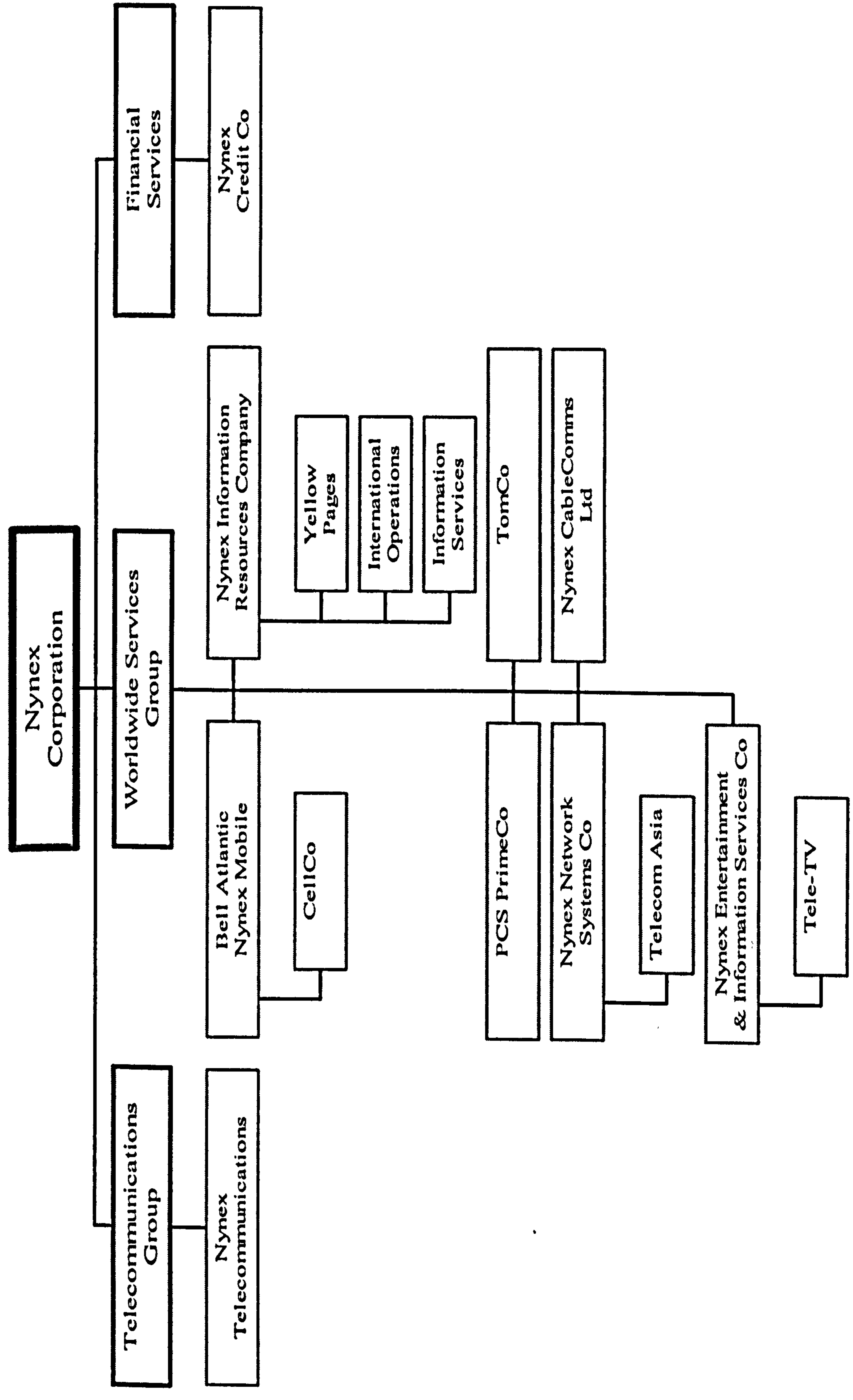


Source: various annual reports; Nynex, 1996.

The relationship between Nynex and the various state PUCs of Nynex New England and Nynex New York has been far from smooth. Although several examples can be cited, the following are illustrative of the role of the regulators have played in shaping the operations of the two BOCs. At the end of 1980s State PUCs investigated the relationship between Nynex's centralised purchasing company, Nynex Material Enterprises Co, and Nynex New England and Nynex New York. The investigation was undertaken to ascertain whether or not Nynex Material Enterprise Co had overcharged the two BOCs to the detriment of their customers. Although Nynex argued that the evidence available was at best supportive of its innocence, and at worst inconclusive, the company agreed to a multi-million dollar settlement in 1990.¹²⁴

¹²⁴ Coy & Lewyn, 1990; Nynex, 1990, pg10.

Figure 5.13: Nynex organisational structure 1994



The New York Public Services Commission (NYPS) moved from rate of return to incentive based regulation of the BOCs. The 1995 incentive based regulatory structure implemented price caps on basic services, though it did not restrict the overall profit level of Nynex. It was though accompanied by a mandated need to improve quality of service levels.¹²⁵ Arnest (1994), Krantz (1994), Maney (1995) and Vann (1994), Krantz (1994) variously demonstrate the inefficiencies within Nynex as well as testify to the antiquated nature of the company's network. State regulators have acted in a manner to encourage new entrants and competition, especially where Nynex had been deemed to provide inadequate service provision. The information intensive nature of the north-eastern United States, coupled with densely populated conurbations and a large number of corporations have encouraged new entrants such as Teleport Communications Group to enter the markets served by the BOCs. The combined result of these regulatory changes, and the increasing diversity of service provision, has been to exert a downward pressure on BOCs revenues.

Operating within a increasingly harsh in-region regulatory and competitive environment led Nynex to adopt a variety of strategies in the post-divestiture period. Adopting a broadly chronological approach the following sections shall examine in turn, the diversification strategy undertaken by Nynex, and then the company's multimedia and cellular strategies.

5.6.1 Financial and software diversification.

Chessler, Clark & Ferng (1986) highlight two areas in which diversification has been undertaken by Nynex. Shortly after divestiture, in 1986, Nynex expanded into financial services. Nynex Credit Company would provide financing to those customers wishing to lease cellular or business systems from Nynex subsidiaries, or third party financing to customers of non-Nynex companies.¹²⁶ An additional company, Nynex Trade Finance Company, evaluates and then finances telecommunications development projects involving Nynex, and repatriates any profits from these developments back to the United States.

¹²⁵ Nynex, 1996, pg6f.

¹²⁶ Nynex, 1986, pg22.

The second area where Nynex has diversified, and which is highlighted by Chessler, Clark & Ferng (1986), is software. Through a series of subsidiaries, such as Nynex Development and Nynex Computer Services Company, the RBOCs expanded its presence in this market. Importantly, this expansion occurred not only through organic growth but also the acquisition of external companies. In 1986 Nynex acquired Data Group and Telco Research Corporation to expand the range of services offered.¹²⁷ Nynex subsequently expanded into the financial software market through the acquisition of AGS Computers Inc, which then became the mainstay of the company's efforts in the market.

In parallel to the company's expansion into the computer software market Nynex also entered the computer retail market as well. In 1984 Nynex Business Information Systems acquired Datago Computer Stores and Computer Solutions in 1985. Nynex expanded in the market in 1986 through the purchased from IBM a national chain of computer stores. The RBOCs' presence in the computer retail market was short-lived, in 1991 Nynex sold Nynex Business Centres to ComputerLand.¹²⁸

Financial and software / computer diversification is synergistic in that Nynex Credit Company facilitated the purchase of services and equipment from Nynex Business Information Systems, Nynex Business Centres and other similar companies within the diversified business group. This is in keeping with one of the early themes of Nynex's post-divestiture strategy, namely, that the various companies within Nynex collaborate to provide customers with the necessary solutions to their needs. This collaboration is expressed in the 1989 Annual Report:

...the Nynex family of companies works together as part of a single, integrated communications business that provides integrated information solutions to our customers.¹²⁹

¹²⁷ Nynex, 1986, pg27.

¹²⁸ Nynex, 1991, pg4.

¹²⁹ Nynex, 1989, pg9.

Nynex remained an active participant within the computer software market until late 1993. In late 1993 Nynex began exiting the computer software market, and in early 1994 sold AGS Computers Inc and eleven other software companies.¹³⁰ The rationale projected by Nynex for the exit, initially from computer retailing and subsequently from computer software, was that these businesses were inconsistent with the company's increasing focus on telecommunications, directory publishing and cellular businesses. However, it is also the case that these businesses did not contribute to the overall profitability of Nynex. Table 5.7 (over) shows that in comparison to financial services, "other diversified operations" which includes computer retailing, software and consultancy services provided by Nynex's computer software businesses have not been profitable. Furthermore, on closer examination, the annual reports of Nynex reveal that the continued loss making situation is due to cost cutting initiatives, and business restructuring within the computer retailing and software subsidiaries.

Table 5.7: Comparison of operating income source for Nynex, 1987 – 1994

Source of operating income, \$m	Year							
	1987	1988	1989	1990	1991	1992	1993	1994
Financial services ¹	14	36	51	75.7	27	63.4	38.9	69.9
Other diversified operations ²	(112)	(133)	(121)	(374)	(169.3)	(67.6)	(384.8)	(134.8)

Notes: 1. Year 1987 – 1989 include real estate. 2. Also includes international as well. Source: various annual reports.

Although the sale by Nynex of its computer related business curtailed the diversification strategy, the RBOCs has remained active within the financial services market. Whilst the businesses have proved to be profitable, they have not been consistently profitable.

5.6.2 Multimedia.

Reacting to both the removal of the MFJ lines-of-business restriction that prevented the provision of information services, and the euphoria of convergence, Nynex articulated a multimedia strategy from 1993 onwards. Nynex believed that digitalisation would result in the convergence of traditionally separate industries, as well as alter the way that people work,

¹³⁰ Nynex, 1993a, pg3.

communicate and learn. Consequently, if Nynex was to retain its position as the dominant provider of telecommunications services within north-east United States it must adapt to these changes in circumstances.

Nynex sought to adapt to the challenge through a series of strategic investments. These investments are summarised in Table 5.8 (over), and are found in the areas of content as well as new technologies. In 1993, as Viacom was fighting QVC for control of Paramount Communications Inc., Nynex made a \$1.2bn investment in Viacom. Karpinski (1993) describes the strategic merits of the deal: Viacom gains access to Nynex's overseas cable-TV businesses as well as telephone switching technologies, whilst Nynex secured access to content and a motive to accelerate the improvement of its network. Whilst this may be the case, the investment enabled Viacom to raise its \$7.4bn bid for Paramount Communications Inc. to more than \$10bn, an offer that was significantly higher than that of \$9.5bn from QVC. Viacom successfully acquired Paramount Communications Inc. in 1994.

Table 5.8: The multimedia and new technology investments of Nynex

Year	Investment
1993	Viacom. \$1.2bn of cumulative preference stock, 5% annual dividend. Redeemable after 5 years.
1994	Equal partner in Tele-TV, a company established to develop branded home entertainment, information and interactive services.
1994	Manhattan video dial tone trial in conjunction with Liberty Cable, Urban Cable, Advanced Research & Technology Inc. and Time Warner Communications.
1995	CAI Wireless Systems, wireless cable entertainment.

Source: various annual reports.

A second content related investment was undertaken in 1994 when Nynex joined with Bell Atlantic, Pacific Telesis and Creative Artists Agency (CAA) to establish Tele-TV. Managed by Howard Stringer, a former chairman of CBS, Tele-TV was formed to develop:

... nationally branded home entertainment, information and interactive services. The venture will develop and market packages of branded entertainment and provide the systems needed to deliver programming over our [Nynex] video dial tone networks.¹³¹

¹³¹ Nynex, 1994a, pg5.

Through forming the joint-venture the previously separate investments of the partners were amalgamated into a single venture, which would not only reduce costs by removing duplication of effort but also quicken product development.

In addition to content based development, Nynex has also invested to gain access to new distribution technologies. In association with Liberty Cable, Time Warner Communications, Urban Cable and Advanced Research & Technology Inc, Nynex began in 1994 a video dial tone trial in Manhattan. In addition to ascertaining the demand for services, the trial also tested the technology employed and highlighted any deficiencies encountered. In 1994 Nynex and BellSouth invested in CAI Wireless, a company that develops wireless cable technology that is capable of broadcasting more than 100 channels. The advantages of wireless cable-TV over traditional versions is that through broadcasting from a central point to antennas located on each customer's house, wireless cable-TV is capable of providing near video on demand as well as improved sound and local programming. More importantly, the use of wireless technology would allow Nynex to enter the entertainment market considerably quicker than if it had to lay cable in the traditional fashion.

The success of Nynex's expansion into the multimedia market has been questioned by more than one commentator. The access guaranteeing motive of Nynex's investment in Viacom is questioned by Maney (1995), who argues that federal broadcast rules and syndication are likely to prevent all but a small minority of programming from becoming exclusively attached to one distributor. Maney (1995) continues:

...Nynex didn't get much. It doesn't have any defined control ... There were no promises to create programming for Nynex, no pre-arranged working relationship that might let the companies trade knowledge. Most analysts felt Nynex made a bad investment, putting up too little money to gain any real clout at Viacom. Even top executives at Viacom imply they don't quite know what to do with Nynex.¹³²

¹³² Maney, 1995, pg95.

In 1995 Nynex began to realise the value of its Viacom investment. A wholly owned subsidiary was created to which Nynex transferred twelve million shares of Viacom stock, as well as Nynex common stock. Outside parties then became shareholders in the this subsidiary, whose assets will be liquidated in December 2000. Through the issuance of two tranches of shares in this subsidiary Nynex was able to raise \$100m in 1995 and \$500m in 1996.¹³³

The Economist (1995) and Tobenkin (1995) both question the underlying business assumptions of Tele-TV. The Economist (1995) questioned the abilities of Howard Stringer to negotiate within Hollywood, and predicted that the RBOCs entry into this market would be as successful as that of the Japanese manufacturing companies. Tobenkin (1995) questioned whether the underlying business assumption of Tele-TV; namely, that interactivity, in combination with educational and traditional TV content, would be sufficient to attract viewers. Furthermore, Tobenkin (1995) also proposed that increased diversity of content distribution would lower prices as companies fought to gain access to customers.

These concerns as to the underlying business assumption of Tele-TV would appear to have been vindicated, for in 1997 the company was restructured and its operational remit significantly reduced.¹³⁴ This restructuring limited the operational remit of the company with the ultimate objective of completely closing the subsidiary. Similarly, 1997 also witnessed the exit of Nynex from CAI Wireless Systems.¹³⁵

5.6.3 Cellular expansion.

Nynex began providing cellular services in-region during 1984 through a wholly owned subsidiary, Nynex Mobile Communications. In contrast to other RBOCs, Nynex has not expanded out-region but has instead focused its attentions solely on the in-region market. The post-divestiture cellular strategy has been characterised by the steady expansion of in-region cellular service coverage, either through the acquisition of existing companies in areas where

¹³³ Bell Atlantic, 1997c, pg40.

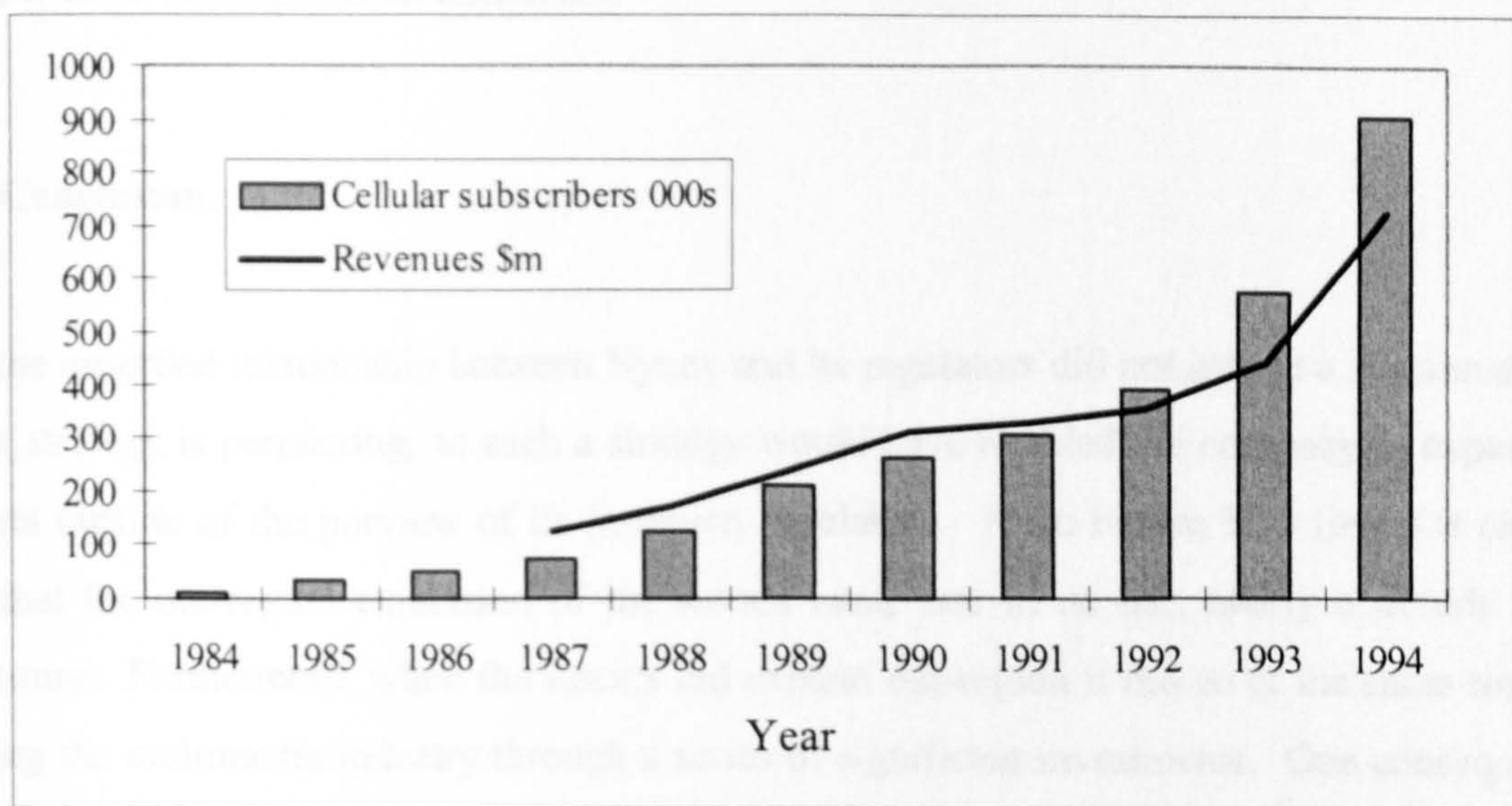
¹³⁴ Bell Atlantic, 1997c, pg15.

¹³⁵ Bell Atlantic, 1997c, pg15.

Nynex did not operate or through increasing the number of base stations. For example, in 1991 the company invested \$114m to increase its in-region coverage and to move the company forward to its stated goal of providing seamless in-region coverage, whilst in 1993 Nynex acquired in-region cellular properties from Contel Cellular.¹³⁶

However, as a consequence of the in-region focus of Nynex Mobile Communications, the company was, by 1994, the smallest cellular company operated by any of the RBOCs.¹³⁷ In 1994 Nynex moved to expand out-region through three joint-ventures with fellow RBOCs. The joint-ventures are summarised in Table 5.9 (over). Nynex Mobile Communications merged with Bell Atlantic Mobile to form Bell Atlantic Nynex Mobile (BANM). In addition to operating in a contiguous market from Maine to South Carolina, BANM also operates in Arizona, New Mexico and Texas. The smaller size of Nynex Mobile Communications when compared to Bell Atlantic Mobile resulted in Nynex being the junior partner in the venture with only 37.65%.

Figure 5.15: Subscriber and revenue growth of Nynex Mobile Communications, 1984 – 1994



Source: various annual reports; Nynex, 1993b, 1994b & 1995b.

¹³⁶ Nynex, 1991, pg14; Nynex, 1993a, pg21.

¹³⁷ Mobile Communications, 1995a, pg11.

Table 5.9: Joint-venture based expansion of Nynex's cellular business

Year	Joint-venture investment
1994	Merger of Nynex Mobile Communications with Bell Atlantic Mobile to create Bell Atlantic Nynex Mobile (BANM). Minority ownership of 37.65%.
1994	Establishment of two cellular joint-ventures with Bell Atlantic, US West and AirTouch Communications. Ownership in both of these joint-ventures is equally distributed.

Source: various annual reports.

In contrast the other two joint-ventures established are equal partnerships between the same four companies of Nynex, Bell Atlantic, US West and AirTouch Communications. In the first of these ventures all four companies came together to provide a national, seamless service in accordance with the notion of "anytime-anywhere" communications. The cellular operations of these four company do not cover Continental USA in its entirety. As a result the second joint-venture, PCS PrimeCo, was formed with the express intention of rectifying this shortcoming through bidding for spectrum in the 1995 personal communications services auctions. The successful purchase of licenses in eleven markets for \$1.1bn, in conjunction with the existing cellular coverage of the four partner companies, expanded their collective service coverage nation wide to 165m potential customers.¹³⁸

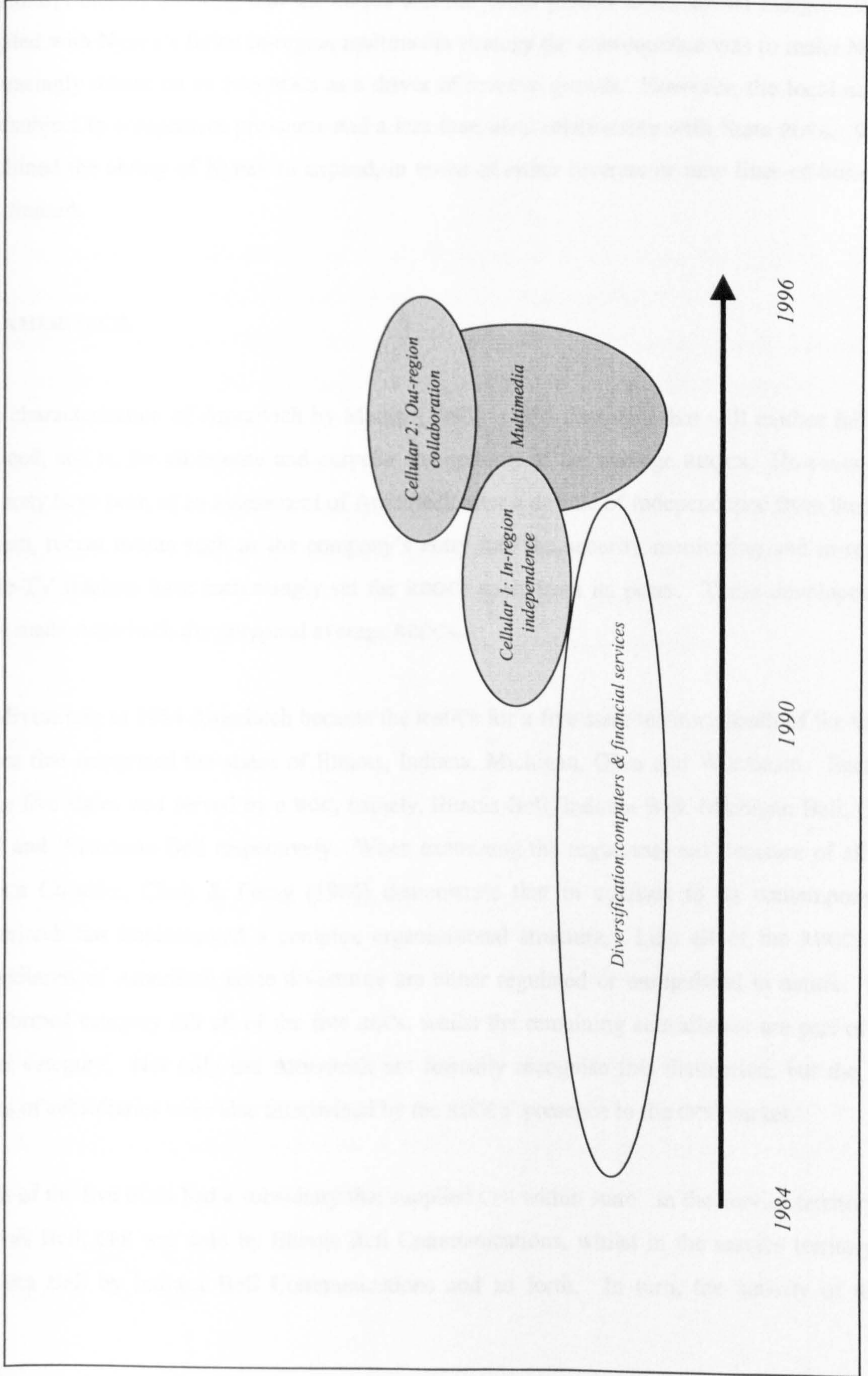
5.6.4 Conclusion.

That the unsettled relationship between Nynex and its regulators did not induce a sustained out-region strategy is perplexing, as such a strategy would have enabled the company to expand in markets outside of the purview of its in-region regulators. From Figure 5.16 (over) it can be seen that the out-region expansion of the RBOCs came late in its life, nearly a decade after divestiture. Furthermore, when the RBOCs did expand out-region it did so at the same time as entering the multimedia industry through a series of significant investments. One consequence of this is that both the cellular and multimedia lines-of-business were competing for investment funds from the same limited source. Consequently, the RBOCs attention was divided between these two markets with the result that both suffered.

The failure to significantly expand out-region ensured that Nynex was heavily reliant on its in-

¹³⁸ Nynex, 1995a, pg16

Figure 5.16: Domestic strategies of Nynex between 1984 and 1998



region markets for revenue growth. This effectively limited the size of Nynex's cellular subsidiary, thereby ensuring that the RBOCs was the junior partner in the BANM merger. When coupled with Nynex's failed in-region multimedia strategy the consequence was to make Nynex increasingly reliant on its two BOCs as a driver of revenue growth. However, the local market was subject to competitive pressures and a less than ideal relationship with State PUCs. When combined the ability of Nynex to expand, in terms of either revenue or new lines-of-business, was limited.

5.7 AMERITECH.

The characterisation of Ameritech by Maney (1995) is of a company that will neither fail nor succeed, and is, for all intense and purpose, the epitomy of the average RBOCs. However true this may have been as an assessment of Ameritech after a decade of independence from the Bell system, recent events such as the company's entry into the security monitoring and in-region cable-TV markets have increasingly set the RBOCs apart from its peers. These developments have made Ameritech the untypical average RBOCs.

On divestiture in 1984 Ameritech became the RBOCs for a five state territory south of the Great Lakes that comprised the states of Illinois, Indiana, Michigan, Ohio and Wisconsin. Each of these five states was served by a BOC, namely, Illinois Bell, Indiana Bell, Michigan Bell, Ohio Bell and Wisconsin Bell respectively. When examining the organisational structure of all the RBOCs Chessler, Clark & Ferng (1986) demonstrate that in contrast to its contemporaries Ameritech has implemented a complex organisational structure. Like all of the RBOCs the subsidiaries of Ameritech since divestiture are either regulated or unregulated in nature. Into the former category fall all of the five BOCs, whilst the remaining subsidiaries are part of the latter category. Not only did Ameritech not formally recognise this distinction, but the two types of subsidiaries were also intertwined by the RBOCs' presence in the CPE market.

Each of the five BOCs had a subsidiary that supplied CPE within state. In the service territory of Illinois Bell, CPE was sold by Illinois Bell Communications, whilst in the service territory of Indiana Bell by Indiana Bell Communications and so forth. In turn, the activity of these

companies is supported by territory wide company, Ameritech Communications, and drew upon Ameritech Credit Corporation for financing arrangements. In turn, the five BOCs were supported by Ameritech Service, a centralised purchasing agent. Outside of these companies Ameritech also had cellular (Ameritech Mobile Communications), directory publishing (Ameritech Publishing), business development (Ameritech Development Group and Ameritech International) and research (Bell Communications Research) subsidiaries.¹³⁹

Over the course of the post-divestiture period the organisational structure of Ameritech has not remained constant. Ameritech has re-branded its BOCs, changing the marketing name of each to Ameritech Illinois, Ameritech Wisconsin etc. However, the legal name of the BOC in each state remained the same. In 1993 Ameritech further altered its organisational structure by creating fifteen strategic business units. (See Table 5.10 below for a list of the fifteen business units created). Each of these units is focused on a particular market, and is treated as an independent profit and loss centre within the company.¹⁴⁰ Whilst some of the business units that were created directly corresponded to individual subsidiaries, or groups of subsidiaries, others were to be found within the BOCs. The operational and structural organisation of Ameritech did not correspond due to regulatory restrictions that mandated structural separation.

Table 5.10: Ameritech's business unit by sector

Consumer & business services	Communications & information products	Other strategic units
<ul style="list-style-type: none"> • Consumer services. • Small business services. • Enhanced business services. • Custom business services. • Ameritech Communications 	<ul style="list-style-type: none"> • Long distance industry services. • Information industry services. • Advertising services. • Pay phone services. • New media. 	<ul style="list-style-type: none"> • Cellular services. • Security monitoring services. • International • Capital services.

Source: Ameritech, 1996a, pg6f.

Chessler, Clark & Ferng (1986) demonstrate that Ameritech partook in diversification efforts that were related to existing lines-of-business. One area that already has been alluded to, and where Ameritech expanded after divestiture was into the CPE market. This apart, Ameritech has more or less enacted the same strategy throughout. This strategy has been three pronged; to

¹³⁹ Cheesler, Clark & Ferng, 1986, pg119.

¹⁴⁰ Ameritech, 1996a, pg7.

focus on its core in-region operations, to develop additional and complementary revenue generating sources and to expand out-region if the opportunity arises. As articulated in the 1996 Fact Book this strategy is described as:

Strategy 1: Speed growth in our core communications business.

Strategy 2: Expand into related high-growth businesses.

Strategy 3: Export our expertise around the world.¹⁴¹

The remaining discussion of Ameritech's domestic strategy since 1984 is structured to reflect this threefold division. The following section will provide an overview of in-region developments of those businesses inherited from Ma Bell, and will be followed by an outline of the Ameritech's entrance into complementary business areas. The final section shall detail Ameritech's out-region expansion. Conclusions are the drawn.

5.7.1 Concentrating in-region.

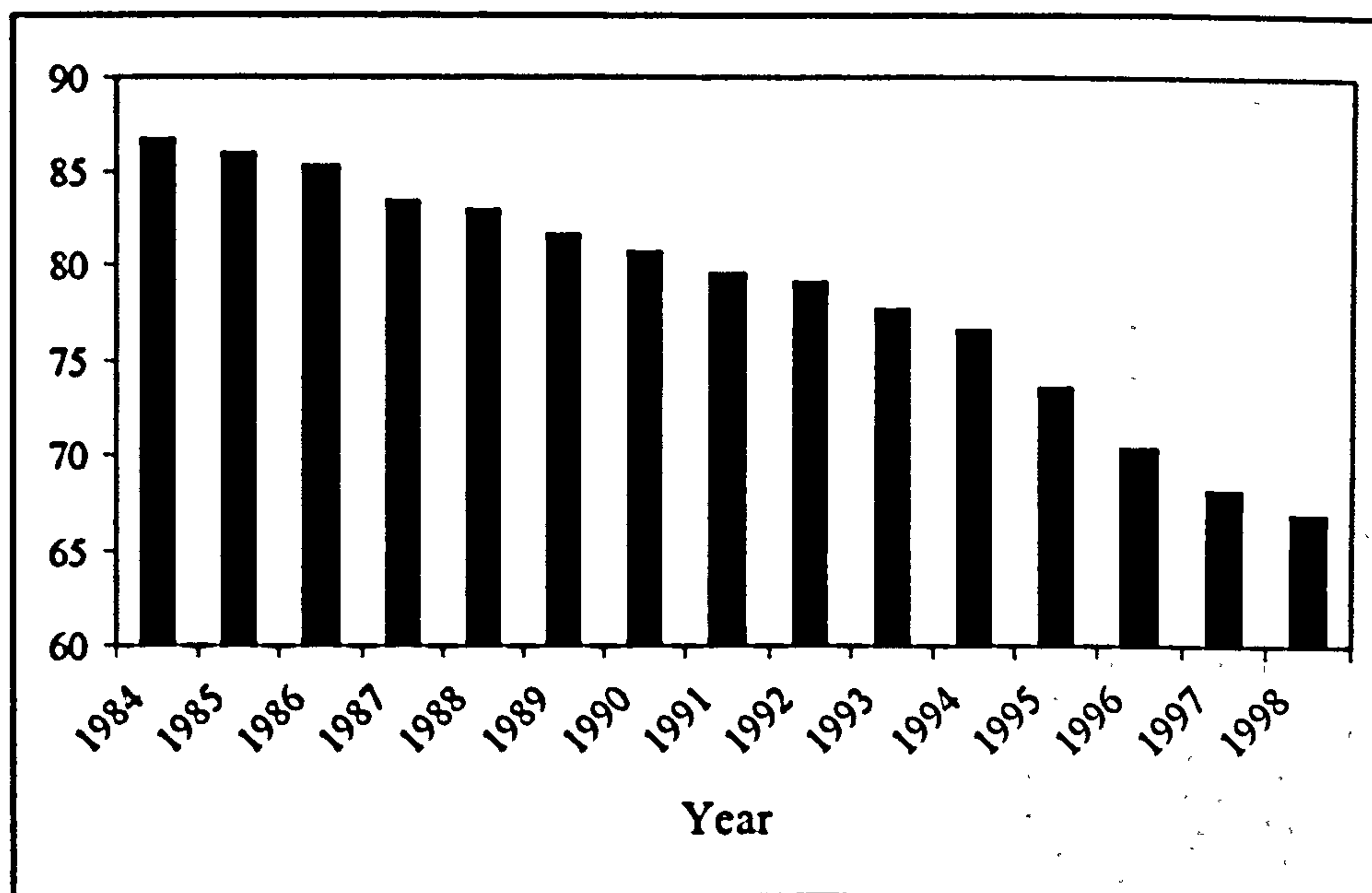
Three forms of communication are central to Ameritech's in-region strategy. The first of these is the in-region telephone network, which despite diversification efforts is the single largest source of revenues. The next component is the in-region wireless network, and the final component of Ameritech's in-region strategy is directory publishing.

5.7.1.1 Wireline.

Despite Ameritech's stated strategy of expanding into new high growth markets the five BOCs still provide the overwhelming majority of the company's revenues and net income. Having said this, Figure 5.17 (below) shows that the percentage of revenues accounted for by the BOCs has declined throughout the post-divestiture period. By 1997 the non-BOCs lines-of-business accounted for nearly one third of Ameritech's overall revenues.

¹⁴¹ Ameritech, 1996a, pg11.

Figure 5.17: BOC derived revenue as a declining percentage of total revenues 1984 - 1998



Source: various annual reports; Ameritech, 1998e.

Ameritech argues that continued capital investment has transformed its in-region network, creating a modern, flexible and digital network capable of meeting customer requirements. Table 5.11 (over) shows that the majority of Ameritech's capital expenditure is directed towards the in-region telephone network, and that between 1993 and 1997 this network became progressively digitalised. Common to Ameritech corporate descriptions of the in-region network is the use of the phrase 'network excellence.' From the context of its use it is possible to identify four different features to network excellence: products, marketing, customer care and productivity.

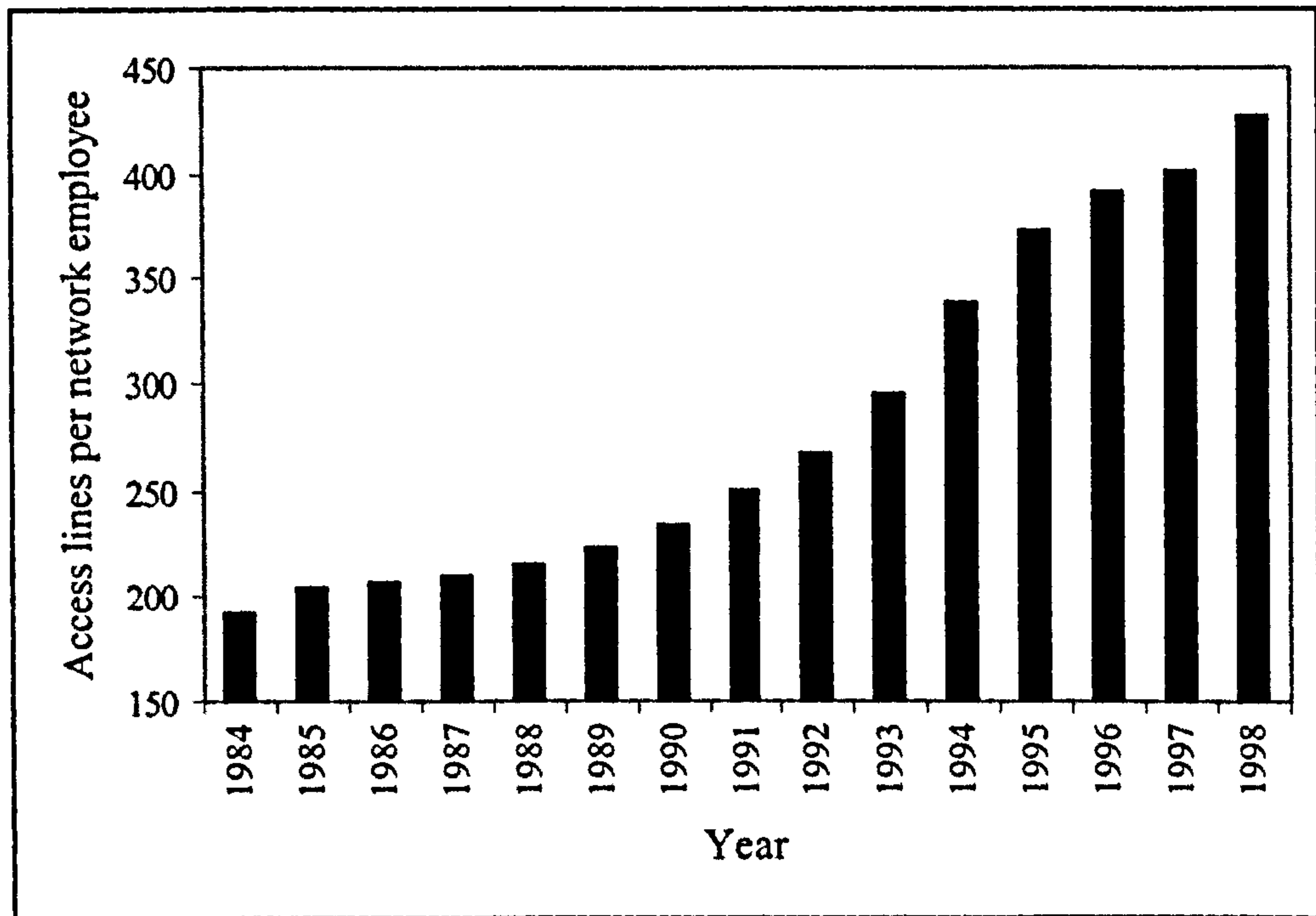
Table 5.11: Capital expenditure

\$bn.	1997	1996	1995	1994	1993
Total Ameritech	2.65	2.48	2.18	1.96	2.11
Total telephone operations	1.95	1.94	1.63	1.63	1.74
Digital expenditure	1.22	1.21	0.89	0.89	0.97
Total fibre miles (000s)	1556	1289	1096	919	802
Number switching entities	1419	1435	1432	1405	1422
Digital stored program control					
% of total switching entities	96%	94%	93%	90%	85%
% of customer lines served	86%	83%	81%	74%	66%

Source: Ameritech, 1997d, pgl6.

The continued network investment by Ameritech has been driven by the need to improve productivity as measured by the number of access lines per BOC employee. As shown in Figure 5.18 (below) productivity has improved in each year of the post-divestiture period, though the most pronounced improvements are to be found after 1993.

Figure 5.18: Ameritech productivity improvements



Source: Ameritech, 1993, 1996a & 1998e.

However, Ferguson (1997) challenges the assertion of Ameritech and the other RBOCs that they have built a highly productive network since divestiture. Through comparisons with information technology and service orientated companies Ferguson (1997) argues that the RBOCs productivity gains are more due to reducing employee numbers and the use of external contractors than productivity improving investments. Anecdotal evidence is drawn upon to demonstrate the decline in service quality, as well as the how other companies with universal service obligations are both more consumer orientated and more productive than the RBOCs. Furthermore, the reluctance of the RBOCs to deploy leading edge technologies in their network is taken as evidence by Ferguson (1997) of the failure of the RBOCs to invest in their core in-region networks. Despite continued and significant network related investment it is still the case that the in-region networks of the RBOCs contain analogue switching technologies.

In parallel with the aforementioned infrastructure changes has been the re-branding and reorganisation of its BOCs by Ameritech. In 1991 Ameritech began to reorganise its BOCs and to standardise the internal operations of each of the five company. The cited aim here was to reduce the cost structure of the BOCs.¹⁴² This reorganisation became more overt in 1993 when the geographical derived names of the five BOCs were replaced by Ameritech Illinois etc. This created a single regional brand for Ameritech, and brought the BOCs into line with the rest of the RBOCs. Not only did this create a single image for the company, thereby allowing for economies of scale in marketing, it also implicitly created the image of the RBOCs as a single provider of telecommunications services even though this was not the case for regulatory reasons. The most dramatic reorganisation occurred in 1994 when the geographical organisation of service provision and support was replaced by business units that spanned the entire in-region market. The stated objective of this change was to bring the company closer to the customer so that their needs could be better served. This transition is also significant in that it represents a clear break with the engineering past of the company, and is a move towards becoming marketing driven.¹⁴³

By shifting the emphasis of the company from engineering to its customers the 1994 reorganisation also encouraged developments within the spheres of product development and customer care. Ameritech sought to improve its customer service through benchmarking against companies outside of the telecommunications industry.¹⁴⁴ However, it is questionable whether or not this had the desired result. As we have seen Ferguson (1997) has questioned the service quality of Ameritech. This is supported by Ameritech admitting that service quality within its BOCs were unsatisfactory and hiring an additional 4000 employees in 1995.¹⁴⁵

5.7.1.2 Wireless.

¹⁴² Ameritech, 1991, pg16.

¹⁴³ Ameritech, 1994, pg11.

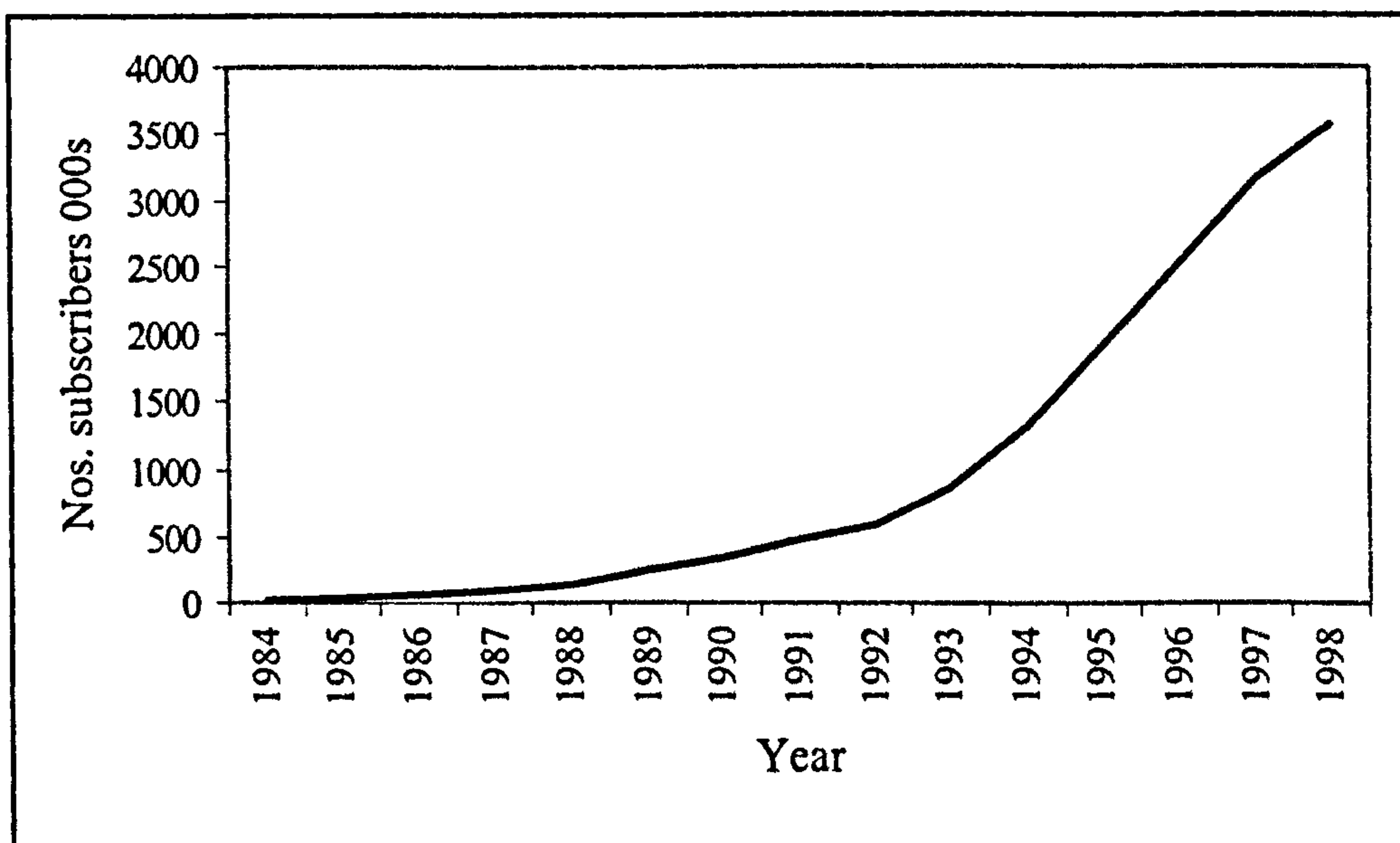
¹⁴⁴ Ameritech, 1994, pg5.

¹⁴⁵ Ameritech, 1995, pg4.

It is possible to identify three distinct elements to Ameritech's post-divestiture wireless strategy: cellular, PCS and paging. Ameritech Cellular is the oldest cellular company in America. In 1977 the FCC awarded the precursor of Ameritech Cellular, Illinois Bell, a license to develop a cellular system in Chicago. The system became operational on 13th October 1983.¹⁴⁶

Ameritech Cellular has enjoyed sustained growth since services began in 1983. Figure 5.19 (below) shows that after an initial period of slow growth the number of cellular subscribers has rapidly grown in recent years to reach 3.1m in 1997. From Figure 5.19 it can be seen that 1992 is a pivotal year in the development of Ameritech Cellular, between the slow growth prior to this and more rapid after this date.

Figure 5.19: Ameritech Cellular subscriber base growth



Source: Ameritech, 1993, 1996a & 1998e.

One possible explanation for the increase could be the expansion in geographical coverage that occurred in the early 1990s. In 1991 Ameritech acquired CyberTel, an operator of cellular systems in Illinois and Minnesota.¹⁴⁷ Four years later the company further expanded its geographical coverage through the acquisition of in-region systems in Cleveland and

¹⁴⁶ Ameritech Cellular & Paging, 1999a, pg1.

¹⁴⁷ Ameritech, 1991, pg3.

Indianapolis. Also contributing to the growth in Ameritech Cellular subscribers were changes to both the marketing and distribution channels. In respect to marketing Ameritech Cellular began to target what were at that point non-traditional cellular subscribers, that is, non-businessmen.

In addition Ameritech Cellular also widened its cellular distribution channels. This was primarily achieved through allowing retailers to act as middlemen on behalf of Ameritech. By the end of 1997 more than 1000 retailers acted on behalf of Ameritech Cellular as middlemen, selling products and services to customers. These retailers were complemented by a much smaller number of company owned stores, Ameritech Communication Centres.

Both of these strategies were underpinned by continued investment in the cellular network. On the one hand this investment expanded the geographical scope of service coverage, whilst on the other hand the investment improved quality of service and allowed for the introduction of new services. Corporate literature clearly demonstrates the view that increasing subscriber numbers, a wider range of services and network investments were viewed as a virtuous cycle. Network investments provides new services that can be marketed to increase the subscriber base, which in turn justify further network investment.

Regulatory changes have also expanded the range of services provided by Ameritech Cellular. The 1996 Telecommunications Act allowed Ameritech, along with the other RBOCs, to offer long distance services to its cellular customers and to bundle this service with others provided by the company. By the end of 1997 Ameritech Cellular had more than one million long distance cellular customers.¹⁴⁸

Nineteen ninety-two is also significant for another reason, namely, Ameritech began to test CDMA and TDMA digital technologies in Chicago. Digital technologies improved both sound quality and clarity. It is significant that the possibility that digital technology would allow additional services to be developed was not mentioned at this stage. In 1994 Ameritech acquired narrow band PCS spectrum for Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota,

¹⁴⁸ Ameritech, 1998i, pg2.

Vest Virginia and Wisconsin. This expanded digital cellular coverage both within and without the five-state territory of Ameritech. This was followed in 1995 by the successful acquisition of PCS spectrum for Cleveland, Ohio, Indianapolis and Central Indiana in the FCC auctions.¹⁴⁹

The acquisition of PCS spectrum, as well as the digital technology trials conducted, laid the foundation for the recent strategy of Ameritech Cellular. The first market where Ameritech Cellular introduced digital cellular services, under the brand name ClearPath, was Chicago in June 1997.¹⁵⁰ Between June 1997 and the end of 1998 the service was introduced in all of Ameritech's major markets.¹⁵¹ One prominent feature of the advertising campaign associated with the introduction of ClearPath has been the additional features that the service provides when compared to 'traditional' cellular services. Such features include text and numeric messaging, voice mail and the same number as a wire-line phone.

The third and final component of Ameritech's wireless strategy is paging. Ameritech Cellular launched its paging service in 1988.¹⁵² In recent years the pace of subscriber growth has quickened, doubling between 1995 and 1997.¹⁵³ Having said this, the growth in subscribers is not as dramatic, or has a discrete turning point in a fashion similar to cellular growth. The strategies that have fuelled this growth are similar to those enacted in respect of cellular: expansion of distribution channels, additional services and the targeting of new types of customers.

5.7.1.3 Directory publishing.

In common with all the other RBOCs Ameritech took control of the directory publishing

¹⁴⁹ Ameritech Cellular & Paging, 1999a, pg2.

¹⁵⁰ Ameritech Cellular & Paging, 1997.

¹⁵¹ By the end of 1998 the full of markets where ClearPath was available was: Chicago; Cincinnati; Cleveland; Columbus, Ohio; Detroit; Indianapolis; Milwaukee, Wisconsin; and St Louis (Ameritech Cellular & Paging, 1999c, pg1).

¹⁵² Ameritech Cellular & Paging, 1999a, pg1.

¹⁵³ Ameritech, 1997c, pg15.

activities of the old Bell system within its five-state territory. These businesses were grouped together as Ameritech Publishing. However, unlike the other RBOCs Ameritech did not publish all of the in-region yellow and white directories. In Illinois R.H. Donnelley published the yellow pages,¹⁵⁴ whilst in Wisconsin LM Berry published several yellow page editions.

From divestiture until the start of the 1990s Ameritech Publishing expanded through organic growth. However, in 1990 Ameritech Publishing altered its strategy and sought to address the in-region gaps present in its coverage. In 1990 the RBOCs acquired the Wisconsin and Dayton Ohio operations of LM Berry.¹⁵⁵ Ameritech Publishing also resolved its Illinois coverage gaps by forming a joint-venture with R.H. Donnelly, called DonTech, which published yellow and white directories in Illinois and Northwestern Indiana.¹⁵⁶

The product range of Ameritech Publishing has not remained constant. In 1993 the directories were divided into three: Ameritech PagesPlus (household), Ameritech Industrial Purchasing Guide (industrial products) and Ameritech Business Search Directory (small businesses).¹⁵⁷ This product differentiation was not extended until 1997, when new printing technology made the introduction of colour and customisation of the directories a commercially viable proposition. The new directories that were introduced were branded as "Palette Colour II." Initially market tested in Cleveland, Detroit, Grand Rapids and Kalamazoo these directories are now available through-out the in-region market.

5.7.2 Generating new revenue sources.

On more than one occasion Ameritech has attempted to diversify its revenue sources by entering new markets. Some of these diversification efforts have been more successful than in other cases. The more successful have been Ameritech's expansion into security monitoring and cable-TV, whilst less successful have been the various software investments. Moreover, the

¹⁵⁴ Chessler, Clark & Ferng, 1986, pg50.

¹⁵⁵ Ameritech, 1990, pg15.

¹⁵⁶ Ameritech, 1993, pg31.

¹⁵⁷ Ameritech, 1993, pg31.

investments that arguably have been the most successful are those that complement the core lines-of-business, and find additional ways to generate revenue from the in-region network.

5.7.2.1 Security monitoring.

Ameritech is unique among the RBOCs in that it is the only company to have entered the security monitoring industry. In December 1994 Ameritech acquired SecurityLink, and expanded its presence in the marketplace by purchasing The National Guardian Corporation in October 1995. Ameritech was attracted to the industry for a variety of reasons - high growth rate and the fragmented structure of the industry that would provide the opportunity for cost savings and improved efficiency through M&A activity. Further acquisitions were made, in 1996 the security monitoring businesses of Circuit City Stores and Pre-Alert Security Systems were bought.¹⁵⁸ In 1997 Ameritech continued the consolidation of the industry when it acquired the security monitoring businesses of Republic Industries and Rollins Inc..¹⁵⁹ When Ameritech completed its extensive acquisition spree in 1997 it had become of the largest, if not the largest company, in the American market with more than one million customers.¹⁶⁰

Since entering the security monitoring industry Ameritech has sought to develop its operations in two different ways. On the one hand the RBOCs has acted to improve the operating efficiency and productivity of its various businesses. To this end, 1997 saw Ameritech consolidate administrative and support services into fewer offices, and replacing nine different billing systems with one.¹⁶¹ On the other hand, Ameritech has also introduced a range of new services. In one of these services the homeowner is paged once the alarm is triggered, whilst another one integrates the service into the user's wider telecommunications needs. Not only will the service be charged to the user's phone bill, but is available from Ameritech retail stores.¹⁶² By integrating security monitoring into the wider array of telecommunications services Ameritech

¹⁵⁸ Ameritech, 1996a, pg18.

¹⁵⁹ Ameritech, 1997c, pg17.

¹⁶⁰ Ameritech, 1997c, pg17.

¹⁶¹ Ameritech, 1997c, pg12f.

¹⁶² Ameritech, 1996a, pg18f; Ameritech, 1997c, pg12f.

is seeking to generate additional revenue for its core in-region networks. One final area that requires comment is the attempt by Ameritech to become the sole or official supplier of security monitoring services to large corporate clients, thereby extending its potential customer base through large one off contracts. In 1996 Ameritech became the exclusive distributor to six health care agencies within Chicago that collectively had 30,000 patients between them.¹⁶³ Ameritech has pursued similar deals with real estate agents and transportation companies.

5.7.2.2 Cable-TV.

In early 1994 Ameritech joined with SBC, BellSouth and Disney to form americast. The objective for Ameritech when entering this joint-venture was to facilitate its entry into the cable-TV market by having access to unique content. Disney would contribute its content origination skills and the RBOCs their communications and customer service skills. At the same time as announcing this joint-venture Ameritech also indicated its intention to invest \$4.4bn over fifteen years to build a video network in-region. Due to regulatory fears over anti-competitive behaviour the cable-TV network would be physically separate from the in-region telephone network of Ameritech. As a consequence Ameritech is utilising its BOC developed operating skills, technical and marketing, to gain additional revenue and not its in-region network per se.

Since 1996, through its Ameritech New Media subsidiary, Ameritech has been acquiring cable-TV franchises in-region in Illinois, Ohio and Michigan. By the end of 1996 Ameritech operated thirty-three franchises with a potential market of 1.7m people. This, according to Ameritech New Media, made the company one of the largest hundred in the industry in 1996.¹⁶⁴ The number of franchises operated has further increased, so that by the end of 1998 Ameritech New Media operated a total of 77 franchises. Within these 77 franchises Ameritech New Media had a total of more than 200,000 customers.¹⁶⁵

¹⁶³ Ameritech, 1996a, pg18.

¹⁶⁴ Ameritech, 1996a, pg16f.

¹⁶⁵ Ameritech New Media, 1999, pg1.

As Ameritech New Media has sought new franchises and rolled out cable-TV network the company has been guided by the desire to maximise scale economies through developing clusters of contiguous franchises, and by the need to build a flexible network. In respect of the first desire Ameritech has concentrated its investments up until the end of 1998 in or near to the metropolitan areas of Chicago, Cleveland, Columbus and Detroit. The technological flexibility has been sought by building a hybrid fibre-coax (HFC) network in the franchises, as this will allow Ameritech New Media to upgrade the network to take account of new service developments.

From the various corporate publications the impression gained is that the expansion of Ameritech into the cable-TV market in-region has been driven by a desire to lock-in customers to Ameritech. Customers know the Ameritech brand, which provides a sense of reassurance, and can subscribe to the service in any of the company's Ameritech Communication Centres. Perhaps the underlying reason why Ameritech entered the cable-TV market in-region was defensive in nature, namely, to counter the competitive threat posed by cable operators by creating competition within their core market. That is, by distracting the cable-TV companies they will be less effective competitors to Ameritech in its core wireline lines-of-business.

5.7.2.3 Venture capital.

Ameritech Development Corporation (ADC) is an investment fund that makes strategic equity investments in start-up companies. As described by Ameritech Development Corporation the company's remit is to make:

... strategic investments in early and mid-stage communications, content and media ventures that enhance Ameritech's competitive position. By focusing on markets related to the competencies of Ameritech and its business units, ADC is able to bring substantive value to its portfolio.¹⁶⁶

ADC initially invests between \$0.5m and \$2m in companies throughout the United States, which

¹⁶⁶ Ameritech Development Corporation, 1997b, pgl.

have experienced management and products that are close to being introduced onto the market.¹⁶⁷ More often than not, this investment takes the form of preferred convertible common stock and is accompanied by ADC supervisory – advice involvement in the management of the company.¹⁶⁸ ADC draws upon other companies within Ameritech for suitable employees to oversee the company's investment and provide the necessary guidance. In all, ADC has invested in 40 companies, and retains a portfolio in late 1997 of investments in 20 of these companies. Past investments have included Omnipoint Corporation and Qualcomm Inc (both wireless technology development companies), whilst examples of current investments are Multichannel Communication Sciences Inc. (cable-TV equipment), Teloquent Communications Corp. (cell centre software) and VIN-Net (EDI).¹⁶⁹

It is possible to discern two quite different motives for ADC's investments. On the one hand these investments are driven by a financial rationale. On the other hand, the investments are a way for Ameritech's various subsidiaries to gain access to new technologies and assess whether or not they should be incorporated into the existing portfolio of services.

5.7.2.4 Software investments.

Immediately after divestiture began to position itself in the software market, and to this end acquired Applied Data Research Inc. in December 1985 for \$217.5¹⁷⁰ The stated aim of Ameritech was to compete against IBM in the systems software market. However, in October 1988 Ameritech sold Applied Data Research to Computer Associated International for \$170m, stating that:

Ameritech is selling Applied Data Research because synergies between software and communications have not developed to the extent that we had anticipated.¹⁷¹

¹⁶⁷ Ameritech Development Corporation, 1997b, pg1.

¹⁶⁸ Ameritech Development Corporation, 1997f.

¹⁶⁹ Ameritech Development Corporation, 1997c, pg1f.

¹⁷⁰ Rosenberg, Borrows, Hunt, Samarajiva & Pollard, 1993, pg102.

¹⁷¹ Rosenberg, Borrows, Hunt, Samarajiva & Pollard, 1993, pg102.

In 1994 Ameritech sought to invest \$472m for a 30% equity holding in General Electric Information Services (GEIS), the electronic commerce and EDI subsidiary of General Electric. As the regulatory framework prevented Ameritech from directly owning any shares in GEIS the investment was to be held as debentures, convertible into the 30% holding in 1998.¹⁷² However, as the legal restrictions had not been removed the two companies terminated the agreement in late 1997.¹⁷³ Notwithstanding the company's exit from the market, Ameritech has continued to articulate its desire to be active within the electronic commerce and EDI markets. As yet the company has not made any investments to realise this assertion.

The only software investments that appears to have been successful for Ameritech is Ameritech Library Services, a subsidiary that provides information services specifically tailored to the needs of libraries. Through a range of products, such as cataloguing and databases, Ameritech Library Services seeks to automate many traditional library activities.¹⁷⁴ In 1991 Ameritech acquired NOTIS Inc, a provider of academic library software in the United States and overseas. However, Ameritech Library Services as it is currently constituted was formed in 1995, when Ameritech acquired Dynix, a library software company, and merged it with NOTIS Inc.¹⁷⁵ That Ameritech Library Services has not been sold by Ameritech would seem to suggest that its performance has been satisfactory. Having said this, it should be remembered that Ameritech Library Services is comparatively small and accounted for only \$111m of the RBOCs' \$13428m in revenues in 1995 (the last year for which information is available).

5.7.3 Out-region expansion.

In stark contrast with the other RBOCs, Ameritech has made only limited efforts to expand out-region. There are three different variants of the out-region expansion undertaken by Ameritech:

¹⁷² Ameritech, 1994, pg19.

¹⁷³ Ameritech, 1997c, pg42.

¹⁷⁴ Ameritech Library Services, 1998a, pg1.

¹⁷⁵ Ameritech Library Services, 1998a, pg1.

- Out-region expansion to complement and strengthen the in-region presence. Ameritech has acquired cellular properties in St Louis (Missouri) as they allowed the company to provide cellular service across the entire metropolitan area. Similarly, through the purchase of various directory publishing companies Ameritech Publishing now has an out-region presence in Alabama, Arkansas, Kansas, Mississippi, Missouri and Tennessee.
- Out-region expansion by acquisition. By buying a string of security monitoring companies Ameritech expanded out-region across the entire United States. Furthermore, Ameritech Library Services is based in Utah.
- Opportunistic. Geographically far removed from Ameritech's mid-west five-state territory is the RBOCs' wholly owned cellular business on Kauai, Hawaii.

At first glance it could be argued that the dispersed nature of the out-region investments accumulated by Ameritech since divestiture in 1984 indicate that geographical concentration has not been a primary concern. However, with the exception of the Hawaiian cellular investment all of the out-region investments are located in markets that are in close proximity to the core five-state territory. It can be concluded from this that the investments have been motivated primarily by a desire to bolster the in-region lines-of-business.

5.7.4 Conclusion.

Through largely eschewing out-region expansion Ameritech has concentrated its efforts in-region, both in the enhancement of its existing lines-of-business as well as the development of new ones. In doing so the in-region telephone network has played a pivotal role. The strategies enacted by Ameritech have sought to develop an in-region telephone network that is technologically advanced, and capable of supporting the array of services demanded by customers. The overarching objective has been to develop a series of 'relationships' with the customer that bind ever more tightly the customer to Ameritech, and thus reduce the likelihood of the customer moving to another service provider. To this end, Ameritech has diversified into new markets such as cable-TV whilst continuing to invest in its core in-region telephone

network.

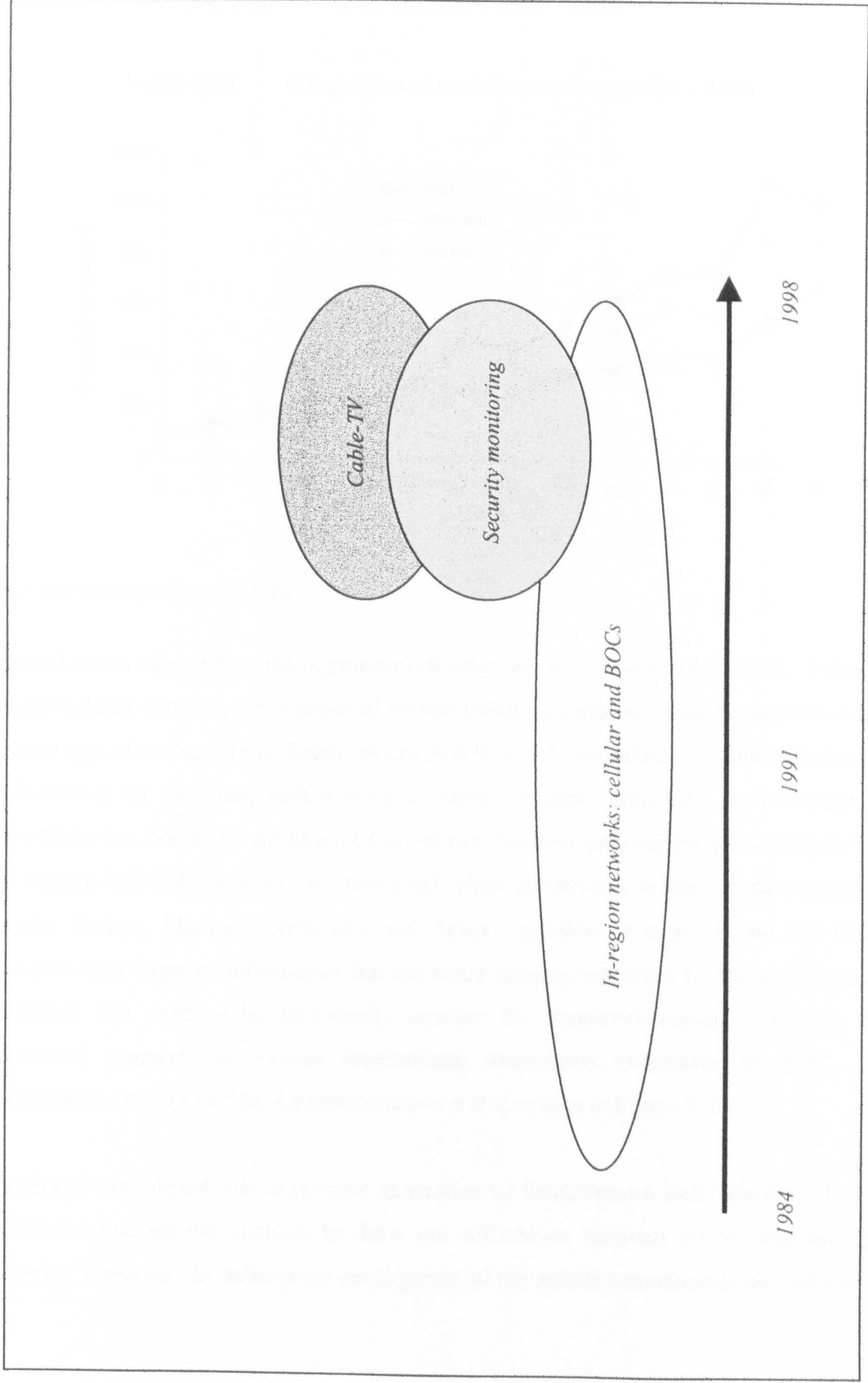
Figure 5.20 (over) highlights that this strategy is a relatively recent affair. It was not until approximately 1994 that Ameritech implemented this new strategy. Moreover, Figure 5.20 also shows that the effective of this new strategy was to broaden the in-region foundations of Ameritech, away from a focus solely on cellular and BOCs to one that also included security monitoring and cable-TV as well. Both security monitoring and cable-TV were new lines-of-business that complemented the existing ones of the RBOCs. Whilst it is undoubtedly the case that the development of a strong in-region portfolio of businesses by Ameritech has clear strategic advantages, it also serves to limit the company to a limited market. Moreover, the continued expansion in-region also ensures that the company will come into increased contact with regulators who may link developments in one market to those in another.

5.8 SBC COMMUNICATIONS.

The characterisation of Southwestern Bell, or SBC Communications as the company became in 1994, as “sleepy” by O’Reilly (1983) has become increasingly less apt in the post-divestiture period. Burrows (1995) asserts that SBC is the RBOCs against which the others should be judged, not least because the company is the most diversified of all the RBOCs with non-BOCs businesses such as cellular contributing 35% of earnings. Chessler, Clark & Ferng (1986) and Rosenberg, Borrows, Hunt, Samarajiva & Pollard (1993) demonstrate that diversification has been both geographical as well as into new markets such as customer premises equipment. However, it is the aggressive expansion of SBC into cellular that both Burrows (1995) and Meyers (1996) draw attention to as a driver of earnings diversity.

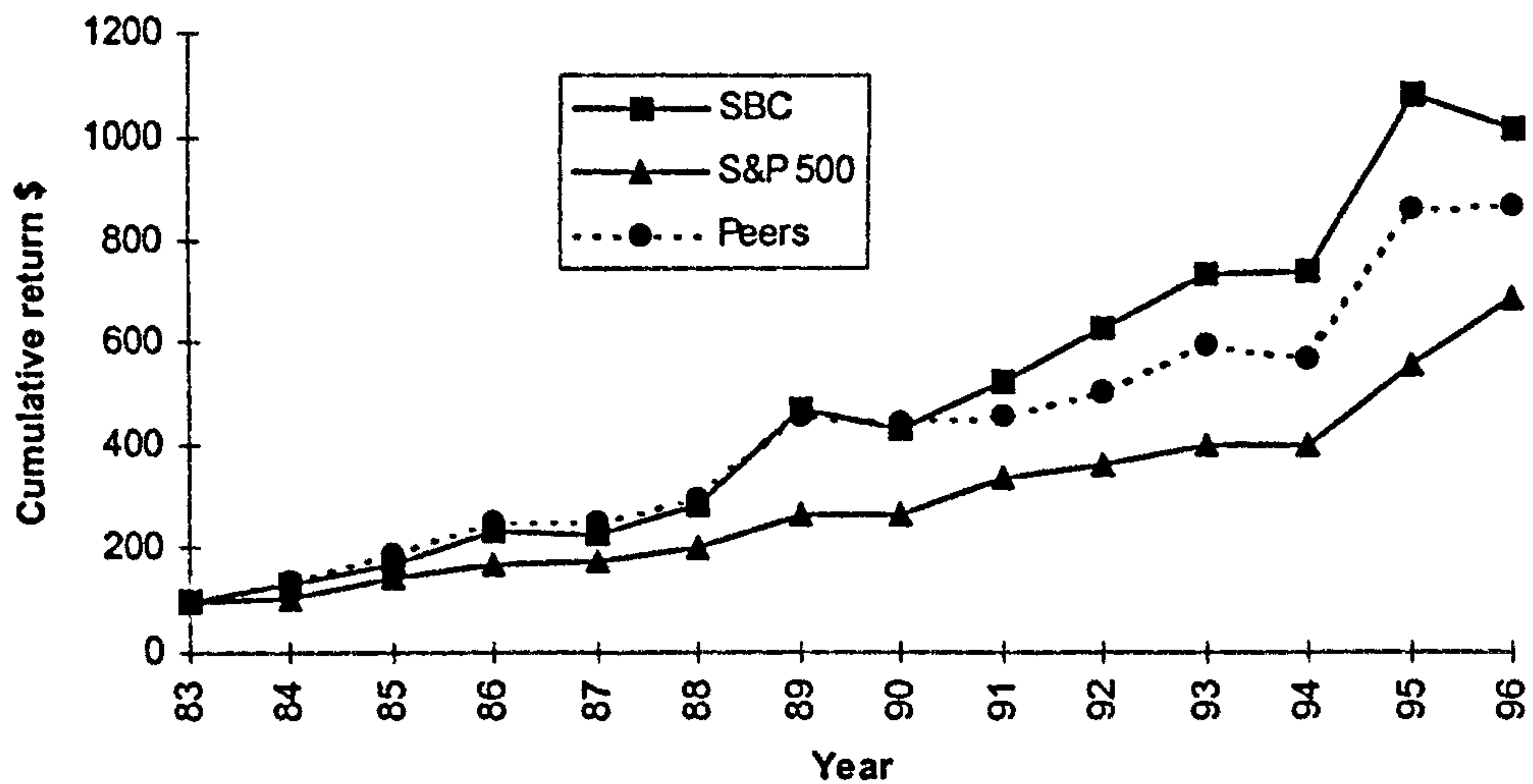
Despite the diversification of SBC into new markets the BOCs remains the principal source of revenue as well as net income for the RBOCs. Reflecting this SBC has sought to enhance its profitability, productivity and ability to deliver new services through continued capital expenditure over the post divestiture period. However, Maney (1995) and Burrows (1995) express concern that the in-region focus has blinded the RBOCs to opportunities / markets elsewhere that may be great long-term significance. Notwithstanding these concerns, SBC has

Figure 5.20: Domestic strategies of Ameritech between 1984 and 1998



been able to implement a strategy that has transformed the company from one of the least profitable to the most profitable RBOCs for the period 1984 – 1996.

Figure 5.21: Comparison of cumulative returns, 1984 – 1996

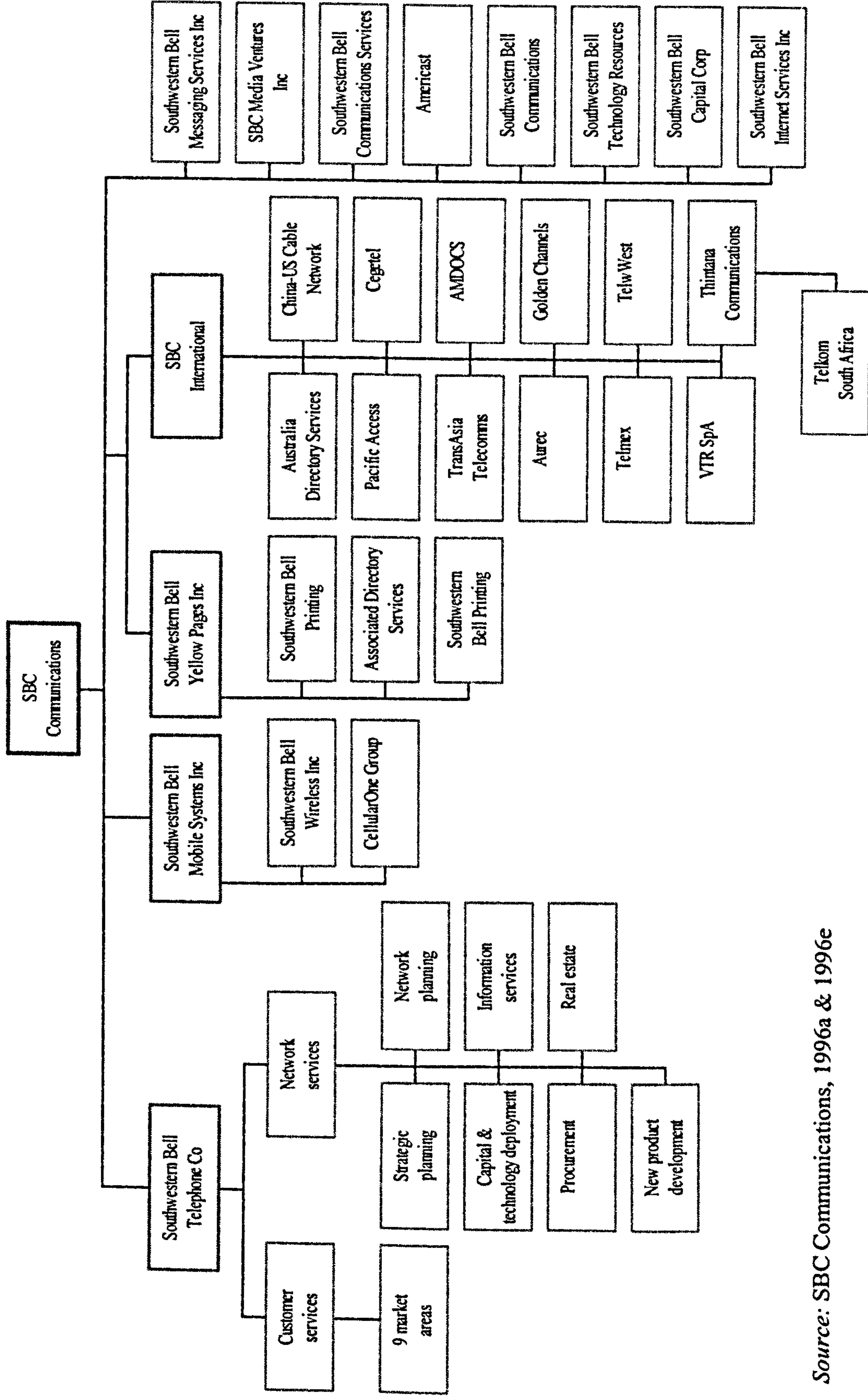


Source: SBC Communications, 1996a.

Compared to the other RBOCs the organisational structure of SBC is more complex. Below the principal holding company are a series of second holding companies, each responsible for one particular type of market. Thus, Southwestern Bell Mobile Systems Inc. is comprised of a series of subsidiaries all providing mobile communication services. Similarly, Southwestern Bell Yellow Pages Inc. has three subsidiaries that provide directory printing and publishing services. Southwestern Bell Telephone Co provides local telephone services in the five-state territory of Arkansas, Kansas, Missouri, Oklahoma and Texas. Outside of these second tier holding companies are a range of subsidiaries that are either service companies for the entire group or subsidiaries that need to be structurally separate for regulatory reasons. Finally, SBC International manages the various international investments undertaken by SBC. The organisational structure of SBC Communications is shown over in Figure 5.22.

Reflecting the prominent role in revenue generation by Southwestern Bell Telephone Co, it is possible to structure the analysis to draw out differences between the in and out-region businesses. However, the subsequent development of the mobile communications - cellular and

Figure 5.22: SBC Communications organisational structure 1996



Source: SBC Communications, 1996a & 1996e

paging - and the directory publishing businesses of SBC transcend this division. To aid understanding mobile communications and directory publishing are detailed separately from the other in and out-region developments. Each of the sections is organised chronologically. A conclusion is then drawn.

5.8.1 Concentrating on the in-region network.

Although SBC has been able to generate an increasing proportion of its revenues from other sources, Southwestern Bell Telephone Co remains the principal source of revenues. The annual reports of SBC since divestiture attest to the pivotal role of Southwestern Bell Telephone Co, underpinning not only revenues but also the overall competitiveness of the RBOCs as well. In the initial annual report, Barnes (Chairman, President & CEO, SBC) writes that:

*... our first priority ... to improve the profitability of our primary business - the Telephone Company - and to make intelligent moves into new lines of business which draw on our expertise in local exchange communications. This strategy grows from our belief that the best way to advance the interests of shareowners is to nurture the business we know best, in full recognition of its tremendous potential for growth in the years ahead.*¹⁷⁶ *(emphasis added)*

Subsequent annual reports repeat a similar story, stating that the company has invested to enhance the capabilities of the network so that new services can be offered and productivity improved. Southwestern Bell Telecom is the embodiment of the desire of SBC to expand into new lines of businesses. Southwestern Bell Telecom was established on divestiture by SBC to expand into the CPE market. As the MFJ prohibits the RBOCs from manufacturing equipment, Southwestern Bell Telecom is effectively a reseller of equipment manufactured by others under the Southwestern Bell brand name. According to Southwestern Bell (1985) this enabled the company to select equipment from the market to satisfy the needs of customers.

¹⁷⁶ Southwestern Bell, 1984, pg2.

By the end of 1984 Southwestern Bell Telecom had sales of \$100m, and had purchased certain assets of COMCOA Inc. to facilitate distribution in the Mid-west and the rights to distribute Freedom Phone.¹⁷⁷ The company had two divisions, Business Systems and Freedom Phone. In 1986 the company again achieved sales of over \$100m, and had installed 17,000 business systems across 35 states, and the one millionth Freedom Phone was sold in 1987.

From 1990 onwards the integration of Business Systems division of Southwestern Bell Telecom with other group companies, such as Technology Resources and Southwestern Bell Telephone Co increased, as the provision of solutions to customers came to the fore. To this end, the company sold software developed by Technology Resources and worked with the BOCs to offer integrated solutions to customers with more than eight lines.¹⁷⁸ The Freedom Phone division continued to expand through the addition of new distribution channels, so that by 1993 a total of 14,000 stores sold Freedom Phone products.¹⁷⁹

According to Dean Witter Reynolds (1996) "SBC has earned a reputation as a shrewd marketer of vertical services," a claim that is substantiated by the penetration rate of such services. Table 5.12 (over) shows that SBC has been more successful than its fellow RBOCs in the sale of advanced services to its customers. In order to develop, and then deliver, such services to its customers SBC has targeted its network investment accordingly. Capital expenditure on the core local telephone network has been guided by the belief that technology should be employed only where it services customers needs best. As stated by Whitace (CEO, SBC) in 1988:

[t]echnology alone isn't meaningful. It becomes meaningful when it changes peoples lives for the better.¹⁸⁰

Although SBC has adopted a selective network investment strategy, it has nevertheless still invested considerable sums in the local telephone network. Over the period 1984 to 1995 SBC invested a total of \$11216m. However, SBC still lags behind its fellow RBOCs in terms of

¹⁷⁷ Chessler, Clark & Ferng, 1986, pg87ff; Southwestern Bell, 1984, pg14.

¹⁷⁸ Southwestern Bell, 1991, pg19f; Southwestern Bell, 1992, pg9.

¹⁷⁹ Southwestern Bell, 1993, pg17.

¹⁸⁰ Southwestern Bell, 1988, pg15

network features, for instance, digital switching and high speed ISSN (integrated services digital network). Table 5.13 (over) clearly illustrates the relative technological standing of SBC against its peers.

Table 5.12: Penetration of total access lines for selected vertical services

	SBC penetration	RBOC average penetration
<i>Class services</i>		
Selective call forwarding	7.4%	2.6%
Distinctive ringing	7.2%	3.6%
Call trace	8.0%	5.7%
Repeat dialling	11.8%	10.0%
Call blocker	12.3%	7.8%
Call return	14.4%	10.6%
<i>Custom calling features</i>		
Speed calling	14%	12%
Three-way calling	20%	12%
Call forwarding	20%	11%
Call waiting	51%	50%

Source: Dean Witter Reynolds, 1996.

Table 5.13: RBOCs network feature and productivity differences

Company	Telephone company employees	Cumulative capital expenditure \$m	Access lines / employee	% digital lines (1996)	ISSN capable switches (1995)
Ameritech	51415	12068	371.49	74	489
Bell Atlantic	57823	15857	342.42	75	671
BellSouth	68585	21054	307.65	76.2	467
Pacific Telesis	64107	11274	288.58	81.6	259
Nynex	47800	15004	330.54	65	417
SBC	48440	11216	293.15	50	303
US West	47934	15321	308.76	62.8	262

Source: Argus Research Corporation, 1996; Global Telecoms Business, 1996; FCC, 1997b; Kraushaar, 1995 & 1997b.

One explanation of the technological gap that exists between SBC and its fellow RBOCs is the aforementioned selective investment policy. This has focused investment on only those areas where customers can best be served, and has not been undertaken with the notion of building foundation on which to develop long term strategies. Another possible explanation arises from

the conservative and financial orientation of SBC, that is epitomised by the long standing, and seemingly well rehearsed, corporate mantra of 'sticking to our knitting.' This policy was subsequently rephrased to become, from 1993 onwards, "intelligent or financially disciplined diversification"¹⁸¹ As stated by Barnes (Chairman, President & CEO, SBC) in 1984, and repeated on numerous occasions subsequently:

...the best way to advance the interests of shareowners is to nurture the business we know best, in full recognition of its tremendous potential for growth in the years ahead.¹⁸²

By eschewing new technologies as they arise, and waiting until they have been further developed so that they are more reliable, and demand has been shown to exist, SBC is ensuring that it avoids unfruitful investment. Burrows (1995) writes that:

[w]hile SBC gets kudos from Wall Street for not throwing money at every new technology that comes along, the company may be dealing itself out of some big opportunities. ... SBC is also conspicuously low-profile on the Information Superhighway.¹⁸³

5.8.2 Investing in the wireless market.

It is possible to discern two strands to the wireless strategy of SBC. From divestiture onwards SBC has invested in the cellular market, building through a combination of organic growth and M&A activity one of the largest cellular operators in the world. In addition SBC was until 1993 one of the largest operators of paging systems within the United States, however, the company extracted itself from this market to concentrate solely on the cellular wireless market. Importantly, the cellular operations of SBC are not homogenous, with a distinction evident between cellular and PCS, wholly owned and joint-ventures and in and out region.

¹⁸¹ Southwestern Bell, 1993, pg4; SBC, 1995, pg11.

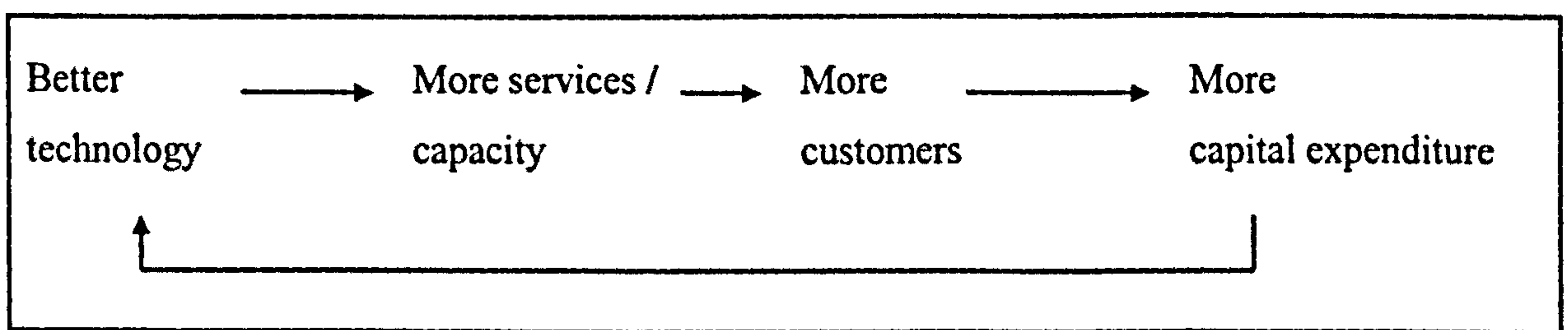
¹⁸² Southwestern Bell, 1984, pg2.

¹⁸³ Burrows, 1995, pg48f

In the 1984 Annual Report SBC asserts that technology and marketing are the necessary ingredients for the company's cellular strategy to be a success. From subsequent company publications it can be observed that considerable effort has been expended on harnessing developments within these two areas, and that a virtuous circle has developed which fuels the growth in the company's cellular business. Continued capital expenditure, especially in the initial years after divestiture, increased geographical coverage, network capacity and the range of services available to subscribers. SBC was the first of the RBOCs to completely build out its cellular network. The features that the capital expenditure provided, such as improved sound quality and security were prominent in the various marketing campaigns of SBC. As the marketing efforts increased subscriber numbers further capital expenditure occurred. The relationship between capital expenditure, network features and reach and subscriber numbers is at the heart of the cellular strategy implemented by SBC.

From divestiture onwards SBC rapidly expanded its cellular network, raising the number of operating systems from three in 1984 to six in February 1985 and became the first company among the RBOCs to build out all its licenses.¹⁸⁴ By the end of 1985 the number of systems operated had tripled from 33 to 100, with more than 35,000 subscribers.¹⁸⁵ SBC was also the first of the RBOCs to expand out-region as a reseller of cellular services. In the 1986 Annual Report SBC reported that 155 systems with more than 600,000 subscribers were in operation.¹⁸⁶

Figure 5.23: Cellular's virtuous circle



¹⁸⁴ Southwestern Bell, 1984, pg5.

¹⁸⁵ Southwestern Bell, 1985, pg18.

¹⁸⁶ Southwestern Bell, 1986, pg23.

The 1987 acquisition of Metromedia's cellular and paging businesses for \$1.4bn is significant for several reasons. The acquisition expanded the geographical coverage of Southwestern Bell Mobile Systems (SWBMS), so that the company operated in twenty-one markets in all. The acquisition also expanded the geographical reach of SWBMS out-region into markets such as Baltimore, Boston and Chicago.¹⁸⁷

In addition the acquisition also brought with it control of the CellularOne brand name. SBC continued to use the brand name, and in 1989 joined with McCaw Cellular to form CellularOne Group with the intention of turning CellularOne into a national brand. The partnership was further expanded in 1992 when Vanguard Cellular Systems Inc. joined. The aspiration to create a national cellular brand is encapsulated in the company's mission statement:

... creating a high-quality seamless cellular service that would span the continent. It involved offering service so easy that each subscriber would have one unique number where that person could be reached anytime, anywhere in the country. It encompassed providing service so dependable that it became synonymous with quality in all markets. And, it included giving its service a unified identity - one unique name and look that would be recognisable from coast to coast.¹⁸⁸

Although CellularOne Group is jointly owned by SBC, Vanguard and McCaw (now AT&T Wireless following AT&T's purchase of McCaw in 1994), more than seventy different companies used the CellularOne brand name by 1997 across 12000 communities. Those companies using the CellularOne brand name enter into a licensing agreement with CellularOne Group. In exchange for a fee the licensee gains the right to use the brand name subject to satisfying conditions consistent with the founding companies' aspiration to create a national cellular brand. The brand owners do not interfere with the operational aspects of licensee companies, but instead maintain a quality monitoring mechanism and engage in national advertising. Through the use of licensees CellularOne Group claims to be the only national cellular brand.

¹⁸⁷ Southwestern Bell, 1987, pg24.

¹⁸⁸ CellularOne, 1997a.

SBC uses the CellularOne brand in all its out-region wireless systems, not least because the company's in-region brand name, Southwestern Bell, suffers from low out-region awareness. In other words Southwestern Bell is a regional brand that does not travel.¹⁸⁹ Hence, from early 1997 SBC has been offering fixed landline services in Rochester New York under the CellularOne brand name instead of SBC or Southwestern Bell.¹⁹⁰ This is consistent with the Group's stated aim of brand extension where eventually member companies will integrate their other services with cellular communications under the CellularOne brand name thereby offering 'one stop shopping.' The CellularOne brand name will facilitate the expansion of SBC into those areas where it does not already have an existing and well known brand name.

Finally, the 1987 acquisition of Metromedia also included paging businesses. SBC began providing paging services in 1985, and by the time of the purchase had operations in twenty-nine markets in all.¹⁹¹ By acquiring Metromedia SBC increased the number of markets in which it provided paging services to fifty, expanded its paging subscriber base to 550,000 and established a presence in eight out of America's ten largest markets.¹⁹² In several north-eastern markets such as Boston, Baltimore and Washington DC, paging and cellular systems overlapped, thereby providing for common marketing and the bundling of services.¹⁹³ In 1989 SBC further deepened its presence in the paging market by acquiring the paging assets of Omni Communications.¹⁹⁴

After repeatedly stating the complimentarity of paging and cellular, SBC sold its paging business during the course of 1992. SBC stated that the sale allowed the company to focus resources, managerial effort and investment, on more profitable wireless markets such as cellular and PCS.¹⁹⁵

¹⁸⁹ McCarthy, 1996b.

¹⁹⁰ Cellular One, 1997b.

¹⁹¹ Southwestern Bell, 1986, pg24.

¹⁹² Southwestern Bell, 1986, pg24.

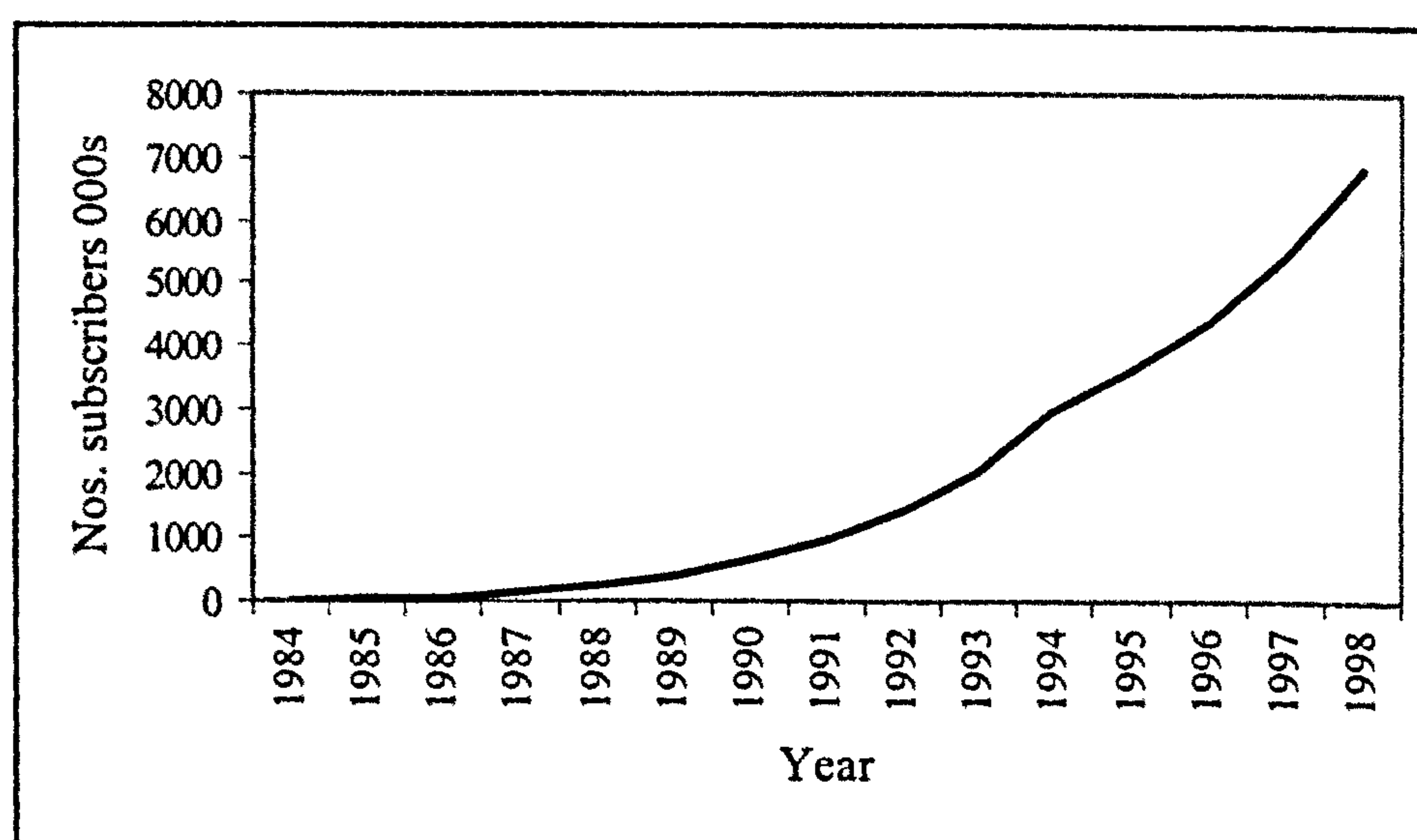
¹⁹³ Southwestern Bell, 1986, pg24.

¹⁹⁴ Southwestern Bell, 1989, pg9.

¹⁹⁵ Southwestern Bell, 1992, pg13.

In addition to the licensing of the CellularOne brand name, SBC has expanded its cellular footprint through a series of joint-ventures and acquisitions. In 1994 SBC acquired control of Associated Communications Corporations for \$705m, a company with cellular operations in the upstate New York regions of Buffalo, Rochester, Albany and Glen Falls. These operations were complemented by the purchase of several smaller cellular businesses in adjacent markets.¹⁹⁶ As part of an international investment in France, SBC sold 10% of its Baltimore-Washington cellular businesses to Compagnie Generale des Eaux.¹⁹⁷

Figure 5.24: SBC cellular subscriber growth 1985 - 1998



Source: various annual reports, SBC Communications; various annual reports, Southwestern Bell.

In 1994 also saw SBC extend its cellular coverage in-region through the formation of a marketing alliance with GTE. SBC extolled the virtues of the alliance in the 1994 Annual Report, writing:

...we announced a wireless network and marketing agreement with GTE that will greatly extend our market presence in Texas. This 20-year agreement allows each company to have access to Texas markets managed by the other company. In total 30 Texas markets and 14 million potential customers are included. This alliance fills out our cellular

¹⁹⁶ SBC, 1994, pg30.

¹⁹⁷ SBC, 1994, pg30; SBC, 1995, pg45.

coverage in high potential communications markets where we have a long history of telephone service, including the attractive metropolitan areas of Houston, Austin and El Paso.¹⁹⁸

SBC continued to fill in-region gaps and extend its cellular coverage in both 1995 and 1996.

SBC partook in the PCS spectrum auctions and was awarded in March 1995 51 licenses covering the majority of Arkansas, and parts of Oklahoma and Tennessee.¹⁹⁹ However, in 1996 SBC exchanged the undeveloped PCS licenses that it had acquired the previous year covering Memphis Tennessee and Little Rock Arkansas for AT&T's cellular business in Arkansas.²⁰⁰ This expanded the cellular coverage in-region by a 2.3m POPs.²⁰¹ SBC continued to expand in-region coverage, acquiring additional PCS licenses in January 1997.²⁰²

5.8.3 Directory publishing and printing.

Southwestern Bell Publications was the largest of all the RBOCs directory publishing companies to emerge from divestiture, and also had the company with the best sales record in the six years prior to divestiture.²⁰³ Since Southwestern Bell Publishing has sought to expand the number of directories that it prints and / or publishes, as well as expand the range of services that it offers. To this end the range of directories offered, from Yellow and White pages has been broadened to include ethnic versions, and Silver Pages that is aimed at the retired population.

In 1985 SBC acquired three companies to complement its out-region expansion. By acquiring Mast Advertising & Publishing, New York Yellow Pages Inc. and JC Blake Company, SBC

¹⁹⁸ SBC, 1994, pg10.

¹⁹⁹ SBC, 1995, pg28.

²⁰⁰ SBC, 1997h, pg27.

²⁰¹ PR Newswire, 1996.

²⁰² SBC, 1997h, pg27.

²⁰³ Southwestern Bell, 1984, pg12. In the six years prior to divestiture sales of yellow pages grew by an average of 17% per year.

expanded both its operational remit as well as its product range. The first of the companies expanded Southwestern Bell Publications into the national yellow pages market, and the printing and publication of the directories of independent telephone companies. In contrast New York Yellow Pages Company expanded the geographical scope of Southwestern Bell Publications, and JC Blake Company took the company into the publication of maps.²⁰⁴ In 1987 Southwestern Bell Publications acquired Gulf Printing, the printer of not only directories for Southwestern Bell Publications but also contract work for outside agencies such as the United States government as well.²⁰⁵

Between 1985 and late 1992 Southwestern Bell Publications continued to expand its presence within the marketplace. For example, in 1985 a range of directories tailored specifically towards retired people were developed and distributed through senior citizen organisations.²⁰⁶ In 1988 a joint-venture was formed with Donnelley Directories to enhance the company's Washington and Baltimore directories. However, those directories aimed at retired people were discontinued in 1988 due to lacklustre take-up as.²⁰⁷ The same year also witnessed the company's exit from the yellow pages market in New York and Chicago as the returns could not justify the investment required.

In 1993 SBC reversed its expansionist directory publishing and printing strategy. Several businesses within Mast Advertising & Publishing were sold, and the remaining businesses renamed as Advertising Directory Services. The principal business of this company was the printing and publishing of 269 directories for GTE/Contel. Also sold were the commercial print businesses of Gulf, and the residual businesses renamed Southwestern Bell Printing. In 1995 SBC sold the GTE/Contel publishing contract for 269 directories to GTE Directories, a subsidiary of GTE Corporation.²⁰⁸

²⁰⁴ Southwestern Bell, 1985, pg14.

²⁰⁵ Southwestern Bell, 1988, pg23.

²⁰⁶ Chessler, Clark & Ferng, 1986, pg86f.

²⁰⁷ Southwestern Bell, 1988, pg23.

²⁰⁸ SBC, 1995, pg22.

5.8.4 Out-region expansion.

As already demonstrated by Southwestern Bell Mobile Systems and Cellular One, SBC has expanded out-region. Furthermore, the expansion of SBC's cellular businesses since divestiture illustrate the role in expansion of M&A activity, the liberalisation process and alliances. Table 5.14 (below) summarises the mergers, acquisitions and joint-ventures that SBC has entered into to expand its geographical coverage.

Table 5.14: The mergers, acquisitions and joint-ventures of SBC, 1984 – 1998

Market	In-region Investment	Out-region Investment
Wireless (cellular & paging)	-GTE – Texas marketing agreement (1994). -PriCellular Corp (1995). -AT&T cellular for PCS swap (1996).	-Metromedia, paging & cellular assets (1987) -Omni Communications (1989) -Associated Cellular Corp (1994) -United States Cellular Corp (1995)
Directory publishing		-New York Yellow Pages Inc (1985) -Mast Advertising & Publishing (1985). -JC Blake Co (1985).
Cable-TV / content		-Cable systems from Hauser (1994) -Americast (1995).
Local telephone service		-Pacific Telesis (1997). ^{1,3} -SNET (1997). -Ameritech (1998). ^{1, 2,3}

Notes: 1. See Section 5.10 for further details. 2. Pending. 3. Principal market. *Source:* various annual reports.

A clear divide is illustrated in Table 5.14 (above) between in and out region expansion, with the majority of M&A and joint-venture activity taking place out-region. The primary focus of the out-region geographical expansion has been the north-east of the United States: Washington-Baltimore, upstate New York and Boston. Other areas include Chicago and Central Illinois. The presence of SBC in the north-east United States has been reinforced though the company's merger with SNET, whilst the proposed merger with Ameritech will expand the presence of SBC into the Great Lakes region. The 1997 merger with Pacific Telesis expanded SBC westward into the Californian market. However, SBC has not continuously expanded out-region and has exited markets such as New York and Chicago in the past.

The cable-TV investments of SBC are unique in that they do not compliment the existing lines

of businesses undertaken, and take the company into a market where it has no prior experience. In December 1993 SBC announced the formation of a \$4.9bn partnership with Cox Cable Communications, the sixth largest cable-TV company in the United States. To this partnership Cox would contribute twenty-one cable systems with 1.62m customers, valued at \$4.9bn. For its part SBC would invest \$1.6bn in cash and other assets. Not included within the partnership were several Cox Cable systems located within the five state territory of SBC, nor any other cable-TV or programming assets owned by either of the companies. The ownership of the partnership, named Cox Cable, would be split 60 / 40 in favour of Cox Communications, though with an option for SBC to buy another ten percent to become an equal partner.²⁰⁹

Landler & Ziegler (1993), Jeffrey (1993) and Rosenberg (1993) attest to the high hopes that SBC pinned onto this venture. The cash element of the deal would be used to fund the purchase of new cable systems, with the intention of, according to Landler & Ziegler (1993) assembling a cable distribution network on the scale of Time Warner of Tele-Communications Inc.. A Cox spokesperson stated the partnership's desire to acquire cable systems instead of programming or interactive assets:

There's a lot of hype out there about multimedia interactive service because of Bell Atlantic/TCI and Time Warner/US West. But there's a lot of money to be lost. We'd rather get the infrastructure. We're not interested in investing dollars in risky programming ventures. We'd rather get the networks in place.²¹⁰

However, less than six months later, in April 1994, the proposed partnership between Cox Communications collapsed. The primary reason cited for the collapse were alterations to the overarching regulatory regime for cable-TV, and the ensuing uncertainty that arose. In addition, SBC cited concerns about the industry's cash flow arising from the imposition by the FCC of lower cable rates. Another explanation for the collapse of the deal, and one alluded to by FCC General Counsel William Kennard in 1994, was that between December 1993 and April 1994 differences had emerged between Cox and SBC. For instance, although Cox asserted that it had

²⁰⁹ Southwestern Bell, 1993, pg4 & 13.

²¹⁰ Bernier, 1993.

no intention of acquiring programming assets, the 1993 Annual Report of SBC stated that the venture would acquire programming and multimedia assets.²¹¹

In the intervening period between the announcement of the Cox partnership, and its collapse SBC did enter the cable-TV market. In January 1994 SBC acquired two cable systems from Hauser Communications in Maryland and Virginia for a total of \$650m.²¹² Together these two systems served 238,000 customers, and their acquisition made SBC the first of the RBOCs to own and operate cable-TV systems within the United States.²¹³

In 1994 SBC joined with Ameritech, BellSouth and Disney to form americast. With a development budget of \$500m the partnership's stated objective was to develop video-on-demand services, navigation software and new services.²¹⁴ The wisdom of the partnership was subject to scrutiny from the very start. Whilst no 'in kind' contributions to the \$500m development budget were made, Goldstein (1994) states that Disney's role will be to provide intellectual property in the form of movies, cartoons and marketing flair. Significantly, the three RBOCs did not gain exclusive access to Disney content. Disney would be free to strike distribution deals with others, telecommunications companies included.²¹⁵ Another important feature of the partnership was that common interactive software would only be developed at the user interface level, with each of the partners being free to develop their own underlying software platforms.²¹⁶ This would complicate the development of the navigation software, and more likely than not result in a lowering of specifications so that the final product would be compatible with all the different software in use by the partners. According to Zimmerman (1994) SBC formed a partnership with Microsoft to integrate its Tiger software into the company's video investments. However, this software had not been fully tested when this partnership was announced, and was not expected to be in service until late 1995.

²¹¹ Southwestern Bell, 1993, pg4.

²¹² SBC, 1994, pg30.

²¹³ Telecom Publishing Group, 1995.

²¹⁴ Bernier, 1995; Television Digest, 1995a.

²¹⁵ Campbell, Ameritech vice-president for corporate strategy and business development, cited in Goldstein (1994).

²¹⁶ Television Digest, 1995a.

In 1996 SBC ceded effective control of its cable interests to a joint-venture company. The Hauser cable systems in Maryland and Virginia were operated by SBC Media Ventures, which in 1996 contributed them to SBC Media Ventures, LP (Partnership) in return for 95% of that company. The remaining 5% was bought for \$20m by Prime Cable, who then became the manager of the two aforementioned cable systems.²¹⁷ Maney (1995) comments that shortly after SBC bought the two cable systems it was widely rumoured that the company has begun to look for ways to divest both of the franchises. One cited explanation was that SBC did not possess a vision of how the cable systems were to be incorporated into the company's overall strategy, especially when the industry was unsettled due to regulatory and technological change.

The withdrawal of SBC from the cable-TV market was completed in the second half of 1997. SBC discontinued its in-region video trials in Texas, and in September 1997 exited from the americast partnership.²¹⁸ This exit was, however, disputed by the other partners so although SBC is no longer a member of the partnership the company remains liable for certain financial obligations relating to its original commitment in 1994. Although no explanation is cited by Breznick (1997) for such a move, the exit from americast is the logical conclusion of the protracted withdrawal of SBC from the marketplace. Alternatively, the partnership had failed to achieve its objectives, with subscriber numbers less than anticipated in 1994.

5.8.5 Conclusion.

Three interlocking strands are discernible in the post-divestiture strategy of SBC. Firstly, the RBOCs has sought to expand out-region, initially in the directory printing market but subsequently, and to a substantially greater degree, in the cellular and local telephone service markets. Secondly, the acquisition of Metromedia's paging and cellular businesses in 1987 provided a strong positive impetus to the out-region expansion and cellular strategies of SBC. Thirdly, realising the significance of its five state territory SBC has acted to enhance its in-region businesses in the face of increasing competitive pressures.

²¹⁷ SBC, 1996e.

²¹⁸ Breznick, 1997.

All three strands of the strategy of SBC can be found in Figure 5.25 (over). Figure 5.25 shows the chronological relationship between the various elements of SBC's strategy. Ever present through the post-divestiture period has been the RBOCs' focus on its in-region telephone network. Immediately after divestiture SBC sought to build up its in-region cellular lines-of-business, and then switched to out-region cellular expansion when this was largely completed. In recent years, from mid-1996 onwards, that the RBOCs has acquired LECs out-region, primarily Pacific Telesis, Ameritech and SNET. These acquisitions have enabled SBC to grow its out-region and in doing so complement its out-region cellular line-of-business with control of the local loop as well.

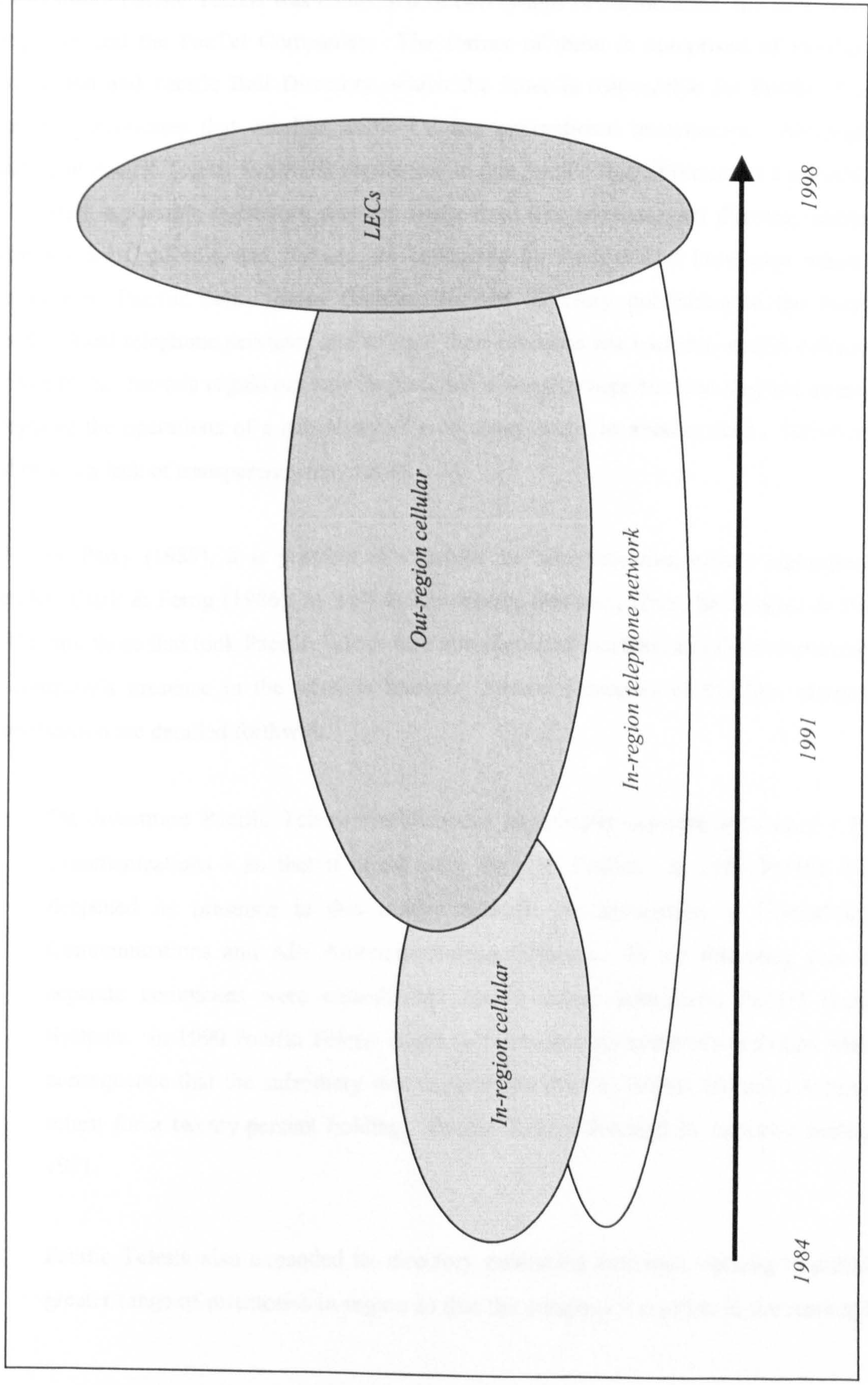
Although it is undoubtedly the case that SBC has prospered in the post-divestiture era, the company has also encountered reversals as well. The most dramatic of these reversals has been the failure of SBC to develop, and then articulate a cable-TV strategy. As market conditions turned against cable-TV investments, the company steadily reduced its exposure and eventually exited the market in 1997. SBC has also left several markets due to their inability to produce satisfactory returns. Together these illustrate another feature of SBC in the post-divestiture period, namely its increased financial orientation that has enabled returns to shareholders to be higher than other RBOCs.

5.9 PACIFIC TELESIS GROUP.

Given that O'Reilly (1983) labelled Pacific Telesis "poor Pacific" in the run up to divestiture, it is somewhat surprising that Perry (1989) asserts, just a few years later, that "Pacific Telesis Group has scored an underdog's triumph."²¹⁹ Although Perry (1989) cites Pacific Telesis's cost cutting and increased revenues and net income in support, two other areas are of greater interest. Firstly, in common with all of its peers, from divestiture onwards Pacific Telesis has diversified into new markets to reduce its reliance on its BOCs. Secondly, Pacific Telesis has expanded into the cellular market, and had done so to such a degree that by 1989 Pacific Telesis placed a \$6bn value on its cellular investments.

²¹⁹ Perry, 1989, pg54.

Figure 5.25: Domestic strategies of SBC Communications between 1984 and 1998



On divestiture Pacific Telesis was comprised of two groups of subsidiaries, the Bell Operating Companies and the PacTel Companies. The former of these is comprised of Pacific Bell, Nevada Bell and Pacific Bell Directory, whilst the latter is responsible for Pacific Telesis's diversified businesses that wireless, cable-TV and international investments. Although this structure of Pacific Telesis facilitates regulation, in that Pacific Bell Directory is a subsidiary of Pacific Bell, a possible regulatory problem arises from this division. All directory publishing operations for California and Nevada are conducted by Pacific Bell Directory, which is a subsidiary of Pacific Bell. Judge Greene allocated directory publishing to the RBOCs to subsidise local telephone services, and as such their revenues are included within calculations by State PUCs. Nevada regulators may be placed at a disadvantage because they are attempting to regulate the operations of a subsidiary of a company based in another state. Jurisdictional clashes and a lack of transparency may result.

Following Parry (1989), it is possible to structure the diversification efforts highlighted by Chessler, Clark & Ferng (1986), as well as Rosenberg, Borrows, Hunt, Samarajiva & Pollard (1993), into those that took Pacific Telesis into non-regulated markets, and those that expanded the company's presence in the wireless market. Several examples of the first category of diversification are detailed forthwith.

- On divestiture Pacific Telesis established a structurally separate subsidiary - Pactel Communications - so that it could enter the CPE market. In 1988 Pacific Telesis deepened its presence in this market through the acquisition of Comprehensive Communications and ABI American Business Phones. In the following year these separate companies were consolidated into a single subsidiary, PacTel Business Systems. In 1990 Pacific Telesis began to restructure its non-BOCs activities with the consequence that the subsidiary was merged into Pacific Telesis Meridien Systems in return for a twenty-percent holding. Pacific Telesis divested its minority holding in 1991.
- Pacific Telesis also expanded its directory publishing activities, seeking to publish a greater range of directories in-region so that the company's position in the marketplace

would be reinforced. In addition Chessler, Clark & Ferng (1986) state that Pacific Telesis acquired JWW Enterprise to expand its publishing activities into the provision of publications tailored for convention centres and city visitor centres. Finally, PacTel sought printing contracts with outside bodies such as the American Hotel and Motel Association.²²⁰

- In a fashion similar to US West Pacific Telesis expanded the role of PacTel Properties in 1984, from an internal service company to one increasingly orientated on the external market as well. To this end, PacTel Properties invested in “office and light industrial properties concentrated in California.”²²¹ In 1990 PacTel Properties ceased expansion of its portfolio, with the parent company making a provision of \$60m to exit the market. In the 1990 Annual Report Pacific Telesis write: “our decision will allow us to pursue lines of business with greater potential to contribute to shareowner value.”

In contrast to the above diversification efforts of Pacific Telesis stand the company’s move into cellular and paging activities. Figure 5.26 (over) charts the rapid growth of cellular subscribers and revenue that Pacific Telesis enjoyed from 1986 until 1994. Whilst it is undoubtedly the case that such growth was driven by organic demand there is a clear expansionary trend to Pacific Telesis’ cellular strategy. In 1985 the company moved to acquire Communications Industries Inc., which provided cellular services outside the two-state territory of Pacific Telesis.²²² As part of the acquisition agreed to divest the manufacturing businesses of Communications Industries Inc. in compliance with MFJ lines of business restrictions, as well as sell those operations where Communications Industries Inc. formed a duopoly with Pacific Telesis.

In addition to its expanded presence in the cellular industry, Pacific Telesis has also diversified into the paging and radio-location markets as well. In 1990 Pacific Telesis sought a waiver from the MFJ lines of business restrictions so that it could acquire a majority stake of

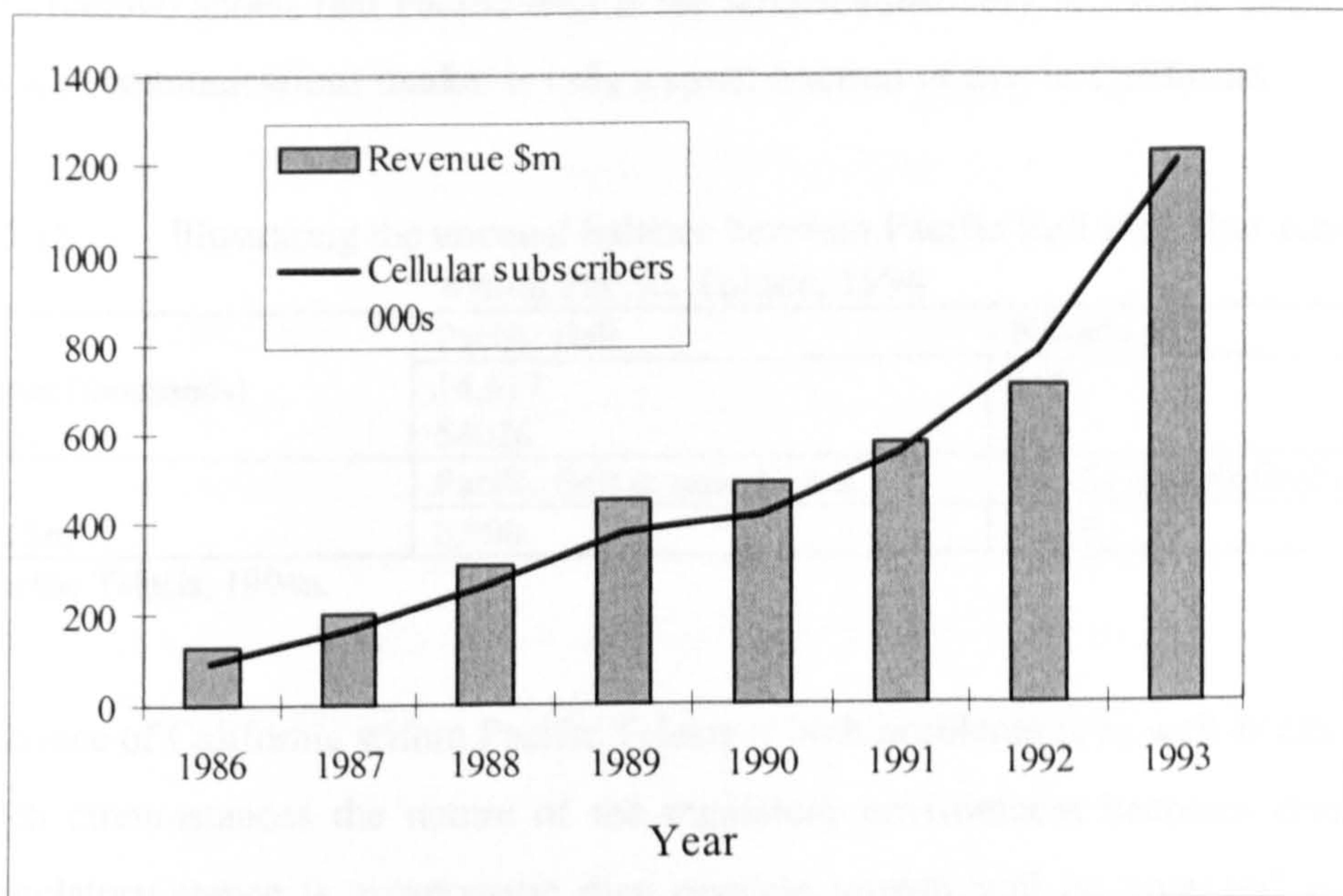
²²⁰ Chessler, Clark & Ferng, 1986, pg74.

²²¹ Pacific Telesis, 1984, Annual Report, pg23, cited in Chessler, Clark & Ferng, 1986, pg75.

²²² Chessler, Clark & Ferng, 1986, pg76.

International Teletrac Systems. Through advanced technology was able to determine the location of vehicles, so that, for example, commercial trucking services, stolen vehicles and distressed motorists located. In 1991 Pacific Telesis was granted a MFJ waiver enabling International Teletrac Systems to be acquired. Less prominent within company literature is Pacific Telesis Paging, which expanded to become one of the largest operators in the United States.

Figure 5.26: Cellular revenue and subscriber growth, 1986 – 1994



Source: various annual reports.

The out-region cellular expansion that Communications Industries Inc signalled, was consolidated in 1990 by an agreement between Pacific Telesis and Cellular Corporation Inc. to merger their respective cellular operations in Michigan and Ohio into a 50/50 joint-venture company, New Par. As part of the merger Pacific Telesis was granted the option to acquire the merged company at a later date.²²³ In 1991 a joint-venture with McCaw Cellular Communications was proposed, that not only broadened the area around San Francisco where Pacific Telesis provided service but also expanded the company's Mid-west presence into

²²³ Pacific Telesis, 1990, pg20; Pacific Telesis, 1993, pg24.

Kansas and Missouri.²²⁴ The joint-venture with McCaw Cellular Communications was completed in September 1993.

5.9.1 Dual edged sword - California.

Even though Pacific Telesis operates in the two state territory of California and Nevada, the distribution of employees, access lines and revenue is heavily skewed in favour of California. Table 5.15 (below) shows that Pacific Bell is the largest subsidiary of Pacific Telesis, and that Nevada's telecommunications market is only a small fraction of that in California.

Table 5.15: Illustrating the unequal balance between Pacific Bell and other subsidiaries within Pacific Telesis, 1994

	Pacific Bell	Nevada Bell
Access lines (thousands)	14,617	256
Employees	54026	860
	Pacific Bell & subsidiaries	Pacific Telesis Group
Revenues \$m	8,900	9,244

Source: Pacific Telesis, 1994a.

The dominance of California within Pacific Telesis is both problematic as well as advantageous. Under such circumstances the nature of the regulatory environment becomes critical, if the State's regulatory stance is antagonistic then revenue growth will be impinged as consumer needs override those of the company. However, the large size of the Californian economy, coupled with the considerable number of innovative and high technology companies that are located within its confines, present a unique opportunity for Pacific Bell to exploit.

The regulatory environment under which Pacific Telesis operates has been judged by many to be harsh, with restrictive rate of return regulation limiting earnings and a continued acrimonious debate over the level and nature of infrastructure investment. According to O'Reilly (1983) Pacific Telesis inherited an acrimonious and harsh regulatory relationship from AT&T on divestiture, and that this has been perpetuated ever since. The way in which the regulatory environment can be judged to be harsh is through rate of return regulation that steadily declined,

²²⁴ Pacific Telesis, 1991, pg18f; Pacific Telesis, 1993, pg24.

from fifteen percent in the late 1980s to ten percent in 1990.²²⁵ When coupled with a relative low level of investment by Pacific Telesis in its Californian telecommunications infrastructure, the result was to limit the level of earnings achievable and discourage further investment.

Within California Pacific Bell's access lines are geographically concentrated in two large conurbations, with the consequence that they receive considerable attention from those telecommunications operators wishing to invest within the Californian market. Two implications arise from the concentration of Pacific Bell's access lines in the Los Angeles / San Diego and San Francisco / Silicon Valley corridor. Firstly, the future of Pacific Bell, and Pacific Telesis, is largely dependent on the economic well being and growth of just two areas. Consequently, a down turn in either will have a disproportionately large impact on the company.

Secondly, as a consequence of such a high degree of concentration any new entrant can have access to a large market through a relatively small investment in infrastructure or reselling mechanisms. For instance, the dense concentration of LATAs in southern California has attracted new entrants into the market, and according to McCarthy (1993c) Pacific Bell has been challenged on intra-LATAs routes as new entrants target particular areas or ethnic groups. The concentration of access lines will encourage inward investment when the Californian economy is growing.

Although the Californian economy has experienced growth Pacific Telesis was unable to grow its revenue base in line with increases in the number of access lines. Smith Barney (1996) and Dean Witter Reynolds (1995) note that revenue attained fell short of expectations in the first half of 1995 due to a combination of a rate re-balancing programme effective 1st January 1995, loss of market share and a lack of stimulation in the marketplace.

First Boston Corporation (1993) offers a useful, though sensationalist, summary of the environment in which Pacific Telesis operated. It should be borne in mind, however, that the assessment will have been influenced by the slow economic growth witnessed at the start of the 1990s. First Boston Corporation (1993) wrote that:

²²⁵ Smith Barney, Harris Upham & Co, 1988, 1989 and 1990.

*The Californian economy stinks.

*Californian regulation is unpredictable and generally bad.²²⁶

5.9.2 The creation of PacTel Corporation.

Noticeable throughout the dire assessments of Pacific Telesis in the post-divestiture period was that one bright spot regularly alluded to was the RBOC's cellular and paging investments. The different assessments given to the cellular and paging subsidiaries as distinct from Pacific Telesis' other operations can be seen in the financial evaluation given by, amongst others, investment analysts Smith Barney, Harris, Upham & Co (1988, 1989, 1990 and 1991). It was argued that in essence that Pacific Telesis was comprised of two different types of business: the highly regulated BOCs subsidiaries, and the company's various diversified operations which included cellular, cable-TV and paging subsidiaries. The former were subject to adverse operating conditions, through a high level of regulation and increasing competition and slow growth, whilst the latter were less regulated and growth orientated.

Smith, Barney, Harris, Upham & Co (1990 and 1991) and Prudential (1992) noted that from 1990 onwards that Pacific Telesis stock traded at a discount to the sum of the company's constituent parts. That is, Pacific Telesis' valuation was driven by appraisals of the BOCs, which were subject to adverse operating conditions. This relegated, into a secondary position, the value creation role of Pacific Telesis' diversified operations, cellular included. In 1992, when the company's stock was trading at \$40, Prudential Securities calculated that if the BOCs were worth \$28 per share, then Pacific Telesis' cellular operations had a value \$6 per share higher than the implied valuation of \$12.

Consequently, to realise shareholder value Pacific Telesis grouped together its non-regulated subsidiaries into PacTel Corporation. The subsidiaries of PacTel Corporation included, PacTel Cellular, PacTel Paging, PacTel Teletrac, PacTel Cable and Pacific Telesis International. Pacific Telesis sold in December 1993 a 14% stake in PacTel Corporation to outside

²²⁶ First Boston Corporation (1993).

shareholders. This raised through \$1.5bn, and placed a total enterprise value of more than \$10bn on PacTel Corporation. The initial public offering allowed a more accurate valuation to be placed on these businesses, separate from the negative connotations of Pacific Telesis' BOCs.

5.9.3 'California First' and the divestiture of AirTouch Communications.

Less than a year later, in April 1994, Pacific Telesis distributed on a pro-rate basis its remaining 86% investment in PacTel Corporation to its existing shareholders. The decision by Pacific Telesis to divest its diversified businesses can be located at the confluence of three sets of factors:

- The already mentioned harsh regulatory environment.
- An increasingly competitive telecommunications environment.
- The perception by Pacific Telesis that the future course of the telecommunications industry would be dominated by 'multimedia' developments.

The multimedia age envisaged by Pacific Telesis spanned many previously separate industries, and thereby acknowledged the impact of convergence on the future trajectory to be taken by the company. Pacific Telesis envisaged a converged telecommunications industry encompassing not only traditional telecommunications, but also cable-TV, entertainment and information systems as well.²²⁷ In order for Pacific Telesis fulfil this vision significant investments would be required, which would, in addition to investments in the existing core network, also take Pacific Telesis into uncharted waters such as entertainment. Maney (1995) describes this strategy, latter dubbed 'California First,' writing that:

... the company is racing like hell to build the equivalent of a communications-age fort around California, hoping it can get the moats, the gates, the walls, and all the

²²⁷ Quigley (Pres. PacBell and subsequent chair Pacific Telesis) quoted in Television Digest, 1995a.

battlements secured before the barbaric invaders ... come crashing in to pillage the place. ... It is the speediest network construction project of all PacTel plans to spend \$16bn through 2000; its goal is to make information superhighway-type services available to half of all homes in California by the century's end.²²⁸

Although 'California First' is a multifaceted strategy, a central element was the need for Pacific Telesis to acquire in-region PCS spectrum so that a range of new services could be provided. However, FCC rules prohibited any of the RBOCS from bidding for in-region PCS licenses. Therefore, some mechanism would be required to enable Pacific Telesis to acquire the necessary spectrum and enact its 'California First' strategy.

To this end, as well as enhance shareholder value, Pacific Telesis decided to complete the separation of its BOCs and diversified business group begun with its initial post-divestiture structure, and continued in the partial sale of PacTel Corporation in 1993, by divesting its remaining holding in PacTel Corporation. To reflect the separation of the companies, and to reiterate its differentiation from Pacific Telesis, PacTel Corporation changed its name to AirTouch Communications. The divestiture would be implemented on April 1 1994. Some of the benefits of the split cited by management at the time included:

- The creation of long-term shareholder value by forming two strong businesses with distinct investment profiles.
- The heightening of strategic focus and increased financial flexibility in both companies. Furthermore, Pacific Telesis Group would be able to increase its investment in telephone operations whilst maintaining its credit rating and dividend policy.
- Improvements to the public policy environment of both companies. This would enable Pacific Telesis Group to become the only RBOCs to participate in the PCS bidding process for in-region licenses up to 40mhz.²²⁹

²²⁸ Maney, 1995, pg83f

²²⁹ Pacific Telesis Group, 1994a, pg2.

Through the divestiture of AirTouch Communications Pacific Telesis simultaneously exited several markets, with the principal ones being cellular and paging. Importantly, this exit occurred not only in-region, but also out-region and internationally as well.

Subsequent to the divestiture Pacific Telesis participated in the PCS spectrum auction, and won the licenses that it sought. In 1995 Pacific Telesis paid \$696m for two licenses covering California and Nevada, and after investing more than \$2bn initiated services in early 1997.²³⁰ This service is provided through a newly created subsidiary, Pacific Bell Mobile Services, which is not structurally separate from the BOCs as in the case of the previous cellular investments of Pacific Telesis. Instead Pacific Bell Mobile Services was a subsidiary of Pacific Bell. FCC rules for PCS are such that it is possible to integrate the services provided with wireline local telephone services.

In the post AirTouch divestiture period, Pacific Telesis sought to strengthen its presence within California and Nevada. In 1995 Pacific Telesis acquired three wireless cable-TV companies. Through these acquisitions Pacific Telesis gained access to a new technology, as well as a potential in-region customer base of 9m.²³¹ These investments were undertaken in the belief that a new digital version of the technology could be deployed in 1997, before wire-line upgrades could be completed. This would enable the company to enter the market sooner than previously anticipated. The use of wireless technologies does not signal the company's abandonment of its commitment to the development of a full service network but rather a way to hasten its advent by developing a customer base on which subsequent developments can build. Consequently, Pacific Telesis has sought to develop both types of technologies in tandem. In September 1996 the company began trials of wireless cable-TV in San Jose California, and time-tabled full service network tests in Los Angeles and Orange County for 1997.²³²

²³⁰ Pacific Telesis, 1995a; Pacific Telesis, 1997.

²³¹ The three companies acquired were: Cross Country Wireless (\$120m), Wireless Holdings and Videotron Bay Area (both for \$175m) (Wolti, 1995).

²³² Pacific Telesis, 1996c.

An aggressive network replacement programme has been initiated involving substantial capital expenditure. In 1996 alone the telephone companies spent \$2.5bn on network investments primarily on those areas required for the provision of “new products and services, increase network quality and reliability, increase transmission speed, and reduce costs.”²³³ Using this as a basis the company has entered into a wide ranging “core process reengineering.” The stated aim of the reengineering undertaken was to reduce costs and deliver customer services more effectively than in the past. For instance, Pacific Telesis has reduced the number of points of contact that it has with its customers so cost savings can be achieved. The move is also intended to improve customer service levels through investing in the training of staff so that they are aware of a greater range of products.

The company has widened its product remit through the provision of new services such as electronic publishing, long distance communications and Internet related products. In 1995 a joint-venture with the Los Angeles Times was launched to provide home shopping services,²³⁴ whilst with Nynex and Bell Atlantic Tele-TV was established in 1994. The operational objective of Tele-TV was the development of “a portfolio of branded programming and services.”²³⁵ Pacific Telesis also established a long distance affiliate to take advantage of the opportunities arising from the 1996 Telecommunications Act. Finally, as befitting the RBOCs serving Silicon Valley several Internet related ventures have been established ranging from access provision to the development of on-line content specific to California.

5.9.4 Vulnerability.

Therefore, in the aftermath of the 1994 divestiture of its cellular, paging and international businesses, Pacific Telesis has actively sought to develop its multimedia network within California and Nevada. The new services developed would allow Pacific Telesis to continue to compete against new entrants in an increasingly competitive and turbulent environment.

²³³ Pacific Telesis, 1996a.

²³⁴ Pacific Telesis, 1995a.

²³⁵ Pacific Telesis, 1995b.

However, the spin-off was a double-edged sword - it represented both an unique opportunity to enter the PCS market before its peers and to develop a stronger home base, but it also effectively bet the future success of the company on an untried technology. As a direct consequence of this 'gamble' Pacific Telesis became vulnerable to opportunistic behaviour by new entrants and potential suitors.

The spin-off of AirTouch financially weakened Pacific Telesis. Not only was the company's market capitalisation reduced, but in the period after the spin-off both earnings and revenue displayed little growth. Measured by revenues alone Pacific Telesis now became the smallest of the RBOCs, a position previously held by US West. Furthermore, the retention of AirTouch, whose market capitalisation was approximately \$14bn in 1996, within Pacific Telesis would have nearly doubled the Pacific Telesis's value making it less susceptible to a take-over / merger.

Pacific Telesis was not able to quickly replace the fast growing, lucrative and highly valuable cellular business with new products and services. A gap developed between the spin-off, the articulation of 'California First' and the ability of the company to actually construct the infrastructure required, and actually offering the services in the marketplace. Such gap arose as the result of the regulatory regime under which Pacific Telesis laboured. For instance, Pacific Telesis applied to the FCC for permission to offer video dialtone services in San Jose California in December 1993 but the actual service was delayed by nearly three years and only began in September 1996.

Though the company has been acknowledged as an industry leader in the field of cost savings these have not directly translated into profits due to the Californian regulatory regime. The regulatory regime has enforced rate reductions and the sharing of cost savings with the public, which together have curtailed earnings growth.

Pacific Telesis misjudged the regulatory process, Cleland (1996) states that:

[t]hey [Pacific Telesis] made a big gamble that the 1994 [telecom] bill would pass, agreeing to intra-LATA competition on the assumption they would receive intra-LATA

relief. When the 94 bill catered, they were left with salt and none of the sugar. It's a subtle reason why Pacific Telesis did so much worse than the other guys.²³⁶

When the regulatory reform did occur in the shape of the Telecommunications Act of 1996 it only served to increase the competitive pressures faced by the company. Whilst the Act freed Pacific Telesis to expand it also opened up its local monopolies to increased competition.

The combined effect of the above was to make Pacific Telesis one of the weakest, if not the weakest, of the RBOCs and thus vulnerable to a take-over. On the First of April 1996 Pacific Telesis announced that it had entered into a definitive agreement with SBC Communications to effect a tax free pooling of interests so that it would become a wholly owned subsidiary of that company. The merger was detailed as follows:

[t]he merger involves an exchange of stock with current Pacific Telesis stockholders receiving SBC stock. Based on the average of SBC's closing stock prices last week, this implies a value of approximately \$39 for each Pacific Telesis' share. The exchange ratio has Pacific Telesis shareowners receiving 0.733 shares of SBC common stock for each of their shares subject to certain adjustments. ... After the tax-free exchange, 66 percent of the company's stock will be retained by SBC shareholders and 34 percent held by Pacific Telesis investors.²³⁷

Completion of the merger was dependent on regulatory approval from the FCC regarding the transfer of Pacific Telesis' licenses to SBC. The merger was also dependent on conformation from the Department of Justice that the merger did not constitute a violation of anti-trust laws, from the PUCs in California and Nevada and finally, from both sets of shareholders. All the necessary parties gave their consent and the merger was formally completed one year after announced on the 1st April 1997 when:

²³⁶ Cleland, analyst with Lynch Jones & Ryan, quoted in Wetli, 1996.

²³⁷ SBC Communications, 1996b.

[a]t 12:01am on April 1, 1997, Pacific Telesis Group (PAC) ... and SBC Communications Inc., ... consummated a merger whereby SBC Communications (NV) Inc., ... a wholly owned subsidiary of SBC ... was merged with and into PAC. As a result of the Merger, PAC has become a wholly-owned subsidiary of SBC.²³⁸

5.9.5 Conclusion.

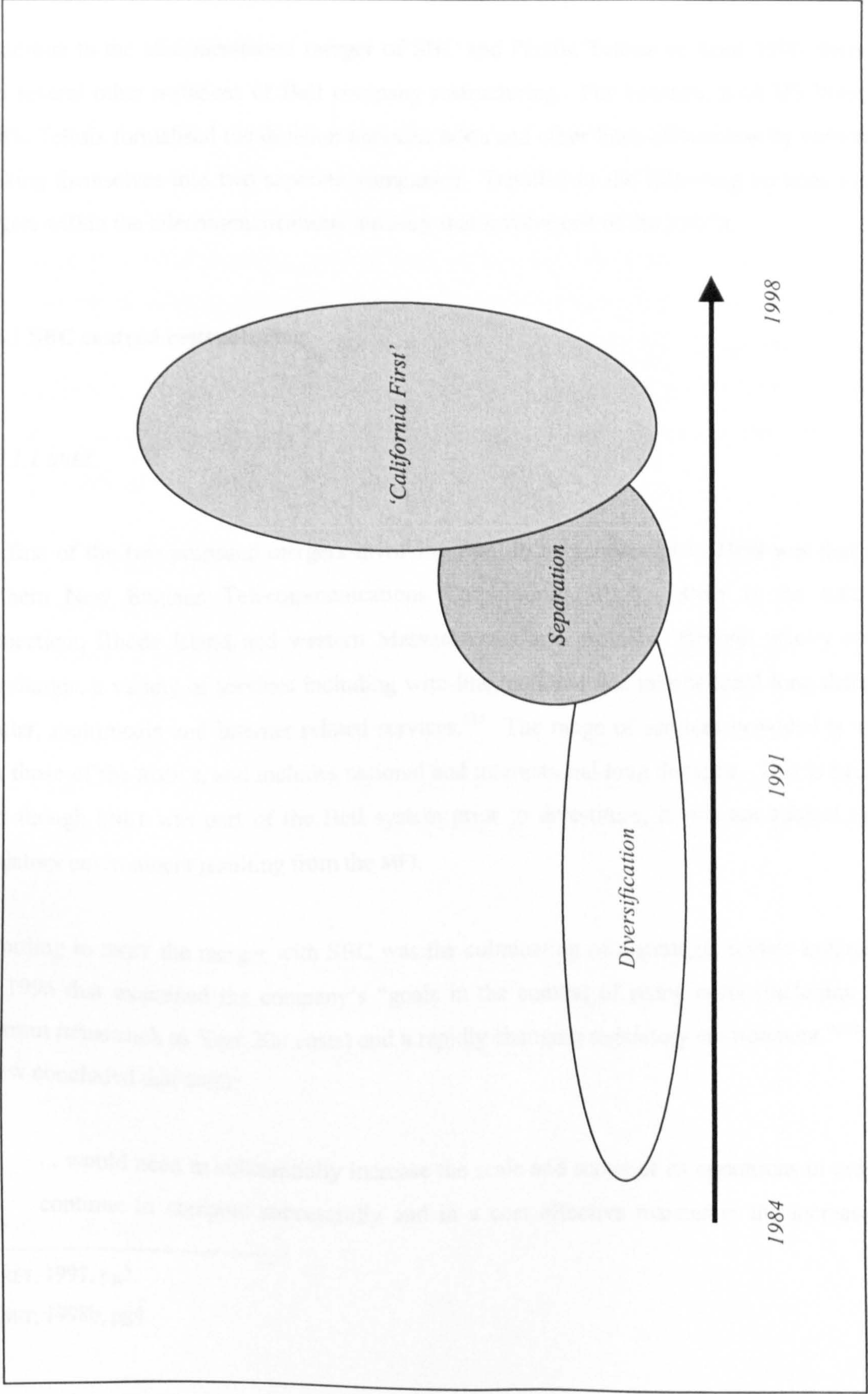
That Pacific Telesis was the first of the RBOCs to surrender its independence could be taken as being indicative of a failure to develop a corporate strategy that reflected the circumstances in which the company found itself after divestiture. Although the Californian market is large and potential lucrative, Pacific Telesis enjoyed an antagonistic relationship with state regulators and faced increasing competitive pressures. Both of these impacted on Pacific Telesis's ability to develop a suitable strategy for its largest market. One bright spot was the cellular business of Pacific Telesis. The dichotomy that resulted between the negatively rated BOCs and the positively viewed cellular investments eventually led Pacific Telesis to spin off AirTouch Communications in 1994.

In Figure 5.27 (over) the separation of AirTouch from Pacific Telesis is the pivotal event in the history of the RBOCs. Prior to the separation the RBOCs was engaged in a diversification strategy where cellular formed a significant component. Subsequent to the separation Pacific Telesis focused on its two state market of California and Nevada.

The separation strategy did however directly and significantly contributed to the vulnerability of Pacific Telesis to opportunistic behaviour by others. The creation of shareholder wealth that the spin off represents can be used to argue that Pacific Telesis did articulate a successful strategy in the post divestiture period.

²³⁸ Pacific Telesis, 1997.

Figure 5.27: Domestic strategies of Pacific Telesis between 1984 and 1998



5.10 RESTRUCTURING WITHIN THE BELL SYSTEM.

In addition to the aforementioned merger of SBC and Pacific Telesis in April 1996, there has been several other instances of Bell company restructuring. For instance, both US West and Pacific Telesis formalised the division between BOCs and other lines-of-business by voluntarily breaking themselves into two separate companies. Detailed in the following sections are the mergers within the telecommunications industry that involve one of the RBOCs.

5.10.1 SBC centred restructuring.

5.10.1.1 SNET.

The first of the two proposed mergers involving SBC to be announced in 1998 was that with Southern New England Telecommunications Corporation (SNET). SNET is the ILEC for Connecticut, Rhode Island and western Massachusetts and provides, through wholly owned subsidiaries, a variety of services including wire-line, national and international long distance, cellular, multimedia and Internet related services.²³⁹ The range of services provided is wider than those of the RBOCs, and includes national and international long distance. This is because even though SNET was part of the Bell system prior to divestiture, it was not subject to the regulatory environment resulting from the MFJ.

According to SNET the merger with SBC was the culmination of a strategic review initiated in late 1996 that examined the company's "goals in the context of rising costs (including non-recurrent items such as Year 200 costs) and a rapidly changing regulatory environment."²⁴⁰ The review concluded that SNET:

... would need to substantially increase the scale and scope of its operations in order to continue to compete successfully and in a cost effective manner in the increasingly

²³⁹ SNET, 1997, pg2.

²⁴⁰ SNET, 1998b, pg4.

competitive telecommunications industry, and to provide customers with the broad range of telecommunications products and services they would demand and to meet the goals of its shareholders.²⁴¹

SNET, therefore, sought to resolve the conflict between its limited geographical scope and shareholder returns on the one hand, and the delivery of product and services to customers on the other. As businesses expand nationally and then internationally SNET's limited geographical reach would become problematic, similarly any expansion would threaten shareholder returns and divert attention away from the delivery of telecommunications products and services to existing customers. The limited resources available to SNET, and the operational limitations imposed by the market, would be exacerbated by increasing competitive pressures due to changes in the regulatory environment. It was on this basis that SNET management resolved to align the company with a major player in the industry. Hence:

On January 5, 1998, SBC and Southern New England Telecommunications Corporations (SNET) jointly announced a definitive agreement to merge an SBC subsidiary with SNET, in a transaction in which each share of SNET common stock will be exchanged for 1.7568 shares of SBC common stock (equivalent to approximately 120 million shares; both the exchange ratio and shares to be issued have been restated to reflect the two-for-one stock split declared January 30, 1998). The transaction is intended to be accounted for as a pooling of interests and to be a tax-free reorganisation.²⁴²

As structured the deal valued SNET at \$4.4bn.²⁴³ The significant difference in size between SNET and SBC ensure that though the deal is described as a merger of equals, it is in fact an acquisition by SBC. The unequal relationship is reflected in:

²⁴¹ SNET, 1998b, pg4.

²⁴² SBC, 1997, pg4.

²⁴³ SBC, 1998c, pg5.

- The ownership structure of the resulting enterprise. The new company will be 94% owned by existing SBC shareholders and 6% by former SNET shareholders.²⁴⁴
- Strategic management decisions will be taken in Texas where SBC is based, although operational control will remain in Connecticut.

The size of the premium underlines SBC's willingness both to expand out-region and to enter the north-eastern United States market. Until the merger SBC's presence in this large and potentially very lucrative market, was limited to CellularOne and SBC MediaVentures L.P. The merger with SNET therefore substantially reinforces the company's presence, and provides a platform for expansion into Bell Atlantic's home territory with a brand name that is locally recognisable. Finally, the merger also continues SBC's strategy of combining a local presence and brands in a national telecommunications company.

5.10.1.2 Ameritech.

In May 1998 SBC announced a \$62bn merger with Chicago based Ameritech. The merger would combine SBC and Pacific Telesis with Ameritech in a company with an enterprise value of \$146bn. Whitacre (Chairman & CEO, SBC Communications) asserted when the merger was announced that it would transform the telecommunications industry, creating a company capable of competing against local, national and global competitors. Whitacre continues that the merger would:

...enable the new SBC to accelerate and expand telecommunications competition by entering 30 U.S. markets outside its traditional 13 state local region so that the combined company will serve customers in all the top 50 markets in the nation. In addition, the new company will build on its growing international presence to serve a worldwide market.

²⁴⁴ SBC, 1998c, pg3.

Other benefits anticipated by the merger partners include the widening of product diversity in all their markets, the introduction of 'one-stop-shopping,' the cross fertilisation of best practices and innovative services between the two RBOCs, and the increased levels of competition over the 13 state region through standardised interconnection agreements.²⁴⁵

Geography and resources are central to understanding the merger. The merger continues SBC's strategy of assembling local telecommunications companies under the same corporate umbrella. Ameritech's brand and management team will remain in-region, though with strategic decision making being transferred to an expanded Texas based board of SBC Communications. The merger also brings together two potential competitors, and thus prevents head to head competition in markets. By creating an axis north-south across the United States the merger provides a solid foundation from which expansionist moves into new markets can be launched. For instance, when Ameritech is combined with the SNET and CellularOne the merger greatly strengthens SBC's position regarding entry into the north-eastern seaboard markets of Bell Atlantic.

Table 5.16: Creating the 'new' SBC Communications

FYE97	'Old' SBC	SNET	Ameritech	'New' SBC.
Revenues \$bn	25.044	2.022	15.998	43.064
Net income \$m	1474	193	2296	3963
Access lines 000s	23100	2286	20544	45930
Cellular 000s	5500	457	3177	8834
Nos. of states	8	3	5	16
Employees	116000	9743	74359	200102
Transaction value \$bn	N/A	4.4	62	N/A

Source: Ameritech, 1997c; SBC, 1997b; SNET, 1998a.

Finally, implicit to the merger is the notion that alone each of the RBOCs possesses insufficient resources to simultaneously grow out-region and defend its in-region operations from increased competitive pressures resulting from the 1996 Telecommunications Act. Undoubtedly a war of attrition between the two neighbouring RBOCs would have been resource intensive, and have distracted management from other tasks such as internationalisation and countering the threat posed by new entrants such as MCI WorldCom.

²⁴⁵ SBC, 1998c, pg2f.

Given the size and antitrust implications of the merger, and the need to gain regulatory approval relating to the transfer of licenses from Ameritech to SBC, it is by no means certain that the merger will go ahead. Fear has been expressed that the new SBC will be too large, not only will the company operate in the local markets of 16 different states but it will also control nearly half of the business lines within America. Furthermore, concern has also been expressed that the merger would stifle competition. Until now SBC has been largely able to withstand FCC calls for competition enhancing actions such as making their OSS open to competitors. It is felt by some that the company will export this reluctance to be more competitive to both Ameritech and SNET. The merger will change the plans of each to enter the region of the other with the result that competition is reduced. It is for these reasons that Harwood (1998) speculates that the merger is by no means certain.

5.10.2 Bell Atlantic centred restructuring.

5.10.2.1 Nynex.

Less than two months after the passage of the 1996 Telecommunications Act Bell Atlantic and Nynex agreed to a \$25bn merger-of-equals. The merger built on the series of joint-ventures already been initiated between the two companies. The Bell Atlantic-Nynex merger would create:

... the second largest telecommunications company with 133000 employees, 1995 revenues of \$27.8bn and earnings of \$3.1bn. The company will provide telecommunications, entertainment and information services to 26 million customers in 13 Northeastern and Middle Atlantic states and the District of Columbia – the most communications intensive region of the country – as well as to customers throughout the nation and world.²⁴⁶

²⁴⁶ Bell Atlantic, 1996b. Bell Atlantic and Nynex were partners in BANM, PCS PrimeCo, Tele-TV and CAI Wireless.

The Bell Atlantic-Nynex merger was driven by the changing nature of the telecommunications industry, especially the introduction of competition and the eventual possibility that the RBOCs would be freed from their local confines and allowed into the long distance market. Under these circumstances both Nynex and Bell Atlantic would be faced with the challenge of responding to increased competitive pressures in their core local markets whilst simultaneously entering the long distance market. Moreover, as around 45% of the long distance traffic in the north-east corridor originates as well as terminates within the combined Bell Atlantic-Nynex region each would have an incentive to enter the other's market. Therefore, the merger prevented the two RBOCs from competing against one another in each other's markets.

Though the primary motivation for the merger are domestic the merger also had an international dimension as well. The merger brought together two complimentary sets of international operations, and greatly enhanced the company's regional presence in Asia and Europe. These two areas are linked together by a Nynex-sponsored project, FLAG.

However, before the merger could be finalised regulatory approval was required from the FCC as well as state PUCs. The FCC approved the merger though only after imposing several competition enhancing conditions that intended to compensate for the removal of each company as a potential competitor for the other. The conditions imposed related to competitors' access to operational support systems (OSS), the use of forward looking economic costs models even though Bell Atlantic had objected to these in court, quicken the collocation process and share costs in accordance with previous rulings.²⁴⁷ With regulatory approval the merger was completed on August 14, 1997.

5.10.2.2 GTE.

In July 1998 Bell Atlantic agreed to merge with GTE. In a merger-of-equals, with senior executives drawn from each company, it is proposed that Bell Atlantic will issue 1.22 new shares for every GTE share outstanding to create a yet unnamed company valued at \$126bn. The proposed merger brings together two quite different companies: Bell Atlantic is primarily

²⁴⁷ FCC, 1997a.

focused on the north-eastern United States corridor, whereas not only is GTE national in scope but also provides long distance and advanced data communications.

Without doubt the operational reach of the combined company would be impressive: operating coast-to-coast across 39 states the company would have annual revenues of \$53bn, 63m access lines and 10.6m domestic cellular subscribers.²⁴⁸ Of perhaps greater significance is that the merged company would epitomise the notion of one stop shopping, being able to provide local, national and international long distance, Internet and cellular solutions to customers.

It is openly acknowledge by executives that enterprise size is a prime motivator for the deal. Executives from both companies have argued that greater scale economies, in terms of operational efficiencies, and greater financial strength, are required to ensure prosperity in the rapidly changing and uncertain telecommunications environment that is taking shape. As stated by Seidenberg (CEO, Bell Atlantic):

[t]he transaction will also mean more competition. The combined enterprise will have the financial, operational and technological resources to compete effectively against the strategies of AT&T/TCI, SBC/Ameritech, WorldCom/MCI and others, both current and future.²⁴⁹

Whilst both parties have argued that the merger is pro-competitive, and that the customer will benefit through improved service delivery and service integration, regulatory barriers need to be overcome. It is unlikely that the new company will be able to integrate services, especially long distance with local and cellular, in a similar manner to GTE. Bell Atlantic will still need to satisfy state PUCs and the FCC that its local markets are competitive under Section 271 of the Telecommunications Act of 1996. The merger, therefore, can not be taken as an alternative, and possibly quicker, route by which Bell Atlantic can enter the long distance market. Moreover, it has also been suggested that service cross selling and integration may fall foul to regulatory concerns that such a move would be anti-competitive.

²⁴⁸ Telecom AM, 1998, July 29th.

²⁴⁹ Bell Atlantic, 1998e.

5.11 SUMMARY.

This chapter has presented an account of the domestic investment activity of the RBOCs between 1984 and the end of 1998. Differences and similarities are clearly evident within the post-divestiture strategies of the RBOCs. To varying degrees all of the RBOCs have focused on those lines-of-business that they inherited from the Bell system, that is on their in-region telephone network, cellular and directory publishing. However, some of the RBOCs have sought to develop complimentary businesses that would bolster their position as a provider of telecommunications services. Some of the RBOCs have also sought to enter markets unrelated to their core in-region lines-of-business. The former strategy is aimed at deepening the relationship between the RBOCs and their customer, whilst the latter intends to widen the RBOCs-customer relationship. Ameritech is illustrative of the former strategy, and Nynex and US West of the latter.

These two different approaches to strategy making in the post-divestiture environment are evident in the contrasting investments that the RBOCs have made. Collectively the RBOCs have invested at one time or another in a diverse range of markets, including real estate, security monitoring and financial services. Most of the diversification efforts that were undertaken occurred immediately after divestiture, and many were exited after only a few years. In contrast, the complementary investments have proved to be more long lasting, and did not give rise to an unsustainable tension within the RBOCs. The tension arises because the regulated in-region investments and unregulated out-region investments pull in opposite directions. If the RBOCs acquire businesses that require significant capital investment then they lay themselves open to charges that in-region users are subsidising the company's out-region expansion. Furthermore, regulators are likely to link the expansion of the RBOCs into new markets to developments in their core lines-of-business.

The tensions between regulated and unregulated lines-of-business led to restructuring within the post-divestiture telecommunications industry. In 1994 Pacific Telesis separated its BOCs and directory publishing subsidiaries from its cellular and other investments by forming and then

divesting AirTouch Communications. Three years later US West sold its cellular investments to AirTouch, and then spun off MediaOne as a separate company containing all its out-region investments. The sale of its cellular investments by US West reflects the initial failure of the company to prosper in the marketplace, and vividly demonstrates the long-term consequences of such a failure. These restructuring both led Pacific Telesis and US West to focus in-region.

Acquisitions have widened the geographical scope of both SBC and Bell Atlantic. SBC has acquired Pacific Telesis and SNET, and has proposed to merge with Ameritech, whereas acquired Nynex and is proposing to merge with GTE. Although these acquisitions increased the geographical scale of both SBC and Bell Atlantic they were operationally complementary in nature, and are unlike to lead to the same sort of tensions that led to the separation strategies of Pacific Telesis and US West. The merger activity of these two RBOCs also underlines the importance of geography in the telecommunications industry. Both SBC and Bell Atlantic are building a national presence, and this has led some to conclude that the future American telecommunications industry will be dominated by a handful of national players. SBC in particular, and Bell Atlantic to a lesser extent, is executing a 'national-local' strategy where the company's national geographical coverage is represented locally through a series of local brands.

The next chapter will continue the analysis of the RBOCs in the post-divestiture period by examining the international dimension to their investment activity.